FACULDADE DE PLANALTINA
PROGRAMA DE PÓS-GRADUAÇÃO EM CIÊNCIAS AMBIENTAIS

ESMERALDA PEREIRA DE ARAÚJO

AGROTÓXICOS EM ÁGUAS DOCES SUPERFICIAIS: CONTEXTO GLOBAL, AVALIAÇÃO CRÍTICA DA LEGISLAÇÃO BRASILEIRA E ESTUDO DE CASO DA BACIA HIDROGRÁFICA DO RIO PRETO - DF

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Linha de Pesquisa: Manejo e conservação de recursos naturais. *Área de Concentração:* Estrutura, Dinâmica e Conservação Ambiental

ORIENTADOR: PROF. DR. EDUARDO CYRINO OLIVEIRA FILHO
COORIENTADORA: PROFA. DRA. ELOISA DUTRA CALDAS

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Universidade de Brasília – UnB

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"Contudo, graças a Deus, que sempre nos conduz vitoriosamente em Cristo, e por nosso intermédio exala em toda parte o bom perfume do seu conhecimento."

"Sin embargo, gracias a Dios que en Cristo siempre nos lleva triunfantes y, por medio de nosotros, esparce por todas partes la fragancia de su conocimiento."

"Now thanks be unto God, which always causeth us to triumph in Christ, and maketh manifest the savour of his knowledge by us in every place."

2 Co.14

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LISTA DE ABREVIATURAS E SIGLAS

μS/cm - microsiemens por centímetro

μg/L - micrograma por litro

AA - annual average

AMPA - ácido aminometilfosfônico

ANVISA - Agência Nacional de Vigilância Sanitária

ATH - atrazina-2-hidroxi

ATZ - atrazina

Aw – clima tropical

AZO - azoxistrobina

BHRP - Bacia Hidrográfica do Rio Preto

°C - graus Celsius

C1 - primeira campanha da chuva

C2 - segunda campanha da chuva

CBF - carbosulfam

CBZ - carbendazim

CE_{50} - concentração efetiva a 50% dos organismos

CENO - concentração de efeito não observado

CEO - menor concentração em que um efeito foi observado

CL_{50} - concentração letal a 50% dos organismos

Codeplan - Companhia de Planejamento do Distrito Federal

CONAMA - Conselho Nacional do Meio Ambiente

Cwa - clima tropical de altitude

d - dias

DDT - diclorodifeniltricloroetano

Déc. - década

DF - Distrito Federal

DT_{50} - tempo necessário para que a concentração do produto químico em condições definidas diminua para 50% da quantidade na aplicação

EC_{50} - effective concentration 50

FAO - Food and Agriculture Organization of the United Nations

FIP - fipronil

FLU – flutriafol

FS - fator de segurança

GLI - glifosato

GLU - glufosinato

h - hora

ha – hectare

HCH - hexaclorociclohexano

I - invertebrado

IBAMA - Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis

IBGE - Instituto Brasileiro de Geografia e Estatistica

IMD - imidaclroprido

INMET - Instituto Nacional de Meteorologia

K_d - coeficiente de distribuição solo/sedimento

K_{oc} - coeficiente de distribuição normalizada orgânico-carbono

LabTox - Laboratório de Toxicologia da Universidade de Brasília

LC_{50} - lethal concentration 50

LC-MS/MS - cromatografia líquida acoplada à espectrometria de massas sequencial

LOC - level of concern

Log K_{ow} - coeficiente de partição octanol-água

LOD - limite de detecção

LOQ - limite de quantificação

LQ - limite de quantificação

m - metro

MAC - maximum allowable concentration

MAPA - Ministério da Agricultura e Pecuária

mg/L - miligrama por litro

mPa - megapascal

MEC - measured environmental concentration

MG - Minas Gerais

MTF - metamidofós

MV - maximum value

n - número de amostra

NORMAN - Network of reference laboratories, research centres and related organisations for monitoring of emerging environmental substances

N.c. - não conclusivo

N.i. - não informado

NOAEC - no observed adverse effect concentration

NOEC - no observed effect concentration

NOEL - no observed effect level

ODS - Objetivos do Desenvolvimento Sustentável

OMS - Organização Mundial de Saúde

ONU - Organização das Nações Unidas

P - peixe

PFM - pirimifós-metílico

pH - potencial hidrogeniônico

PNEC - predicted non-effect concentration

PNRH - Política Nacional dos Recursos Hídricos

PNV - plantas não vasculares

POP - poluente orgânico persistente

PPDB - Pesticide Properties Database

PTFE - politetrafluoretileno

QR - quociente de risco

RQ - risk quotient

RS - Rio Grande do Sul

S1 - primeira campanha da seca

S2 - segunda campanha da seca

SIEG - Sistema Estadual de Geoinformação

SEMA – Secretaria de Estado do Meio Ambiente e Proteção Animal do Distrito Federal

Sol_w: solubilidade em água

TDS - sólidos totais dissolvidos

TEB - tebuconazol

TMX - tiametoxam

Ton. - tonelada

UH - unidade hidrográfica

USA - United States of America

USEPA - United States Environmental Protection Agency

VM - valor máximo

RESUMO

A água doce superficial é um recurso natural necessário para a manutenção dos ecossistemas, consumo humano e desenvolvimento de suas atividades. Contudo, também está sujeita a contaminações diversas decorrentes do uso da terra, incluindo a atividade agrícola com o uso de agrotóxicos. O objetivo deste trabalho foi analisar cenários sobre a contaminação da água doce superficial por agrotóxicos a partir das escalas global, nacional e regional. O cenário global de contaminação foi avaliado por meio de uma revisão sistemática de estudos sobre agrotóxicos na água doce superficial. Dentre os 146 trabalhos retornados numa série histórica de 46 anos, Estados Unidos foi o país que mais realizou estudos, o herbicida atrazina foi o agrotóxico mais avaliado e detectado e algumas das suas maiores concentrações sugeriam riscos de toxicidade para organismos aquáticos. No âmbito nacional, os valores máximos (VMs) de agrotóxicos previstos para as classes de água doce da Resolução CONAMA N° 357/2005 foram comparados com dados ecotoxicológicos publicados na literatura e em bases de dados para o cálculo do quociente de risco (QR). Dos 534 testes realizados em 31 estudos e em três bases de dados, espécies modelos do gênero *Daphnia* foram as mais utilizadas e atrazina o agrotóxico mais testado. Os QRs estimados para 16 agrotóxicos estavam acima do limite de preocupação e indicaram um potencial risco para a biota aquática, evidenciando a necessidade de atualização da resolução. No âmbito regional, amostras de água superficial da Bacia Hidrográfica do Rio Preto no Distrito Federal, sua principal bacia agrícola, foram avaliadas quanto à presença de 81 agrotóxicos de classes e grupos químicos diversos. Amostras coletadas em 19 pontos da bacia, em quatro campanhas, duas no período de seca (2021) e duas no período de chuva (2022), foram analisadas utilizando cromatografia líquida acoplada à espectrometria de massas sequencial (LC-MS/MS). Das 76 amostras analisadas, 86.8% (66) foram positivas para ao menos um composto, sendo 14 agrotóxicos e dois produtos de degradação, dos quais dois possuem uso proibido no país. O inseticida e acaricida acefato foi encontrado na maior concentração (2.59 μg/L). O QR indicou que pirimifós-metílico, fipronil, tiametoxam, carbendazim e atrazina estavam presentes em concentrações que representam potenciais riscos para a biota aquática. Embora as concentrações de atrazina e glifosato, únicos que possuem VMs previstos na CONAMA N° 357/2005, estejam em conformidade com a legislação, o QR avaliado indicou que o VM estabelecido para atrazina não é seguro para a biota aquática. Os resultados deste estudo mostram que a presença de agrotóxicos em águas superficiais é um problema global. A Resolução CONAMA N° 357/2005 precisa de atualização, tanto quanto à lista de agrotóxicos incluídos quanto aos seus VMs, de maneira a garantir a proteção dos organismos aquáticos.

Palavras-chave: recursos hídricos, contaminação por agrotóxicos, ecotoxicidade aquática, CONAMA N° 357/2005, Bacia Hidrográfica do Rio Preto no Distrito Federal.

ABSTRACT

Surface freshwater is a natural resource necessary for the maintenance of ecosystems, human consumption, and the development of its activities. However, it is also subject to contamination resulting from land use, such as pesticides used in agriculture. The objective of this study was to analyze scenarios on surface freshwater contamination by pesticides from the global, national, and regional scales. At global scale, a systematic review on pesticides in surface fresh water conducted. Among the 146 studies retrieved in a 46-year historical series, the United States was the country that carried out the most studies, the herbicide atrazine was the most evaluated and detected pesticide, and some of its highest concentrations suggested potential risk for aquatic organisms. At national level, the maximum values (MVs) of pesticide for freshwater classes included in the CONAMA Resolution No. 357/2005 were compared with ecotoxicological data published in the literature and in databases to estimate the risk quotient (RQs). Of the 534 tests carried out in 31 studies and in three databases, the *Daphnia* genus. was the most used and atrazine the most investigated pesticide. The RQ estimated for 17 pesticides listed in the resolution indicated a potential risk to the aquatic biota, pointing the need to update the directive. Finally, surface water samples collected in the Rio Preto Hydrographic Basin in the Federal District, its main agricultural basin, were evaluated for the presence of 81 pesticides of different chemical classes and groups. Samples were collected at 19 points, in four campaigns, two in the dry season (2021) and two in the rainy season (2022), and analyzed using liquid chromatography-tandem mass spectrometry (LC-MS/MS). Of the 76 samples analysed, 86.8% (66) were positive for at least one analyte, 14 pesticides and two degradation products, of which two were banned in the country. The insecticide and acaricide acephate was detected at the highest concentration (2.59 μg/L). The RQs estimated for pirimiphos-methyl, fipronil, thiamethoxam, carbendazim and atrazine were found in concentrations that show potential risks to the aquatic biota. However, the concentrations of atrazine and glyphosate, the only ones included in the CONAMA N° 357/2005, are in compliance with the directive, the evaluated RQ indicated that the MV established for atrazine is not safe to aquatic biota. The results of this study indicated that the presence of pesticide in superficial fresh water is a global issue. The CONAMA N° 357/2005 needs to be updated regarding the list of pesticides included as well as the MVs established, aiming at guarantee the protection of the aquatic organisms.

Keywords: surface fresh water, pesticide contamination, ecotoxicity, CONAMA N° 357/2005, Rio Preto Hydrographic Basin in Federal District.

I. INTRODUÇÃO GERAL

Os agrotóxicos se tornaram importantes insumos utilizados na agricultura moderna para aumentar a qualidade e a quantidade da produção e garantir a segurança alimentar para a crescente população mundial (SHARMA *et al.*, 2019), que em novembro de 2022 atingiu 8 bilhões de pessoas (UNITED NATIONS, 2022a). Seu uso aumentou significativamente a partir da segunda metade do século XIX devido ao crescimento econômico mundial, principalmente dos setores industrial e agrícola (SHARMA *et al.*, 2019). Contudo, ainda é esperado nas próximas décadas uma maior pressão sobre os sistemas agrícolas devido ao alto crescimento populacional e às mudanças climáticas (FITTON *et al.*, 2019), o que pode ser preocupante, pois esses insumos são potenciais contaminantes de matrizes ambientais diversas, como a água doce superficial. Segundo Foley *et al.* (2011), atender a demanda por alimentos no mundo e reduzir os danos da agricultura, em termos ambientais, é um dos maiores desafios do atual século.

Devido à ampla gama de moléculas de agrotóxicos existentes (PPDB, 2022) e ao uso intensivo dessas substâncias (FAO, 2022a), diferentes cenários de contaminação de água superficial podem ocorrer. Em geral, países em desenvolvimento tendem a usar substâncias mais tóxicas que os países desenvolvidos (ZHANG, 2018). Em revisão realizada por Pirsaheb *et al.* (2017), agrotóxicos organofosforados, organoclorados, fosforotiolato, carbamato e ácido ariloxialcanóico ocorreram nas maiores concentrações em estudos realizados na Ásia; lindano, isoprotiolano, atrazina e endossulfam nos países africanos; atrazina e δ-HCH em países da América do Sul; metamidofós e ácido clortal-dimetil em países da América do Norte; triazol, cloroacetanilidas, triazina, organoclorados, organofosforados e imidazol em alguns países europeus. Esse cenário de contaminação reflete o uso agrícola dessas substâncias, sendo necessária a avaliação dessas moléculas nas águas e dos seus prováveis riscos para o ecossistema aquático.

Os agrotóxicos podem ocasionar a perda da biodiversidade no ambiente aquático (TANG *et al.*, 2021). Desse modo, agências nacionais e internacionais estabelecem limites para agrotóxicos no intuito de garantir a proteção da saúde humana e do meio ambiente. Para o consumo humano, a qualidade da água é verificada para 40 parâmetros com 42 agrotóxicos e 12 produtos de degradação no Brasil (BRASIL, 2021), 24 agrotóxicos no Canadá (CANADA, 2020) e para a União Europeia dois parâmetros: agrotóxicos e agrotóxicos total (EUROPEAN COMMISSION, 2020). Também há diretiva para regular limites dessas substâncias na água ambiental europeia (EUROPEAN COMMISSION, 2013). No Brasil, a Resolução CONAMA N° 357 de 2005 estabelece valores máximos (VMs) para 27 agrotóxicos para corpos hídricos de água doce superficial considerados classe 1, 2 e 3 (BRASIL, 2005). Os limites definidos para esses

contaminantes são importantes, pois para atender os usos múltiplos a qualidade da água deve ser garantida para o seu uso mais exigente.

No Brasil, muitos estudos mostram a presença dos agrotóxicos em recursos hídricos (ex. córregos, rios) próximos a áreas agrícolas (BARIZON *et al.*, 2019; BERTON; BRUGNERA; DORES, 2018; CALDAS *et al.*, 2019; CHIARELLO *et al.*, 2016; CORREIA; CARBONARI; VELINI, 2020; DELLA-FLORA *et al.*, 2019; SEVERO *et al.*, 2020; SPOSITO *et al.*, 2018). No Distrito Federal, a principal bacia agrícola é a Bacia Hidrográfica do Rio Preto (BHRP), afluente do Rio Paracatu, que deságua no Rio São Francisco (MAPBIOMAS, 2022). Nesta bacia a agricultura é predominantemente caracterizada por culturas temporárias e a soja, o milho, o feijão e o sorgo são as culturas mais produzidas por médios e grandes produtores (BORGES *et al.*, 2007). Dados da Produção Agrícola Municipal mostram que, em 2021, 166.865 hectares foram plantados com lavouras temporárias ou permanentes no DF (IBGE, 2022). Nesse mesmo ano, 1.563,71 ton. de ingrediente ativos foram comercializados, principalmente glifosato, clorotalonil e atrazina (IBAMA, 2022a). Embora a atividade agrícola seja predominante na BHRP, há poucas informações sobre a qualidade da água no que se refere aos agrotóxicos (DISTRITO FEDERAL, 2012).

Dessa forma, algumas perguntas foram norteadoras desta tese: 1°) No mundo, a água doce superficial está contaminada por quais agrotóxicos e em quais concentrações?; 2°) Em função do cenário de contaminação, a legislação sobre a qualidade da água doce superficial brasileira estabelece limites seguros para a proteção do ecossistema aquático a essas substâncias? e 3°) Como está a qualidade dos corpos hídricos superficiais da principal bacia agrícola do Distrito Federal (Bacia Hidrográfica do Rio Preto) em relação aos agrotóxicos?

II. REFERENCIAL TEÓRICO

1. Água doce superficial

1.1 Bacias hidrográficas

Os corpos hídricos superficiais fazem parte de unidades geográficas que captam e drenam a água e são denominadas bacias hidrográficas (Figura 1). Nas bacias hidrográficas, os corpos d'águas estão localizados nas partes mais baixas do relevo e por isso tendem a ser receptores da matéria orgânica, dos sedimentos e de poluentes diversos advindos dos vários usos e ocupações da terra. Esses corpos hídricos estão suscetíveis a contaminação com patógenos (vírus, bactérias e protozoários), resíduos sólidos, plásticos, metais pesados, fármacos, fertilizantes e agrotóxicos diversos (UNEP, 2021).

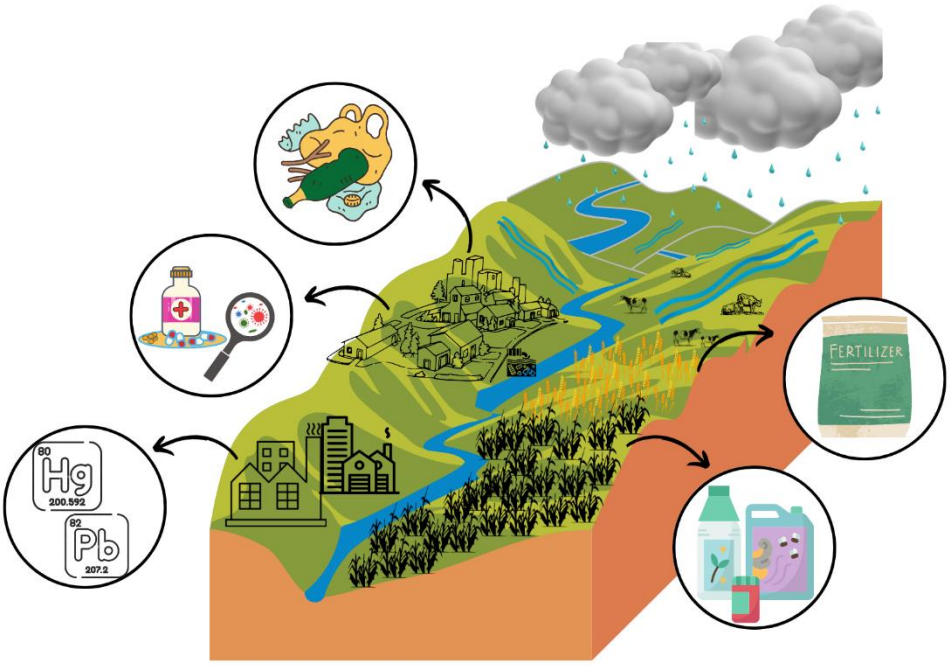

Figura 1. Modelo demonstrativo de uma bacia hidrográfica com o processo de captação da água da chuva e drenagem para as partes mais baixas do relevo, os corpos hídricos superficiais, que estão suscetíveis a contaminantes diversos decorrentes do uso e ocupação da terra.
Fonte: autora.

Diversos poluentes de fontes pontuais e difusas podem atingir os corpos hídricos nas bacias hidrográficas (TSABOULA *et al.*, 2019). A fonte pontual de poluição é de fácil identificação, pode ser controlada ou mitigada; porém as fontes difusas não têm suas origens facilmente identificadas, está geralmente relacionada às grandes áreas e quando associada com a chuva e o escoamento alcançam os mananciais de forma intermitente (SODRÉ, 2012). Como mostrado na Figura 1, resíduos sólidos e plásticos, fármacos e patógenos podem advir da poluição da cidade, bem como

resíduos de metais como chumbo e mercúrio serem procedentes de atividades industriais, caracterizando assim a poluição pontual. Porém, a agricultura e pecuária compreendem extensas áreas de terras e a poluição da água por insumos utilizados nestas áreas não ocorre em pontos específicos, qualificando-a como poluição difusa.

Por ser um importante recurso natural, a Organização das Nações Unidas (ONU) estabeleceu algumas metas dos Objetivos do Desenvolvimento Sustentável (ODS) que possuem relação com a gestão de substâncias químicas (ex. agrotóxicos) para a conservação, o uso sustentável e a recuperação das águas (UNITED NATIONS, 2022b). As ações para a meta 6.3 do ODS 6 concentram-se, por exemplo, em melhorar a qualidade da água a partir da redução da poluição e minimizar a liberação de produtos químicos e materiais perigosos até 2030. Outras metas importantes foram propostas para até 2020: alcançar o manejo ambientalmente adequado dos produtos químicos e de seus resíduos, bem como reduzir sua liberação na água, minimizando impactos negativos à saúde humana e ao meio ambiente (ODS-12.4) e conservar, recuperar e usar de forma sustentável os ecossistemas de água doce conforme determinado em acordos internacionais (ODS-15.1). Tendo em vista que apenas 1% da água doce disponível existente no planeta está localizada em ambiente superficial (Figura 2) (ANA, 2020), essas metas precisam ser atingidas para garantir a qualidade e a quantidade desse recurso natural e a sua utilização de forma segura.

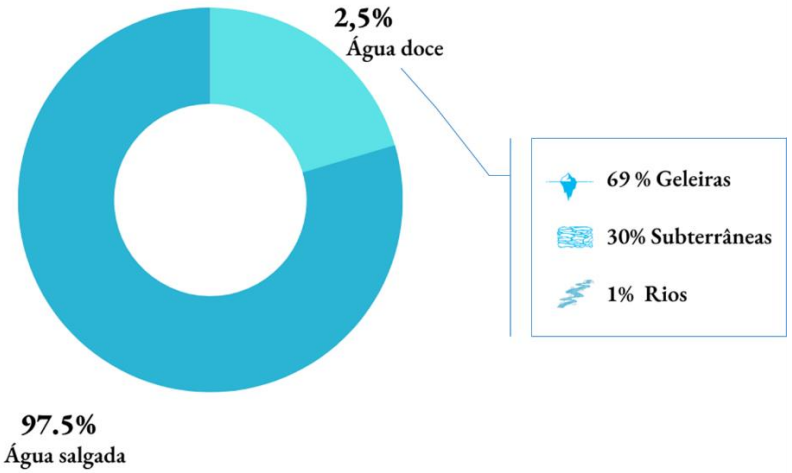

Figura 2. Quantidade de água disponível no mundo, com destaque para o percentual de apenas 1% localizado em ambiente superficial.
Fonte: ANA (2020).

O relatório da ONU de 2022 para o ODS-6.3 aponta que, em uma avaliação da qualidade de rios, lagos e aquíferos de 97 países, mais da metade (60%) tinha boa qualidade, porém apenas 1% (de 76000) dos corpos hídricos avaliados eram de países mais pobres, sendo que a qualidade da

água para ao menos 3 bilhões de pessoas ainda era desconhecida devido à falta de monitoramento (UNITED NATIONS, 2022c). Quanto ao ODS 12.4, a pandemia foi um agravante para a poluição global e dificultou a implementação efetiva de acordos internacionais, como a Convenção de Basel sobre o Controle de Movimentos Transfronteiriços de Resíduos Perigosos e seu Descarte, a Convenção de Roterdã sobre o Procedimento de Consentimento Prévio e Informado para Certos Produtos Químicos Perigosos e Pesticidas no Comércio Internacional e a Convenção de Estocolmo sobre Poluentes Orgânicos Persistentes. Sobre o ODS 15.1, a conservação de eixos importantes para a proteção da biodiversidade, como a água doce, aumentou a partir do estabelecimento de áreas protegidas ou outro tipo de conservação. Esses relatos mostram que muitos ainda são os desafios relacionados à gestão da água em relação a contaminantes químicos como os agrotóxicos.

A conservação da água doce superficial é importante, pois a degradação dos ecossistemas aquáticos é notória e crescente. A má gestão, o uso excessivo e a sua contaminação ao longo de várias décadas comprometeram esses ecossistemas e consequentemente afetaram a saúde humana, as atividades econômicas e o suprimento de energia e de alimentos (UNITED NATIONS, 2022c). Nos últimos 300 anos, as zonas úmidas (*wetlands*) tiveram mais de 85% de perda e outros ecossistemas como reservatórios, lagos e rios também passam por mudanças rápidas, acima do natural. Em ambas as situações, os principais impulsionadores dessas mudanças são o crescimento da população, as mudanças na cobertura e uso da terra e as mudanças climáticas (UNITED NATIONS, 2022c). Entre 1985 e 2021 o Brasil, país com bacias hidrográficas de grandes dimensões, perdeu 1 471 245 ha (8.17%) de superfície da água, sendo o Pantanal, a Caatinga e o Cerrado os biomas recordistas nestas perdas (MAPBIOMAS, 2021a). Segundo o coordenador do Projeto MapBiomas Água, são diversos os fatores que explicam essa redução, dentre eles a conversão da floresta para a agropecuária que pode aumentar a temperatura local e alterar cabeceiras de corpos hídricos, podendo ocasionar o assoreamento; a construção de represas para irrigação nas fazendas que diminui o fluxo da água; e em escala maior, as grandes represas com foco na produção energética, mas que pela extensa superfície está sujeita à evapotranspiração e perda d'água para a atmosfera (MAPBIOMAS, 2021b). Dessa forma, como a água doce superficial é importante para a manutenção dos ecossistemas e para o desenvolvimento das atividades humanas, bem como é um recurso renovável, porém finito, sua qualidade e sua utilização de forma racional precisam ser garantidas, observando principalmente seus usos múltiplos.

1.2 Gestão dos recursos hídricos brasileiros

A água doce superficial atende diferentes demandas de uso para a atividade humana. No Brasil a irrigação agrícola é a atividade que mais faz uso desse recurso, seguida do abastecimento humano e da indústria (Figura 3) (ANA, 2019). O uso da água pode ser dividido em dois tipos. O uso consuntivo é aquele em que a água retirada pode ser evaporada, transpirada, incorporada no produto ou cultivo, consumida no abastecimento humano ou pecuária, ou removida de forma imediata do recurso hídrico em que foi captada (ANA, 2019), o que torna inviável sua completa devolução ao ambiente de origem (REIS; BRANDÃO, 2013), portanto, é caracterizado pelo seu consumo de forma direta. O uso não consuntivo admite a devolução completa da água utilizada (REIS; BRANDÃO, 2013) e depende da manutenção de suas condições naturais ou da operação de sua infraestrutura, desse modo, não há o consumo direto do recurso, como ocorre nas atividades de turismo e lazer (ANA, 2019). Consequentemente, como os interesses pela água são diversos, sua gestão adequada se faz necessária.

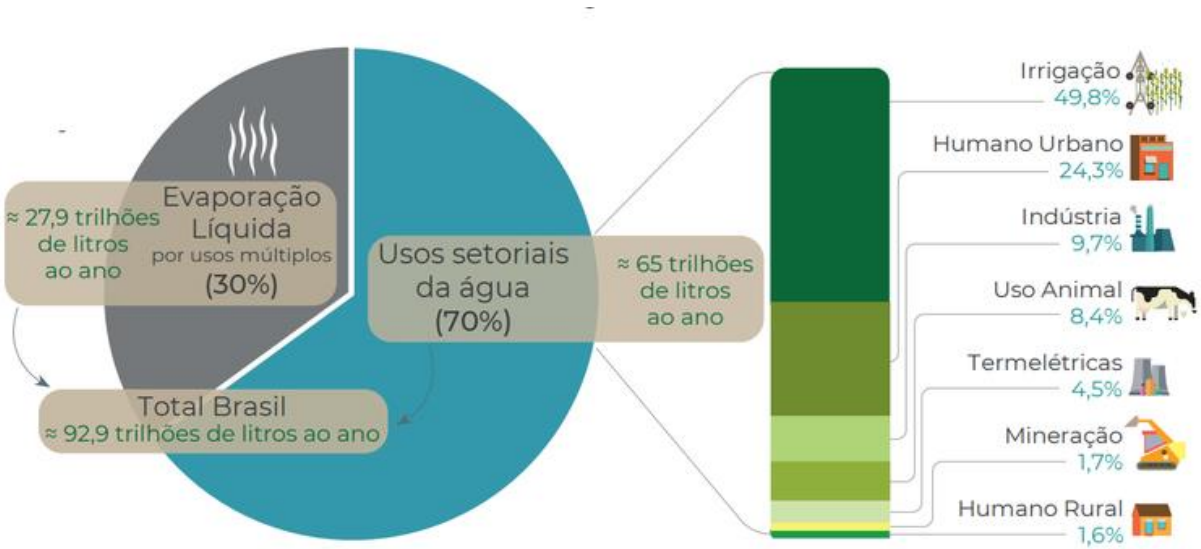

Figura 3. Percentuais de usos da água doce superficial no Brasil para diferentes atividades antrópicas. Fonte: ANA (2019).

A irrigação agrícola (Figura 3) altera a condição da água à medida que é retirada do ambiente, armazenada e sua maior parcela é consumida na evapotranspiração das plantas e do solo, tornando-a indisponível para outros usos (ANA, 2021a). De acordo com o Atlas de Irrigação do país, a área irrigada no Brasil é de 8.195.391 hectares e é predominante na produção de cana fertirrigada (35.4%), em culturas anuais com pivôs centrais (17,6%) e na produção de arroz (15.9%). Paracatu-MG (86.291 ha) e Uruguaiana-RS (82.471 ha) são os municípios que mais utilizam irrigação, e o Distrito Federal é o 22°, com 293 ha destinados para a cultura do café, 14.843 ha para culturas

anuais em pivôs centrais e 18.222 ha para outras culturas e sistemas. Contudo, a demanda hídrica depende também da cultura, clima local e do tipo de manejo. Lavouras de arroz inundado e permanentes no Semiárido, por exemplo, demandam mais irrigação por hectare.

Alguns instrumentos normativos fundamentais para a gestão dos corpos hídricos superficiais no Brasil são mostrados na Figura 4. A Política Nacional do Meio Ambiente (Lei N° 6.938) estabelece padrões de qualidade ambiental como um dos seus instrumentos de gestão dos corpos hídricos brasileiros (BRASIL, 1981). Em 1986, a Resolução CONAMA N° 20 tornou-se a precursora na classificação das águas brasileiras (BRASIL, 1986), sendo substituída pela CONAMA N° 357/2005. Em 1997 houve um avanço notório para a gestão da água a partir da instituição da Política Nacional dos Recursos Hídricos (PNRH), dada pela Lei N° 9.433 de 1997, bem como a criação do Sistema Nacional de Gerenciamento de Recursos Hídricos (BRASIL, 1997). Alguns instrumentos dessa lei são o enquadramento dos recursos hídricos, a outorga e a cobrança pela utilização da água, bem como o Sistema de Informação sobre os Recursos Hídricos. A Resolução CONAMA N° 357, atual norma sobre qualidade das águas, foi instituída em 2005 e dispõe sobre "a classificação dos corpos de água e diretrizes ambientais para o seu enquadramento, bem como estabelece as condições e padrões de lançamento de efluentes, e dá outras providências" para garantir os diferentes usos da água (BRASIL, 2005). O enquadramento em classes de água, instituído pela PNRH, é realizado a partir do direcionamento desta resolução.

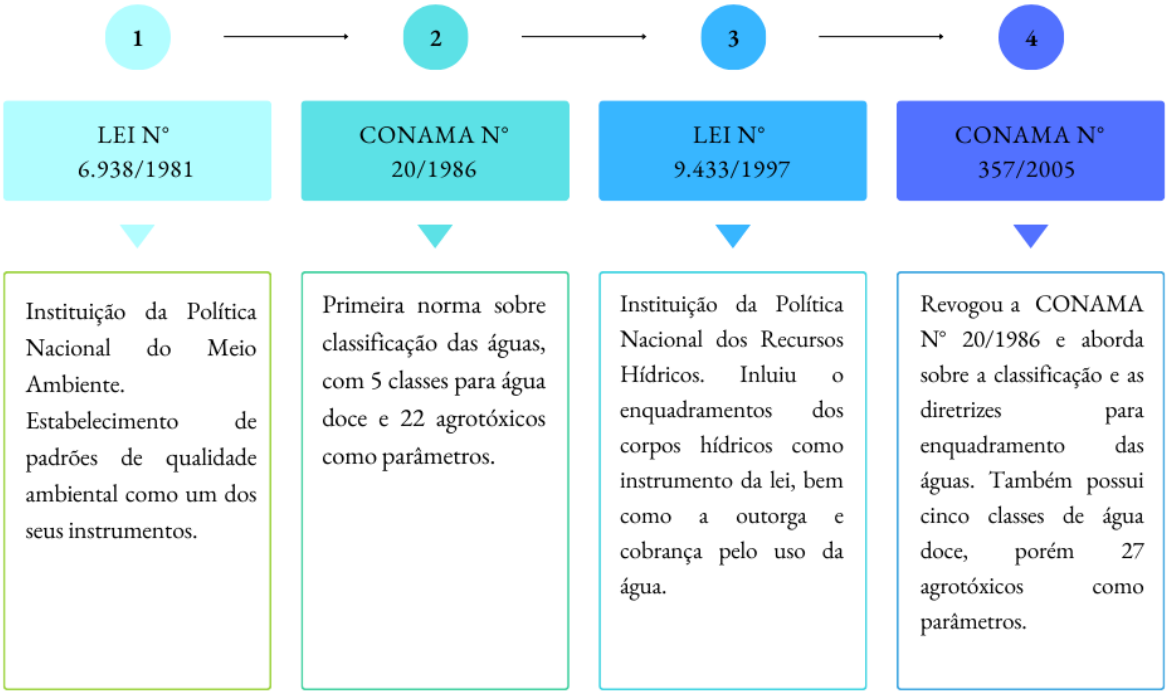

Figura 4. Resumo sobre a gestão dos recursos hídricos superficiais brasileiros até a instituição da Resolução CONAMA N° 357 de 2005.

O enquadramento em classes é um instrumento de gestão da água que norteia seus diferentes usos (BRASIL, 2005) e considera três pontos fundamentais: o rio que temos – (condição atual), o rio que queremos (a vontade da sociedade expressa pelos usos que deseja) e o rio que podemos ter (visão realista com base em limitações técnicas e econômicas necessárias para transformar o rio que temos no que queremos ter) (ANA, 2010). Dessa forma, como instrumento para a gestão dos usos múltiplos da água, o enquadramento é o somatório de esforços (público, privado e da sociedade) que busca o rio que se quer ter considerando a realidade técnica e econômica de sua região. Para as águas doces superficiais, a resolução determina cinco classes de enquadramento (especial, 1, 2, 3 e 4), como mostrado na Figura 5, e quanto maior o número da classe, pior é sua qualidade.

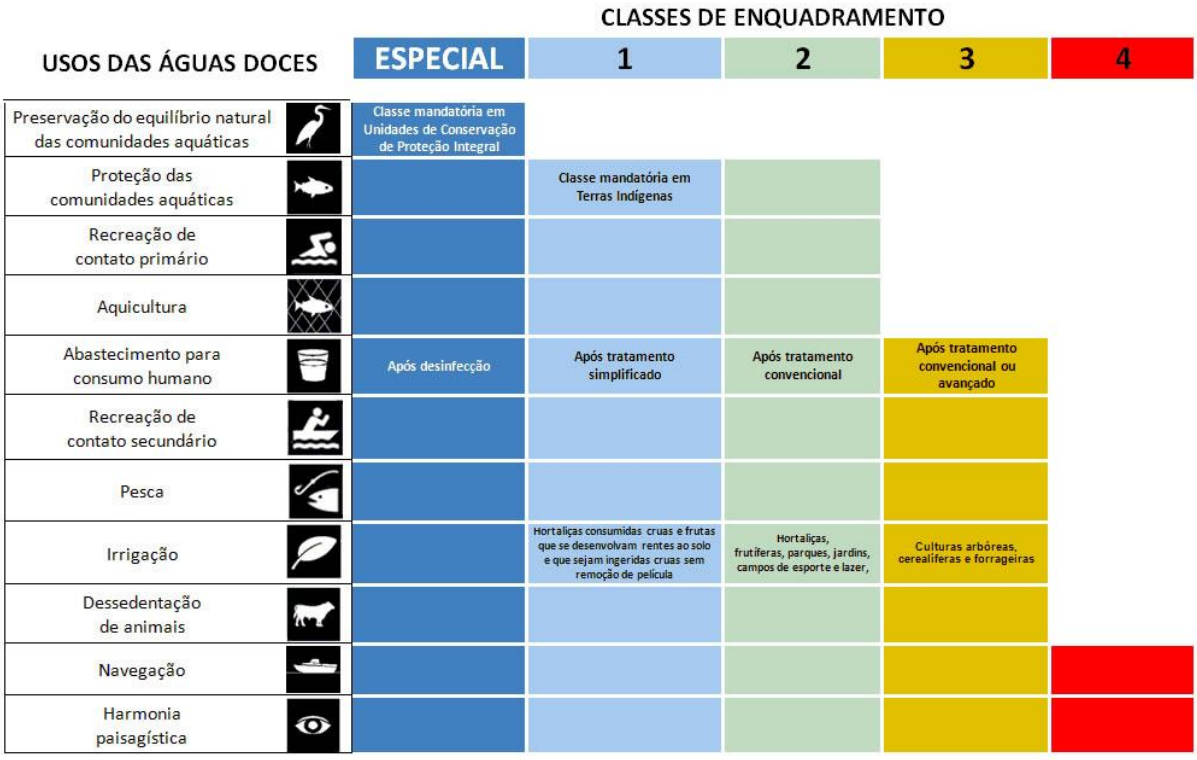

Figura 5. Classes de enquadramento dos corpos hídricos superficiais brasileiros e seus respectivos usos previstos conforme a Resolução CONAMA 357 de 2005.
Fonte: ANA (2010).

O enquadramento é "o estabelecimento da meta ou objetivo de qualidade da água (classe) a ser, obrigatoriamente, alcançado ou mantido em um segmento de corpo de água, de acordo com os usos preponderantes pretendidos, ao longo do tempo" (BRASIL, 2005). Como instrumento para gestão dos recursos hídricos, seu objetivo é garantir a qualidade da água para o uso mais exigente a qual for destinada e reduzir gastos ao combate à poluição hídrica a partir de ações preventivas (ANA, 2010). Para tal propósito, são estabelecidas metas progressivas de qualidade de

água para que sejam alcançadas por meio de metas intermediárias até se conquistar a meta final. Contudo, boa parte das bacias hidrográficas brasileiras ainda não possuem enquadramento (ANA, 2021b), e nesta perspectiva, os corpos hídricos são considerados como classe 2 (BRASIL, 2005).

Muitas unidades hidrográficas (UHs) do Distrito Federal foram enquadradas em classes segundo a Resolução CONAMA N° 357/2005, dentre elas quatro das sete UHs (20-22 e 35) da Bacia Hidrográfica do Rio Preto (BHRP), sua principal bacia agrícola, foram classificadas como classe 2 (DISTRITO FEDERAL, 2014). Legalmente, o enquadramento desses corpos hídricos nesta classe determina que sua qualidade seja mantida ou atingida com o tempo (UMBUZEIRO; LORENZETTI, 2009).

Para a realização do enquadramento de um corpo hídrico em classes, um conjunto de parâmetros químicos, físicos e biológicos, e padrões para substâncias químicas orgânicas (como os agrotóxicos) e inorgânicas são estabelecidos (BRASIL, 2005). Especificamente para os agrotóxicos, como mostrado na Tabela 1, com a revogação da Resolução N° 20/1986 pela Resolução N° 357/2005, os parâmetros dodecacloro e nonacloro, bem como os compostos organofosforados e carbamatos totais, foram exluídos, alguns VMs foram alterados e alguns agrotóxicos foram inseridos. Atualmente 27 agrotóxicos estão presentes na Resolução, dos quais dezenove com uso proibido no país e doze são considerados Poluentes Orgânicos Persistentes (POPs).

Tabela 1. Comparação entre a lista de agrotóxicos da Resolução CONAMA N° 20/1986 com a Resolução Conama N° 357/2005 mostrando mudanças para alguns compostos.

Agrotóxico	**Classe ambiental** [b]	**Conama 20/1986 (µg/L)**		**Conama 357/2005 (µg/L)**	
		Classes 1 e 2	**Classe 3**	**Classes 1 e 2**	**Classe 3**
Alacloro	II			20	
Atrazina	I-III			2	2
Carbaril	II	0.02	70	0.02	70
2,4-D	I-III	4	20	4	30
Glifosato	I-III			65	280
Malation	I-IV	0.1	100	0.1	100
Simazina	II-III			2	
Trifluralina	I-II			0.2	
Aldrin	POP	0.01	0.03	0.005	0.03
Dieldrin	POP	0.005	0.03	0.005	0.03
Clordano	POP	0.04	0.3	0.04	0.3
2,4-Diclorofenol	POP			0.3	
DDT	POP	0.002	1	0.002	1
Endossulfam	POP	0.056	150	0.056	0.22
Endrin	POP	0.004	0.2	0.004	0.2
Epóxido de heptacloro	POP	0.01	0.1		
Heptacloro	POP	0.01	0.1	0.000039[a] e 0,01	0.03
Hexaclorobenzeno	POP			0.00029[a] e 0,0065	
Lindano	POP	0.02	3	0.02	2
Dodecacloro+Nonacloro	POP	0.001	0.001		
Pentaclorofenol	POP	10	10	3 e 9	9

Agrotóxico	Classe ambiental [b]	Conama 20/1986 (µg/L)		Conama 357/2005 (µg/L)	
		Classes 1 e 2	Classe 3	Classes 1 e 2	Classe 3
Toxafeno	POP	0.01	5	0.00028[a] e 0,01	0.21
Demeton	N.r.	0.1	14	0.1	14
Gution	N.r.	0.005	0.005	0.005	0.005
Metolacloro	N.r.			10	
Metoxicloro	N.r.	0.03	30	0.03	20
Paration	N.r.	0.04	35	0.04	35
2,4,5-T	N.r.	2	2	2	2
2,4,5-TP	N.r.	10	10	10	10
Compostos organofosforados e carbamatos totais:	-	10 em Paration	100 em Paration		

[a]Padrões para águas em que haja pesca ou cultivo de organismos para consumo intensivo. N.r.: não regulado, POP: poluente orgânico persistente.
Fonte: [b] MAPA (2022), Brasil (1986), Brasil (2005).

2. Agrotóxicos

2.1 Definição e destino ambiental

Conforme a Lei N° 7.802 de 1989, agrotóxicos e afins são produtos e agentes de processos físicos, químicos ou biológicos utilizados em setores e ambientes diversos a fim de alterar a flora ou a fauna, no intuito de preservá-las das ações danosas de seres vivos considerados nocivos (BRASIL, 1989). Adicionalmente, também são substâncias e produtos que podem ser manejados como desfolhantes, dessecantes, estimuladores e inibidores de crescimento. São utilizados nos setores de produção, armazenamento e beneficiamento de produtos agrícolas, nas pastagens, na proteção de florestas (nativas ou implantadas) e de outros ecossistemas, bem como de ambientes urbanos, hídricos e industriais.

Os agrotóxicos podem ser divididos em grupos químicos (ex. carbamatos, organofosforados e triazinas), conforme a espécie-alvo a ser combatida (ex. herbicida, inseticida e fungicida) (Figura 6), e modo de ação (ex. inibidores de fotossistema, inibidores da acetilcolinesterase e inibidores da divisão celular). Historicamente, os compostos clorados, como o DDT e o heptacloro (Figura 6), foram os primeiros agrotóxicos utilizados, porém, posteriormente com a descoberta de que são muito persistentes no ambiente, se bioacumulam nos organismos e são altamente tóxicos a várias espécies, foram banidos para uso na agricultura e classificados como poluentes orgânicos persistentes (POPs) (STOCKHOLM CONVENTION, 2019). Foram muito utilizados na agropecuária nacional e internacional a partir da década de 1940, especialmente como inseticidas (CETESB, 2018). Atualmente, os agrotóxicos largamente utilizados na agricultura incluem os inseticidas organofosforados (introduzidos na década de 1960), carbamatos (déc. 1970) e piretróides (déc. 1980) (AKTAR; SENGUPTA; CHOWDHURY, 2009). No Brasil, os primeiros

registros sobre usos de organoclorados são de 1946 (CETESB, 2018) e a retirada dessas moléculas do mercado para usos agropecuário e domissanitário ocorreu de forma gradativa, a partir de 1985 para grande parte dos compostos e em 2019 para o acaricida dicofol (STOCKHOLM CONVENTION, 2007).

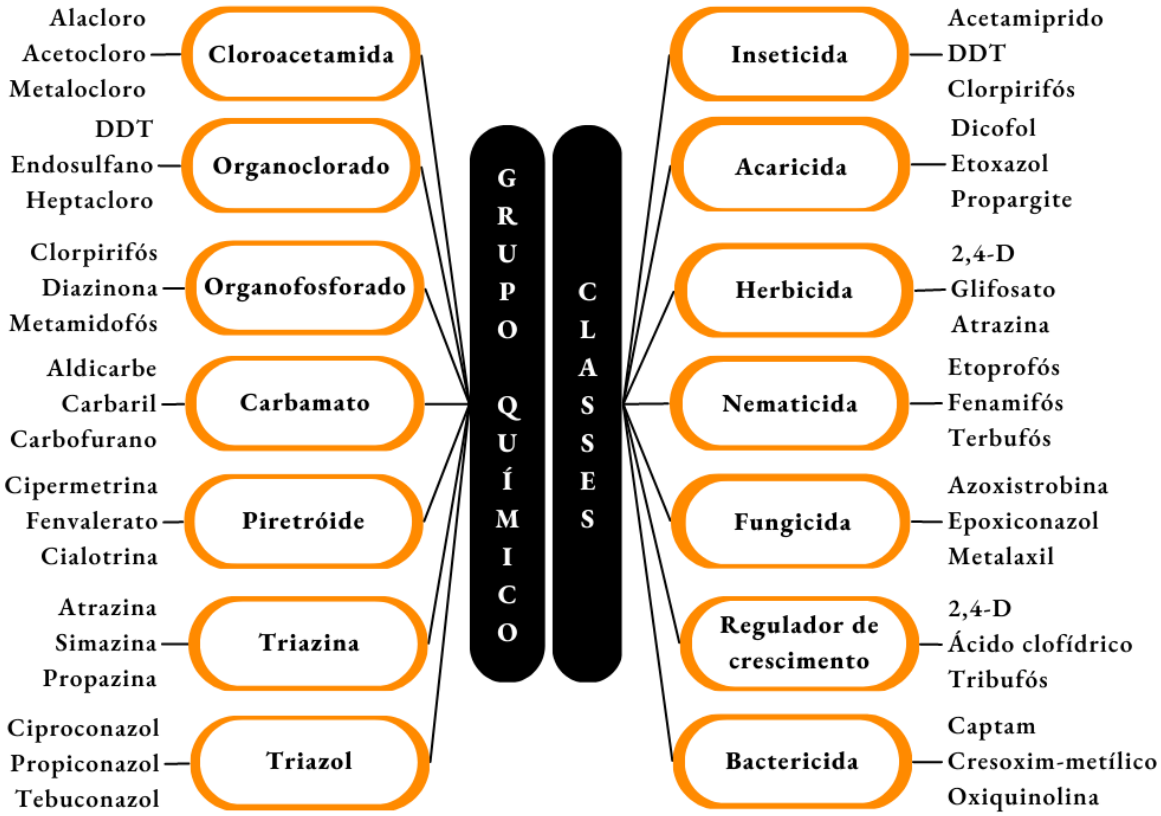

Figura 6. Alguns grupos químicos e classes com seus respectivos agrotóxicos representantes.
Fonte: Adaptado de PPDB (2022).

Os agrotóxicos aplicados na agricultura podem alcançar matrizes ambientais por diferentes rotas, como água, solo e ar (SHARMA *et al.*, 2019). Como mostrado na Figura 7, quando pulverizados em um campo agrícola, por exemplo, essas substâncias podem atingir as águas, que são os ambientes mais baixos do relevo, por meio da deriva, precipitação, escoamento superficial e lixiviação. O escoamento superficial é uma forma potencial de transporte dessas substâncias (OLIVEIRA; BRIGHENTI, 2011) para os corpos hídricos, contudo, com a intensificação das chuvas também ocorre paralelamente a diluição das suas concentrações (BERTON; BRUGNERA; DORES, 2018).

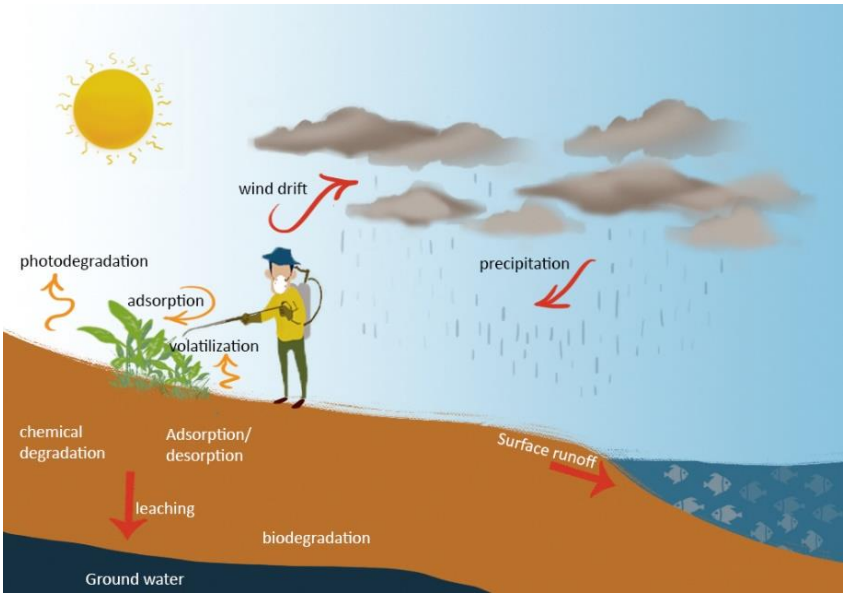

Figura 7. Transformação e transporte de agrotóxicos em sistema agrícola para o corpo hídrico superficial. Fonte: Caldas (2019).

A agricultura é a principal fonte de contaminação das águas superficiais por agrotóxicos e alguns fatores determinam o alcance desses contaminantes e seus produtos de degradação nos corpos hídricos, incluindo condições de aplicação e proximidade da área de aplicação com as águas, condições meteorológicas, propriedades físico-químicas do princípio ativo, impurezas presentes e aditivos misturados no produto formulado e produtos de degradação ou metabólitos (WHO, 2016). Adicionalmente, a contaminação também pode ser originária de fontes pontuais como áreas de recepção de embalagens de agrotóxicos e locais de beneficiamento de frutas (VEIGA, 2017).

As propriedades físico-químicas de alguns agrotóxicos são apresentadas na Tabela 2 e são relevantes para compreensão da sua movimentação no ambiente. Coeficiente de partição octanol-água, apresentado de forma logarítmica (Log K_{ow}), indica a solubilidade da substância, sendo maior para moléculas mais apolares (OLIVEIRA; BRIGHENTI, 2011). O índice K_{oc} é o coeficiente que estima a tendência de partição de um agrotóxico da fase líquida para a matéria orgânica do solo. É obtido dividindo o índice K_d (coeficiente de partição sólido-líquido) pela quantidade de carbono orgânico no solo. Solubilidade e K_{oc} geralmente são inversamente proporcionais, o que significa que o aumento na solubilidade resulta em menor adsorção. A pressão de vapor está relacionada com a tendência de volatilização no estado normal da molécula (sólido ou líquido) e é uma propriedade importante para avaliar a distribuição ou transferência de um agrotóxico no ambiente. O tempo de meia vida (DT_{50}) pode ser usado para comparar as taxas de degradação de um agrotóxico em diferentes situações, como no campo e na água (Tabela 2).

Tabela 2. Algumas propriedades físico-químicas para alguns agrotóxicos muito utilizados no Brasil e/ou mais detectados nas águas doces superficiais.

Agrotóxico	**K_d**	**K_{oc}**	**Sol_w mg/L (20 °C)**	**Log K_{ow} pH 7, 25 °C**	**Pressão de vapor mPa (20 °C)**	**DT_{50} solo**	**DT_{50} água**
Glifosato	209.4	1424	100000	-6.28	0.0131	6.45	9.9
2,4-D	0.70	39.3	24300	-0.82	0.009	28.8	7.7
Atrazina	-	100	35	2.7	0.039	29	80
Imidacloprido	-	-	610	0.57	$4.0x10^{-07}$	174	174
Carbendazim	-	-	8	1.48	0.09	22	7.9
Simazina	-	130	5	2.3	0.00081	90	46
Mancozebe	9.7	998	6.2	2.3	0.013	0.05	0.2
Clomazona	-	300	1212	2.58	27	27.3	54
Quincloraque	-	50	0.065	-1.15	0.01	540.5	-
Acefato	1.6	302	790000	-0.85	0.226	3	-

K_d: coeficiente de distribuição solo/sedimento; K_{oc}: coeficiente de distribuição normalizada orgânico-carbono; Sol_w: solubilidade em água; Log K_{ow}: coeficiente de partição octanol-água; DT_{50}: tempo necessário para que a concentração da substância em condições definidas diminua para 50% da concentração inicial. Fonte: PPDB (2022).

Em geral, compostos com alta solubilidade e mobilidade na água tendem a alcançar as águas subterrâneas, enquanto os com baixa mobilidade tendem a ficar no solo/sedimento, porém podem alcançar os corpos hídricos superficiais pelo escoamento (CALDAS, 2019). E ainda, há probabilidade de que agrotóxicos com grande pressão de vapor possam ser transportados a maiores distâncias. Desse modo, como mostrado na Tabela 1, agrotóxicos como quincloraque, mancozebe e simazina são pouco solúveis em água e, portanto, tendem a permanecer no solo/sedimentos, diferente do herbicida 2,4-D, por exemplo. Contudo, as moléculas modernas de agrotóxicos foram criadas para serem menos persistentes, sendo mais comum atingirem os corpos hídricos a partir do pico de escoamento e a maioria dos agrotóxicos utilizados atualmente são moderadamente solúveis em água e facilmente lixiviados no solo (WHO, 2016).

2.2 Uso de agrotóxicos pelo mundo

Segundo dados da FAO, os países que mais utilizaram agrotóxicos entre 1990 (1.685.494,45 ton.) e 2020 (2.661.124,23 ton.) foram Estados Unidos, China, Brasil, Argentina e Federação Russa (FAO, 2022a). A Figura 8 mostra que essas substâncias são utilizadas globalmente em larga escala e que em muitos países o consumo foi maior que 24401 ton. Dentre os continentes, a América foi

o maior consumidor (45.5%), seguida da Ásia (28.5%) e da Europa (20.7 %). Em 2020, as classes herbicidas (1.397.465,09 ton.), fungicidas e bactericidas (605.986,15 ton.) e inseticidas (471.237,79 ton.) foram as mais consumidas mundialmente. Contudo, quando considerados dados médios de utilização de agrotóxicos por área (2020), Santa Lúcia, no Caribe (20.48 kg/ha), Hong Kong (18.33 kg/ha), Maldívias (16.69 kg/ha), Oman (15.78 kg/ha) e Israel (14.51 kg/ha) são os primeiros no ranking. Brasil está na 26° posição, com 5.94 kg/ha (FAO, 2023).

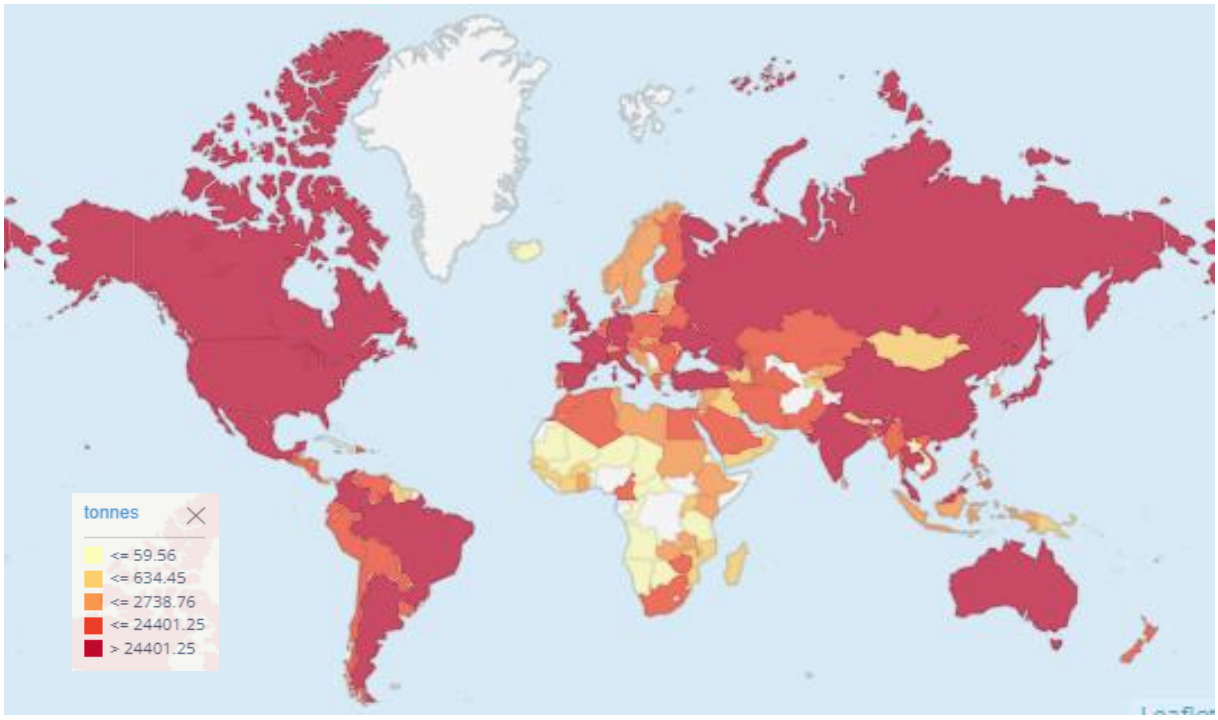

Figura 8. Distribuição do consumo mundial de agrotóxicos em toneladas evidenciando que a maior parte dos países utilizaram mais de 24401.25 toneladas dessas substâncias.
Fonte: FAO (2022).

Dados históricos de 2008 a 2012 nos Estados Unidos, mostram que a classe herbicida foi a mais utilizada no país (ATWOOD; PAISLEY-JONES, 2008), diferente da União Europeia que a classe de fungicidas e bactericidas foram os mais utilizados pelos Estados Membros (EUROSTAT, 2021). No Brasil, a maioria dos agrotóxicos consumidos também são herbicidas (56,63%), seguido de fungicidas (17,90%) e inseticidas (12,87%) (IBAMA, 2022a). Os dados de vendas de agrotóxicos e afins em 2021 para o país mostram que a região Centro-Oeste foi a maior consumidora (258.192,86 ton.) e os estados do Mato Grosso (150.981,23 ton.), São Paulo (90.918,16 ton.) e Rio Grande do Sul (76.081,85 ton.) os recordistas de vendas no país (Figura 9) (IBAMA, 2022b). No Distrito Federal, em 2021 foram comercializados 1.563,71 ton. e os fungicidas se destacaram dentre os primeiros colocados.

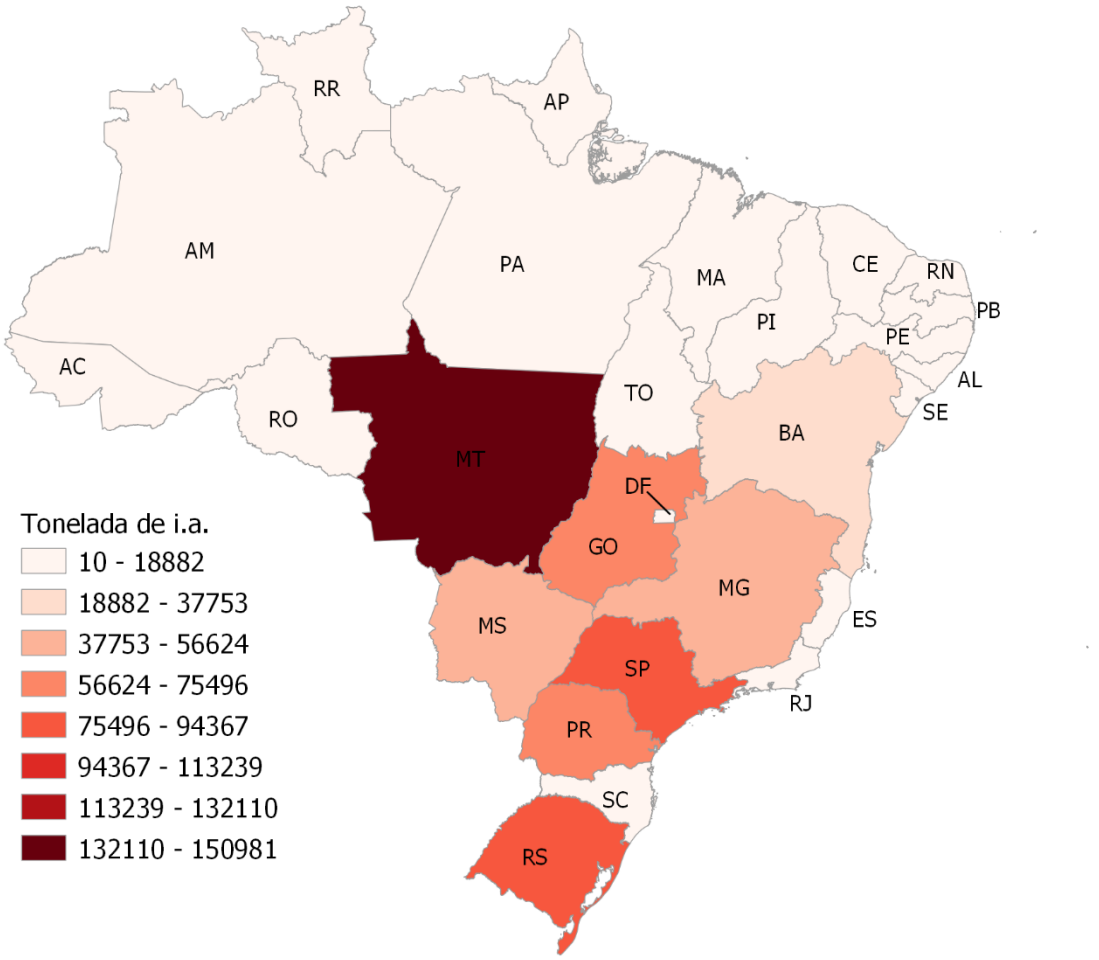

Figura 9. Total das vendas de agrotóxicos e afins nos estados brasileiros e Distrito Federal em 2021 apresentada por toneladas de ingrediente ativo (i.a.).
Fonte: Adaptado de IBAMA (2022b).

Glifosato, 2,4-D, mancozebe, clorotalonil e atrazina são os agrotóxicos mais utilizados no Brasil (Figura 10), muito semelhante ao ranking dos mais vendidos no Distrito Federal: glifosato, clorotalonil, atrazina, acefato e mancozebe (IBAMA, 2022a). Conforme o Painel de Monografias de Agrotóxicos em Vigência da ANVISA, glifosato possui uso aprovado para 73 culturas, incluindo feijão, trigo, soja, milho, arroz e diversas frutíferas (ANVISA, 2022). O herbicida 2,4-D tem uso aprovado para 13 culturas, incluindo café, milho, milheto, soja e cana-de-açúcar. O fungicida mancozebe é aprovado para 60 culturas, dentre elas muitas frutíferas, cereais, leguminosas, hortaliças, algodão e cana-de-açúcar. Clorotalonil possui aprovação para uso em 77 culturas, incluindo cereais, diversas frutíferas, leguminosas, hortaliças, algodão e café. Atrazina tem uso aprovado para 6 culturas: abacaxi, cana-de-açúcar, milheto, milho, soja e sorgo. Soja, algodão, milho, tomate, feijão e citros são algumas das 11 culturas das quais acefato tem uso aprovado no país.

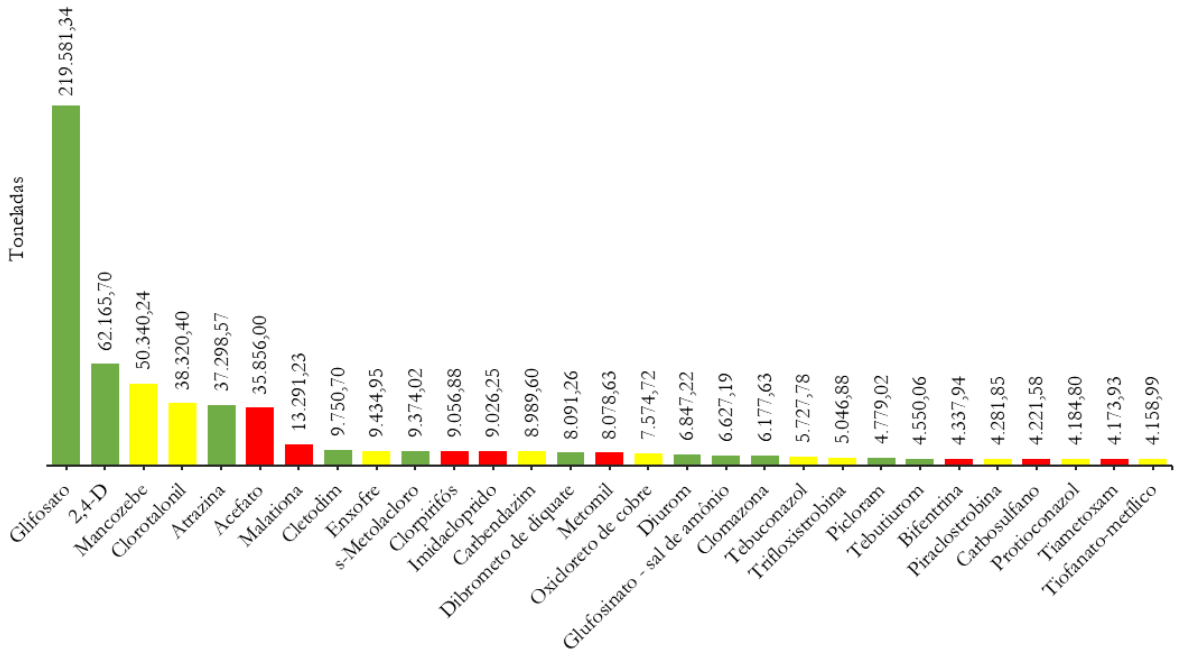

Figura 10. Os 30 ingredientes ativos mais vendidos no Brasil em 2021 (em toneladas) classificados conforme espécie-alvo a ser combatida. Verde: herbicida. Amarelo: fungicida. Vermelho: inseticida. Adaptado de IBAMA (2022a).

Globalmente, no mesmo período de crescimento do uso de agrotóxicos (1994 a 2021) também houve aumento da produção das *commodities* agrícola, principalmente cereais, cana de açúcar e milho (FAO, 2022b). No Brasil, as culturas de soja, milho e cana-de-açúcar são as que historicamente tiveram a maior área plantada por hectare e maior quantidade produzida em toneladas (Figura 11) (IBGE, 2022). Como mostrado na Figura 11, no mesmo período as vendas de agrotóxico no país também aumentaram. Esse aumento da produção agrícola e do uso de agrotóxicos pode levar ao aumento dos níveis dessas substâncias em matrizes ambientais, como os recursos hídricos superficiais.

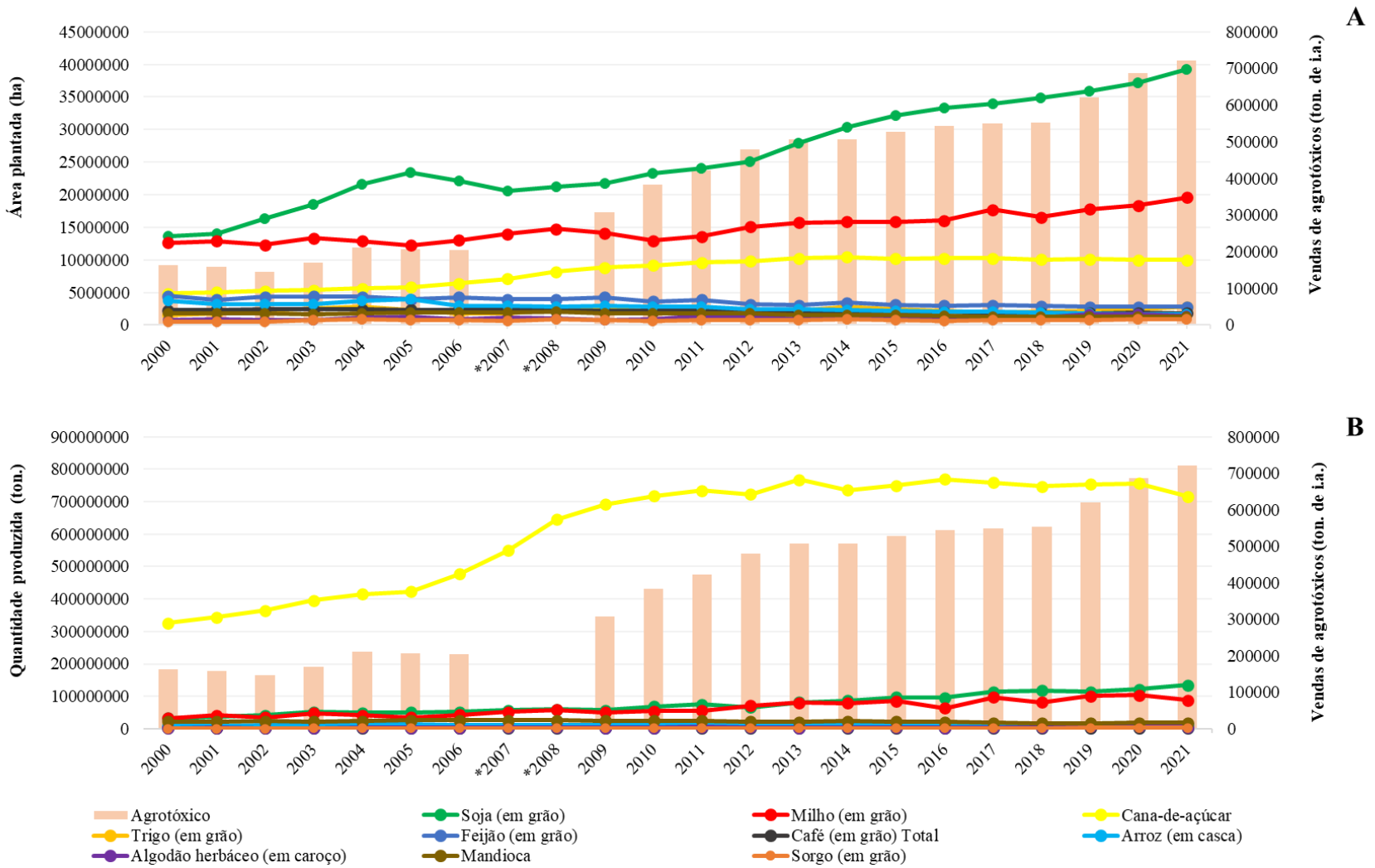

Figura 11. Série histórica de 2000 a 2021 da **A)** área plantada em hectares e da **B)** quantidade produzida em toneladas com as dez maiores culturas agrícolas brasileiras, bem como da quantidade de agrotóxicos vendidos em toneladas de ingrediente ativo (i.a.) no país. Os dados dos anos de 2007 e 2008 não foram sistematizados pelo IBAMA.
Fonte: Adaptado de IBAMA (2022b) e IBGE (2022).

2.3 Contaminação de corpos hídricos superficiais por agrotóxicos

Na literatura há muitos estudos que mostram a detecção de agrotóxicos na água doce superficial. Pirsaheb *et al.* (2017) compilaram 32 trabalhos sobre a contaminação das águas por agrotóxicos, principalmente dos grupos químicos organoclorados e organofosforados, em países da América, Europa, África e Ásia. Diazinona, endosulfam, clorpirifós, malationa, dieldrin e aldrin foram os agrotóxicos mais avaliados, sendo que o inseticida diazinona teve a maior concentração detectada (768.91 μg/L). Em estudo sobre ocorrência, impactos e aspectos gerais de agrotóxicos nas águas doces superficiais entre 2012 e 2019, Souza *et al.* (2020) mostraram que as maiores concentrações detectadas, conforme classes, foram de diuron (22.77 μg/L), dimetoato (61.2 μg/L) e metconazol (5.76 μg/L).

Outros estudos ainda mostram a presença dos agrotóxicos em diferentes tipos de corpos hídricos superficiais. Na Grécia, próximo às fronteiras grega-búlgara-turca, atrazina, metolacloro, alacloro, prometrina e molinato foram frequentemente encontrados na bacia do rio Evros em concentrações maiores que 0.1 μg/L (VRYZAS *et al.*, 2009). Na Venezuela, os agrotóxicos diazinona (459 μg/L), clorpirifós (302.9 μg/L), mancozebe (108 μg/L), metamidofós (107 μg/L) e dimetoato (55 μg/L) foram detectados com maior frequência e concentrações nos rios Las Tapias, Las Plaiytas e Mocoties (MOLINA-MORALES *et al.*, 2012). Em Ruanda foi verificada a presença em lagos e rios de metalaxil (4.82 μg/L), carbendazim (0.015 μg/L) e malationa (0.193 μg/L), agrotóxicos muito utilizados nas fazendas da região (HOUBRAKEN *et al.*, 2017).

No Brasil, um compilado de 29 estudos realizados em cinco estados mostrou que clomazona foi o agrotóxico mais avaliado nos estudos e fipronil o detectado em maior concentração em águas doces superficiais (26.2 μg/L) (ALBUQUERQUE *et al.*, 2016). Em Mato Grosso, os agrotóxicos carbofurano (<0.20 μg/L), carbendazim (<0.99 μg/L), trifluralina (0.28 μg/L), diuron (<0.39 μg/L), metolacloro (0.34 μg/L), imidacloprido (<0.19 μg/L), acetamiprido (<0.19 μg/L) e malationa (0.94 μg/L) foram encontrados em suas maiores concentrações em uma região de cabeceira do rio São Lourenço (BERTON; BRUGNERA; DORES, 2018). Na região de irrigação Jaguaribe-Apodi no Ceará, atrazina (0.96 μg/L), azoxistrobina (1.36 μg/L), clorpirifós (0.63 μg/L), difenoconazol (6.93 μg/L), paration-metílica (0.39 μg/L), propiconazol (10.14 μg/L) e triazofós (6.91 μg/L) foram detectados (MILHOME *et al.*, 2015). No Distrito Federal, atrazina (0.0055 μg/L) foi encontrada nos lagos Descoberto e Paranoá (SODRÉ *et al.*, 2018), que pertecem a duas unidades hidrográficas que não possuem atividade agrícola importante. Recentemente, em um estudo desenvolvido na área da sub-bacia agrícola do Rio Jardim, glifosato e AMPA foram detectados em amostras de águas superficiais nas maiores concentrações de 0.018 e 0.0057 μg/L, respectivamente (PIRES *et al.*, 2023).

Todos esses estudos mostram que a complexa gama de agrotóxicos encontrados em água superficial é um reflexo da sua utilização nas diferentes escalas espaciais (local, regional, nacional e global), facilitado também pelo manejo inadequado, as condições ambientais e climáticas e o tipo de solo. A comercialização dos agrotóxicos no Brasil, por exemplo, historicamente o terceiro maior consumidor global (FAO, 2022a), teve aumento nos últimos anos, de 162.461,96 ton. no ano de 2000 para 720.869 ton. no ano de 2021 (Figura 11) (IBAMA, 2022b). Entretanto, dentre os agrotóxicos mais comercializados em 2021, apenas glifosato, 2,4-D, atrazina, malationa e trifluralina possuem padrões determinados na Resolução CONAMA N° 357 de 2005 para as águas doces superficiais, que inclui outras 22 substâncias. O herbicida clomazona, por exemplo, que também está no ranking de mais vendidos (Figura 10), foi ainda um dos agrotóxicos mais detectados em águas doces superficiais no Brasil (ALBUQUERQUE *et al.*, 2016) e não compõe a lista de agrotóxicos da Resolução para qualidade da água.

3. Efeitos ecotoxicológicos dos agrotóxicos para a biota aquática

3.1 Ecotoxicidade

A presença de agrotóxicos no ambiente pode ocasionar a perda da biodiversidade. Segundo Tang *et al.* (2021), há um risco global de poluição por agrotóxicos em áreas vulneráveis, com alta biodiversidade e baixa disponibilidade de água doce. Na água, os agrotóxicos podem ocasionar efeitos adversos aos organismos (OLIVER *et al.*, 2012; RONCO; BÁEZ; GRANADOS, 2004) por esta matriz ambiental ser receptora temporária ou final da descarga de contaminantes (OLIVEIRA-FILHO; SISINNO, 2013).

Segundo Solomon *et al.* (2010), toda substância possui uma dose letal em algum organismo, uma dose menor que provocará efeitos adversos crônicos e uma dose muito baixa que não ocasionará efeitos adversos (Figura 12). Adicionalmente, também pode haver uma dose menor que estimule ou beneficie de alguma forma o organismo a ela exposto. Complementarmente, o efeito adverso ocasionado por uma substância envolve um conjunto de fatores, incluindo alterações genéticas, bioquímicas, morfológicas ou fisiológicas (sinais e sintomas) (OLIVEIRA-FILHO; SISINNO, 2013).

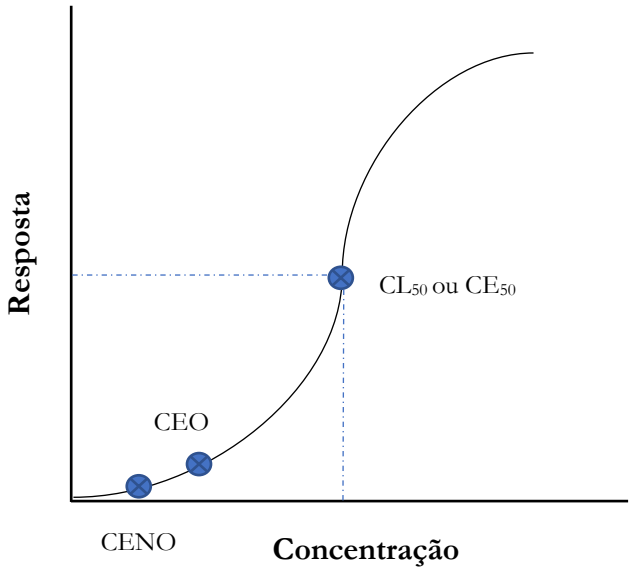

Figura 12. Relação hipotética de dose-resposta mostrando que para um produto químico em contato com algum organismo sempre haverá uma dose que não cause efeito, outra que ocasione efeito crônico e uma dose que cause efeito agudo e morte ou efeito adverso a metade dos indivíduos.
Fonte: Adaptado de Solomon *et al.* (2010).

Os efeitos adversos de determinada substância a um organismo podem ser agudos, decorrentes de uma exposição a alta concentrações por um curto período, e crônicos, ocasionados por uma exposição a concentrações baixas por um período mais longo. A toxicidade aguda é uma resposta severa e rápida e a toxicidade crônica caracteriza-se por uma toxicidade cumulativa, ocasionando efeitos como mutagênese e carcinogênese, por exemplo (OLIVEIRA-FILHO; SISINNO, 2013). Muitos testes de toxicidade aguda e crônica são realizados com espécies modelos, assim chamadas por serem bem estudadas e validadas em ensaios ecotoxicológicos realizados em condições específicas e controladas (COSTA *et al.*, 2008). Para a toxicidade aguda, os estudos visam determinar a concentração letal (CL_{50}) ou que causa imobilidade (concentração efetiva – CE_{50}) dos organismos. A toxicidade crônica pode incluir efeitos sobre mais de uma fase do ciclo de vida, como o impacto da substância no comportamento, reprodução e crescimento de determinada espécie e buscam determinar a concentração de efeito não observado (CENO) e a menor concentração em que um efeito foi observado (CEO) (COSTA *et al.*, 2008).

Dados ecotoxicológicos estão disponíveis em bases de dados abertas como a *Pesticide Properties Database* (PPDB) e a *NORMAN Substance Database,* bem como há muitos estudos publicados para diferentes organismos modelos para diversos agrotóxicos (FAIRCHILD; RUESSLER; CARLSON, 1998; IVEY *et al.*, 2017; PEEBUA *et al.*, 2008; SANFORD *et al.*, 2021; SATYANARAYAN *et al.*, 2004), principalmente para testes agudos. Para a avaliação de risco da

exposição dos organismos aos agrotóxicos, quanto maior for a quantidade de dados para determinada substância, maior será sua confiabilidade.

3.2 Estimativa de risco e normas de qualidade da água

Para estimar o risco de determinada substância para o ecossistema aquático é fundamental que tenha dados disponíveis para representantes de, ao menos, três níveis tróficos (Figura 13) (COSTA *et al.*, 2008), que são fundamentais para o estabelecimento de critérios de qualidade da água para proteção ambiental (UMBUZEIRO; KUMMROW; REI, 2010). Nos Estados Unidos, limites para proteção da vida aquática foram estimados a partir de valores de toxicidade de agrotóxicos para plantas aquáticas, invertebrados e peixes (USEPA, 2022a). No Brasil, a Resolução CONAMA N° 357/2005 estabelece valores máximos para 27 agrotóxicos (BRASIL, 2005) e na União Europeia, a Diretiva 2013/39/EU determina concentrações máximas para alguns agrotóxicos que compõem a lista de substâncias prioritárias e outros poluentes (EUROPEAN COMMISSION, 2013). O compilado dessas normas e os padrões para alguns agrotóxicos são mostrados na Tabela 3.

Tabela 3. Limites para agrotóxicos na água doce superficial do Brasil e União Europeia e padrões de vida aquática (crônico) para plantas não vasculares (PNV), invertebrados (I) e peixes (P) nos Estados Unidos.

Agrotóxico	**Brasil**	**União Europeia**	**Estados Unidos**
	Classe 1-2/3 (µg/L)	**AA/MAC (µg/L)**	**PNV/I/P (µg/L)**
Alacloro	20	0.3/0.7	1.64/110/187
Aldrin	0.005/0.03	∑=0.01/0.005[b]	-
Dieldrin	0.005/0.03	∑=0.01/0.005[b]	-
Atrazina	2/2	0.6/2	< 1/60/5
Carbaril	0.02/70	-	340/0.5/6.8
Clordano	0.04/0.3	-	-
2,4-D	4/30	-	3880/16050/23600
Demeton	0.1/14	-	> 100000/46/5
2,4-Diclorofenol	0.3	-	-
DDT	0.002/1	Total = 0.025[b]	-
Endossulfam	0.056/0.22	0.005-0.0005/0.01-0.004	-
Endrin	0.004/0.2	∑=0.01/0.005[b]	-
Glifosato	65/280	-	12100/49900/25700
Gution	0.005/0.005	-	
Heptacloro	0.000039[a]-0,01/0.03	$2x10^{-7}$-$1x10^{-8}$/$3x10^{-4}$-$3x10^{-5}$	-
Hexaclorobenzeno	0.00029[a]-0.0065	0.05[c]	-
Lindano	0.02/2	-	-
Malation	0.1/100	-	2040/0.06/8.6
Metolacloro	10	-	8/3200/30
Metoxicloro	0.03/20	-	0.7 (I)/7.5 (P) agudo
Paration	0.04/35	-	-
Pentaclorofenol	3[a]-9/9	0.4/1	27/6.9/11
Simazina	2	1/4	6/40/60
2,4,5-T	2/2	-	-
Toxafeno	0.00028[a]-0.01/0.21	-	-
2,4,5-TP	10/10	-	-
Trifluralina	0.2	0.03[b]	21.9/2.4/1.9

[a]Padrões para águas em que haja pesca ou cultivo de organismos para consumo intensivo. [b]Apenas AA. [c]Apenas MAC. AA: *annual average*, MAC: *maximum allowable concentration.*
Fonte: Brasil (2005), European Commission (2013) e USEPA (2023).

Os organismos *Raphidocelis subcapitata*, *Scenedesmus subspicatus* e *Chlorella vulgaris* são algumas espécies representantes do grupo trófico dos produtores primários e muito utilizadas em testes de ecotoxicidade. Espécies do gênero *Daphnia* são geralmente utilizadas em estudos para consumidores primários e *Danio rerio* e *Pimephales promelas* são alguns exemplos de modelos utilizados como representantes dos consumidores secundários. A Figura 13 mostra algumas espécies modelos conforme nível trófico. Contudo, apesar dessas espécies serem utilizadas mundialmente, também há o incentivo para a realização de estudos ecotoxicológicos com organismos nativos. Para o Brasil *Raphidocelis subcapitata, Chlorella vulgaris, Ceriodaphnia dúbia* e *Rhamdia quelen* são algumas espécies modelos nativas (GBIF, 2022; REFLORA, 2022; TCBF, 2022) utilizadas em testes de ecotoxicidade (FAIRCHILD; RUESSLER; CARLSON, 1998; IVEY *et al.*, 2017; KREUTZI *et al.*, 2008; MANAR; VASSEUR; BESSI, 2012; PEEBUA *et al.*, 2008; SOUISSI *et al.*, 2013).

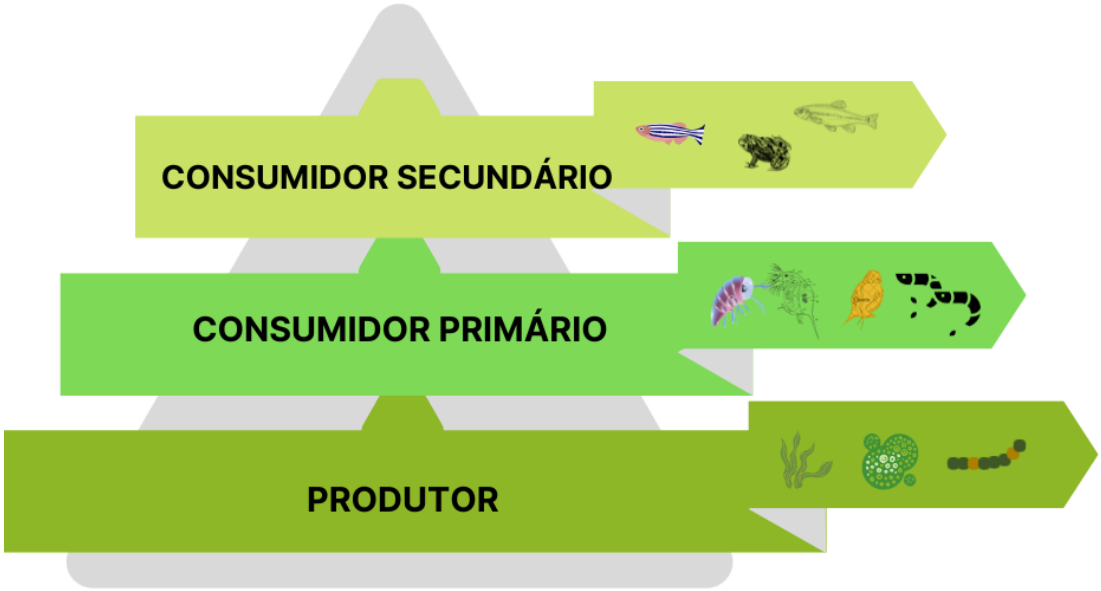

Figura 13. Níveis tróficos representativos do ecossistema aquático e algumas espécies utilizadas como organismos modelos.

A Tabela 4 mostra alguns dados para toxicidade aguda e crônica em diferentes espécies modelos para alguns agrotóxicos mais utilizados no Brasil, detectados em frequência ou/e em maiores concentrações no país (ALBUQUERQUE *et al.*, 2016; BROVINI *et al.*, 2021). Destaca-se que quanto menor a concentração de efeito de uma substância, maior é sua toxicidade. Dessa forma

é possível afirmar que o herbicida atrazina é mais tóxico que o inseticida acefato para alga, assim como carbendazim é mais tóxico para o peixe *Oncorhynchus mykiss* que o fungicida imidacloprido.

Tabela 4. Toxicidade aguda e crônica para alguns agrotóxicos muito utilizados no Brasil e/ou mais detectados em suas águas doces superficiais.

Classe	**Agrotóxico**	**Produtor (µg/L)**	**Consumidor Primário (µg/L)**	**Consumidor Secundário (µg/L)**
Herbicida	Glifosato	*Lemna gibba* CE_{50} (7 d) = 12000	*Daphnia magna* CENO (21 d) = 12500	CENO (21 d) = 1000
	2,4-D	*Lemna gibba* CE_{50} (7 d) biomassa = 2700	*Daphnia* CL_{50} (48 h) = 134200	*Pimephales promelas* CL_{50} (96 h) = 100000
	Atrazina	*Lemna gibba* CE_{50} (72 h) biomassa = 19	*Daphnia magna* CEO (21 d) = 250	*Oncorhynchus mykiss* CENO (21 d) = 2000
	Simazina	*Lemna gibba* CE_{50} (72 h) biomassa = 300	*Daphnia magna* CE_{50} (48 h) = 1100	Peixe CENO = 700
	Clomazona	*Navicula pelliculosa* CE_{50} (120 h) crescimento = 136	*Americamysis bahia* CL_{50} (96 h) = 530	*Oncorhynchus mykiss* CENO (21 d) = 2300
	Quincloraque	*Lemna gibba* CE_{50} (7 d) biomassa = 500	*Daphnia magna* CE_{50} (48 h) = >29800	*Oncorhynchus mykiss* CL_{50} (96 h) = >100000
Inseticida	Acefato	Alga CE_{50} (72 h) crescimento = 98000	*Americamysis bahia* CL_{50} (96 h) = 7300	*Galaxias maculatus* CENO (20 d) = 4700
	Imidacloprido	*Scenedesmus subspicatus* CENO (96 h) crescimento = 10000	*Americamysis bahia* CL_{50} (96 h) = 34	*Oncorhynchus mykiss* CENO (21 d) = 9020
Fungicida	Carbendazim	*Scenedesmus subspicatus* CE_{50} (72 h) crescimento = >7700	*Daphnia magna* CENO (21 d) = 1.5	*Oncorhynchus mykiss* CENO (21 d) = 3.2
	Mancozebe	*Pseudokirchneriella subcapitata* CE_{50} (72 h) crescimento = 44	*Daphnia magna* CENO (21 d) = 7.3	*Oncorhynchus mykiss* CL_{50} (96 h) = 74

CE_{50}: concentração efetiva; CL_{50}: concentração letal; CENO: concentração de efeito não observado; CEO: menor concentração em que um efeito foi observado.
Fonte: PPDB (2022).

Segundo IBAMA (2017), a avaliação de risco é a probabilidade de ocorrência de um efeito ecológico adverso resultante da exposição a um ou mais agente estressor e acontece em função da exposição e pela toxicidade. Para a estimativa de risco de determinado agrotóxico, a abordagem probabilística ou determinística pode ser adotada. A abordagem probabilística é mais completa e resulta numa distribuição provável com valores de exposição e risco utilizando modelos probabilísticos para sua determinação, incluindo dados de campo para demonstrar vários cenários (REBELO; CALDAS, 2014). A abordagem determinística é mais simples, descreve um cenário único, utilizando o quociente de risco (QR), em que a concentração ambiental estimada é dividida

por valores de ecotoxicidade (agudos e crônicos), e o compara a um nível de preocupação (*level of concern,* LOC), sendo eficiente e de baixo custo para verificação de situações com potencial risco. A avaliação de risco é realizada de forma faseada, em que os recursos são otimizados e empregados à medida da complexidade do problema e do risco do produto, com a abordagem determinística utilizada nas fases iniciais e a abordagem probabilística utilizada em cenários que exigem mais refinamento (REBELO; CALDAS, 2014).

Na avaliação determinística, o QR é determinado pela seguinte equação: $QR = \frac{MEC}{PNEC}$, em que MEC (*measured environmental concentration*) é a concentração ambiental detectada para o agrotóxico e PNEC (*predicted non-effect concentration*) é derivado de um dado de ecotoxicidade dividido por um fator de segurança, que dependerá da disponibilidade de dados de ecotoxicidade encontrados para representantes de mais de um nível trófico (UMBUZEIRO *et al.*, 2011). Essa abordagem é utilizada na estimativa de risco de agrotóxicos para organismos aquáticos em países como Austrália, Estados Unidos e União Europeia (LEE-STEERE, 2009; USEPA, 2022b), e no Brasil para estimativa de risco para abelhas (CHAM *et al.*, 2017).

O Quociente de Risco é uma potencial abordagem a ser utilizada também em dados resultantes da avaliação de agrotóxicos em águas superficiais. Juksu *et al.* (2019) notaram que para amostras coletadas em corpos hídricos superficiais na Tailândia o fungicida clotrimazol tinha alto risco de toxicidade para organismos aquáticos. Em estudo realizado no Rio Grande do Sul, no lago Guaíba, Perin *et al.* (2021) mostraram que para algas os agrotóxicos atrazina, ciproconazol, diuron e simazina tiveram maiores riscos de toxicidade, para invertebrados os inseticidas DDT, seu produto de degradação DDD, e bifentrina, sendo este último também o mais tóxico para peixes. Desse modo, o QR é uma ferramenta apropriada para avaliar possíveis riscos de agrotóxicos nas águas superficiais como as da Bacia Hidrográfica do Rio Preto no Distrito Federal.

III. OBJETIVOS

Objetivo Geral

Analisar cenários sobre a contaminação da água doce superficial por agrotóxicos a partir das escalas global, nacional e regional.

Objetivos Específicos

- Revisar criticamente estudos sobre a presença de agrotóxicos em água doce superficial no mundo;
- Avaliar se os valores máximos (VMs) para agrotóxicos presentes na Resolução CONAMA N° 357 de 2005 são seguros para a biota aquática, comparando-os com dados ecotoxicológicos publicados;
- Avaliar a presença de agrotóxicos em águas superficiais na Bacia Hidrográfica do Rio Preto, Distrito Federal, Brasil.

IV. ESTRUTURA DA TESE

A tese foi estruturada em três capítulos seguindo o formato de artigo científico, sendo dois deles redigidos na língua inglesa e já publicados e um na língua portuguesa. Foram desenvolvidos de forma que o contexto sobre a contaminação dos agrotóxicos a nível internacional, bem como da segurança da aplicabilidade dos padrões para essas substâncias conforme normativa brasileira fossem verificados e avaliados criticamente. Por conseguinte, a partir de ambos os contextos, relacioná-los com a avaliação de dados de campo a nível regional, mostrando a importância da avaliação dessas substâncias na água e do potencial risco aos organismos aquáticos.

O capítulo 1, intitulado "Pesticides in surface freshwater: a critical review" foi publicado na revista *Environmental Monitoring and Assessment,* e atende ao primeiro objetivo desta tese.

O segundo capítulo, intitulado "Relationship between pesticide standards for classification of water bodies and ecotoxicity: a case study of the brazilian directive" foi publicado na revista *Toxics*, e atende ao segundo objetivo da tese.

O terceiro capítulo, intitulado "Avaliação da presença de agrotóxicos em águas superficiais na Bacia Hidrográfica do Rio Preto, Distrito Federal, Brasil" contempla o último objetivo da tese.

CAPÍTULO 1: AGROTÓXICOS NAS ÁGUAS DOCES SUPERFICIAIS: UMA REVISÃO CRÍTICA

Publicado na revista *Environmental Monitoring and Assessment*, 194:452, 2022 (Anexo I).

Araújo, E.P., Caldas, E.D. & Oliveira-Filho, E.C. Pesticides in surface freshwater: a critical review. *Environ Monit Assess* 194, 452 (2022). https://doi.org/10.1007/s10661-022-10005-y

RESUMO

O objetivo deste estudo foi revisar criticamente estudos publicados até Novembro de 2021 que investigaram a presença de agrotóxicos nas águas doces superficiais para responder a três perguntas: (1) em quais países os estudos foram realizados? (2) quais agrotóxicos foram mais avaliados e detectados? e (3) quais agrotóxicos possuem as maiores concentrações? Utilizando o protocolo Prisma, 146 artigos publicados entre 1946 a Novembro de 2021 foram incluídos nesta análise: 127 estudos utilizaram amostragem instantânea, 10 utilizaram amostragem passiva e 9 utilizaram ambas as técnicas de amostragem. Na série histórica de 45 anos, USA, China e Espanha foram os países que realizaram o maior número de estudos. Atrazina foi o agrotóxico mais avaliado (56% dos estudos), detectado em 43% dos estudos que utilizaram amostragem instantânea e o mais detectado nos estudos com amostragem passiva (68%). Os compostos com maiores concentrações máxima e média na amostragem instantânea foram molinato (211.38 μg/L) e bentazona (53 μg/L), respectivamente, e na amostragem passiva, foram oxifluorfen (16.8 μg/L) e atrazina (4.8 μg/L), respectivamente. Os níveis encontrados para atrazina, p,p'-DDD e heptacloro no Brasil foram maiores que os valores máximos estabelecidos para água superficial no país. As concentrações excederam os *endpoints* toxicológicos para ao menos 11 agrotóxicos, incluindo atrazina (*Daphnia* LC_{50} e peixe NOAEC), cipermetrina (algae EC_{50}, *Daphnia* e peixe LC_{50}; peixe NOAEC) e clorpirifós (*Daphnia* e peixe LC_{50}; peixe NOAEC). Esses resultados podem ser utilizados em planejamentos para programas de monitoramento de agrotóxicos na água doce superficial, a nível regional e global, e para o estabelecimento ou a atualização de normativas para a qualidade da água.

Palavras-chave: água doce superficial, contaminação por pesticida, herbicidas, inseticidas, organoclorados, organofosforados.

CAPÍTULO 2: RELAÇÃO ENTRE AGROTÓXICOS E PADRÕES PARA CLASSIFICAÇÃO DE CORPOS HÍDRICOS E ECOTOXICIDADE: UM ESTUDO DE CASO DA NORMATIVA BRASILEIRA

Publicado na revista *Toxics*, 10:12, 2022 (Anexo II).

Araújo, E.P.; Caldas, E.D.; Oliveira-Filho, E.C. Relationship between Pesticide Standards for Classification of Water Bodies and Ecotoxicity: A Case Study of the Brazilian Directive. *Toxics* 2022, 10, 767. https://doi.org/10.3390/toxics10120767

RESUMO

O objetivo desse estudo foi avaliar se os valores máximos (VMs) para agrotóxicos nas águas doces superficiais incluídos na Resolução CONAMA N° 357/2005 são seguros para a biota aquática comparando-os com dados ecotoxicológicos publicados na literatura. Os termos "aquatic toxicity", "chronic" "acute", "LC_{50}", "EC_{50}", "NOEL", "NOEC" e o nome de cada agrotóxico foram usados para buscas nas plataformas de pesquisas. Dados de 534 testes reportados em 37 artigos publicados e três bases de dados ecotoxicológicas foram incluídos neste estudo; 24% dos testes foram conduzidos com organismos produtores, 34% com consumidores primários e 42% com consumidores secundários. Microcrustáceos do gênero *Daphnia* e os peixes *Pimephales promelas* e *Oncorhynchus mykiss* foram os organismos mais utilizados. Atrazina, alacloro e metolacloro foram os agrotóxicos mais investigados. Atrazina e alacloro são aprovados no Brasil, sendo atrazina o quarto agrotóxico mais utilizado no país. Os resultados indicam que dos 27 agrotóxicos presentes na resolução, 16 possuem um quociente de risco maior que o nível de preocupação para ao menos um parâmetro ecotoxicológico e pode não proteger a biota aquática. O inseticida malationa, usado em várias culturas agrícolas no Brasil, foi o que apresentou maiores QRs (3125 e 3,125,000 para águas doces classificadas como 1/2 e 3, respectivamente), relatados para a LC_{50} (96 h) de 0.000032 μg/L em *Chironomus ramosus*. Esses resultados indicam que a Resolução CONAMA 357/2005 deve ser atualizada conforme o uso atual de agrotóxicos no país e seus VMs devem ser reavaliados para que não representem toxicicidade à abiota aquática.

Palavras-chave: toxicologia ambiental, limites de agrotóxicos, corpos hídricos, qualidade da água.

CAPÍTULO 3: AVALIAÇÃO DA PRESENÇA DE AGROTÓXICOS EM ÁGUAS SUPERFICIAIS NA BACIA HIDROGRÁFICA DO RIO PRETO, DISTRITO FEDERAL, BRASIL

RESUMO

Os agrotóxicos estão presentes nas águas doces superficiais de muitas regiões do globo, contudo, o panorama dessas substâncias na principal bacia agrícola do Distrito Federal ainda é pouco conhecido. Dessa forma, o objetivo deste estudo foi avaliar a presença de agrotóxicos em águas superficiais na Bacia Hidrográfica do Rio Preto, Distrito Federal, Brasil. Amostras foram coletadas em 19 pontos, em quatro campanhas amostrais, sendo duas em período de seca e duas em período de chuva. Foram realizadas análises para um conjunto de 81 agrotóxicos, divididos em dois métodos que utilizaram cromatografia líquida acoplada à espectrometria de massas sequencial (LC-MS/MS). Quatorze agrotóxicos e dois produtos de degradação foram detectados, incluindo glifosato, atrazina e carbendazim, compostos muito utilizados no Distrito Federal e detectados em todas as campanhas de amostragem, além do AMPA, produto de degradação do glifosato. Carbendazim e metamidofós são moléculas banidas no país. Acefato, detectado no Ribeirão Jacaré (P4), foi encontrado na maior concentração (2.59 μg/L) e é provável que seu uso tenha ocorrido nas culturas de feijão, milho e/ou soja da região de estudo. Os compostos atrazina-2-hidroxi, carbendazim, pirimifós-metílico, tiametoxam e fipronil apresentaram potencial de ocasionarem efeitos adversos à biota aquática nas maiores concentrações detectadas. Os resultados mostram que há agrotóxicos na água superficial da BHRP e, dentre eles, atrazina e glifosato estão em conformidade com a CONAMA N° 357/2005, porém, o VM para atrazina não é seguro para a biota. Mesmo detectados em baixas concentrações na água, carbendazim, pirimifós-metílico, tiametoxam, fipronil e atrazina-2-hidroxi podem causar toxicidade para os organismos aquáticos, conforme quociente de risco avaliado.

Palavras-chave: *pesticide*, ecossistema aquático, poluentes aquáticos, toxicidade à biota.

1. Introdução

Os agrotóxicos e seus produtos de degradação são transportados aos corpos hídricos por diversas rotas, sendo as mais comuns o escoamento da água, as partículas do solo em processos erosivos e a deriva de gotículas durante a pulverização (OLIVER *et al.*, 2012). O descarte indevido de recipientes de produtos agrotóxicos e a lavagem de equipamentos de aplicação (KONSTANTINOU; HELA; ALBANIS, 2006) são outras fontes de contaminação. Adicionalmente, fatores como propriedades físico-químicas, questões ambientais e climáticas podem induzir a movimentação dessas substâncias nos ecossistemas (SISINNO; MOREIRA, 2013) e representar riscos aos diversos níveis tróficos do ecossistema aquático (ARAÚJO; CALDAS; OLIVEIRA-FILHO, 2022b) e à saúde humana (CALDAS, 2019).

Segundo Araújo, Caldas e Oliveira-Filho (2022a), cerca de 1064 ingredientes ativos e produtos de degradação de diferentes grupos químicos e classes foram avaliados nas águas doces superficiais do mundo entre 1976 e 2021, sendo o Brasil o quarto país com maior número de estudos realizados (11). Devido à alta representatividade do agronegócio no Brasil, com grande uso de agrotóxicos (IBAMA 2022a), o país tem um potencial cenário de contaminação dos seus recursos hídricos decorrentes desse uso. Cenários dessa contaminação também foram relatados em revisões recentes sobre essas substâncias nas águas doces superficiais em vários estados brasileiros (ALBUQUERQUE *et al.*, 2016; BROVINI *et al.*, 2021; SOUZA *et al.*, 2020).

No Distrito Federal (DF), estudos recentes detectaram agrotóxicos em lagos urbanos (SODRÉ *et al.*, 2018), na sub-bacia agrícola do rio Samambaia (CORREIA; CARBONARI; VELINI, 2020) e na Bacia Hidrográfica do Rio Preto (BHRP) (PIRES *et al.,* 2023). A BHRP é a principal bacia agrícola do DF (MAPBIOMAS, 2022). No Plano de Gerenciamento Integrado de Recursos Hídricos do Distrito Federal a contaminação por agrotóxicos nesta bacia foi uma preocupação destacada, principalmente pela escassez de dados da quantificação dessas substâncias (DISTRITO FEDERAL, 2012). Portanto, a realização de estudos para avaliação de agrotóxicos nesta região é importante.

O Rio Preto divide os estados de Goiás e Minas Gerais do DF e sua bacia, nesta unidade federativa, destaca-se pela atividade agrícola com uso de pivôs centrais e alta produção de grãos, hortaliças e frutas (CODEPLAN, 2021), com grande parte para atender a capital federal (CARNEIRO *et al.*, 2007). A região da Bacia Hidrográfica do Rio Preto (BHRP) possui limitações edáficas e climáticas para a agricultura (BORGES *et al.*, 2007), com solos ácidos e estação seca bem definida entre maio e setembro (REATTO *et al.*, 2000), e o desenvolvimento agrícola de forma intensiva ocorreu pelo uso de fertilizantes e corretivos, como também através da irrigação (BORGES *et al.*, 2007). A BHRP está localizada em uma zona de planalto do bioma Cerrado e é

uma importante área de recarga hídrica que contribui para a manutenção da Bacia Hidrográfica do Rio São Francisco (CODEPLAN, 2021). Suas unidades hidrográficas também são propícias para a avaliação dos impactos decorrentes da atividade agrícola realizada no território do DF, pois as unidades hidrográficas que desaguam no Rio Preto estão localizadas no estado de Goiás e possuem boa parte de seu território preservados com cobertura natural (MAPBIOMAS, 2022). Contudo, como em sua jusante há várias cidades nos estados do Goiás e Minas Gerais, é de fundamental importância a gestão adequada de suas águas. Diante da necessidade de avaliar as concentrações de agrotóxicos e seus produtos de degradação nos ambientes (CHOPRA; SHARMA; CHAMOLI, 2011), o objetivo deste estudo foi avaliar a presença de agrotóxicos em águas superficiais na Bacia Hidrográfica do Rio Preto, Distrito Federal, Brasil.

2. Material e Métodos

2.1 Área de estudo e caracterização ambiental

A BHRP faz parte da Bacia do Rio São Francisco, que compreende os estados de Distrito Federal, Goiás, Minas Gerais, Bahia, Sergipe, Pernambuco e Alagoas e é uma das grandes bacias hidrográficas do país. No Distrito Federal, a BHRP localiza-se na região leste e é dividida em sete unidades hidrográficas: Alto Rio Preto (UH-3), Rio São Bernardo (UH-8), Ribeirão Extrema (UH-20), Ribeirão Jacaré (UH-21), Baixo Rio Jardim (UH-22), Ribeirão Santa Rita (UH-28) e Alto Rio Jardim (UH-35) (Figura 14) (SEMA, 2016). No DF, os corpos hídricos presentes na BHRP são enquadrados como classe d'água 2, segundo a Resolução Distrital N° 2/2014 (DISTRITO FEDERAL, 2014).

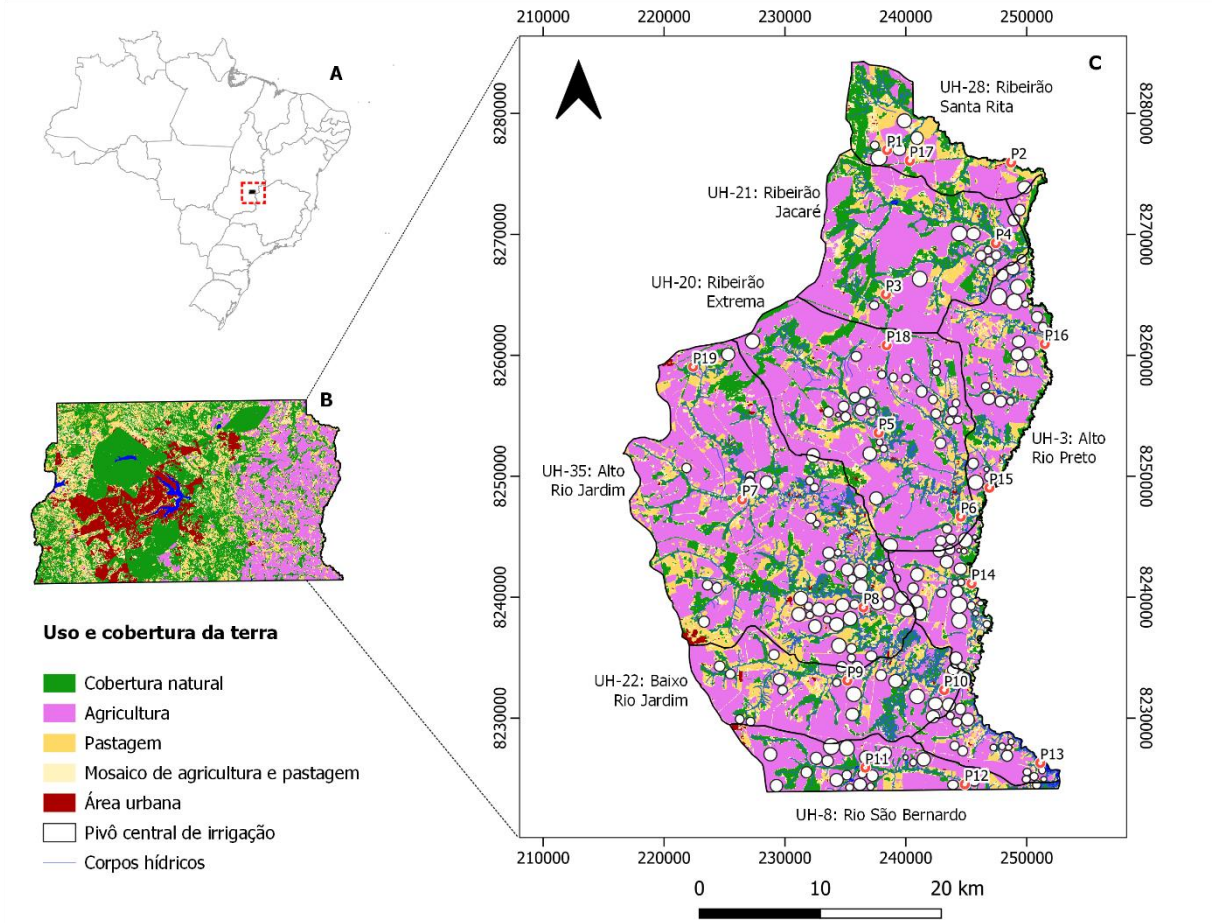

Figura 14. A) Localização do Distrito Federal no Brasil; **B)** Mapa de uso e ocupação da terra no DF e região da Bacia Hidrográfica do Rio Preto (BHRP); **C)** Unidades hidrográficas que compõem a BHRP e localização dos pontos amostrais em que houve a coleta das amostras de água superficial.
Fonte: Adaptado de MAPBIOMAS (2021c), SEMA (2016) e SIEG (2015).

Segundo a Codeplan (2021), na BHRP predomina o tipo de solo latossolo-vermelho, a declividade da bacia varia de 0 a 45%, sendo as áreas de declividade ondulada e fortemente ondulada localizadas no vale do Rio Preto. Os tipos climáticos presentes na região são o tropical (Aw), característicos das regiões abaixo dos 1000 m, e tropical de altitude (Cwa), característico das regiões com cotas entre 1000 e 1200 m, conforme classificação de Köppen. Historicamente, boa parte da precipitação (90%) no DF ocorre entre setembro/outubro e março/abril (período chuvoso), com baixa precipitação em abril, e os demais meses caracterizam-se como período de seca.

2.2 Coleta e preservação das amostras

As amostras de água superficial foram coletadas em quatro campanhas (S1: agosto/2021, S2: setembro/2021, C1: janeiro/2022 e C2: fevereiro/2022), divididas em dois períodos distintos (seco

e chuvoso) e realizadas em 19 pontos amostrais, totalizando 76 amostras. Os pontos amostrais foram definidos de forma que abrangessem um ponto amostral logo à montante e outro à jusante da região central (metade) de cada unidade hidrográfica da BHRP, sendo também definidos três pontos (P17-19) em áreas de nascentes (Figura 14C). Os pontos foram escolhidos considerando também o acesso à área de coleta e proximidade com os pivôs centrais de irrigação, pois nestas áreas a atividade agrícola também ocorre no período de seca. Alguns registros da área de estudo e da atividade agrícola desenvolvida na região podem ser conferidos na Figura 15.

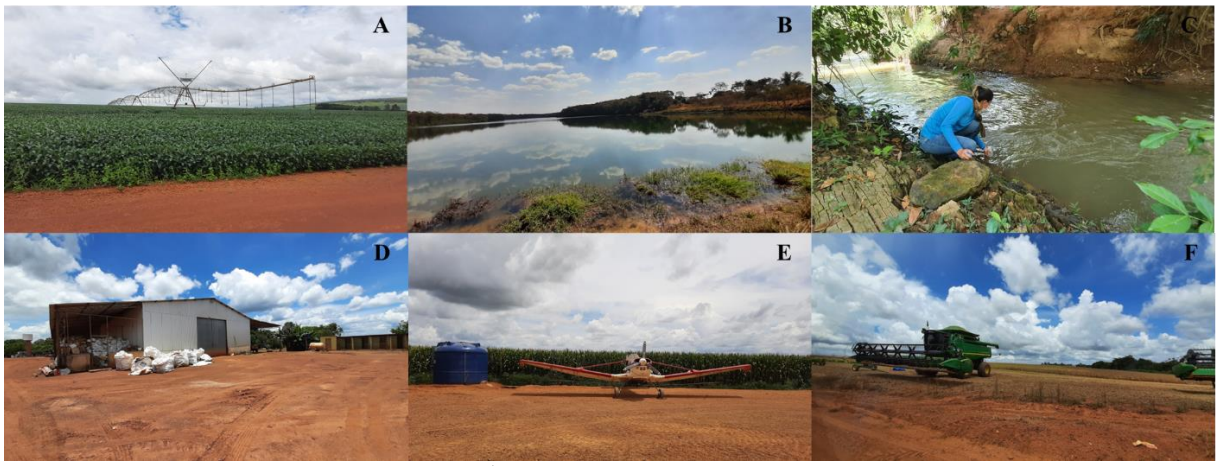

Figura 15. A) Sistema de irrigação por pivô central e cultura de soja plantada na área (C1); **B)** Barragem no Rio São Bernardo utilizada para captação para irrigação na área agrícola (S2, P11); **C)** Coleta de água no Ribeirão Extrema (P5, S2); **D)** Depósito de embalagens de produtos agrícolas em uma propriedade rural (C2); **E)** Reservatório para preparo de calda para pulverização de agrotóxico, aeronave utilizada no processo e cultura de milho ao fundo (C2); **F)** Maquinários agrícolas realizando colheita de uma cultura na região de estudo (C2).
Fonte: A-B, D-F - autora; C – Daphne Muniz.

Para a realização das coletas, foram utilizados frascos de polietileno (350 mL), ambientados previamente por três vezes com a água do local e, em alguns pontos, o coletor do tipo *van Dorn* também foi utilizado (Figura 16B). Temperatura, pH, condutividade e sólidos totais dissolvidos (TDS) foram medidos em campo com sonda multiparamétrica Hq40d (Figura 16D; Hach, USA). A temperatura das amostras coletadas variou entre 14.94-29.6 °C, a condutividade entre 2.35-97.7 µS/cm, TDS entre 0.6-46.3 mg/L e pH entre 4.83-7.46 (Tabela S1, Apêndice I). As amostras coletadas em campo foram mantidas em caixa térmica com gelo e encaminhadas ao Laboratório de Toxicologia para processamento e análise de agrotóxicos. Os procedimentos de coleta e preservação de amostras seguiram as diretrizes do Guia Nacional de Coleta e Preservação de Amostras: água, sedimento, comunidades aquáticas e efluentes líquidos (CETESB, 2011).

Figura 16. A) Coleta de água no Ribeirão Jacaré no período de seca na campanha S2; **B)** Coleta de água superficial utilizando coletor do tipo *van Dorn* no Rio Preto no período de seca (P16; S1); **C)** Amostras coletadas em frascos polietileno; **D)** Sonda multiparamétrica utilizada em campo para medição de temperatura, pH, condutividade e sólidos totais dissolvidos; **E)** Filtro utilizado no processo de filtração das amostras de campo; **F)** Tubo falcon utilizado para alíquota de 10 mL das amostras; **G)** Amostras passando pelo processo de liofilização para posterior armazenamento em freezer a -24°C; **H)** Cromatógrafo líquido acoplado à espectrometria de massas sequencial (LC-MS/MS; QTRAP 6500+ Sciex) utilizado para análises dos agrotóxicos na água.
Fonte: A: Daphne Muniz e B-H: Autora.

2.3 Metodologia analítica

No Laboratório de Toxicologia da Universidade de Brasília (LabTox/UnB), as amostras foram filtradas com microfibra PTFE de 0.45 μm (Millipore®), transferidas em alíquotas de 10 mL para tubo falcon de 15mL, congeladas no freezer em temperatura de -24ºC, liofilizadas e mantidas à -24ºC até o momento da análise dos agrotóxicos.

Como mostrado na Tabela 5, para os compostos glifosato, AMPA e glufosinato foi seguido o método 1 e para um conjunto de 78 agrotóxicos de vários grupos químicos foi seguido o método 2 (multirresíduo). No método 1 as amostras foram ressuspendidas em 500 μL de solução tampão

(pH 2.9), agitadas em vórtex e filtradas com filtros PTFE de 0.45 μm (Millipore®) para *vials*, e analisadas em triplicata por meio de cromatografia líquida acoplada à espectrometria de massas sequencial (LC-MS/MS; QTRAP 6500+ Sciex) com uso de ionização por eletrospray e coluna Thermo Acclaim Trinity 3 μm 100x3 mm, conforme descrito em Pires *et al.* (2023). Para o método 2, as amostras foram ressuspendidas em 500 μL de metanol/água Mili-Q (50%/50%), agitadas em vórtex e filtradas com filtros PTFE de 0.45 μm (Millipore®) para *vials*, e realizadas em triplicata também por LC-MS/MS, mas com uso de coluna Phenomenex Luna Omega Polar C18 (1.6 μm x 100 mm). Todos os padrões analíticos dos agrotóxicos, bem como o limite de quantificação do método (LOQ) podem ser conferidos na Tabela 3. O limite de detecção (LOD) foi estabelecido como ½ LOQ.

Tabela 5. Materiais de referência dos agrotóxicos analisados por LC-MS/MS e o LOQ do método utilizado nas amostras ambientais de água.

Analito	**Fornecedor**	**Pureza (%)**	**Grupo químico**	**Classe**	**Aprovado no Brasil?** [a]	**Método**	**LOQ µg/L**
Glifosato	AccuStandard	98.2	Glicina substituída	Herbicida	Sim	1	0.0025
AMPA	Aldrich	98	-	Produto de degradação	-	1	0.0025
Glufosinato	AccuStandard	100	Homoalanina substituída	Herbicida	Sim	1	0.0025
Acefato	AccuStandard	98	Organofosforado	Inseticida e acaricida	Sim	2	2.5
Acetamiprido	Sigma-Aldrich	99.7	Neonicotinóide	Inseticida	Sim	2	0.05
Aldicarbe	AccuStandard	100	Carbamato	Inseticida, acaricida e nematicida	Não	2	2.5
Aldicarbe sulfona	AccuStandard	100	Carbamato	Produto de degradação	-	2	0.0025
Aldicarbe sulfóxido	AccuStandard	99.4	Carbamato	Produto de degradação	-	2	2.5
Ametrina	AccuStandard	100	Triazina	Herbicida	Sim	2	0.0025
Atrazina	Sigma	99.1	Triazina	Herbicida	Sim	2	0.0025
Atrazina-2-hidroxi	Dr. Ehrenstorfer	97.24	-	Produto de degradação	-	2	0.05
Atrazina-desetil	AccuStandard	99.9	-	Produto de degradação	-	2	0.05
Atrazina-desisopropil	AccuStandard	100	-	Produto de degradação	-	2	0.05
Azoxistrobina	AccuStandard	100	Estrobilurina	Fungicida	Sim	2	0.01
Boscalida	AccuStandard	100	Anilida	Fungicida	Sim	2	0.05
Buprofezina	AccuStandard	100	Tiadiazinona	Inseticida e acaricida	Sim	2	0.0025
Carbaril	AccuStandard	99.3	Carbamato	Inseticida	Sim	2	0.05
Carbendazim	AccuStandard	97.8	Benzimidazol	Fungicida	Não	2	0.0025
Carbossulfano	AccuStandard	99.3	Carbamato	Inseticida, nematicida e acaricida	Sim	2	0.0025
Carbofurano	AccuStandard	100	Carbamato	Inseticida, nematicida e acaricida	Não	2	0.0025
Carbofurano-3-hidroxi	Sigma - Aldrich	98	-	Produto de degradação	-	2	0.05
Ciromazina	AccuStandard	98.8	Triazinamina	Inseticida	Sim	2	0.05
Clorfenvinfós	AccuStandard	99.9	Organofosforado	Inseticida e acaricida	Não	2	0.01
Clorpirifós (ethyl)	AccuStandard	99.6	Organofosforado	Inseticida, acaricida e formicida	Sim	2	0.05
Clorpirifós-metílico	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	2.5
Diazinona	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	0.01
Diclorvos						2	0.5
Dicrotofós	AccuStandard	97.9	Organofosforado	Inseticida e acaricida	Não	2	0.0025
Difenoconazol	AccuStandard	100	Triazol	Fungicida	Sim	2	0.0025
Dimetoato	AccuStandard	100	Organofosforado	Inseticida e acaricida	Sim	2	0.01

Analito	Fornecedor	Pureza (%)	Grupo químico	Classe	Aprovado no Brasil? [a]	Método	LOQ µg/L
EPN	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	0.05
Epoxiconazol	AccuStandard	100	Triazol	Fungicida	Sim	2	0.05
Etiona	AccuStandard	97	Organofosforado	Inseticida e acaricida	Não	2	0.05
Fenitrotiona	AccuStandard	97.1	Organofosforado	Inseticida e formicida	Sim	2	0.5
Fenpropatrina	AccuStandard	100	Piretróide	Inseticida e acaricida	Sim	2	0.05
Fenpiroximato	Sigma - Aldrich	98.4	Pirazol	Acaricida	Sim	2	0.05
Fentiona	AccuStandard	98.4	Organofosforado	Inseticida e avicida	Não	2	0.5
Fentoato	AccuStandard	95.5	Organofosforado	Inseticida e acaricida	Não	2	0.05
Fluquinconazol	AccuStandard	100	Triazol	Fungicida	Sim	2	0.05
Flutriafol	AccuStandard	100	Triazol	Fungicida	Sim	2	0.05
Fipronil	AccuStandard	98.1	Pirazol	Inseticida, formicida e cupinicida	Sim	2	0.0025
Heptenofós	AccuStandard	97.7	Organofosforado	Inseticida e acaricida	Não	2	0.05
Imidacloprido	AccuStandard	99.5	Neonicotinóide	Inseticida	Sim	2	0.05
Imazalil	AccuStandard		Imidazol	Fungicida	Sim	2	0.05
Cresoxim-metílico	AccuStandard	98.7	Estrobilurina	Fungicida	Sim	2	0.5
Linurom	AccuStandard	100	Uréia	Herbicida	Sim	2	0.05
Malaoxon	AccuStandard	98.7	Organofosforado		Não	2	0.0025
Malationa	AccuStandard	100	Organofosforado	Inseticida e acaricida	Sim	2	0.05
MCPA	AccuStandard	98.9	Ácido ariloxialcanóico	Herbicida	Sim	2	0.05
Metalaxil-M	AccuStandard	99.9	Acilalaninato	Fungicida	Sim	2	0.01
Metamidofós	AccuStandard	99.7	Organofosforado	Inseticida e acaricida	Não	2	0.05
Metiocarbe	AccuStandard	99.9	Carbamato	Inseticida e moluscicida	Não	2	0.5
Metomil	AccuStandard	99.9	Carbamato	Inseticida e acaricida	Sim	2	0.05
Metribuzim	AccuStandard	100	Triazinona	Herbicida	Sim	2	0.5
Miclobutanil	AccuStandard	100	Triazol	Fungicida	Sim	2	0.05
Monocrotofós	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	0.0025
Ometoato	AccuStandard	96.8	Organofosforado	Inseticida e acaricida	Não	2	0.05
Oxifluorfem	AccuStandard	99.2	Éter difenílico	Herbicida	Sim	2	0.5
Paraoxona-metílica	AccuStandard	98.8	Organofosforado		Não	2	0.05
Pencicuron	Sigma - Aldrich	99.8	Feniluréia	Fungicida	Sim	2	0.05
Piraclostrobina	AccuStandard	100	Estrobilurina	Fungicida	Sim	2	0.01
Pirazofós	AccuStandard	100	Fosforotioato	Fungicida	Não	2	0.01
Piridafentiona	AccuStandard	100	Organofosforado	Inseticida	Não	2	0.01
Pirimicarbe	AccuStandard	98.5	Carbamato	Inseticida	Não	2	0.01
Pirimifós-etílico	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	0.0025
Pirimifós-metílico	AccuStandard	96.3	Organofosforado	Inseticida e acaricida	Sim	2	0.0025
Procloraz	AccuStandard	99.4	Imidazolilcarboximida	Fungicida	Não	2	0.5
Profenofós	AccuStandard	99.2	Organofosforado	Inseticida e acaricida	Sim	2	0.05
Propanil	AccuStandard	100	Anilida	Herbicida	Sim	2	0.05
Protiofós	AccuStandard	97.6	Organofosforado	Inseticida	Não	2	0.5
Quinalfós	AccuStandard	100	Organofosforado	Inseticida e acaricida	Não	2	0.05
Tebuconazol	AccuStandard	100	Triazol	Fungicida	Sim	2	0.05
Tiobencarbe	AccuStandard	99.5	Carbamato	Herbicida	Sim	2	0.05
Tiofanato-metílico	AccuStandard	98.1	Benzimidazol	Fungicida	Sim	2	0.05
Tiabendazol	AccuStandard	100	Benzimidazol	Fungicida	Sim	2	0.01
Tiametoxam	AccuStandard	100	Neonicotinóide	Inseticida	Sim	2	0.05
Triazofós	AccuStandard	100	Organofosforado	Inseticida, acaricida e nematicida	Não	2	0.01
Triclorfom	AccuStandard	95.8	Organofosforado	Inseticida	Não	2	0.05
Trifloxistrobina	AccuStandard	100	Estrobilurina	Fungicida	Sim	2	0.0025
Zoxamida	Dr. Ehrenstorfer	98.08	Benzamida	Fungicida	Sim	2	0.01
2,4-D	AccuStandard	98.8	Ácido ariloxialcanóico	Herbicida	Sim	2	0.5

AMPA: ácido aminometilfosfônico, EPN: O-Ethyl-O-(4-nitrophenyl)phenylphosphonothioate, MCPA: ácido 2-metil-4-cloro fenoxiacético. [a] ANVISA (2022).

2.4 Quociente de risco (QR) para dados de campo

Como mostrado no estudo de Araújo, Caldas e Oliveira-Filho (2022b), os valores máximos de alguns agrotóxicos estabelecidos para águas doces superficiais, segundo a Resolução CONAMA 357/2005 não protegem a biota aquática, sendo então importante a avaliar os potenciais riscos utilizando as concentrações reais encontradas em campo.

A estimativa do potencial risco de cada agrotóxico detectado neste estudo ocorreu a partir do cálculo de quociente de risco (QR) em que $QR = \frac{MEC}{PNEC}$, onde MEC (*measured environmental concentration)* foi a maior concentração detectadas na água para cada agrotóxico, e o PNEC (*predicted non-effect concentration)* foi estimado dividindo pelo fator de segurança 10 o parâmetro toxicológico crônico mais sensível para os representantes de três níveis tróficos do ecossistema aquático, por 100 para o dado crônico mais sensível encontrados para apenas dois níveis tróficos e por 1000 para o dado de toxicidade aguda mais sensível, quando não foram encontrados dados crônicos (UMBUZEIRO *et al.*, 2011). Os quocientes obtidos foram comparados com os níveis de preocupação disponíveis (*level concern,* LOC) (LEE-STEERE, 2009), sendo LOC > 0.1 para toxicidade aguda e LOC> 1 para toxicidade crônica. Os QRs maiores que os LOCs indicam potencial risco de ocasionarem efeitos adversos aos diferentes níveis da biota aquática.

3. Resultados e Discussão

3.1 Agrotóxicos presentes na BHRP

Das 76 amostras analisadas, 66 foram positivas (86.8 %) para ao menos um analito. Quatorze agrotóxicos e dois produtos de degradação foram detectados (≥ LOD) nas amostras analisadas (17.28 % dos analitos pesquisados) (Figura 17B; Tabela S2, Apêndice I). Os níveis de azoxistrobina, carbosulfano, flutriafol, imidacloprido, metamidofós e tebuconazol estavam em concentrações < LOQ. Dentre os analitos detectados, o inseticida e acaricida metamidofós, detectado no P11 (UH-8: Rio São Bernardo) na campanha C2 teve seu registro cancelado no Brasil em 2011 (ANVISA, 2011). Metamidofós é produto de degradação do acefato (PPDB, 2022), ingrediente ativo com monografia vigente no país. O fungicida carbendazim, detectado em todos os pontos, exceto P3, P7 e nos pontos de nascentes (P17-P19), foi proibido no país recentemente (ANVISA, 2022), posterior às coletas das amostras. Carbendazim possuía uso aprovado para, dentre outras culturas, feijão, milho, soja e trigo (ANVISA, 2022), culturas cultivadas na região do estudo.

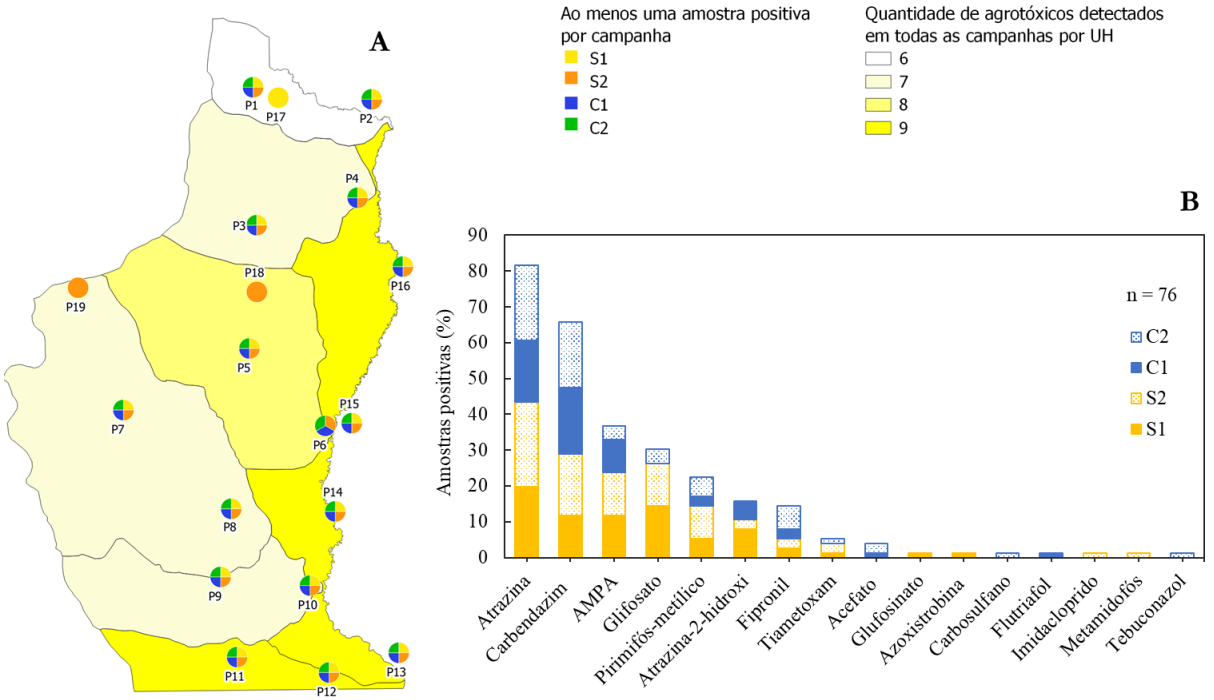

Figura 17. A) Mapa com quantitativo de agrotóxicos detectados em todas as campanhas por unidade hidrográfica e demonstrativo de amostras positivas por campanha; **B)** Percentual de amostras positivas nas quatro campanhas de amostragem realizadas nos dois períodos hidrológicos (S1-S2: seca e C1-C2: chuva) na BHRP, região do Distrito Federal.

O quantitativo de agrotóxico detectado nas UHs variou de 6 (UH-28 Ribeirão Santa Rita) a 9 (UH-3 Alto Rio Preto e UH-8 Rio São Bernardo) e exceto para o P6 e as nascentes (P17-19), em todos os demais pontos amostrais foi detectado ao menos um agrotóxico em todas as campanhas realizadas (Figura 17A). Os agrotóxicos mais detectados foram atrazina, carbendazim, glifosato e seu produto de degradação AMPA (ácido aminometilfosfônico). Atrazina, carbendazim, AMPA, pirimifós-metílico e fipronil foram detectados em todas as campanhas de amostragem (Figura 17B). Similar ao resultado deste estudo, atrazina foi considerada o agrotóxico mais avaliado e detectado em águas doces superficiais em escalas mundial (ARAÚJO; CALDAS; OLIVEIRA-FILHO, 2022a) e nacional (ALBUQUERQUE *et al.*, 2016) e é o terceiro ingrediente ativo mais comercializado no DF e o quarto no país (IBAMA, 2022a). Dados de vendas para o DF também mostram que em 2021 o glifosato foi o agrotóxico mais consumido nesta UF, carbendazim o 17° e fipronil o 37°, o que significa que os contaminantes mais frequentemente detectados são aqueles utilizados em campo. Não há dados de comercialização de pirimifós-metílico neste período.

O percentual de amostras positivas (44.7 %) foi maior no período da seca, com uma diferença de 29 amostras em relação às campanhas realizadas no período chuvoso (42.1 %). Conforme dados do INMET (2023), nos meses de realização das campanhas S1 e S2 (seca) não ocorreram eventos de chuvas na região (Figura S1, Apêndice I), assim, a maior quantidade de amostras positivas nesse

período pode ser devido à menor vazão da água nos corpos hídricos, que favorece à concentração dos analitos nesta matriz. Correia, Carbonari e Velini (2020) também detectaram mais amostras positivas na estação de seca (100%) comparadas à chuvosa (99%) na sub-bacia agrícola do Rio Samambaia que abrange o DF e o estado de Goiás.

3.2 Concentrações dos agrotóxicos nas UHs da BHRP

Embora menos quantificado que outros agrotóxicos (Figura 17B), o inseticida e acaricida acefato foi o contaminante detectado em maior concentração na BHRP (2.6 μg/L; Figura 18; Tabela 6), encontrado na campanha C2, em amostra coletada no P4 - Ribeirão Jacaré (UH-21; Figura 14C e Figura 19B). Os demais analitos foram detectados em concentrações abaixo de 0.2 μg/L (Figura 18B; Tabela 6). Acefato possui alta solubilidade em água (790000 mg/L, 20° C), rápida degradação no campo (3 dias) (Tabela 1) e uso aprovado para culturas como feijão, milho e soja (ANVISA, 2022), cultivadas na região próxima ao P4. Dessa forma, sua detecção apenas em amostras coletadas nas campanhas de chuva pode ter sido decorrente de escoamento superficial após provável aplicação em campo em período próximo ao da realização da coleta das amostras.

Dentre os 16 analitos detectados, apenas atrazina e glifosato possuem padrões estabelecidos para as águas doces superficiais classe 2 (2 e 65 μg/L respectivamente; BRASIL, 2005), e suas concentrações estavam em conformidade com a normativa. Contudo, segundo Araújo, Caldas e Oliveira-Filho (2022a) o VM estabelecido para atrazina não garante proteção à biota aquática. A Tabela 6 resume 45 estudos realizados no país e que detectaram em águas doces superficiais em ao menos um dos 16 analitos detectados neste trabalho (Figura 17B); os estudos foram conduzidos principalmente em regiões com atividade agrícola, semelhante à BHRP. Em amostras coletadas por Perin *et al.* (2021) no lago Guaíba no Rio Grande do Sul, acefato não foi detectado.

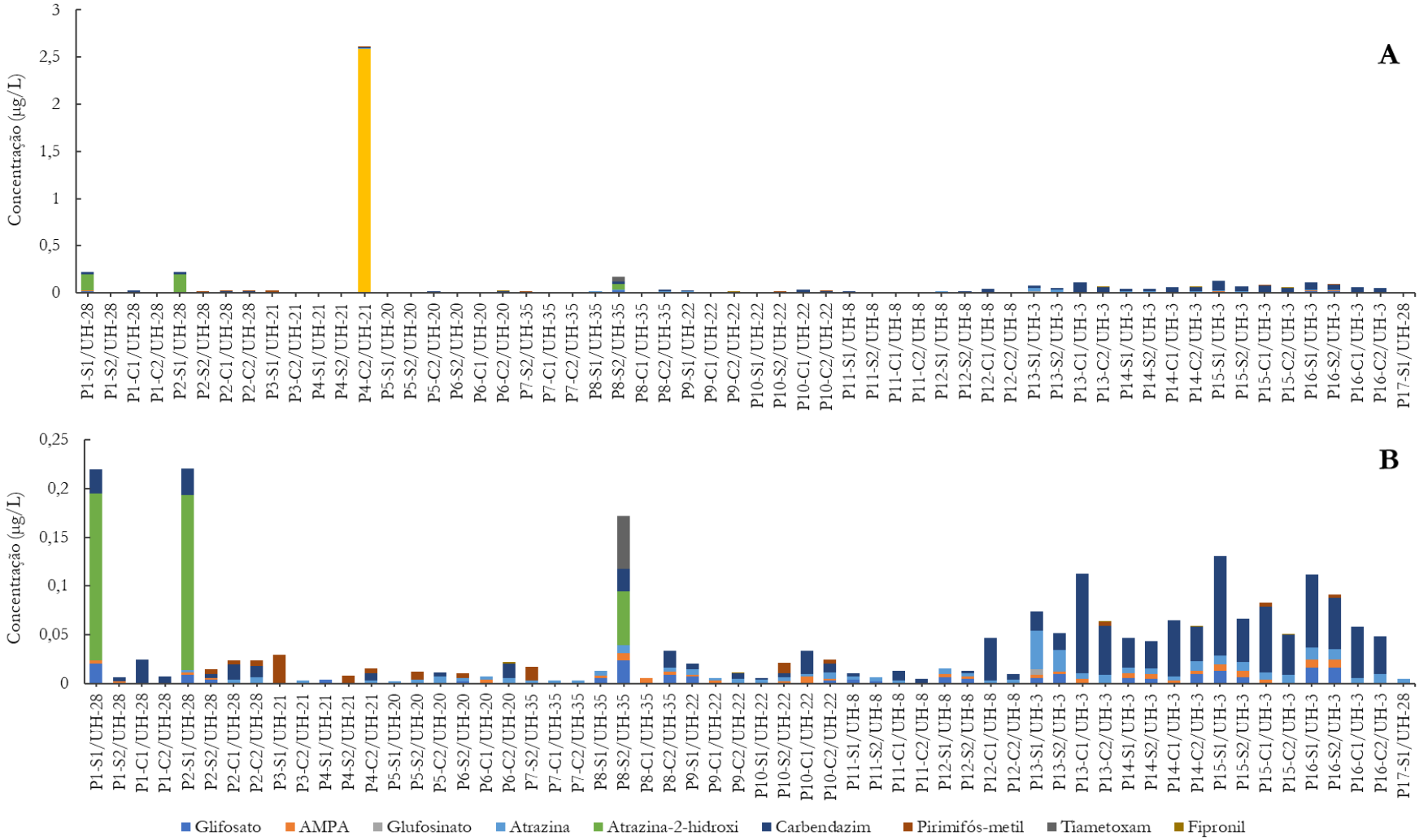

Figura 18. Concentrações dos agrotóxicos quantificados nas campanhas de seca (S1-S2) e de chuva (C1-C2) na Bacia Hidrográfica do Rio Preto no Distrito Federal dispostos por ponto e por unidade hidrográfica com **A)** destacando todos os compostos detectados abaixo de 0.25 µg/L na região e **B)** mostrando o inseticida acefato em amarelo.

Figura 19. Locais de alguns corpos hídricos amostrados e que foram detectadas concentrações de agrotóxicos, em que **A)** mostra o P4-C2 no Ribeirão Jacaré; **B)** área de nascente (P17) no Ribeirão Santa Rita na campanha S1; **C)** nascente do Ribeirão Extrema (P18) e **D)** nascente do Alto Rio Jardim (P19) no período S2; **E)** P1 e **F)** P2 localizados no Ribeirão Santa Rita, na campanha S1; **G)** Alto Rio Preto no ponto 13 e campanha S1.
Fonte: A: Daphne Muniz e B-G: Autora.

Embora menos ocorrente que nos demais pontos, algumas amostras positivas foram encontradas nas nascentes mostradas na Figura 19B-D, sendo atrazina (< LOQ-0,0048 µg/L) em todos os pontos (P17-P19), seu produto de degradação atrazina-2-hidroxi (< LOQ) somente no P19 e pirimifós-metílico (0.0046 µg/L) no P17. Casara *et al.* (2012) e Nogueira *et al.* (2012) também detectaram atrazina em área de nascentes do Rio São Lourenço em Mato Grosso em maiores concentrações (9.3 e 0.35 µg/L respectivamente; Tabela 6) que as encontradas neste estudo. Porém, em estudo conduzido por Berton, Brugnera e Dores (2018) na mesma região, não foi detectado tal contaminante. Atrazina-2-hidroxi foi detectada em amostras coletadas nos rios Dourados e Brilhante em Mato Grosso do Sul na concentração máxima de 0.129 µg/L (SPOSITO *et al.*, 2018) e pirimifós-metílico foi avaliado em amostras de uma sub-bacia agrícola em Minas Gerais (< LOQ; SOARES *et al.*, 2013) e na Bacia Hidrográfica Lajeado Tacongava no Rio Grande do Sul (não detectado; CHIARELLO *et al.*, 2017), porém, não em áreas de nascentes (Tabela 6). Os resultados deste e dos demais estudos confirmam a contaminação de nascentes por agrotóxicos e mostram a importância da avaliação dessas substâncias nestas regiões.

Conforme mostra a Figura 18, as concentrações detectadas à montante da região central das UHs foram um pouco mais baixas que as concentrações detectadas às suas jusantes, o que pode

ser devido à maior influência de área agrícola nesses pontos e pela maior concentração de pivôs centrais nas regiões mais baixas dos territórios das UHs estudadas (Figura 14B). Todas as amostras coletadas nos pontos P1, P2, P8, P10-P16 foram ≥ LOQ e nesses locais, glifosato, atrazina e carbendazim foram detectados mais frequentemente e em maiores concentrações. Atrazina e glifosato foram bastante avaliados em amostras de águas doces superficiais no Brasil (Tabela 6), com concentrações chegando a 18.96 (MOREIRA *et al.*, 2012) e 100 μg/L (SILVA; PERALBA; MATTOS, 2013), respectivamente. Os níveis de carbendazim avaliado no país variaram entre < LOQ (SEVERO *et al.*, 2020; SPOSITO *et al.*, 2018) e 12 μg/L (RIBEIRO *et al.*, 2013), sendo, portanto, as concentrações detectadas neste estudo para esses três agrotóxicos mais baixas que as reportadas em outros trabalhos.

O somatório das concentrações de agrotóxicos detectados em todas as campanhas à montante nas UHs 28 (P1, Ribeirão Santa Rita), 35 (P7, Alto Rio Jardim) e 8 (P9, Rio São Bernardo) foram um pouco mais baixas do que o somatório das concentrações detectadas à jusante de cada uma dessas UHs (P2, P8, P10; Figura 18B). Para a UH-3 (Alto Rio Preto) é possível notar a predominância e frequência de glifosato, AMPA, carbendazim e atrazina em concentrações semelhantes, que pode ser devido estarem localizados no Rio Preto, corpo hídrico principal da BHRP e receptor de todas as demais UHs.

Tabela 6. Concentrações para os 16 agrotóxicos detectados neste estudo e de ao menos um destes agrotóxicos detectados em outros estudos realizados no país.

Referência	**Agrotóxicos e concentrações (μg/L)**	**Área de estudo e amostras coletadas (n)**	**Uso da terra**	**Estado**
Esse estudo	ACE (<LOQ-2,59), AMPA (0.002-0.009), ATZ (<LOQ-0.039), AZO (<LOQ), CBZ (<LOQ-0.102), CBF (<LOQ), FIP (<LOQ-0.001), FLU (<LOQ), GLU (0.006), GLI (0.002-0.024), ATH (<LOQ-0.179), IMD (<LOQ), MTF (<LOQ), PFM (<LOQ-0.029), TEB (<LOQ) e TMX (<LOQ-0.055).	Bacia Hidrográfica do Rio Preto. n=76.	Agricultura, pastagem e cobertura natural	Distrito Federal
Pires *et al.* (2023)	AMPA (0.0057), GLI (0.018) e GLU (n.d.).	Sub-bacia do Rio Jardim. n=14.	Agricultura, pastagem e cobertura natural	Distrito Federal
Morgado *et al.* (2023)	ACE (n.d.); ATZ (< LQ-1.41), TEB (n.d.).	Bacia do Rio Curuá-Una. n=28.	Agricultura.	Pará
Perin *et al.* (2021)	ATZ (<0.001-0.1), CBZ (<0.001-0.07), FIP (n.d.), FLU (<0.007-<0.007), IMD (0.031-0.544), MTF (n.d.), TEB (<0.001-0.089, TMX (0.018-0.03).	Lago Guaíba. n=35.	Agricultura, pastagem, área urbana e industrial.	Rio Grande do Sul

Referência	Agrotóxicos e concentrações (µg/L)	Área de estudo e amostras coletadas (n)	Uso da terra	Estado
Correia, Carbonari e Velini (2020)	ATZ (0.008-1.75) e GLI (0.61-11.33)	Sub-bacia do Rio Samambaia. n=n.c.	Agricultura	Goiás e Distrito Federal
Pires *et al.* (2020)	AMPA (0.65-1.9), GLU (n.d.) e GLI (1.5-9.7)	Bacia do Rio Curuá-Una. n= 28.	Floresta, agricultura e pecuária de subsistência	Pará
Severo *et al.* (2020)	ATZ (<LOQ-0.13), AZO (<LOQ-0.083), CBZ (<LOQ), IMD (<LOQ-0.82), TEB (<LOQ-1.016) e TMX (<LOQ-0.125)	Rio Vacacaí. n= n.i.	Agricultura e cobertura natural	Rio Grande do Sul
Barizon *et al.* (2019)	ATZ (0.3-1.4), AZO (n.d.), FIP (n.d.), FLU (n.d.), IMD (n.d.), MTF (m.d.), TEB (n.d.) e TMX (n.d.).	Bacia hidrográfica do Rio Camanducaia. N= 105.	Pastagem, cobertura natural, floresta plantada e agricultura	Minas Gerais e São Paulo
Caldas *et al.* (2019)	ATZ (<LOQ-0.049), AZO (0.04-0.23), CBZ (0.01-0.042), FIP (0.006-0.021) e TEB (0.04-0.3).	Canal São Gonçalo. n= n.i.	Agricultura, área urbana e industrial	Rio Grande do Sul
Della-Flora *et al.* (2019)	ATZ (<LOQ-0.81)	Três bacias hidrográficas. n= 407.	Agricultura	Paraná
Souza *et al.* (2019)	ATZ (0.165-0.265), AZO (0.015-0.049), CBZ (0.016-0.023), IMD (0.01-0.05) e TEB (<LOQ-<LOQ).	Rio Tibagi. n=24.	Área urbana	Paraná
Amaral *et al.* (2018)	ATZ (0.02-0.56), AZO (<LOQ) e IMD (0.02-0.04)	Reservatório Passo Real. n= n.c.	Cobertura natural, agricultura e pecuária	Rio Grande do Sul
Berton, Brugnera, Dores (2018)	ATZ (n.d.), CBZ (<0.02-<0.99), CBF (n.d.), IMD (<20-<190), TEB (n.d.) e TMX (n.d.)	Nascentes do Rio São Lourenço. n= 39.	Agricultura e cobertura natural	Mato Grosso
Sodré *et al.* (2018)	ATZ (0.0055)	Córrego Cabeça de Veado, Lagos Paranoá e Descoberto. n= 12.	Área urbana	Distrito Federal
Sposito *et al.* (2018)	ATZ (0.017-0.17), CBZ (<LOQ-0.096), FIP (0.029), ATH (0.018-0.129), IMD (0.016-0.053) e TEB (n.d.)	Rios Dourados e Brilhante. n= 18.	Agricultura, pastagem, cobertura natural e área urbana	Mato Grosso do Sul
Bianchi *et al.* (2017)	ATZ (n.d.).	Bacia do Rio Sinos. n= 60	Agricultura, área urbana e industrial	Rio Grande do Sul
Chiarello *et al.* (2016)	AZO (0.1-0.2), CBZ (n.d.), IMD (n.d.), MTF (n.d.), PFM (n.d.) e TEB (n.d.).	Bacia Hidrográfica do Lajeado Tacongava. n= n.c.	Agricultura	Rio Grande do Sul
Prá-Urio e Masini (2017)	ATZ (<LOQ-<LOQ)	Rios. n= 2.	Parque	Bahia
Vieira *et al.* (2017)	ATZ (<LOQ-0.5), FIP (<LOQ-0.04) e TEB (<LOQ-0.13)	Rios Lontra, Sarandizinho, Santa Cruz e Siemens	Agricultura	Paraná
Sousa *et al.* (2016)	ATZ (15)	Dez reservatórios. n= n.c.	Agricultura	Ceará
Botelho *et al.* (2015)	ATZ (0.11-1.92)	Rio Piracicaba. n= n.c.	Agricultura e área industrial	São Paulo
Santos *et al.* (2015)	ATZ (14)	Bacia hidrográfica do Córrego Rico. n=15.	Agricultura	São Paulo
Stolberg *et al.* (2015)	ATZ (n.d.), AZO (0.65) e TEB (n.d.).	Rio Marombas. n= 24.	Agricultura, pastagem e cobertura natural	Santa Catarina

Referência	Agrotóxicos e concentrações (µg/L)	Área de estudo e amostras coletadas (n)	Uso da terra	Estado
Montagner *et al.* (2014)	ATZ (0.007-0.29), AZO (0.009-0.037), CBZ (0.003-0.781), FIP (n.d.) e TEB (0.003-0.019)	Rios e córregos. n= 46.	Agricultura	São Paulo
Monteiro *et al.* (2014)	ATZ (8.21)	Rio Corumbataí. n= n.c.	N.i.	São Paulo
Ribeiro *et al.* (2013)	CBZ (12), IMD (n.d.), TEB (n.d.) e TMX (n.d.)	Nascente do Rio São Lourenço. n= n.c.	Agricultura	Mato Grosso
Sequinatto *et al.* (2013)	ATZ (0.29) e IMD (0.13).	Córregos da Bacia do Rio Jacuí. n = 15.	Agricultura e cobertura natural	Rio Grande do Sul
Silva *et al.* (2013)	ATZ (<LOQ-0.92)	Rios Piracicaba e Capivari. n= n.c.	N.c.	São Paulo
Soares *et al.* (2013)	ATZ (<LQ), FLU (<LQ) e PFM (<LQ)	Sub-bacia no distrito Dom Corrêa. n= n.i.	Agricultura	Minas Gerais
Casara *et al.* (2012)	ATZ (0.18-0.35) e FLU (0.04-0.46)	Nascente do Rio São Lourenço. n= n.c.	Agricultura e cobertura natural	Mato Grosso
Moreira *et al.* (2012)	ATZ (0.02-18.96) e FLU (0.01-57.11)	Córregos e rios. n= 50.	Agricultura	Mato Grosso
Nogueira *et al.* (2012)	ATZ (0.25-9.3) e FLU (0.2-0.29)	Rios Casca, Lucas, Verde, Itambiquara e Cedro, Nascente do Rio São Lourenço e Córrego Lajes. n= n.d.	Agricultura e área urbana	Mato Grosso
Mendes *et al.* (2011)	ATZ (<LOD-<LOD), AZO (<0.1) e TEB (<0.1)	Rio Marombas. n= n.c.	Agricultura, pecuária e indústria	Santa Catarina
Marchesan *et al.* (2010)	FIP (0.05-26.2)	Rios. n= 159.	Agricultura	Rio Grande do Sul
Pinheiro, Silva, Kraisch (2010)	ATZ (<LOQ-<LOQ), AZO (9.09) e TEB (261.75)	Bacia Hidrográfica do Rio Itajaí. n= 129	Agricultura, pastagem e área urbana	Santa Catarina
Becker *et al.* (2009)	ATZ (0.21-0.22) e IMD (0.67)	Bacia Hidrográfica do Córrego Lino. n= 15.	Agricultura e cobertura natural	Rio Grande do Sul
Marques *et al.* (2009)	GLI (<LOQ-<LOQ)	Córrego Siri. n= n.c.	N.c.	Sergipe
Armas *et al.* (2007)	ATZ (<LOQ-2.7) e GLI (<LOQ-<LOQ)	Rio Corumbataí e afluentes. n= n.c.	Agricultura e área urbana	São Paulo
Bortoluzzi *et al.* (2007)	ATZ (<LOD-0.82) e IMD (0.55-2.59)	Bacias de Nova Boemia, Cândido Brum e Passo do Meio. n= n.c.	Agricultura e cobertura natural	Rio Grande do Sul
Marques *et al.* (2007)	ATZ (0.02-0.06)	Bacia hidrográfica do Ribeira de Iguape. n= 152.	Agricultura e cobertura natural	São Paulo
Bortoluzzi *et al.* (2006)	ATZ (0.19-0.63) e IMD (0.38-2.18)	Microbacia Hidrográfica de Agudo. n= n.c.	Agricultura e cobertura natural	Rio Grande do Sul
Cerdeira *et al.* (2005)	ATZ (<LOQ-0.09)	Córrego do Espraiado. n= n.c.	Agricultura	São Paulo
Azevedo, Gerchon e Reis (2004)	ATZ (0.231)	Rio Paraíba do Sul. n= n.c.	Agricultura, área urbana e industrial	Rio de Janeiro
Silva, Peralba e Mattos (2003)	AMPA (10-100) e GLI (<LOQ-100)	Microbacia Arroio Passo do Pilão. n= n.c.	Agricultura	Rio Grande do Sul

Referência	Agrotóxicos e concentrações (µg/L)	Área de estudo e amostras coletadas (n)	Uso da terra	Estado
Laabs *et al.* (2002)	ATZ (0.002-0.018) e TEB (0.014-0.044)	Rios e córregos. n= 139.	Agricultura	Mato Grosso
Mattos *et al.* (2002)	AMPA (13) e GLI (14.44).	Açudes e canais. n= n.c.	Agricultura	Rio Grande do Sul

ACE: acefato; ATZ: atrazina, AZO: azoxistrobina, CBZ: carbendazim, CBF: carbosulfam, FIP: fipronil, FLU: flutriafol, GLU: glufosinato, GLI: glifosato, ATH: atrazina-2-hidroxi, IMD: imidacloprido, MTF: metamidofós, PFM: pirimifós-metílico, TEB: tebuconazol e TMX: tiametoxam. N.c.: não conclusivo. N.i.: não informado.

3.3 Quociente de risco para a biota aquática

A estimativa de risco foi realizada para as maiores concentrações detectadas para cada composto (MEC). A Tabela 7 mostra que os QRs de carbendazim, pirimifós-metílico, tiametoxam, fipronil e atrazina-2-hidroxi foram maiores que o nível de preocupação (LOC). Esses resultados indicam que mesmo em baixas concentrações, como as detectadas neste estudo, esses contaminantes possuem potencial para provocar efeitos adversos à biota aquática e por isso precisam ser avaliados nessas unidades hidrográficas, principalmente nas regiões em que foram mais frequentemente detectados (Figura 18). Apesar de ter sido detectado na maior concentração neste estudo, os resultados dos QR mostram que a exposição ao acefato indica um menor risco que outros agrotóxicos e o produto de degradação de atrazina que foram encontrados em menores concentrações.

Tabela 7. Maiores concentrações para os agrotóxicos quantificados, *endpoint* mais sensível e o quociente de risco em que QR > 0.1 para risco agudo e QR > 1 para risco crônico apresenta potencial risco de efeito adverso.

Agrotóxico	*Endpoint* (µg/L)	PNEC (µg/L)	MEC (µg/L)	FS	QR (µg/L)
Glifosato	*Daphnia magna* NOEC (21d) = 12500 [a]	250	0.024	50	0.0001
AMPA	*Daphnia magna* NOEC (21d) = 15000 [a]	150	0.009	100	0.0001
Glufosinato	Invertebrados NOAEC = 31000 [b]	620	0.006	50	0.00001
Acefato	Invertebrados NOAEC = 150 [b]	3	2.59	50	0.863
Atrazina	Peixe NOAEC = 5 [b]	0.5	0.039	10	0.078
Atrazina-2-hidroxi	Algae EC_{50} = 1000 (72h) [c]	0.1642	0.179	1000	**1.092**
Carbendazim	*Daphnia magna* NOEC = 1.5 (21d) [a]	0.03	0.102	50	**3.413**
Pirimifós-metílico	*Daphnia magna* NOEC = 0.08 (21d) [a]	0.0016	0.029	50	**18.313**

Agrotóxico	*Endpoint* (µg/L)	PNEC (µg/L)	MEC (µg/L)	FS	QR (µg/L)
Tiametoxam	Invertebrados NOAEC = 0.74 [b]	0.0148	0.055	50	**3.686**
Fipronil	Invertebrados NOAEC = 0.011 [b]	0.00022	0.001	50	**5.909**

PNEC: *predicted non-effect concentration*. MEC*: measured environmental concentration*. NOEC: *no observed effect concentration*. NOAEC: *no observed adverse effects concentration*. EC_{50}: 50 *percent effect concentration*. FS: fator de segurança.
Fonte: [a] PPDB (2022), [b] USEPA (2022a) e [c] NORMAN (2022).

Em estudo realizado em uma área agrícola no Rio Grande do Sul, Perin *et al.* (2021) mostraram que nas concentrações detectadas, os RQs de carbendazim e tiametoxam não ultrapassaram o limite de preocupação (>1), contudo atrazina se mostrou com potencial risco para algas e plantas aquáticas. Sousa *et al.* (2019) detectaram tiametoxam em amostras dos rios Ave e Sousa em Portugal, mas em concentrações que não representavam riscos ecotoxicológicos. De igual modo, a maior concentração de atrazina no rio Ugie na Escócia não apresentou risco para os organismos aquáticos (ZHANG *et al.*, 2016). Para os demais analitos detectados neste estudo não foram encontrados dados de estimativa de riscos em outros trabalhos.

4. Conclusão

Do total de 76 amostras coletadas, dezesseis agrotóxicos foram detectados em ao menos uma amostra, sendo que atrazina, carbendazim, AMPA, pirimifós-metílico e fipronil foram quantificados em todas as campanhas de amostragem. A maior concentração detectada foi de acefato (2.59 µg/L) e os demais analitos foram detectados em concentrações abaixo de 0.2 µg/L, porém, os compostos carbendazim, pirimifós-metílico, tiametoxam, fipronil e atrazina-2-hidroxi, o produto de degradação de atrazina, apresentaram potencial risco para ocasionarem efeitos adversos à biota aquática mesmo nas baixas concentrações encontradas na BHRP.

Os resultados deste estudo preenchem a lacuna sobre o panorama da contaminação dos corpos hídricos superficiais da BHRP no DF e podem auxiliar o poder público e o comitê desta bacia na gestão da qualidade dos recursos hídricos na região, principalmente porque a contaminação dessas águas por essas substâncias pode ser decorrente das práticas agrícolas realizadas no território desta unidade federativa. É necessária a continuidade da avaliação da qualidade das águas da referida bacia para os agrotóxicos, também para verificar se moléculas banidas no país, como metamidofós e carbendazim, continuam sendo detectadas e se são indícios de uso ilegal do produto na região.

V. CONCLUSÃO GERAL

A revisão crítica sobre a contaminação das águas doces superficiais por agrotóxicos em escala mundial mostrou que o herbicida atrazina e seus produtos de degradação são alguns dos contaminantes mais detectados nesses ecossistemas, indicando o largo uso dessa molécula em vários países, inclusive no Brasil, quarto país com a maior quantidade de estudos publicados. Contudo, outras moléculas também foram frequentemente detectadas, como molinato, bentazona e oxifluorfen. Nesse estudo, notou-se a limitação de regulações sobre agrotóxicos na água doce superficial no mundo, o que dificulta a comparação das concentrações encontradas em campo. Comparados com dados ecotoxicológicos, as concentrações encontradas indicaram que ao menos 11 agrotóxicos sugeriam riscos à biota aquática.

Os limites estabelecidos para critérios de qualidade da água são fundamentais para a avaliação de concentrações ambientais de agrotóxicos, contudo, a comparação da resolução brasileira (CONAMA N°357/2005) com resultados de ensaios ecotoxicológicos mostrou que uma atualização dos padrões da normativa é necessária, pois valores máximos estabelecidos para 16 agrotóxicos podem não garantir a proteção da biota aquática. Adicionalmente, alguns agrotóxicos da normativa já foram banidos no país. Outro grupo de agrotóxicos ainda seguem na normativa, por serem considerados poluentes orgânicos persistentes e devido acordos internacionais ainda são monitorados, como em outros países. É também importante que a base para a inclusão dos agrotóxicos e o estabelecimento de VMs em futuras atualizações seja disponibilizada, tendo em vista que a base da resolução corrente é desconhecida.

Na Bacia Hidrográfica do Rio Preto, no Distrito Federal, atrazina, carbendazim, glifosato e seu produto de degradação (AMPA) foram frequentemente detectados, e mostraram que, assim como em outros países, esses corpos hídricos foram contaminados por agrotóxicos. A concentração máxima detectada nesse estudo foi de 2.59 μg/L (acefato) e os únicos compostos que constam na CONAMA 357, atrazina e glifosato, estavam em conformidade. Contudo, na perspectiva da estimativa de risco foi possível notar que mesmo em baixas concentrações detectadas, cinco compostos (atrazina-2-hidroxi, carbendazim, pirimifós-metílico, tiametoxam e fipronil) apresentaram potencial para ocasionarem efeitos adversos aos organismos aquáticos. Por isso é fundamental a análise dos dados ambientais com resultados de ensaios ecotoxicológicos para representantes da biota aquática.

O estudo mundial e o estudo sobre a regulação nacional contribuíram com a estruturação e discussão do trabalho regional sobre agrotóxicos nas águas superficiais. De modo similar ao estudo mundial, atrazina também foi frequentemente detectada a nível regional. A disponibilidade de muitos testes de ecotoxicidade para esse herbicida, como mostrado no capítulo 2, é fundamental

para conhecer a estimativa de riscos para a biota e para o estabelecimento de critérios de qualidade. Contudo, é importante a realização de testes agudos e crônicos para outros compostos, principalmente produtos de degradação como atrazina-2-hidroxi e AMPA. Os resultados deste estudo poderão ser utilizados por pesquisadores, gestores e demais interessados nas relações entre a qualidade de água e os agrotóxicos.

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APÊNDICE I

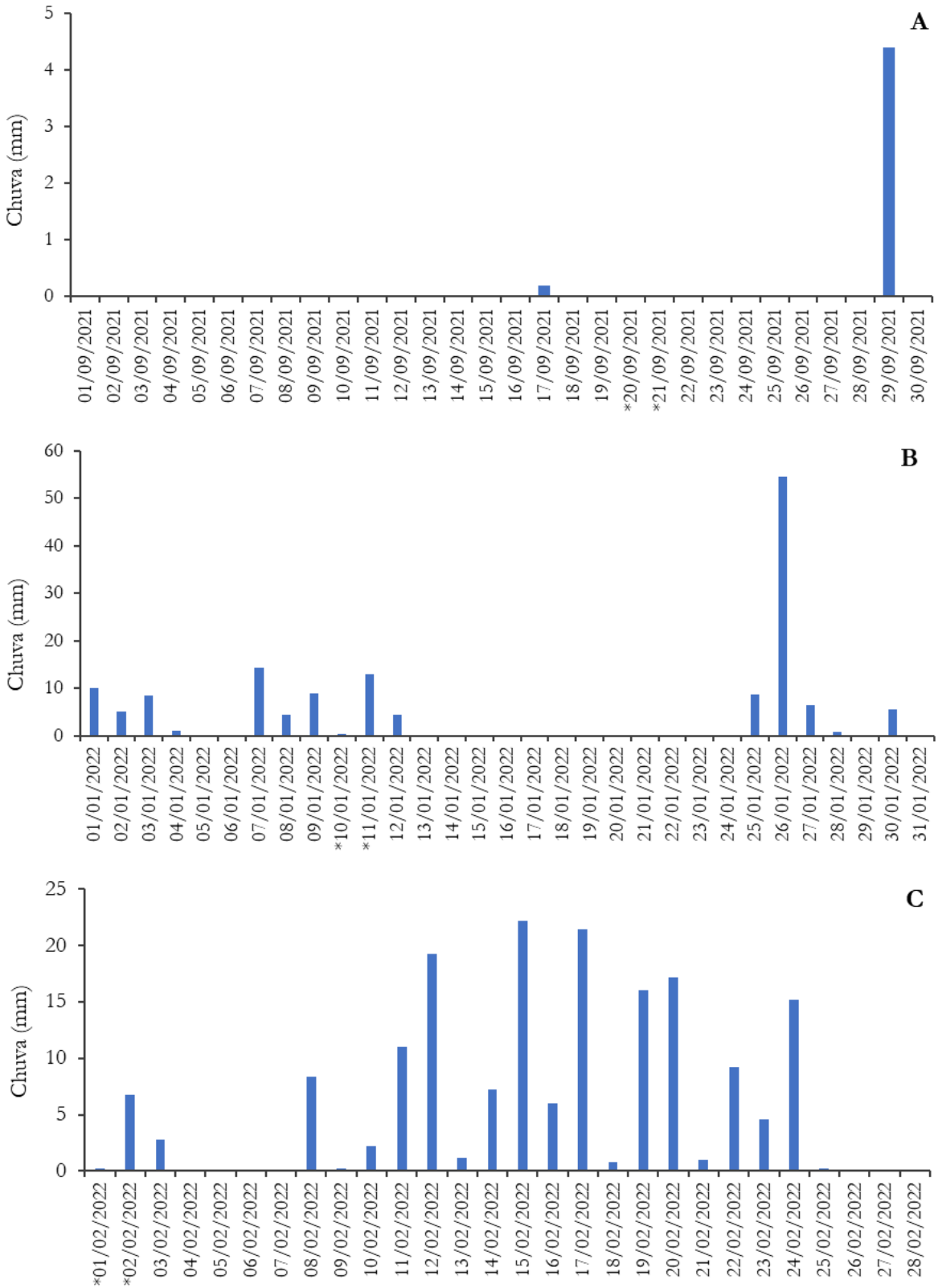

Figura S1. Precipitação na área de estudo correspondente aos meses de **A)** setembro/2021, **B)** janeiro/2022 e **C)** fevereiro/2022, período em que foram realizadas as campanhas S2, C1 e C2, respectivamente. Para o mês de agosto não houve precipitação na região. * Datas das coletas. Fonte: INMET (2023).

Tabela S1. Coordenada geográfica dos pontos amostrais e valores de temperatura, condutividade, sólidos totais dissolvidos (TDS) e pH das amostras coletadas nas quatro campanhas (S1-S2: seca e C1-C2: chuva).

Coordenada	Local de amostragem	Campanha	Temperatura (°C)	Condutividade (µS/cm)	TDS (mg/L)	pH
15° 34' 17.5" S, 47° 26' 20.0" W	P1, Ribeirão Santa Rita - UH 28	S1	22,2	15.7	7	6.26
	P1, Ribeirão Santa Rita - UH 28	S2	25.3	17.99	8.1	6.91
	P1, Ribeirão Santa Rita - UH 28	C1	24.1	13.79	6.1	5.88
	P1, Ribeirão Santa Rita - UH 28	C2	26.6	11.36	4.9	6.29
15° 34' 54.47"S, 47° 20' 36.29" W	P2, Ribeirão Santa Rita - UH 28	S1	21	28.1	12.9	6.16
	P2, Ribeirão Santa Rita - UH 28	S2	21.4	32.4	15	6.74
	P2, Ribeirão Santa Rita - UH 28	C1	23.4	27.7	12.7	6.66
	P2, Ribeirão Santa Rita - UH 28	C2	24.5	22.1	10	6.49
15° 40' 45.9" S, 47° 26' 28.1" W	P3, Ribeirão Jacaré - UH 21	S1	20.9	9.07	3.8	6.28
	P3, Ribeirão Jacaré - UH 21	S2	20.9	9.5	4	6.83
	P3, Ribeirão Jacaré - UH 21	C1	23	8.4	3.5	6.76
	P3, Ribeirão Jacaré - UH 21	C2	24.2	8.07	3.3	6.81
15° 38' 31.14"S, 47° 21' 21.01" W	P4, Ribeirão Jacaré - UH 21	S1	20.6	40.9	19	7.04
	P4, Ribeirão Jacaré - UH 21	S2	21.3	45.3	21.2	6.99
	P4, Ribeirão Jacaré - UH 21	C1	23.4	36.8	17.1	6.74
	P4, Ribeirão Jacaré - UH 21	C2	24.5	32.8	15.2	6.78
15° 46' 57.5" S, 47° 26' 52.4" W	P5, Ribeirão Extrema - UH 20	S1	22.6	19.87	9	7.18
	P5, Ribeirão Extrema - UH 20	S2	21.3	24	10.9	7.09
	P5, Ribeirão Extrema - UH 20	C1	23.9	14.98	6.6	6.48
	P5, Ribeirão Extrema - UH 20	C2	24.8	16.8	7.5	6.93
15° 50' 45.6" S, 47° 23' 06.8" W	P6, Ribeirão Extrema - UH 20	S1	20.6	18.32	8.2	7.01
	P6, Ribeirão Extrema - UH 20	S2	19.8	21.7	9.8	7.05
	P6, Ribeirão Extrema - UH 20	C1	23.3	16.49	7.4	6.78
	P6, Ribeirão Extrema - UH 20	C2	24.6	14.94	6.6	6.89
15°49'52.71"S, 47°33'13.92"W	P7, Alto Rio Jardim - UH 35	S1	20.8	12.4	5.4	7.02
	P7, Alto Rio Jardim - UH 35	S2	21.9	14.84	6.6	6,98
	P7, Alto Rio Jardim - UH 35	C1	24.3	10.43	4.5	6.7
	P7, Alto Rio Jardim - UH 35	C2	25.2	9.89	4.2	6.83
15° 54' 46.7" S, 47° 27' 40.4" W	P8, Alto Rio Jardim - UH 35	S1	20.9	30.1	13.9	6.83
	P8, Alto Rio Jardim - UH 35	S2	21.5	36.4	16.9	6.99

Coordenada	Local de amostragem	Campanha	Temperatura (°C)	Condutividade (µS/cm)	TDS (mg/L)	pH
	P8, Alto Rio Jardim - UH 35	C1	23.8	17.23	7.7	7.10
	P8, Alto Rio Jardim - UH 35	C2	23.2	17.33	7.8	6.61
15°58'3.12"S, 47°28'27.37"W	P9, Baixo Rio Jardim - UH 22	S1	21.5	13.43	5.9	6.94
	P9, Baixo Rio Jardim - UH 22	S2	22.1	14.45	6.4	7.11
	P9, Baixo Rio Jardim - UH 22	C1	23.5	12.96	5.7	6.80
	P9, Baixo Rio Jardim - UH 22	C2	25.5	13.45	5.9	7.04
15°58'31.25"S, 47°23'58.42"W	P10, Baixo Rio Jardim - UH 22	S1	20.3	30.6	14.1	7.01
	P10, Baixo Rio Jardim - UH 22	S2	21.2	42.7	19.9	7.04
	P10, Baixo Rio Jardim - UH 22	C1	24.1	19.70	8.9	6.82
	P10, Baixo Rio Jardim - UH 22	C2	23.8	18.93	8.5	6.86
16° 01' 57.4" S, 47° 27' 40.5" W	P11, Rio São Bernardo - UH 8	S1	26.2	6.41	2.5	6.33
	P11, Rio São Bernardo - UH 8	S2	29.6	7.27	3	7.34
	P11, Rio São Bernardo - UH 8	C1	25.2	11.43	4.9	6.66
	P11, Rio São Bernardo - UH 8	C2	27.1	11.97	5.2	6.32
16° 02' 45.6" S, 47° 23' 04.1" W	P12, Rio São Bernardo - UH 8	S1	21.2	6.95	2.8	6.45
	P12, Rio São Bernardo - UH 8	S2	23.5	7.69	3.2	6.26
	P12, Rio São Bernardo - UH 8	C1	24.5	9.98	4.2	6.37
	P12, Rio São Bernardo - UH 8	C2	25.8	9.66	4.1	6.15
16° 01' 50.4" S, 47° 19' 33.4" W	P13, Alto Rio Preto - UH 3	S1	26.7	48.5	22.7	7.31
	P13, Alto Rio Preto - UH 3	S2	28.1	52.7	24.7	7.2
	P13, Alto Rio Preto - UH 3	C1	26.2	39.8	18.6	6.87
	P13, Alto Rio Preto - UH 3	C2	29.0	41.6	19.4	6.99
15° 53' 45.7" S, 47° 22' 39" W	P14, Alto Rio Preto - UH 3	S1	24.4	60.4	28.4	7.34
	P14, Alto Rio Preto - UH 3	S2	24.7	67.5	31.8	7.03
	P14, Alto Rio Preto - UH 3	C1	26.7	50.9	23.8	7.00
	P14, Alto Rio Preto - UH 3	C2	27.3	45.0	21.0	7.16
15° 49' 28.6" S, 47° 21' 46.3" W	P15, Alto Rio Preto - UH 3	S1	20.1	79.9	37.8	7.46
	P15, Alto Rio Preto - UH 3	S2	21.1	93.3	44.2	7.18
	P15, Alto Rio Preto - UH 3	C1	24.8	60.4	28.4	6.80
	P15, Alto Rio Preto - UH 3	C2	25.2	56.1	26.3	6.85
15°43'3.64"S, 47°19'8.05"W	P16, Alto Rio Preto - UH 3	S1	24.6	84.4	40	7.45
	P16, Alto Rio Preto - UH 3	S2	24	97.7	46.3	7.36

Coordenada	Local de amostragem	Campanha	Temperatura (°C)	Condutividade (µS/cm)	TDS (mg/L)	pH
	P16, Alto Rio Preto - UH 3	C1	26.4	60.3	28.4	6.89
	P16, Alto Rio Preto - UH 3	C2	26.7	59.1	27.8	6.95
15° 34' 46.7" S, 47° 25' 17.2" W	P17, Ribeirão Santa Rita - UH 28	S1	24.6	5.27	2.1	4.98
	P17, Ribeirão Santa Rita - UH 28	S2	25.1	14.72	6.5	5.6
	P17, Ribeirão Santa Rita - UH 28	C1	23.4	4.82	1.8	4.69
	P17, Ribeirão Santa Rita - UH 28	C2	24.4	4.65	1.7	5.00
15° 43' 02.5" S, 47° 26' 27.5" W	P18, Ribeirão Extrema - UH 20	S1	22.7	5.22	2.2	4.83
	P18, Ribeirão Extrema - UH 20	S2	21.9	5.04	1.9	5.48
	P18, Ribeirão Extrema - UH 20	C1	26.4	4.21	1.5	4.92
	P18, Ribeirão Extrema - UH 20	C2	28.3	4.48	1.6	5.31
15° 43' 54.3" S, 47° 35' 25.8" W	P19, Alto Rio Jardim - UH 35	S1	21.1	2.38	0.6	5.55
	P19, Alto Rio Jardim - UH 35	S2	21.4	8.8	3.7	5.62
	P19, Alto Rio Jardim - UH 35	C1	22.2	2.74	0.8	5.99
	P19, Alto Rio Jardim - UH 35	C2	26.1	2.35	0.6	5.93

Tabela S2. Agrotóxicos detectados na Bacia Hidrográfica do Rio Preto no Distrito Federal, seus limites de quantificação (LOQ) e concentrações (µg/L) por ponto em cada unidade hidrográfica e campanha (S1-S2: seca e C1-C2: chuva).

Local de amostragem	Campanha	GLI 0.0025	AMPA 0.0025	GLU 0.0025	ACF 2.5	ATZ 0.0025	ATH 0.05	AZO 0.01	CBZ 0.0025	CBF 0.0025	FLU 0.05	IMD 0.05	MTF 0.05	PFM 0.0025	TEB 0.05	TMX 0.05	FIP 0.0025
P1, Ribeirão Santa Rita - UH 28	S1	0.0207	0.0032	<LOD	<LOD	<LOQ	0.171	<LOD	0.0249	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P1, Ribeirão Santa Rita - UH 28	S2	<LOD	0.0021	<LOD	<LOD	<LOQ	<LOD	<LOD	0.00455	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P1, Ribeirão Santa Rita - UH 28	C1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	0.0243	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P1, Ribeirão Santa Rita - UH 28	C2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	0.00725	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P2, Ribeirão Santa Rita - UH 28	S1	0.0086	0.00235	<LOD	<LOD	0.0032	0.179	<LOD	0.0276	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P2, Ribeirão Santa Rita - UH 28	S2	0.00355	0.00225	<LOD	<LOD	<LOQ	<LOD	<LOD	0.00395	<LOD	<LOD	<LOD	<LOD	0.0052	<LOD	<LOD	<LOD
P2, Ribeirão Santa Rita - UH 28	C1	<LOD	<LOD	<LOD	<LOD	0.00385	<LOD	<LOD	0.0155	<LOD	<LOD	<LOD	<LOD	0.0046	<LOD	<LOD	<LOD
P2, Ribeirão Santa Rita - UH 28	C2	<LOD	<LOD	<LOD	<LOD	0.0064	<LOD	<LOD	0.0116	<LOD	<LOD	<LOD	<LOD	0.0055	<LOD	<LOD	<LOD
P3, Ribeirão Jacaré - UH 21	S1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.0293	<LOD	<LOD	<LOD
P3, Ribeirão Jacaré - UH 21	S2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P3, Ribeirão Jacaré - UH 21	C1	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD

Local de amostragem	Campanha	GLI 0.0025	AMPA 0.0025	GLU 0.0025	ACF 2.5	ATZ 0.0025	ATH 0.05	AZO 0.01	CBZ 0.0025	CBF 0.0025	FLU 0.05	IMD 0.05	MTF 0.05	PFM 0.0025	TEB 0.05	TMX 0.05	FIP 0.0025
P3, Ribeirão Jacaré - UH 21	C2	<LOD	<LOD	<LOD	<LOD	0.0027	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P4, Ribeirão Jacaré - UH 21	S1	0.00395	<LOD	<LOD	<LOD	<LOQ	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P4, Ribeirão Jacaré - UH 21	S2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.0082	<LOD	<LOD	<LOD
P4, Ribeirão Jacaré - UH 21	C1	<LOD	<LOD	<LOD	<LOQ	<LOQ	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P4, Ribeirão Jacaré - UH 21	C2	<LOD	<LOD	<LOD	2.590	0.003	<LOD	<LOD	0.00735	<LOQ	<LOD	<LOD	<LOD	0.0049	<LOD	<LOD	<LOD
P5, Ribeirão Extrema - UH 20	S1	<LOD	<LOD	<LOD	<LOD	0.00265	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P5, Ribeirão Extrema - UH 20	S2	<LOD	<LOD	<LOD	<LOD	0.00365	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	0.0082	<LOD	<LOD	<LOD
P5, Ribeirão Extrema - UH 20	C1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P5, Ribeirão Extrema - UH 20	C2	<LOD	<LOD	<LOD	<LOD	0.00695	<LOD	<LOD	0.0044	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P6, Ribeirão Extrema - UH 20	S1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P6, Ribeirão Extrema - UH 20	S2	0.00235	<LOD	<LOD	<LOD	0.0036	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	0.00435	<LOD	<LOD	<LOD
P6, Ribeirão Extrema - UH 20	C1	<LOD	0.00425	<LOD	<LOD	0.00325	<LOD	<LOQ	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P6, Ribeirão Extrema - UH 20	C2	<LOD	<LOD	<LOD	<LOD	0.00535	<LOD	<LOD	0.01541	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	0.0013
P7, Alto Rio Jardim - UH 35	S1	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P7, Alto Rio Jardim - UH 35	S2	<LOD	<LOD	<LOD	<LOD	0.0033	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.0139	<LOD	<LOD	<LOD
P7, Alto Rio Jardim - UH 35	C1	<LOD	<LOD	<LOD	<LOD	0.00275	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P7, Alto Rio Jardim - UH 35	C2	<LOD	<LOD	<LOD	<LOD	0.0027	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P8, Alto Rio Jardim - UH 35	S1	0.0056	0.00225	<LOD	<LOD	0.00555	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD
P8, Alto Rio Jardim - UH 35	S2	0.02365	0.0077	<LOD	<LOD	0.0077	0.056	<LOD	0.0227	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.055	<LOD
P8, Alto Rio Jardim - UH 35	C1	<LOD	0.00595	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P8, Alto Rio Jardim - UH 35	C2	0.0085	0.0033	<LOD	<LOD	0.0044	<LOD	<LOD	0.0178	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P9, Baixo Rio Jardim - UH 22	S1	0.0069	0.0021	<LOD	<LOD	0.0056	<LOD	<LOD	0.00605	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P9, Baixo Rio Jardim - UH 22	S2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P9, Baixo Rio Jardim - UH 22	C1	<LOD	0.00275	<LOD	<LOD	0.0027	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P9, Baixo Rio Jardim - UH 22	C2	<LOD	<LOD	<LOD	<LOD	0.0046	<LOD	<LOD	0.00565	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.0005
P10, Baixo Rio Jardim - UH 22	S1	<LOD	<LOD	<LOD	<LOD	0.00425	<LOD	<LOD	0.0016	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD
P10, Baixo Rio Jardim - UH 22	S2	<LOD	0.00225	<LOD	<LOD	0.0039	<LOD	<LOD	0.004	<LOD	<LOD	<LOD	<LOD	0,0112	<LOD	<LOQ	<LOD
P10, Baixo Rio Jardim - UH 22	C1	<LOD	0.007	<LOD	<LOD	0.0026	<LOD	<LOD	0.02435	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P10, Baixo Rio Jardim - UH 22	C2	0.0027	0.00225	<LOD	<LOD	0.0061	<LOD	<LOD	0.00965	<LOD	<LOD	<LOD	<LOD	0.0035	<LOD	<LOD	<LOD
P11, Rio São Bernardo - UH 8	S1	0.00355	<LOD	<LOD	<LOD	0.00385	<LOD	<LOD	0.00325	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P11, Rio São Bernardo - UH 8	S2	0.00265	<LOD	<LOD	<LOD	0.0034	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD

Local de amostragem	Campanha	GLI 0.0025	AMPA 0.0025	GLU 0.0025	ACF 2.5	ATZ 0.0025	ATH 0.05	AZO 0.01	CBZ 0.0025	CBF 0.0025	FLU 0.05	IMD 0.05	MTF 0.05	PFM 0.0025	TEB 0.05	TMX 0.05	FIP 0.0025
P11, Rio São Bernardo - UH 8	C1	<LOD	<LOD	<LOD	<LOD	0.0034	<LOD	<LOD	0.0099	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P11, Rio São Bernardo - UH 8	C2	<LOD	<LOD	<LOD	<LOQ	<LOQ	<LOD	<LOD	0.0048	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD
P12, Rio São Bernardo - UH 8	S1	0.0068	0.00255	<LOD	<LOD	0.0063	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P12, Rio São Bernardo - UH 8	S2	0.0048	0.00255	<LOD	<LOD	0.00295	<LOD	<LOD	0.0027	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD
P12, Rio São Bernardo - UH 8	C1	<LOD	<LOD	<LOD	<LOD	0.0031	<LOD	<LOD	0.044	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P12, Rio São Bernardo - UH 8	C2	<LOD	<LOD	<LOD	<LOD	0.00415	<LOD	<LOD	0.00545	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P13, Alto Rio Preto - UH 3	S1	0.0058	0.0028	0.00625	<LOD	0.03905	<LOQ	<LOD	0.0204	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P13, Alto Rio Preto - UH 3	S2	0.00985	0.0027	<LOD	<LOD	0.02195	<LOD	<LOD	0.01725	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P13, Alto Rio Preto - UH 3	C1	<LOD	0.0048	<LOD	<LOD	0.00545	<LOQ	<LOD	0.102	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P13, Alto Rio Preto - UH 3	C2	<LOD	<LOD	<LOD	<LOD	0.00885	<LOD	<LOD	0.051	<LOD	<LOD	<LOD	<LOD	0.00345	<LOD	<LOD	0.00055
P14, Alto Rio Preto - UH 3	S1	0.00575	0.00495	<LOD	<LOD	0.00555	<LOD	<LOD	0.03075	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P14, Alto Rio Preto - UH 3	S2	0.0047	0.00465	<LOD	<LOD	0.00635	<LOD	<LOD	0.02795	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P14, Alto Rio Preto - UH 3	C1	<LOD	0.0031	<LOD	<LOD	0.0041	<LOQ	<LOD	0.058	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P14, Alto Rio Preto - UH 3	C2	0.01005	0.0029	<LOD	<LOD	0.0098	<LOD	<LOD	0.0358	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	0.00085
P15, Alto Rio Preto - UH 3	S1	0.01275	0.00675	<LOD	<LOD	0.00935	<LOD	<LOD	0.102	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOQ
P15, Alto Rio Preto - UH 3	S2	0.00665	0.0063	<LOD	<LOD	0.0088	<LOD	<LOD	0.04505	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ
P15, Alto Rio Preto - UH 3	C1	<LOD	0.0042	<LOD	<LOD	0.00705	<LOQ	<LOD	0.067	<LOD	<LOD	<LOD	<LOD	0.00425	<LOD	<LOD	<LOQ
P15, Alto Rio Preto - UH 3	C2	<LOD	<LOD	<LOD	<LOD	0.00895	<LOD	<LOD	0.04075	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.00095
P16, Alto Rio Preto - UH 3	S1	0.01615	0.00855	<LOD	<LOD	0.0124	<LOQ	<LOD	0.075	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ
P16, Alto Rio Preto - UH 3	S2	0.0163	0.0083	<LOD	<LOD	0.01025	<LOD	<LOD	0.053	<LOD	<LOD	<LOD	<LOD	0.00355	<LOD	<LOD	<LOQ
P16, Alto Rio Preto - UH 3	C1	<LOD	<LOD	<LOD	<LOD	0.00535	<LOD	<LOD	0.053	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOQ
P16, Alto Rio Preto - UH 3	C2	<LOD	<LOD	<LOD	<LOD	0.00945	<LOD	<LOD	0.03915	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P17, Ribeirão Santa Rita - UH 28	S1	<LOD	<LOD	<LOD	<LOD	0.0048	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.0046	<LOD	<LOD	<LOD
P17, Ribeirão Santa Rita - UH 28	S2	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P17, Ribeirão Santa Rita - UH 28	C1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P17, Ribeirão Santa Rita - UH 28	C2	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P18, Ribeirão Extrema - UH 20	S1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P18, Ribeirão Extrema - UH 20	S2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P18, Ribeirão Extrema - UH 20	C1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P18, Ribeirão Extrema - UH 20	C2	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P19, Alto Rio Jardim - UH 35	S1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD

Local de amostragem	Campanha	GLI 0.0025	AMPA 0.0025	GLU 0.0025	ACF 2.5	ATZ 0.0025	ATH 0.05	AZO 0.01	CBZ 0.0025	CBF 0.0025	FLU 0.05	IMD 0.05	MTF 0.05	PFM 0.0025	TEB 0.05	TMX 0.05	FIP 0.0025
P19, Alto Rio Jardim - UH 35	S2	<LOD	<LOD	<LOD	<LOD	<LOQ	<LOQ	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P19, Alto Rio Jardim - UH 35	C1	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
P19, Alto Rio Jardim - UH 35	C2	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD

ATZ: atrazina, AZO: azoxistrobina, CBZ: carbendazim, CBF: carbosulfam, FIP: fipronil, FLU: flutriafol, GLU: glufosinato, GLI: glifosato, ATH: atrazina-2-hidroxi, IMD: imidacloprido, MTF: Metamidofós, PFM: pirimifós-metílico, TEB: tebuconazol e TMX: tiametoxam.

ANEXO I

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Pesticides in surface freshwater: a critical review

Esmeralda Pereira de Araújo ·
Eloisa Dutra Caldas ·
Eduardo Cyrino Oliveira-Filho

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Abstract The objective of this study was to critically review studies published up to November 2021 that investigated the presence of pesticides in surface freshwater to answer three questions: (1) in which countries were the studies conducted? (2) which pesticides are most evaluated and detected? and (3) which pesticides have the highest concentrations? Using the Prisma protocol, 146 articles published from 1976 to November 2021 were included in this analysis: 127 studies used grab sampling, 10 used passive sampling, and 9 used both sampling techniques. In the 45-year historical series, the USA, China, and Spain were the countries that conducted the highest number of studies. Atrazine was the most evaluated pesticide (56% of the studies), detected in 43% of the studies using grab sampling, and the most detected in passive sampling studies (68%). The compounds with the highest maximum and mean concentrations in the grab sampling were molinate (211.38 µg/L) and bentazone (53 µg/L), respectively, and in passive sampling, they were oxyfluorfen (16.8 µg/L) and atrazine (4.8 µg/L), respectively. The levels found for atrazine, p,p′-DDD, and heptachlor in Brazil were higher than the regulatory levels for superficial water in the country. The concentrations exceeded the toxicological endpoint for at least 11 pesticides, including atrazine (*Daphnia* LC_{50} and fish NOAEC), cypermethrin (algae EC50, *Daphnia* and fish LC_{50}; fish NOAEC), and chlorpyrifos (*Daphnia* and fish LC_{50}; fish NOAEC). These results can be used for planning pesticide monitoring programs in surface freshwater, at regional and global levels, and for establishing or updating water quality regulations.

Keywords Surface freshwater · Pesticide contamination · Herbicides · Insecticides · Organochlorines · Organophosphates

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E. P. de Araújo (✉)
Faculty of Planaltina - FUP, University of Brasilia - UnB, Planaltina, Federal District, Brazil
e-mail: esmeraldaneta.a@gmail.com

E. D. Caldas
Toxicology Laboratory, Faculty of Health Sciences, University of Brasília - UnB, Brasília, Federal District, Brazil
e-mail: eloisa@unb.br

E. C. Oliveira-Filho (✉)
Brazilian Agricultural Research Corporation - Embrapa Cerrados, Planaltina, Federal District, Brazil
e-mail: eduardo.cyrino@embrapa.br

Introduction

Pesticides are widely used in the management of pests that affect agricultural quality and production (Mateo-Sagasta et al., 2017), and their use has increased over the years to meet the demand for food and other products

for a growing population (FAO, 2020a). Currently, more than 1680 substances, active ingredients and metabolites, are included in the Pesticides Properties DataBase (PPDB, 2021). These are substances classified into different classes (e.g., herbicide, insecticide, and fungicide), chemical groups (e.g., organochlorines, organophosphates, and triazines), and modes of action (e.g., acetylcholinesterase enzyme and photosystem inhibition).

Despite the benefits of using pesticides in agriculture, these compounds are potential contaminants of surface freshwater (Caldas, 2019; Pirsaheb et al., 2017; Souza et al., 2020). Rockström et al. (2009) described chemical water pollution as one of the axes of the planetary boundary that is not yet quantified, and its damage to aquatic organisms and humans is still not totally understood. Environmentally sound management and a significant reduction in the release of chemical substances into water by 2020, such as pesticides, were also two of the goals of the 12th United Nations Sustainable Development Targets (UN, 2016). Therefore, efforts to assess the panorama of pesticides in surface freshwater at local and global scales are important.

Some review studies demonstrated the presence of pesticides in freshwater, from trace levels to high concentrations. Pirsaheb et al. (2017) focused on organochlorine and organophosphate chemical groups and restricted the study to the period 2000 to 2015, while Souza et al. (2020) analyzed studies published from 2012 to 2019. However, a review that covers all pesticides, without restriction of period, is important to understand the panorama of water contamination by these pollutants and the evolution of the problem in recent decades.

The objective of this study was to critically review studies on pesticides in surface freshwater. The study covered works published until November 2021, of all types and chemical groups of pesticides, to answer three questions: (1) in which countries were studies that analyze pesticides in surface freshwater conducted? (2) which pesticides are most evaluated and detected by the studies? and (3) which pesticides have the highest concentrations?

Methods

The Prisma protocol, used to prepare a systematic review and meta-analysis, was followed in this critical review in order to reduce the risk of bias and ensure study quality (Moher et al., 2015). Descriptors related to pesticides inserted into the search string were: {((pesticide* OR metabolite* OR agrochemical* OR agrichemical) AND detect*)} AND {(((surface AND freshwater* OR river* OR lake*) AND contaminant*) AND NOT soil*)}. Searches were performed in the ScienceDirect, Scopus, and Web of Science databases, focusing on titles, abstracts, and keywords, and include papers published up to November 08, 2021. Additionally, papers that escaped from the database search but were mentioned in some studies were also included.

Eligibility criteria

For inclusion criteria, were considered studies (1) published in peer-reviewed scientific journals, (2) in English, (3) about pesticides in surface freshwater, (4) cited the sampling environment and pesticide analysis technique, (5) generated analytical data, and (6) contained the names and the concentrations of the investigated pesticides. Exclusion criteria were studies that (1) were not original research (reviews, meta-analysis, letters, etc.), (2) had data from another study already included, (3) presented data for the sum of pesticide concentrations, and (4) showed data that were in non-comparable units and/or only displayed in graphs.

Study selection and data collection process

Two independent reviewers selected the publications based on information contained in titles and abstracts and considering the eligibility criteria. When there were disagreements regarding the inclusion or exclusion of a study, the reviewers evaluated the work and decided together. The studies included were fully read to verify if they met the eligibility criteria.

After assessing compliance with the eligibility criteria, the following information was extracted: (1) authors and year of publication; (2) country and/or region where the study was conducted; (3) landscape from the surrounding area to the sampling locations; (4) type of water body monitored; (5) sampling technique performed in the study (grab or passive); (6) pesticides evaluated and concentrations detected; (7) analysis technique and method limit of quantification

(LOQ), maximum detection limit (MDL) and/or limit of detection (LOD).

Data analysis

The name of each substance (pesticide and/or its metabolite) was first standardized according to the Pesticides Properties Data Base (PPDB, 2021), and, when the name was not found, the PubChem (2021) database was used. The included studies were separated into two groups, according to the sampling technique: grab and passive sampling. Grab sampling consists of carrying out the sample collection at an episodic moment in time, while passive sampling makes use of devices, called passive samplers, which are installed in the environment for a period, usually days, and makes up for the loss of occasional events of pollution and the variation of pollutants over time (Vrana et al., 2005).

The collected data were tabulated and analyzed using Excel software. Concentrations extracted from the studies and the LOD/MDL/LOQ of the methods were standardized in micrograms per liter. The number of studies conducted per country and by region was plotted on a map using Google Earth and QGis software.

The number of studies in which each pesticide was evaluated, and the number of studies in which it was detected at least once was counted. Concentration values equal to or above the LOD/MDL or LOQ were considered, as reported in the study. Pesticides with the highest concentrations were identified for both sampling techniques, considering the maximum and mean concentrations reported in the studies. The highest concentrations found were compared with regulations on pesticides in surface freshwater and ecotoxicological endpoints for aquatic biota, according to data availability.

Results and discussion

Selection process and study distribution around the world

The search returned 941 publications (Fig. 1). With the removal of duplicates and selection of articles according to eligibility criteria, 146 studies remained in this revision, the oldest published in 1976: 127 studies used grab sampling, 10 studies used

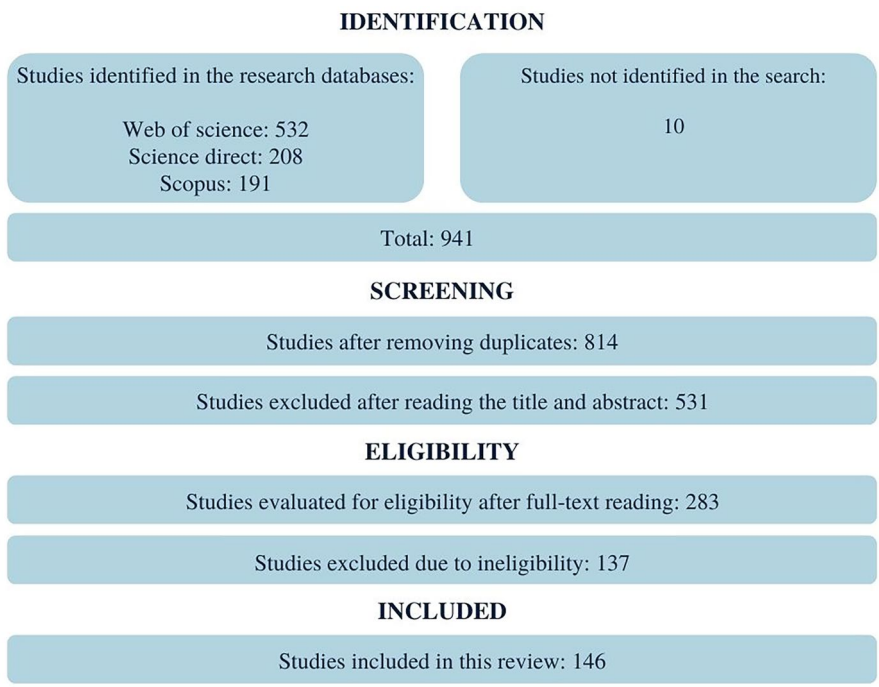

Fig. 1 Flowchart for selecting the studies that analyzed pesticides in surface water published up to November 08, 2021

passive sampling, and 9 studies used grab and passive samplings.

The 146 studies were conducted in 48 countries, mainly the USA (30), China (19), and Spain (16) (Fig. 2). Detailed information of each study is available in Table 1 and in the Supplementary Material (Tables S1 and S2). The studies conducted in the USA included several regions of the country and were carried out mainly by institutional agencies such as the US Geological Survey (USGS), Environmental Protection Agency (EPA), and California Department of Pesticide Regulation (Bai et al., 2018; Bradley et al., 2019; Bradley et al., 2017a, b; Elliott et al., 2017; Elliott & VanderMeulen, 2017; Ensminger et al., 2013),

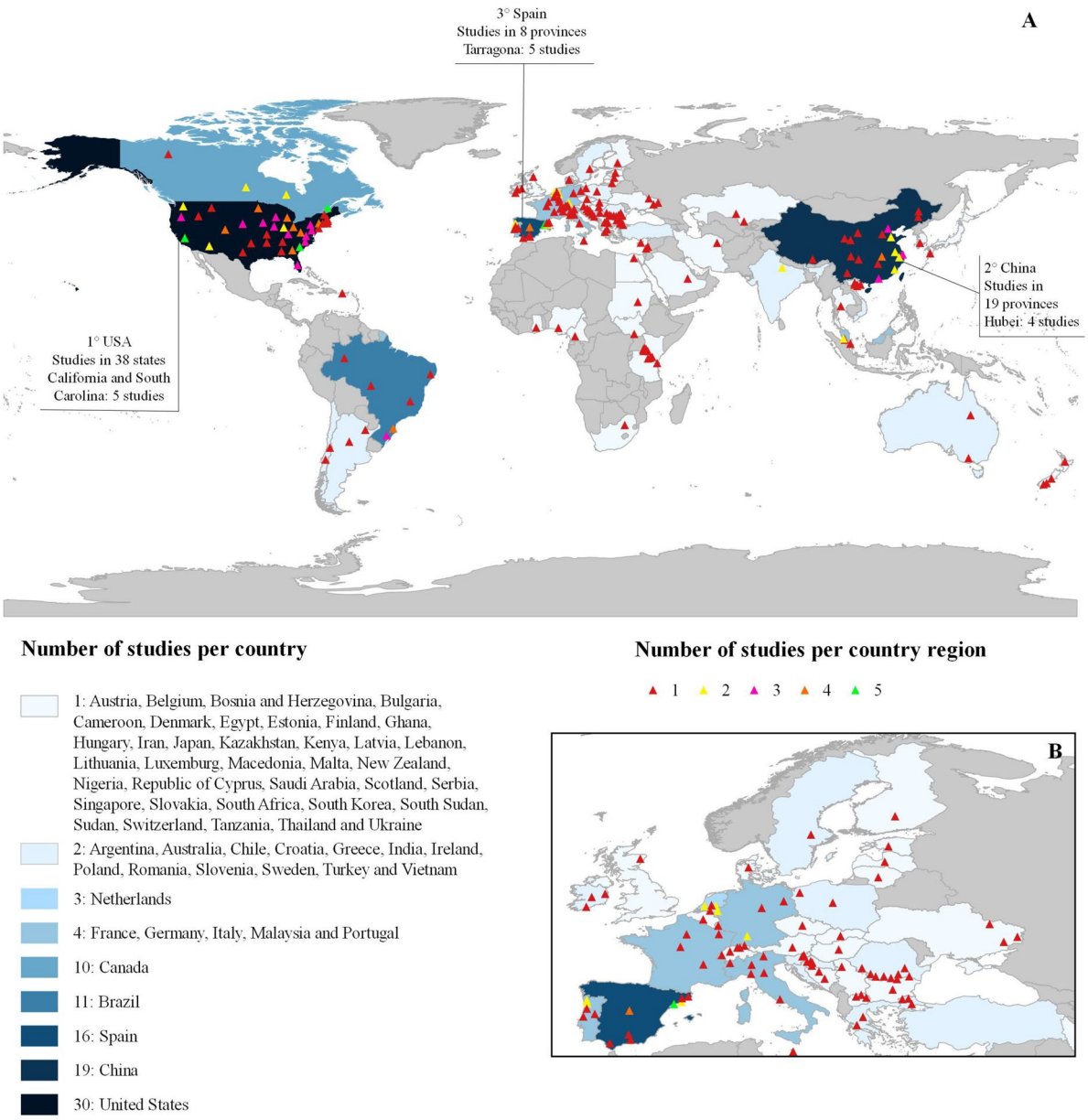

Fig. 2 (**A**) World distribution of the 146 studies published from 1976 to 2021 that investigated the occurrence of pesticides in surface freshwater. (**B**) Distribution of the 43 studies conducted in Europe

Table 1 General characteristics of the 146 studies included in this review that investigated the occurrence of pesticides in surface freshwater in the world, listed according to the publication year. G, grab sampling; P, passive sampling

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: tolylfluanid [201,56]	River	Agriculture, urban areas, and industry	Croatia	Malev et al. (2022)
G: diuron [1.37]	Rivers	Agriculture, urban area, and industry	Ukraine	Nikolopoulou et al. (2022)
G: δ-HCH [0.026] and o,p′-DDD (0.002)	River and spring water	Agriculture	China	Huang et al. (2021)
G: bentazone [180] and (53)	Channels	Agriculture and chemical industries	Spain	Barbieri et al. (2021)
G: metolachlor SA [0.09]	River and creeks	Agriculture, pasture, forests, and developed	USA	Thompson et al. (2021)
G: malathion [0.535]	Rivers and streams	Urban area	Brazil	Rico et al. (2021)
G molinate [211.38] and (15.56)	River and creeks	Agriculture, big urban regions, and industries	Turkey	Emadian et al. (2021)
G: metolachlor ESA [0.08]	River[a]	n.i	Canada	Picard et al. (2021)
G: imazethapyr [0.58]	Lake	Agriculture, urban areas, industries, and livestock	Brazil	Perin et al. (2021)
G: MCPA [23.7] and flufenacet ESA (1)	Streams	Agriculture and pasture	France	Le Cor et al. (2021)
G: metazachlor ESA [3]	River	Agriculture, urban area, industry, and forest	Italy	Carere et al. (2021)
G: 2,4-D [1.2]	Creeks	Urban area	USA	Cavallin et al. (2021)
G: aldrin (1.15)	River	Agriculture, urban area, and livestock	Portugal	Paíga et al. (2021)
G: carbendazim [0.02]	River	Agriculture, urban area, and forests	China	Liu et al. (2021)
G: bentazone [63.1]	Rivers and creeks	Agriculture and urban area	USA	Bradley et al. (2021)
G: thiabendazole [< MDL]	Reservoir	n.i	China	Zhang et al. (2021a, b)
G: atrazine [38]	River and creeks	Agriculture, urban area, pasture, and forest	USA	Smalling et al. (2021)
G: heptachlor [0.04] and β-HCH (0.02)	Lake	Agriculture and industry	China	Cao et al. (2021)
G: 2,6-dichlorobenzamide [0.06]	River	Urban area	Sweden	Golovko et al. (2021)
G: dichlorvos (0.04)	River	Urban area	China	Zhang et al. (2021)
G: atrazine [0.3]	Rivers and creeks	Park	USA	Bradley et al. (2020)
P: atrazine [4.1] and (0.35)	Rivers, lakes, channel, and creeks	Agriculture, urban area, and pasture	USA	Alvarez et al. (2021)
G: atrazine [0.3]	Streams	Agriculture, urban area, and pasture	USA	Guardian et al. (2021)
G: carbendazim [0.17]	Lakes and river	Agriculture and urban area	Vietnan	Wan et al. (2021)
P: p,p′-DDE [0.00007]	Lake and creeks	Urban area and industries	Canada	Zhang et al. (2020)
G: bentazone [0.18]	Lake and river	Agriculture, urban area, and industry	China	Meng et al. (2020)

Table 1 (continued)

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: metolachlor [3.8]	Rivers and chaneel	Agriculture, urban area, and industry	USA	Battaglin et al. (2020)
G: imidacloprid [0.41]	River	Agriculture	Japan	Hashimoto et al. (2020)
G: dieldrin [0.37] P: atrazine (0.001)	River and reservoir	Agriculture, wetlands, and pasture	Kazakhstan	Snow et al. (2020)
G: hexazinone [1.5]	Lake	Agriculture, urban area, industry, and grassland	Kenya	Kandie et al. (2020)
G: n.d	River	Urban area	Brazil	Huelsmann et al. (2020)
G: n.d	River	Agriculture and urban area	Brazil	Cancillier et al. (2020)
G: α-HCH [0.013] P: α-HCH (0.007)	River	Agriculture and livestock	China	Liu et al. (2020)
G: n.d	Lake and channek	n.i	Turkey	Turan et al. (2020)
G: diazinon [0.25]	River	Urban area, agriculture, industry, and mineral	Malaysia	Zainuddin et al. (2020)
G: acetamiprid [0.034] and (0.02)	River and creek	Urban area	China	Lu et al. (2020)
G: glyphosate [4.8] and AMPA (1.6)	Streams	Agriculture, urban area, industry, grassland, forest, and park	Australia	Okada et al. (2020)
G: propoxur (0.85)	River	Agriculture and urban area	Brazil	Gonçalves et al. (2020)
G: diazinon [1.01] and (0.14)	Lakes and channels	Agriculture, urban area, and industries	Saudi Arabia	Picó et al. (2020)
P: diazinon [0.05]	River	Agriculture, urban areas, and industries	Bosnia and Herzegovina	Toušová et al. (2019)
G: atrazine [76.8]	River and creeks	Agriculture, urban areas, forests, and grass	USA	Cipoletti et al. (2019)
G: tebuconazole [0.45] P: diuron [1]	Rivers and streams	Agriculture, urban areas, forested areas, and grasslands	Spain	Rico et al. (2019)
G: glyphosate [3] and (0.1)	Rivers	Agriculture, urban area, forest, and forestry	Canada	Montiel-Léon et al. (2019)
G: α-HCH (0.2)	River	Agriculture, urban area, and industry	Nigeria	Ogbeide et al. (2019)
G: 2,4-D (0.2) P: 2,4-D (0.07)	Streams	Agriculture, pasture, and native bush	New Zealand	Hageman et al. (2019)
G: terbutryn [0.43]	Rivers and stream	Agriculture, urban area, and industry	Spain	Rubirola et al. (2019)
G: carbendazim [0.15]	River and channel	Urban area	Thailand	Juksu et al. (2019)
G: imidacloprid [0.15] and (0.08)	River	Urban area	China	Yi et al. (2019)
G: n.d	River	n.i	Brazil	Silva et al. (2019)
G: prometryn [0.03] P: prometryn (0.05)	River	Urban area	China	Gao et al. (2019)
G: carbendazim [16.84] and (4.84)	Rivers	Agriculture, urban area, industry, and mining	Spain	Quintana et al. (2019)
G: thiamethoxam [0.27] and imidacloprid (0.006)	River	Agriculture and urban area	China	Mahai et al. (2019)

Table 1 (continued)

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: imidacloprid [0.16]	Rivers[a]	Agriculture, urban area, industry, livestock, and poultry	China	Zhang et al. (2019)
G: imidacloprid (0.016)	Rivers	Agriculture, urban region, and industries	Spain	Borrull et al. (2019)
G: 2,4,5-trichloro-6-hydroxybenzene-1,3-dicarbonitrile [39.18]	Creeks	Agriculture, pasture, urban region, and forest	USA	Bradley et al. (2019)
G: n.d	River	n.i	Iran	Chahkandi et al. (2019)
P: oxyfluorfen [16.8]	Rivers, streams, and lakes	Agriculture	Brazil	Valenzuela et al. (2019)
G: quinoxyfen [0.006]	Rivers[a]	Agriculture, urban region, and industries	Ireland	Jones et al. (2019)
G: triallate [0.5]	Rivers[a]	Agriculture, pasture, urban region, and industries	Portugal	Sousa et al. (2019)
G: diazinon [< 0.00001]	River[a]	Urban region	Malasyan	Wee et al. (2019)
G: bentazone [0.85] and (0.23)	Rivers and channel	n.i	China	Xu et al. (2019)
G: chlorpyrifos and 2-phenylphenol [< 0.01]	Rivers*	Agriculture, urban area, and park	Australia	Scott et al. (2018)
P: atrazine (0.5)	River	Agriculture and urban area	Canada	Challis et al. (2018)
P: atrazine (0.14)	River	Agriculture and urban area	USA	Penland et al. (2018)
G: 2-Phenylphenol [0.04] and (0.04)	River, lake, and channel	Agriculture, urban area, and industry	Serbia	Škrbić et al. (2018)
G: acephate [4.47] and (1.67)	River[a]	Agriculture and urban area	China	Sun et al. (2018)
G: thiamethoxam [0.06] and imidacloprid (0.01)	Wetland	Agriculture	USA	Williams and Sweetman (2019)
G: triclopyr [5.2]	Rivers and creeks	Agriculture, urban region, industries, forests, recreation parks, and golf courses	USA	Bai et al. (2018)
P: atrazine (1.25)	Rivers, lake,[a] and creek	Agriculture and urban region	Canada	Challis et al. (2018, b)
G: bromacil [0.02]	Dam catchment and rivers[a]	Agriculture, urban region, and industries	South Africa	Rimayi et al. (2018)
G: thiacloprid (0.76)	Rivers[a]	Agriculture, urban region, and industries	Portugal	Barbosa et al. (2018)
G: malathion [0.94]	River	Agriculture and vegetation native	Brazil	Berton et al. (2018)
G: diuron [13.9] and (1.63) P: diuron [0.37] and (0.21)	Rivers	Agriculture, urban regions, industries, and forests	Cameroon	Branchet et al. (2018)
G: hydroxyatrazine [9.7]	River	Agriculture, urban region, and industry	China	Brauns et al. (2018)

Table 1 (continued)

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: carbendazim [0.12]	Streams and river[a]	Industry	Germany	Merel et al. (2018)
G: terbuthylazine [0.002]	Stream and lake	Glaciers	Italy	Ferrario et al. (2017)
G: β-Endosulfan [0.004]	Tributaries and channels	Urban area and industry	Singapore	Wang and Kelly (2017)
G: phorate sulfoxide (38.9)	River	n.i	India	Asati et al. (2017)
G: 2,4-D [0.8] and (0.2)	Rivers	Agriculture, urban region, and industries	Brazil	Bianchi et al. (2017)
G: simazine [3.14]	Rivers, creeks, lakes, and streams	Agriculture, urban region, industry, pasture, forest, wetland, and grassland	USA	Elliot and VanderMeulen (2017)
G: pentachlorophenol [0.2]	Rivers and creeks	Agriculture, urban region, forest, and wetland	USA	Bradley et al. (2017a)
G: 3,4-dichloroaniline [80.02]	Rivers, creeks, canals, swamp, dam, lakes, and sloughs	Agriculture, urban regions, pasture, forests, shrubs, and wetlands	USA	Bradley et al. (2017b)
G: metolachlor [1.53]	Rivers, lakes, creeks, and channel	Agriculture, urban region, animal feeding operations, forest, and wetland	USA	Elliot et al. (2017)
G: permethrin (0.94) P: deltamethrin (0.02)	Creeks	Urban region	USA	Liao et al. (2017)
G: desphenyl-chloridazon [0.42] and (0.37)	Rivers[a]	Agriculture, urban region, and industries	Germany	Seitz and Winzenbacher (2017)
G: molinate [0.55]	Rivers	Agriculture, urban region, factories, industries, and mining	Macedonia	Stipaničev et al. (2017)
P: chlorpyrifos [0.12] and diazinon (0.05)	Lake and river	Agriculture and urban region	Lebanon	Aisha et al. (2017)
G: chlorotoluron (0.02) P: chlorotoluron (0.01)	River[a]	Agriculture and urban area	Scotland	Zhang et al. (2016)
G: simazine [0.46] P: 2,4-D (0.25)	Creeks and river	Agriculture, forests, and bare rock	USA	Hapke et al. (2016)
G: aclonifen [0.01]	Rivers	n.i	Romania	Iancu et al. (2016)
G: chlorpyrifos (0.07)	Rivers[a]	Agriculture, urban region, industries, mining, forest, and poultry farm	Malaysia	Wee et al. (2016)
G: metolachlor [0.44]	Creeks	Agriculture, pasture, and urban region	USA	Fairbairn et al. (2016)
G: atrazine [0.004]	River	Agriculture, urban region, and forest	Slovenia	Koroša et al. (2016)
G: heptachlor epoxide [1.57] and (0.67)	River	Agriculture and urban region	Sudan and South Sudan	Nesser et al. (2016)
G: atrazine (0.16)	Rivers	Agriculture, urban region, and forest	France	Camilleri et al. (2015)
G: n.d	Rivers and channel	Agriculture and urban region	Spain	Luque-Espinar et al. (2015)

Table 1 (continued)

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: chloridazon-desphenyl [2.2]	Rivers	Agriculture and urban regions	Switzerland	Moschet et al. (2014)
G: chlorpyrifos (0.02)	River[a]	Agriculture, urban region, industries, and park	Spain	Pintado-Herrera et al. (2014)
G: p,p′-DDE [0.02]	Lake	Agriculture and urban region	China	Zhang et al. (2014)
G: dimethoate [5.17] and prometon (4.1)	Rivers and reservoirs[a]	Agriculture, urban region, and industries	Spain	Robles-Molina et al. (2014)
G: chlorpyrifos [0.04]	Rivers and tributaries	Agriculture and industry	South Korea	Lee et al. (2014)
G: α-HCH [0.004] and (0.003)	Rivers	Agriculture, urban area, industry, and livestock	Tanzania	Hellar-Kihampa et al. (2013)
G: endosulfan sulfate [0.03]	Rivers	Urban region	Spain	Nallanthigal et al. (2013)
G: simazine [2]	Rivers[a]	n.i	USA	Anumol et al. (2013)
G: diuron [17.6]	Creeks[a]	Urban region	USA	Ensminger et al. (2013)
P: atrazine (4.8)	River	Agriculture	USA	Knight et al. (2013)
G: carbaryl [0.09]	Rivers	Agriculture and forests	Chile	Retamal et al. (2013)
G: AMPA [2.28]	Rivers, channel, intake, and sluice	Agriculture, urban region, industry, stock farming, and nature	Netherlands	Houtman et al. (2013)
G: γ-HCH [0.025]	Rivers	Agriculture, urban area, and forest	Malaysia	Santhi and Mustafa, (2013)
G: endosulfan sulfate [0.004]	River	Agriculture	Argentina	Schreiber et al. (2013)
G: clopyralid [3.5]	Reservoir and rivers	Agriculture, urban region, and industries	China	Wolf et al. (2013)
G: diazinon [0.27] and (0.09)	River	Agriculture, urban area, and industry	Spain	Gómez et al. (2012)
P: endosulfan sulfate [0.0006]	Lakes	Agriculture, forest, and park	USA	Mast et al. (2012)
G: 21 pesticides [<LOD]	Ponds, ditches, and canals	Agriculture	Vietnan	Hoai et al. (2011)
G: diazinon [0.15] and MCPA (0.1)	River	Agriculture and urban area	Spain	Calderón-Preciado et al. (2011)
G: atrazine [0.2]	Creeks	Agriculture and pasture	USA	Sellin et al. (2011)
G: aldrin [0.16]	Rivers	Agriculture	Brazil	Bedendo and Carasek (2010)
G: diuron [0.06]	Rivers	Agriculture, urban region, and industries	Spain	Bueno et al. (2010)
G: MCPA [0.38] and (0.1)	Rivers	n.i	Spain	Matamoros et al. (2010)
G: isoproturon [0.3] and (0.16)	River*	Agriculture and urban region	Greece	Stamatis et al. (2010)
G: endrin [0.28] and (0.04)	River	Agriculture, urban region, industry, and wetland	Poland	Tomza-Marciniak and Witczak (2010)
G: atrazine [7.3]	Rivers	Agriculture, urban region, pasture, wetland, and forests	USA	Kolpin et al. (2010)

Table 1 (continued)

Highest concentration [max.] and (mean), µg/L	Environment	Landscape	Country	Reference
G: α-HCH [26.8]	River	Agriculture, urban region, and industry	India	Najam et al. (2010)
G: isoproturon [1.96] and (0.05)	Rivers and creeks	n.i	Union European	Loos et al. (2009)
G: atrazine [2.1]	River and creek[a]	Agriculture, urban region, and forests	USA	Alvarez et al. (2009)
G: desethylatrazine [0.48]	Rivers	Agriculture and urban region	Canada	Garcia-Ac et al. (2009)
G: γ-HCH [1.61] and (0.07)	Lake	Agriculture	Ghana	Darko et al. (2008)
G: atrazine [0.17]	River	Agriculture, urban area, and industry	Spain	Gómez-Gutiérrez et al. (2006)
G: n.d	Lake	n.i	China	Xiao et al. (2006)
G: parathion-methyl [0.13]	Creeks[a]	Agriculture, urban region, pasture, and forests	USA	Barber et al. (2006)
G: o,p′-DDT [0.16] and p,p′-DDE (0.05)	Reservoir	Agriculture, urban region, and industries	China	Xue and Xu (2006)
G: n.d	River	Agriculture, forestry, and rocks	Chile	Barra et al. (2005)
G: aldrin [0.11]	River[a]	Agriculture, urban region, and industry	Spain	Brossa et al. (2005)
G: atrazine (0.09)	River	Agriculture and urban region	Canada	Sabik et al. (2003)
G: atrazine [0.08]	Rivers[a]	Agriculture and industry	Netherlands	van Stee et al. (2002)
G: molinate [0.36]	River	Agriculture	Italy	Agradi et al. (2000)
G: β-HCH [0.0001]	River[a]	Agriculture, urban region, and industry	Egypt	Yamashita et al. (2000)
G: heptachlor [57.8]	River	Agriculture and urban regions	Brazil	Araújo et al. (1998)
G: atrazine [0.05]	River	Agriculture and urban region	Canada	Sabik and Jeannot (1998)
G: mecoprop and dichlorprop [0.1]	Canals, river, and lake	n.i	Germany	Heberer et al. (1998)
G: 2,4,6 trichlorophenol [0.04]	River	Agriculture and industry	Canada	McCarthy et al. (1997)
G: p,p′-DDT [0.02] and (0.005)	River	Agriculture and industry	Argentina	Janniot et al. (1994)
G: atrazine [0.8]	Rivers[a]	Agriculture	France	Legrand et al. (1991)
G: aldicarb sulfoxide [10.9]	River[a]	Agriculture and urban region	USA	Foran et al. (1986)
G: hexachlorobenzene [0.03]	River	Industry	Canada and USA	Kauss and Hamdy (1985)
G: atrazine [42]	Rivers, reservoirs, creek, lake, and pond[a]	Agriculture and urban region	USA	Junk et al. (1976)

n.i. not informed

[a]Environment: exclusion of one or more collection points due to the study classifying it in an environment other than freshwater or the data being graphically displayed

which demonstrated a strong government effort to monitor pesticides in water. As one of the five countries with the largest export, import, and use of pesticides in the world (FAO, 2020a, b), the USA is extremely susceptible to the environmental impacts arising from the use of these substances.

China is the largest exporter and user of pesticides in the world (FAO, 2020a, b) and has the largest population on the planet (The World Bank, 2019). Since the 2000s, China has been implementing agricultural policies to guarantee food security and stabilize prices (Gale, 2013). Indeed, the first study conducted in the country that investigated the levels of pesticides in freshwater retrieved in this review was published in 2006, and in total, 19 studies were conducted up to November 2021, indicating also a growing concern over the impact of pesticide use on the environment.

Member countries of the European Union are required to monitor water quality for priority substances and other pollutants, including pesticides, but no concentration limits are established (European Commission, 2008). A total of 43 studies were conducted in the European region in surface water eligible for this critical review (Fig. 2B). Spain was the country that most conducted these studies (16), followed by Portugal, France, Italy, and Germany, with four studies each (Table 1; Tables S1 and S2).

In South America, only Brazil, with 11 studies, Argentine and Chile (2 studies each) had studies included in this review, and 9 studies were conducted on the African continent (Fig. 2). Analytical techniques for pesticide detection involve complex and expensive instruments that require specific training for use and ongoing maintenance (Kot et al., 2000; Ong et al., 2020), which may be limiting factors for some developing countries, including in Central and South American and Asian countries. It is interesting to note that no studies conducted in Russia were retrieved in this review, a developed country where, in principle, technical limitations do not apply (Fig. 2A).

General aspects of selected studies

The review covered a period of 45 years, and the oldest study was conducted in the USA using grab monitoring technique (Junk et al., 1976). This study evaluated the levels of atrazine, DDE, the degradation product of DDT (1,1′-(2,2,2-trichloroethane-1,1-diyl) bis(4-chlorobenzene)), and dieldrin in water bodies in Iowa.

The USGS pioneered the development of passive sampling techniques (USGS, 1999), and some studies describe these devices for use in surface water (Alvarez, 2010; Brumbaugh et al., 2002). van Stee et al. (2002) was the first study found during the article search process that used a passive sampler (Semipermeable Membrane Device, SPMD); however, the study was not included in this review because the concentrations were expressed in non-comparable units (ng/g fat). In addition to SPMD, the studies used other passive sampling devices such as POCIS (Polar Organic Chemical Integrative Sampler), o-DGT (diffusive gradients in thin films for organics), and PU (polyurethane film), with exposure from 4 to 460 days in water (Table S2). Alvarez et al. (2009) used POCIS and SPMD to evaluate various pesticides in the Potomac River watershed, USA, and four other studies using this technique were carried out in the country.

The use of grab sampling for water is widespread and consolidated (CETESB, 2011; European Commission, 2009); however, the chemical profile and concentrations of contaminants are restricted to the time of sampling, and the conditions between collections are unknown (European Commission, 2009). On the other hand, passive sampling provides weighted mean concentrations over the exposure time, which covers the conditions of the entire sampled period and eliminates extreme variations, such as fluctuations in contaminants (Valenzuela et al., 2020). However, these devices still have some limitations, including the effects of environmental conditions on analyte absorption; low sampling rate, which requires longer sampling time for lower concentrations (Namieśnik et al., 2005); and device theft. Additionally, some require complex mathematical models to calculate the sampling rate (Valenzuela et al., 2020). Thus, the two techniques are not mutually exclusive, but complementary. In Europe, for example, passive sampling is used as a method complementary to grab sampling (European Commission, 2009), and 9 studies included in this review also used both methods (Table 1).

Most studies were conducted close to agricultural regions (Table 1), an activity identified as the main source of pesticide contamination in water (WHO, 2016). However, some studies also evaluated pesticides in urban regions (Table 1), such as Liao et al.

(2017), who investigated insecticides for urban use and Wee et al. (2019), who focused on endocrine disruptors in urban rivers.

Rivers were the most monitored water bodies, although it must be noted that terms that describe lower order water bodies, such as streams, were not included in the search string. The European water quality directive, for example, suggests monitoring points in large rivers, because they are strategic environments for checking the state of a hydrographic basin (European Commission, 2000). In any case, the monitoring of water bodies of various orders in the hydrographic basin is important.

Pesticides evaluated and detected by studies on surface freshwater

The improvement of chromatography, with the development of new equipment and techniques from the 1960s onwards, allowed advances in the analysis of pesticides, with more sensitive and specific detectors, such as the mass spectrometer (MS), and made it possible to measure concentrations in the order of ng and pg (Solomon & Stephenson, 2010). Tables S1 and S2 show the analytical methods used in the studies and the reported LOD/MDL and/or LOQ. All studies included in this review used chromatographic methods for analyte separation. While non-polar and thermostable compounds, such as organochlorines and pyrethroids, are more easily evaluated by gas chromatograph (GC) techniques, (Ibáñez et al., 2008; Wille et al., 2012), more polar and thermolabile molecules are preferentially analyzed by liquid chromatography (LC) (Ibáñez et al., 2008). GC was the equipment used in most studies, and tandem mass spectrometry (MS/MS) was the most frequent detector, coupled with GC and/or with LC; many studies used different equipment, including high resolution (HR) GC or LC for screening before quantitation. The lowest LOD reported in the studies was 0.8 pg/L, obtained in UPLC-ESI-QqQ-MS/MS equipment (ultra-performance liquid chromatography equipped with an electrospray ion source coupled to triple quadrupole tandem mass spectrometry).

A total of 1064 pesticides were evaluated in the 127 studies that used grab sampling, with the reported number of samples collected varying from 2 to 370, information that was not included in most studies (Table S1). Almost half of the investigated pesticides (636) were detected. The pesticides most evaluated were atrazine (56%), simazine (46%), and chlorpyrifos (36%), and the most detected were atrazine (43%), simazine (29%), metolachlor (28%), and imidacloprid (28%) (Fig. 3A). Atrazine, simazine, chlorpyrifos, and metolachlor were more evaluated and detected in the USA (Table S1).

Nineteen studies were conducted using passive samplers (Fig. 3B), mainly in regions with agricultural proximity, with samples collected in South and North America, Europe, Africa, Asia, and Oceania, of which nine studies also used grab sampling (Table S2). A total of 164 pesticides were investigated in the 19 studies, with 5 to 460 passive samplers used and 132 pesticides detected at least once. Chlorpyrifos (74%), atrazine (68%), and diazinon (63%) were the most investigated compounds, while atrazine (68%), simazine (42%), chlorpyrifos (42%), p,p′-DDD (42%), and p,p′-DDE (42%) both DDT degradation products, were the most detected (Fig. 3B), with percentages similar to those of grab sampling (Fig. 3A).

Atrazine is a selective and systemic herbicide of the triazine group, used in the pre- and post-emergent stages of many crops, mainly corn, soybean, wheat, cotton, sorghum, and sugarcane (ANVISA, 2021; PPDB, 2021; USGS, 2017). Atrazine degradation products (desethyl and deisopropylatrazine) were also detected in surface water samples (Fig. 3). In 2017, the use of atrazine in the corn crop in the USA was 10,508 ton/km^2 (USGS, 2017). In Brazil, this herbicide was the fifth highest-selling active ingredient, with more than 23,000 tons sold in 2019 (IBAMA, 2020). In the European Union, the use of this herbicide has been banned (European Commission, 2004), but it is still monitored in food (European Commission, 2016) and in surface water (European Commission, 2008).

Simazine, another triazine herbicide, is also used in the pre- and post-emergent stages in various crops, including fruits, canola, chickpeas, beans, corn, sorghum, and sugarcane (ANVISA, 2021; PPDB, 2021; USGS, 2017). Metolachlor is a selective herbicide of the chloroacetamide group, which inhibits the synthesis of very long chain fatty acids in plant tissue and can be used in various crops, including corn, soybeans, sorghum, potatoes, cotton, and ornamental plants (PPDB, 2021; USGS, 2017). Imidacloprid is a systemic neonicotinoid insecticide used in various crops, including rice, maize, cotton, sugar cane, and various vegetables (PPDB, 2021; ANVISA, 2021).

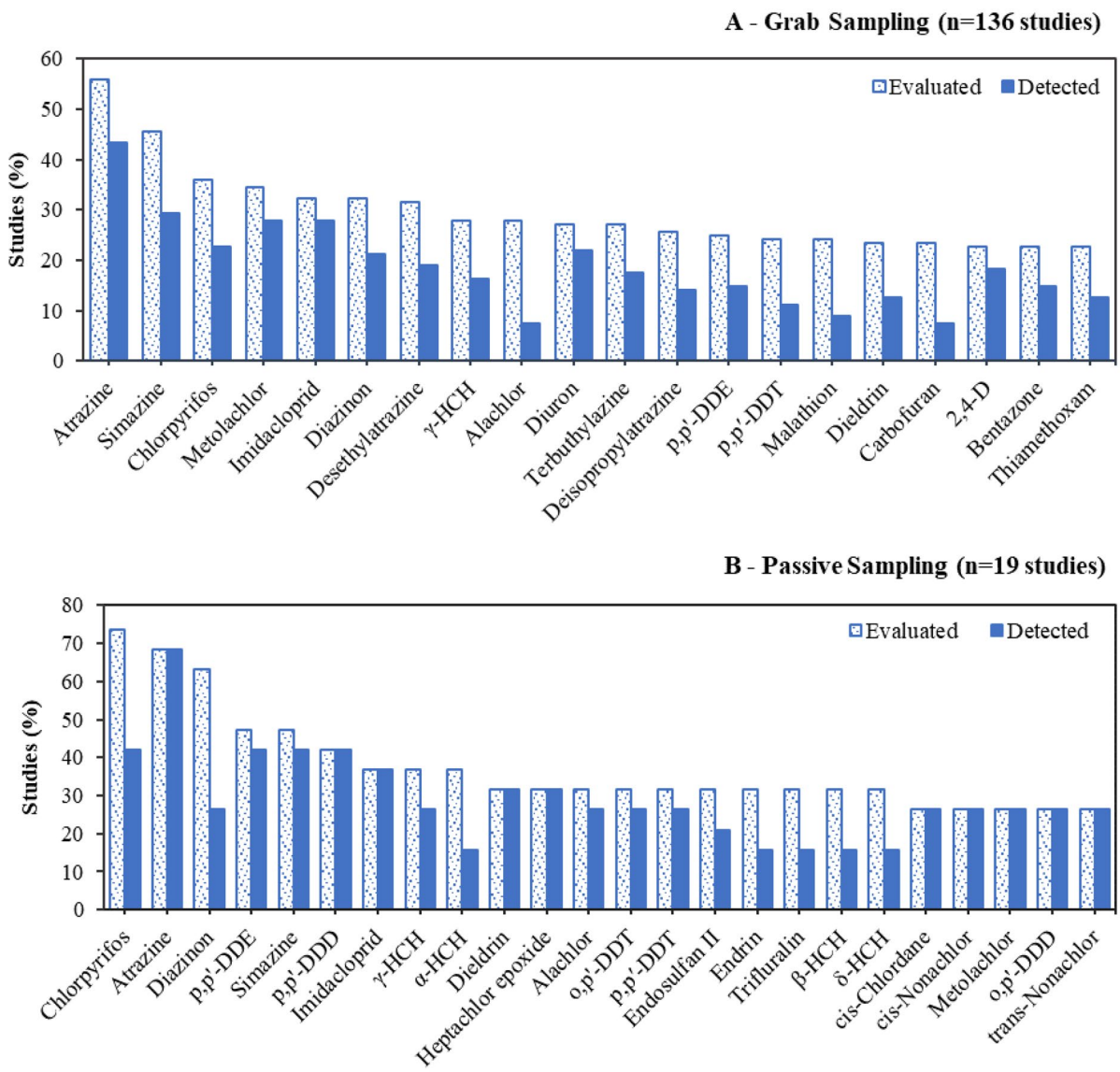

Fig. 3 Pesticides most evaluated and detected in the 146 studies (≥ LOD/MDL/LOQ) using (**A**) grab sampling and (**B**) passive sampling as monitoring techniques

Several organophosphate insecticides were evaluated and detected in the studies, including chlorpyrifos, diazinon, and malathion (Fig. 3). These compounds are neurotoxic, acting as inhibitors of the enzyme acetylcholinesterase (AChE) in mammals, insects, and other organisms (Colovic et al., 2013). Several persistent organochlorine pollutants (POPs) were also detected in surface water samples, including the insecticides lindane (γ-HCH), DDT and its metabolite DDE, aldrin and dieldrin, and heptachlor and its epoxide (Fig. 3). These compounds are no longer used in agriculture in most countries or have restricted use, but their chemical characteristics make them persistent in the environment and susceptible to bioaccumulation in ecosystems (Chopra et al., 2011). Aiming to reduce and eliminate the release of these organochlorine pollutants, and to safeguard human health and the environment, the Stockholm Convention determined that the signatory parties carry out national and international research on these compounds (UN, 2001).

Pesticide concentrations in the surface freshwater

It is important to note that, for both sampling techniques, the most detected pesticides are not necessarily those with highest concentrations (Tables S1 and S2; Fig. 4). In general, the maximum and mean concentrations of compounds detected in samples collected by the grab monitoring technique were higher than those found in passive sampling (Fig. 4), similar to what was reported for some pesticides by Hapke et al. (2016). This is expected due to the dilution factor of concentration peaks that occurs during the passive sampling period.

The highest maximum and mean concentrations detected using grab sampling were for molinate (211.38 µg/L; Fig. 4A) and bentazone (53 µg/L; Fig. 4B), found, respectively, in the Ergene River hydrographic basin (Turkey; Emadian et al., 2021) and in Fangay Bay, Ebro River (Spain; Barbieri et al., 2021) (Table 1). For the passive sampling, the highest concentrations were for oxyfluorfen (16.8 µg/L; Fig. 4C) and atrazine (4.8 µg/L; Fig. 4D), detected in the San Francisco river basin (Brazil) and in the Elkhorn river (USA) (Table 1; Knight et al., 2013; Valenzuela et al., 2019). In all cases, the herbicides were detected

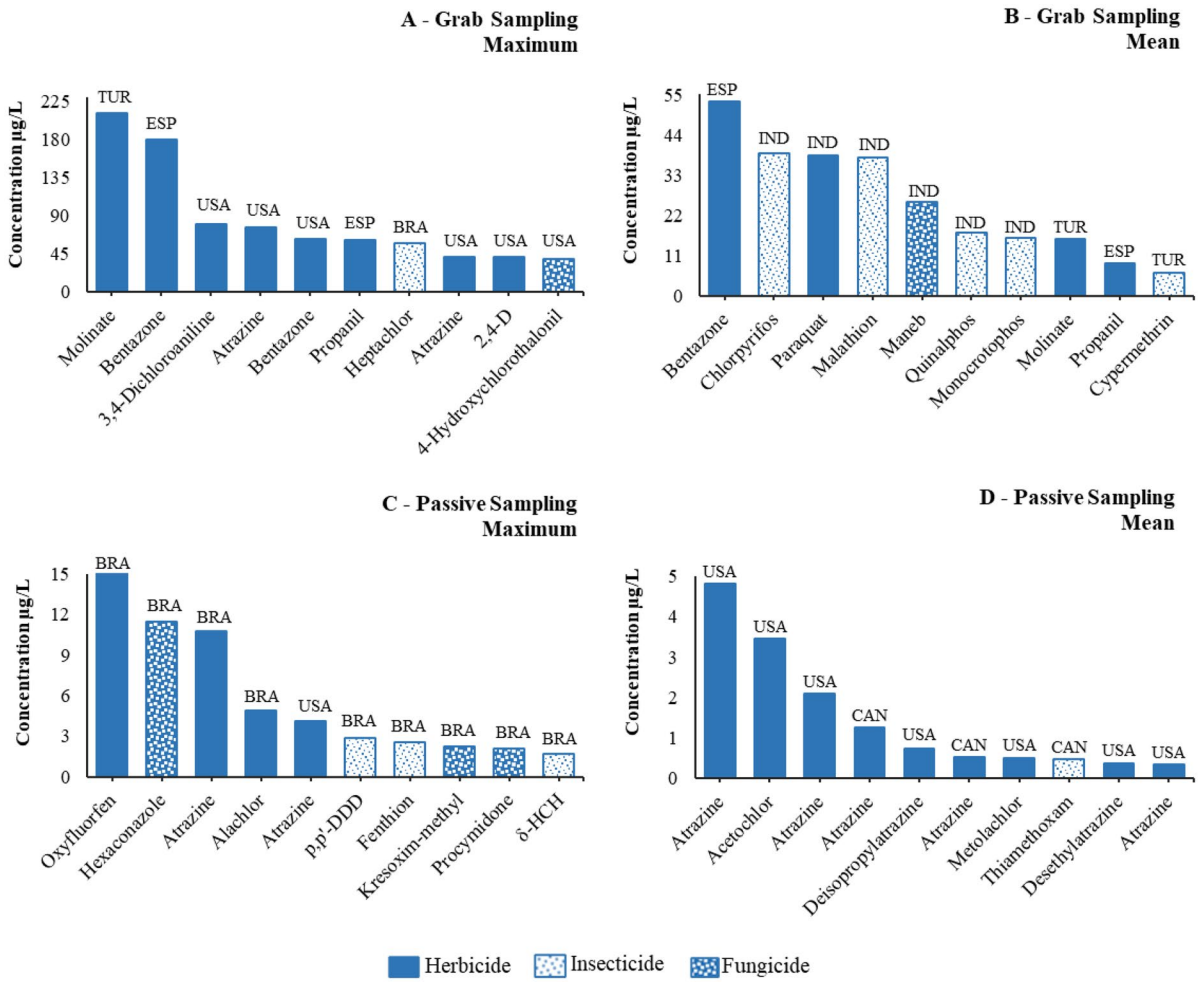

Fig. 4 The ten highest concentrations of pesticides or metabolites found in the 146 studies according to the sampling technique: (**A**) grab sampling — maximum concentrations; (**B**) grab sampling — mean concentrations; (**C**) passive sampling — maximum concentrations; (**D**) passive sampling — mean concentrations. Source: BRA: Brazil: Araújo et al. (1998); Valenzuela et al. (2019); CAN: Canada: Challis et al. (2018a, b); ESP: Spain: Barbieri et al. (2021); IND: India: Asati et al. (2017); TUR: Turkey: Emadian et al. (2021) and USA: United States: Alvarez et al. (2009, 2021); Bradley et al. (2021, 2017b); Cipoletti et al. (2019); Junk et al. (1976) and Knight et al. (2013)

Table 2 Pesticides for which the highest maximum or mean concentration (Fig. 4) is higher than the ecotoxicological parameter (µg/L)

Pesticide	Algae EC_{50} (72 h)[a]	*Daphnia* LC_{50} (48 h)[a]	Fish (LC_{50})[b]	Fish (NOAEC)[b]
Atrazine	68.02	30,031.17	2650	5
Chlorpyrifos	203.03	0.81	0.9	0.57
Cypermethrin	0.08	0.0006	0.195	0.051
Hexaconazole	0.5	10.96	2.44[a]	
Malathion	6371.78	20.32	2.05	8.6
Maneb	0.229	2.41	21	6.1
Molinate	18,455.77	17,783.15	105	390
Oxyfluorfen	507.17	231.22	100	1.3
Propanil	4589.33	1678.35	1150	9.1
Quinalphos	275.96	2.46	-	-
δ-HCH	2.03	1.39	0.0857[a]	-

LC_{50} lethal concentration, *EC_{50}* effective concentration, *NOAEC* non-observed adverse effect concentration

[a]Norman (2022)

[b]USEPA (2021)

near agricultural areas, which are indeed the major source of pesticide water contamination.

The European Commission (2020) established a parametric value of 0.1 µg/L for water for human consumption for any pesticide, except for organochlorine compounds (0.03 µg/L), but no value is established for surface water. Indian, Canadian, and USA regulations also establish values for water for human consumption (India, 2012; Canada, 2020, USEPA, 2018). Brazilian regulation for maximum pesticide levels in surface water depends on the water use (Brazil, 2005) and includes heptachlor (0.01 or 0.03 µg/L), atrazine (2 µg/L), and ΣDDTs (0.002 or 1 µg/L). These levels are much lower than the maximum concentrations found in the many studies conducted in the country (Fig. 4A, C). No regulation for pesticide in water was found in Turkey, in which a study showed the highest molinate concentration (Emadian et al., 2021).

The presence of pesticides and other chemicals in water bodies can have an important impact on aquatic organisms, reducing biodiversity and compromising the functioning of ecosystems (Carvalho, 2017). Table 2 shows the pesticides from Fig. 4 for which the highest maximum or mean concentrations extrapolated at least one ecotoxicological endpoint (EC_{50} and LC_{50} for acute exposure and NOAEC for fish chronic exposure), obtained from NORMAN (2022) and/or USEPA (2021).

Algae EC_{50} was extrapolated for atrazine (Fig. 4A; 76.8 µg/L) and cypermethrin (Fig. 4B; 6.24 µg/L) concentrations and *Daphnia* LC_{50} for chlorpyrifos, cypermethrin, and quinalphos (Fig. 4B; 6.24 to 38.9 µg/L) and δ-HCH (Fig. 4C; 1.65 µg/L). Fish LC_{50} was extrapolated for molinate (Fig. 4A; 211.4 µg/L); chlorpyrifos, cypermethrin, malathion, and maneb (Fig. 4B; 6.24 to 38.9 µg/L); and hexaconazole (Fig. 4C; 11.4 µg/L). Fish NOAEC was extrapolated for atrazine (Fig. 4A, C; 76.8, 10.7 µg/L); chlorpyrifos, cypermethrin, malathion, maneb, and propanil (Fig. 4B; 6.24 to 38.9 µg/L); and oxyfluorfen (Fig. 4C;16.8 µg/L).

This systematic review study has some limitations that should be pointed out. One limitation is that some publications may have been missed during the literature search, which was restricted to the previously defined descriptors and did not include other types of water bodies, such as streams and ponds. Another limitation is that most studies that used grab sampling did not report the number of samples collected, which hampered the estimation of the incidence of positive samples for each pesticide.

Conclusions

The USA, China, and Spain were the countries with the largest number of studies on pesticides in surface freshwater, and few economically less developed countries have also conducted studies, including those with high agricultural activity. Atrazine was the most evaluated and detected pesticide until 2021, and it is also among the compounds detected at higher concentrations, in addition to molinate, bentazone, and oxyfluorfen, detected in samples collected in the USA, Turkey, Spain, and Brazil. The levels of atrazine, p,p′-DDD and heptachlor were higher than the legal maximum levels for surface water in Brazil. The concentrations exceeded the ecotoxicological endpoint for at least 11 pesticides, including atrazine, cypermethrin, and chlorpyrifos.

Regulations that establish maximum concentration limits for pesticides in surface freshwater are limited in the world, and they were only identified in Brazil. Therefore, the results of this review can be used in planning monitoring of surface freshwater quality, at regional and global levels, and for implementing or updating regulations on the subject, which are essential for the protection of aquatic ecosystems.

Future studies in this area should include the use of landscape ecology tools to understand the dynamics that occur in the watershed and the flow of polluting sources to water bodies, thus identifying priority areas for water monitoring, including those for water intake for human consumption.

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Declarations

Conflict of interest The authors declare no competing interests.

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Table S1 Pesticide concentrations (μg/L) in surface freshwater using grab sampling

Pesticide group*	Chemical group*	Pesticide	Minimum	Maximum	Mean (min.)	SD	Mean (max.)	SD	Median (min.)	Median (max.)	Limit 1	Limit 2	Limit Type	Analysis Technique	N	Country	Reference
Herbicide	Triazine	Atrazine					<LOQ				0,0260	0,0850	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide	Organophosphate	Chlorpyrifos			35,2100	3,8000	38,9400	2,6000			0,0090	0,2980	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Herbicide	Bipyridylium	Paraquat			35,2300	3,1200	38,3400	2,6500			0,0790	0,2610	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion			35,2300	1,8000	37,9400	2,1000			0,0190	0,0620	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Fungicide	Carbamate	Maneb			24,9800	2,4800	25,6500	2,6400			0,1620	0,5330	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide	Organophosphate	Quinalphos			15,7900	3,3000	17,2600	2,6000			0,1610	0,0350	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide	Organophosphate	Monocrotophos			12,6400	0,8000	15,8900	0,4000			0,0230	0,0760	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide	Organophosphate	Parathion-methyl			2,7400	0,9000	4,4100	0,6000			0,0570	0,1870	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Ethion			1,2000	0,9000	2,4000	0,4000			0,0160	0,0520	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Herbicide	Urea	Isoproturon			0,7600	0,0300	0,8400	0,0700			0,0260	0,0860	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran			<LOQ		0,4200	0,0600			0,0150	0,0500	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide	Organophosphate	Phosalone									0,0620	0,2040	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos									0,0210	0,0700	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate									0,0190	0,0640	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate									0,0200	0,0670	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Acaricide, Termiticide, Veterinary substance	Pyrethroid	Fenvalerate									0,1260	0,4160	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin									0,0410	0,1370	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Degradate	Unclassified	Methyl paraoxon									0,0340	0,1130	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Degradate	Unclassified	Phorate sulfone									0,0550	0,1820	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Degradate	Organophosphate	Phorate sulfoxide									0,0300	0,0980	LOD/LOQ	LC-ESI-MS/MS	10	India	Asati et al., 2017
Degradate	Triazine	Desethylatrazine			0,0190	0,0010	0,4790	0,0040			0,0030		MDL	LC-MS/MS	-	Canada	Garcia-Ac et al., 2009
Herbicide	Triazine	Atrazine			0,0020	0,0008	0,0480	0,0030			0,0006		MDL	LC-MS/MS	-	Canada	Garcia-Ac et al., 2009
Herbicide	Triazine	Simazine			0,0040	0,0010	0,0120	0,0040			0,0020		MDL	LC-MS/MS	-	Canada	Garcia-Ac et al., 2009
Degradate	Triazine	Deisopropylatrazine			0,0020	0,0002	0,0120	0,0010			0,0010		MDL	LC-MS/MS	-	Canada	Garcia-Ac et al., 2009
Herbicide	Triazine	Cyanazine			<MCL		0,0040	0,0005			0,0008		MDL	LC-MS/MS	-	Canada	Garcia-Ac et al., 2009
Herbicide	Thiocarbamate	Molinate	0,0040	0,3630							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Chloroacetamide	Metolachlor	<0,0050	0,0960							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Thiocarbamate	Thiobencarb	<0,0020	0,0910							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide	Organophosphate	Fonofos	<0,0020	0,0300							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Triazine	Simazine	<0,0050	0,0300							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Degradate	Unclassified	Desethylatrazine	<0,0050	0,0250							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Triazine	Atrazine	<0,0020	0,0150							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,0020	0,0130							n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Triazine	Propazine									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide	Organophosphate	Parathion-methyl									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Thiocarbamate	Tiocarbazil									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Chloroacetamide	Alachlor									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Insecticide, Acaricide	Organophosphate	Parathion									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
		2.4-D									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Aryloxyalkanoic acid	Mecoprop									n.i.		n.i.	GC-MS	-	Italy	Agradi et al., 2000
Herbicide	Triazine	Atrazine	<1	<1							0,1000	0,5000	LOD/LOQ	UHPLC-MS/MS	-	United States	Anumol et al., 2013
Herbicide	Triazine	Simazine	<2	2,0000							0,1000	0,5000	LOD/LOQ	UHPLC-MS/MS	-	United States	Anumol et al., 2013
Insecticide	Organochlorine	Heptachlor	<LOQ	57,8000							0,001 pg		LOQ	GC-ECD[1]	56	Brazil	Araújo et al., 1998
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene									0,001 pg		LOQ	GC-ECD[1]	56	Brazil	Araújo et al., 1998
Insecticide	Organochlorine	Mirex									0,001 pg		LOQ	GC-ECD[1]	56	Brazil	Araújo et al., 1998
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin									0,001 pg		LOQ	GC-ECD[1]	56	Brazil	Araújo et al., 1998
Degradate	Unclassified	Heptachlor epoxide									0,001 pg		LOQ	GC-ECD[1]	56	Brazil	Araújo et al., 1998
Herbicide	Pyridine compound	Triclopyr		5,2100					0,0382	0,0474	0,0200		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		3,7900					0,0738	0,1140	0,0100		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Phenylamide	Diuron		1,3100					0,0406	0,0524	0,0200		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazine	Atrazine		1,2500					0,0147	0,0282	0,0100		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Uracil	Bromacil		1,1900					0,0747	0,0808	0,0500		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Metolachlor ESA		1,0400					0,1130	0,0900	0,0200		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Aryloxyalkanoic acid	Mecoprop		0,9760					0,0536	0,0586	0,0200		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Metolachlor		0,7780					0,0220	0,0173	0,0100		MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018

Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,3390	0,0302	0,0401	0,0200	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,1540	0,0301	0,0192	0,0100	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Fungicide	Strobilurin	Azoxystrobin				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Fungicide	Phenylamide	Metalaxyl				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Fungicide	Triazole	Propiconazole				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Acetochlor				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Alachlor				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazine	Atrazine-D5				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Benzothiazinone	Bentazone				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Sulfonylurea	Chlorimuron-ethyl				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Sulfonylurea	Chlorsulfuron				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazine	Cyanazine				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Benzenedicarboxylic acid	Dacthal				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Aryloxyalkanoic acid	Dichlorprop				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Dimethachlor				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Dimethenamid				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazinone	Metribuzin				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Phenylurea	Monuron				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Urea	Neburon				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Dinitroaniline	Oryzalin				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Methoxytriazine	Prometon				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Chloroacetamide	Propachlor				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazine	Propazine				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazine	Simazine				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Sulfonylurea	Sulfometuron-methyl				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Urea	Tebuthiuron				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide	Organophosphate	Chlorpyrifos				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide	Neonicotinoid	Thiamethoxam				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Degradate	Carbamate	Methomyl				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon-D10				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion-D10				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Degradate	Neonicotinoid	Clothianidin				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Nematicide	Organophosphate	Ethoprophos				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran-D3				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	3-Hydroxycarbofuran				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Acetochlor OA				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Alachlor OA				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Aldicarb sulfoxide				n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018

Degradate	Unclassified	Dacthal monoacid		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Triazine	Deisopropylatrazine		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Triazine	Desethylatrazine		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Dimethachlor ESA		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Dimethenamid ESA		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Disulfoton sulfone		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Fipronil sulfide		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Fipronil sulfone		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Propachlor OXA		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Propachlor ESA		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Pyrimidinylsulfonyl urea	Foramsulfuron		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Triazinone	Hexazinone		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Imidazolinone	Imazethapyr		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Urea	Linuron		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Thiocarbamate	EPTC		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Degradate	Unclassified	Butachlor ESA		n.i.	MRL	UHPLC-MS/MS and GC-MS	311	United States	Bai et al., 2018
Herbicide	Pyridine compound	Picloram	<MDL	0,0500	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Methoxytriazine	Prometon	<MDL	0,0150	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Degradate	Benzonitrile	Dichlobenil	<MDL	0,0500	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Triazine	Desethylatrazine	<MDL	0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide	Organophosphate	Parathion-methyl	0,1300	0,0060	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,1100	0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0310	0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Triazine	Atrazine	0,0170	0,0010	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Chloroacetamide	Metolachlor	0,0080	0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Insecticide, Acaricide, Fungicide	Dinitrophenol	DNOC		0,3000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Acaricide	Sulphite ester	Propargite		0,0100	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Fungicide	Chloronitrile	Chlorothalonil		0,0300	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Aryloxyalkanoic acid	2,4-DB		0,1000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Chloroacetamide	Acetochlor		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Chloroacetamide	Alachlor		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitroaniline	Benfluralin		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzothiazinone	Bentazone		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Uracil	Bromacil		0,0600	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	Butylate		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Pyridine compound	Clopyralid		0,2000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Triazine	Cyanazine		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzenedicarboxylic acid	Dacthal		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzoic acid	Dicamba		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Aryloxyalkanoic acid	Dichlorprop		0,0300	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitrophenol	Dinoseb		0,0600	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Phenylamide	Diuron		0,0500	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	EPTC		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Aryloxyalkanoic acid	MCPB		0,1000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Triazinone	Metribuzin		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	Molinate		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Alkanamide	Napropamide		0,0030	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Urea	Neburon		0,0200	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Pyridazinone	Norflurazon		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitroaniline	Oryzalin		0,3000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	Pebulate		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitroaniline	Pendimethalin		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Chloroacetamide	Propachlor		0,0070	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Anilide	Propanil		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzamide	Propyzamide		0,0030	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Triazine	Simazine		0,0050	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Urea	Tebuthiuron		0,0100	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Uracil	Terbacil		0,0070	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	Thiobencarb		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Thiocarbamate	Triallate		0,0010	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Pyridine compound	Triclopyr		0,0700	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitroaniline	Trifluralin		0,0020	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Degradate	Nitrophenyl	Acifluorfen		0,0500	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA		0,0200	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-Trichlorophenoxyacetic acid		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Plant growth regulator	Phenoxipropionic acid	Fenoprop		0,0300	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Plant growth regulator	Carbamate	Propham		0,0400	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		0,1000	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide	Organophosphate	Chlorpyrifos		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide	Pyrethroid	cis-Permethrin		0,0050	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide	Organophosphate	Fonofos		0,0030	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide	Organophosphate	Disulfoton		0,0200	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide	Organophosphate	Parathion		0,0040	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Degradate	Carbamate	Methomyl		0,0200	MDL	GC-MS and HPLC	-	United States	Barber et al., 2006

Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl				0,0010		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb				0,2000		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl				0,0200		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate				0,0020		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion				0,0050		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur				0,0200		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb				0,0300		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Nematicide	Organophosphate	Ethoprophos				0,0030		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Nematicide	Organophosphate	Terbufos				0,0100		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran				0,0030		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone				0,1000		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Plant growth regulator	Carbamate	Carbaryl				0,0030		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Unclassified	2,6-Diethylaniline				0,0020		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Unclassified	3-Hydroxycarbofuran				0,0100		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Unclassified	Aldicarb sulfoxide				0,0200		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Unclassified	Dacthal monoacid				0,0400		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Urea	Linuron				0,0020		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Dinitroaniline	Ethalfluralin				0,0040		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Urea	Fenuron				0,0700		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Phenylurea	Fluometuron				0,0600		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin				0,0010		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Insecticide, Other substance	Organochlorine	α-HCH				0,0020		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Degradate	Organochlorine	p,p'-DDE				0,0030		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzoic acid	Chloramben				0,1000		MDL	GC-MS and HPLC	-	United States	Barber et al., 2006
Herbicide	Benzothiazinone	Bentazone	0,1500	180,0000	53,0000	0,0043	0,0140	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Anilide	Propanil	0,0210	61,0000	9,0000	0,0009	0,0030	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,1300	8,2100	1,7000	0,0055	0,0180	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Neonicotinoid	Acetamiprid	0,0003	4,0000	0,4200	0,0002	0,0005	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Thiocarbamate	Triallate	0,0410	1,0000	0,3100	0,0021	0,0070	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0230	0,7000	0,1300	0,0009	0,0029	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0100	0,4400	0,0410	0,0061	0,0200	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0100	0,0730	0,0380	0,0001	0,0003	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Algistat, Herbicide, Other substance	Triazine	Cybutryne	0,0110	0,0490	0,0290	0,0009	0,0028	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0110	0,0410	0,0210	0,0001	0,0005	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Oxidiazole	Oxadiazon	0,0004	0,0470	0,0180	0,0002	0,0007	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Thiocarbamate	Molinate	0,0057	0,0480	0,0160	0,0011	0,0036	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,0008	0,0270	0,0150	0,0004	0,0015	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Phenylamide	Diuron	0,0052	0,0120	0,0057	0,0001	0,0004	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Carboxamide	Diflufenican	0,0020	0,0190	0,0042	0,0012	0,0040	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide, Degradate	Triazine	Terbutryn	0,0017	0,0066	0,0027	0,0002	0,0007	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0010	0,0048	0,0021	0,0000	0,0002	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	0,0004	0,0063	0,0019	0,0002	0,0008	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Acaricide	Organochlorine	Dicofol	0,0037	0,0037	0,0018	0,0022	0,0073	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Triazine	Simazine	0,0006	0,0067	0,0015	0,0003	0,0011	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Urea	Chlorotoluron	0,0075	0,0140	0,0012	0,0001	0,0004	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Fungicide, Degradate	Triazole	Triadimefon	0,0020	0,0049	0,0012	0,0012	0,0040	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Urea	Linuron	0,0010	0,0130	0,0011	0,0006	0,0019	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0007	0,0033	0,0010	0,0004	0,0014	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl	0,0007	0,0056	0,0009	0,0004	0,0014	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Urea	Isoproturon	0,0130	0,0130	0,0007	0,0002	0,0005	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Dinitroaniline	Pendimethalin	0,0010	0,0010	0,0006	0,0006	0,0020	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Metabolite	Organophosphate	Fenthion sulfoxide	0,0007	0,0045	0,0004	0,0004	0,0014	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0001	0,0027	0,0004	0,0001	0,0002	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Fenthion oxon	0,0008	0,0025	0,0004	0,0028	0,0094	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Triazine	Atrazine	0,0005	0,0025	0,0002	0,0001	0,0009	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Chloroacetamide	Alachlor	0,0014	0,0016	0,0002	0,0012	0,0038	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Fenthion oxon sulfoxide	0,0002	0,0032	0,0001	0,0001	0,0004	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0012	0,0012	0,0001	0,0007	0,0024	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Malaoxon	0,0003	0,0006	0,0001	0,0002	0,0005	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021

Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl					0,0004	0,0013	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Azinphos-methyl oxon					0,0031	0,0100	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil					0,0026	0,0086	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin					0,0023	0,0075	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Triazine	Cyanazine					0,0001	0,0003	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Desethylatrazine					0,0023	0,0079	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Triazine	Deisopropylatrazine					0,0044	0,0150	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos					0,0054	0,0180	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate					0,0008	0,0026	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Organophosphate	Fenitrothion					0,0026	0,0088	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Fenitrothion oxon					0,0008	0,0026	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion					0,0002	0,0006	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Fenthion oxon sulfone					0,0028	0,0094	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Fenthion sulfone					0,0042	0,0140	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Pyridine compound	Fluroxypyr					0,0280	0,0950	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Aryloxyalkanoic acid	Mecoprop					0,0011	0,0036	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam					0,0018	0,0060	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Sulfonylurea	Thifensulfuron-methyl					0,0000	0,0001	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Degradate	Organochlorine	o,p'-DDD					0,0011	0,0038	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Organochlorine	o,p'-DDE					0,0012	0,0040	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Organochlorine	o,p'-DDT					0,0017	0,0058	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Organochlorine	p,p'-DDE					0,0016	0,0053	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Organochlorine	p,p'-DDT					0,0010	0,0033	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin					0,0078	0,0260	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin					0,0015	0,0049	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Fungicide	Triazole	Cyproconazole					0,0016	0,0053	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion					0,0015	0,0049	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Degradate	Unclassified	Heptachlor epoxide					0,0005	0,0016	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					0,0004	0,0012	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Diphenyl ether	Oxyfluorfen					0,0070	0,0230	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Fungicide	Quinoline	Quinoxyfen					0,0007	0,0022	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Herbicide	Dinitroaniline	Trifluralin					0,0150	0,0510	LOD/LOQ	LC-MS/MS and GC-MS/MS	-	Spain	Barbieri et al., 2021
Insecticide	Neonicotinoid	Acetamiprid		<MQL	<MQL		0,0011		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid		0,0007	0,7553	0,0093	0,0002		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Herbicide	Urea	Isoproturon		0,0001	0,0889	0,0017	0,0000		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Herbicide	Triazine	Simazine		0,0030	0,0044	0,0000	0,0007		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			0,0019	0,0005	0,0004		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Herbicide	Triazine	Atrazine		0,0002	0,0016	0,0000	0,0001		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Herbicide	Chloroacetamide	Alachlor					0,0029		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide	Neonicotinoid	Thiamethoxam					0,0017		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos					0,0011		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide, Degradate	Neonicotinoid	Clothianidin					0,0002		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb					0,0004		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Plant growth regulator, Herbicide	Auxin	Clofibric acid					0,0008		MDL	UHPLC-MS/MS	58	Portugal	Barbosa et al., 2018
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Insecticide, Other substance	Organochlorine	α-HCH					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Isomer	Unclassified	δ-HCH					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Isomer	Unclassified	ε-HCH					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Degradate	Organochlorine	p,p'-DDE					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Insecticide	Organochlorine	p,p'-DDT					0,0000		LOD	GC-MS	-	Chile	Barra et al., 2005
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,3610				n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,0103				n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fipronil sulfonate	<0,0960				n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	<0,0950				n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020

Degradate	Unclassified	Desulfinylfipronil amide	<0,0090	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Desulfinylfipronil amide	<0,0090	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Sulfosulfuron	<0,0090	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Semicarbazone	Diflufenzopyr	<0,0880	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Intermediate	Unclassified	cis-Cyhalothric acid	<0,0860	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Dimethenamid OXA	<0,0850	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	<0,0800	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	<0,0080	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	<0,0080	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxyfluometuron	<0,0080	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Prosulfuron	<0,0080	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	<0,0790	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hexazinone Transformation Product G	<0,0760	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Tebuthiuron TP 106	<0,0760	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Chlorosulfonamide acid	<0,0750	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	4-Hydroxy molinate	<0,0070	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Disulfoton oxon sulfone	<0,0070	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Disulfoton oxon sulfoxide	<0,0070	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Triazole	Myclobutanil	<0,0070	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Phorate oxon sulfoxide	<0,0070	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	O-Ethyl S-propyl phosphorothioate	<0,0640	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Benzoylurea	Diflubenzuron	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Urea	Linuron	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Pyrimidinylsulfonylurea	Orthosulfamuron	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Tebuthiuron TP 104	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Triazole	Tetraconazole	<0,0060	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2,3,3-trichloro-2-propene sulfonic acid	<0,0540	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Benzenedicarboxylic acid	Dacthal monoacid	<0,5000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Benzoic acid	Dicamba	<0,5000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Methomyl oxime	<0,5000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Diphenyl ether	Oxyfluorfen	<0,5000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Dinitroaniline	Oryzalin	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Carbamate	Asulam	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Thiocarbamate	Butylate	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Deiodo flubendiamide	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Didemethyl hexazinone F	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Organostannic	Fentin	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Oxyacetamide	Isoxaflutole	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Methyl paraoxon	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Metolachlor hydroxy morpholinone	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Thiocarbamate	Molinate	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Organophosphate	Naled	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Phorate oxon	<0,0500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-[(2-Ethyl-6-methylphenyl)amino]-1-propanol	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-Chloro-2,6-diethylacetanilide	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Pyrethroid	cis-Permethrin	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Nematicide	Organophosphate	Ethoprophos	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fenamiphos sulfone	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fenamiphos sulfoxide	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Benzene-dicarboxamide	Flubendiamide	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	O-Ethyl-O-methyl-S-propylphosphorothioate	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Oxamyl oxime	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Organophosphate	Phorate sulfoxide	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Phenylurea	Siduron	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Nematicide	Organophosphate	Terbufos	<0,0050	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Neonicotinoid	Dinotefuran	<0,0045	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Diamide	Cyantraniliprole	<0,0042	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Cyanoimidazole	Cyazofamid	<0,0041	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020

Degradate	Unclassified	2-amino-N-isopropylbenzamide	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	4-Chlorobenzylmethyl sulfoxide	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Chlorpyrifos-oxon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organophosphate	Chlorpyrifos	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Dechlorofipronil	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Demethyl norflurazon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Diazinon oxon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Organophosphate	Dicrotophos	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Organophosphate	Disulfoton sulfoxide	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Pyridazinone	Norflurazon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	O-Ethyl S-methyl S-propyl phosphorodithioate	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Paraoxon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Benzamide	Propyzamide	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Terbufos oxon	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Terbufos oxon sulfoxide	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Pyrethroid	trans-Permethrin	<0,0040	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Cyanoacetamide oxime	Cymoxanil	<0,0039	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Thiazole	Ethaboxam	<0,0038	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazopyrimidine	Penoxsulam	<0,0035	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Aphicide	Pyridine compound	Flonicamid	<0,0034	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Mandelamide	Mandipropamid	<0,0033	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	<0,0032	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	4-Hydroxyhexazinone A	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Aldicarb sulfoxide	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Demethyl hexazinone B	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Prothioconazole-desethio	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Phenylurea	Fluometuron	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Diphenyl ether	Lactofen	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Malaoxon	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Dinitroaniline	Pendimethalin	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Organophosphate	Profenofos	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Pyridazinone	Pyridaben	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Sulfosulfuron-ethyl sulfone	<0,0030	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Imidazolinone	Imazamox	<0,028	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Triazole	1H-1,2,4-triazole	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-(1-Hydroxyethyl)-6-methylaniline	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	3-Phenoxybenzoic acid	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	4-(Hydroxymethyl) pendimethalin	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Carboxy molinate	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	sec-Alachlor oxanilic acid	<0,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Sulfonylurea	Halosulfuron	<0,0022	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hexazinone Transformation Product C	<0,0022	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
		Desaminodiketo-metribuzin	<0,2000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hexazinone Transformation Product E	<0,2000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Diketo-metribuzin	<0,2000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-isopropyl-6-methyl-4-pyrimidinol	<0,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	<0,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Acaricide, Insecticide	Organometal	Fenbutatin	<0,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxy didemethyl fluometuron	<0,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Phorate oxon sulfone	<0,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Fungicide	Pyrazolium	Tolfenpyrad	<0,0029	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Desmethyl fluometuron	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Disulfoton oxon	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Acaricide	Diphenyl oxazoline	Etoxazole	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Nematicide	Organophosphate	Fenamiphos	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hexazinone Transformation Product D	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020

Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazine	Prometryn	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Acaricide	Sulphite ester	Propargite	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Diacylhydrazine	Tebufenozide	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Tebupirimfos oxon	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Thiocarbamate	Thiobencarb	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Plant growth regulator, Herbicide	Organophosphate	Tribufos	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Strobilurin	Trifloxystrobin	<0,0020	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Pyrethroid	Bifenthrin	<0,0019	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	<0,0019	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Alachlor SAA	<0,1690	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	3-Hydroxycarbofuran	<0,0016	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Thiocarbamate	Triallate	<0,0016	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Azinphos-methyl oxon	<0,0015	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
		3,4-Dichlorophenyl urea	<0,144	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Nicosulfuron	<0,0014	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Organophosphate	Disulfoton	<0,0013	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organophosphate	Chlorpyrifos	<1,2000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Tebuthiuron TP 109	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organophosphate	Fonofos	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxydiazinon	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Anilide	Propanil	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Terbufos oxon sulfone	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Terbufos sulfone	<0,0011	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Deisopropylhydroxyatrazine	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organophosphate	Acephate	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Chloroacetamide	Alachlor	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Plant growth regulator, Herbicide	Dinitroaniline	Butralin	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxy monodemethyl fluometuron	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	EPTC degradate R248722	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Oxadiazine	Indoxacarb	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide	Organophosphate	Methidathion	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide; Insect growth regulator	Benzoylurea	Novaluron	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	<0,0010	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	<1600,0000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Nematicide	Unclassified	Chloropicrin	<18,0000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Chloroacetamide	Metolachlor	3,8000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazine	Atrazine	2,3000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Metolachlor ESA	2,3000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	2,0200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Aryl triazolinone	Sulfentrazone	1,7200	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Phosphonoglycine	Glyphosate	1,5000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Acetochlor SA	1,3600	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Acetochlor OA	1,2500	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	AMPA	1,1000	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Metolachlor OXA	1,0800	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Acetochlor SAA	0,7150	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	4-Hydroxychlorothalonil	0,5540	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Chloroacetamide	Acetochlor	0,4270	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Desethylatrazine	0,3650	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,3590	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Chlorodiamino-s-triazine	0,3580	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Uracil	Bromacil	0,2600	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Phenylamide	Metalaxyl	0,2400	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Deisopropylatrazine	0,1990	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Diketonitrile-isoxaflutole	0,1670	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazine	Simazine	0,1470	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxyatrazine	0,1420	n.i.	n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020

Herbicide	Chloroacetamide	Dimethenamid	0,1410			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,1325			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Alachlor OA	0,1230			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazinone	Metribuzin	0,1190			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Dimethenamid SA	0,1120			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Unclassified	1,4-Dichlorobenzene	0,0950			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Thiocarbamate	EPTC	0,0870			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxymetolachlor	0,0853			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Pyridine compound	Triclopyr	0,0842			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Methoxytriazine	Prometon	0,0800			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Imidazolinone	Imazethapyr	0,0755			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxyacetochlor	0,0690			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Dimethenamid SAA	0,0570			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Desamino-metribuzin	0,0479			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Isoxaflutole acid degradate RPA 203328	0,0437			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0396			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Deisopropylhydroxyatrazine	0,0389			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Sulfometuron-methyl	0,0365			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Anthranilic diamide	Chlorantraniliprole	0,0347			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Dechlorometolachlor	0,0328			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam	0,0325			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Chlorimuron-ethyl	0,0278			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazine	Propazine	0,0208			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Organophosphate	Glufosinate	0,0200			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Sulfonylurea	Chlorsulfuron	0,0180			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	3,4-Dichloroaniline	0,0170			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Neonicotinoid	Acetamiprid	0,0155			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Triazole	Propiconazole	0,0154			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-Chloro-N-(2-ethyl-6-methylphenyl)acetamide	0,0153			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	DCPMU	0,0153			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Uracil	Terbacil	0,0129			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	2-Aminobenzimidazole	0,0118			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Triazine	Hydroxysimazine	0,0118			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Strobilurin	Azoxystrobin	0,0108			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Unclassified	Fluridone	0,0091			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0090			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0069			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Terbufos sulfoxide	0,0051			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	DCPU	0,0049			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Hydroxyalachlor	0,0047			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fipronil amide	0,0047			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0043			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazine	Ametryn	0,0032			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fipronil sulfone	0,0031			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fipronil-desulfinyl	0,0030			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Fipronil sulfide	0,0025			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Herbicide	Triazinone	Hexazinone	0,0024			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organophosphate	Tebupirimphos	0,0020			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Tebuthiuron TP 108	0,0018			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Strobilurin	Pyraclostrobin	0,0014			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0012			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Fungicide	Triazole	Metconazole	0,0012			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0011			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Degradate	Unclassified	Deisopropyl prometryn	0,0007			n.i.		n.i.	LC-MS/MS	28	United States	Battaglin et al., 2020
Insecticide	Organochlorine	p,p'-DDT		<LD	<LD	0,0079	0,0260	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Acaricide	Organochlorine	Endosulfan I		<LD	<LD	0,0086	0,0280	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Acaricide	Organochlorine	Endosulfan II		<LD	<LD	0,0100	0,0350	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH		<LD	<LD	0,0130	0,0440	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin		<LD	<LD	0,0133	0,0311	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Degradate	Organochlorine	p,p'-DDD		<LD	<LD	0,0180	0,0599	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010

Insecticide, Other substance	Organochlorine	α-HCH			<LD		<LD				0,0027	0,0084	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Degradate	Unclassified	Heptachlor epoxide			<LD		<LD				0,0099	0,0330	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide	Organochlorine	Aldrin			<LD		0,1610	0,0251			0,0110	0,0396	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Degradate	Organochlorine	p,p'-DDE			<LD		0,0760	0,0255			0,0120	0,0429	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Isomer	Unclassified	δ-HCH			<LD		0,0738	0,0136			0,0200	0,0600	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin			<LD		0,0440	0,0199			0,0137	0,0450	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Insecticide	Organochlorine	Heptachlor			<LD		0,0118	0,0035			0,0092	0,0396	LOD/LOQ	GC-MS	2	Brazil	Bedendo and Carasek, 2010
Fungicide, Degradate	Benzimidazole	Carbendazim	<0,0200	<0,9900					<0,0200	<0,0200	5,0000	0,9900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide	Phenylamide	Diuron	<0,0200	<0,3900					<0,0200	<0,0200	5,0000	0,3900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	<0,0200	<0,2000					<0,0200	<0,0200	5,0000	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide	Neonicotinoid	Acetamiprid	<0,0200	<0,1900					<0,0200	<0,0200	5,0000	0,1900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	<0,0200	<0,1900					<0,0200	<0,0200	5,0000	0,1900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<0,0300	0,9400					<0,0300	<0,0300	0,0300	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide	Chloroacetamide	Metolachlor	<0,0200	0,3400					<0,0200	<0,0200	0,0200	0,0200	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide	Dinitroaniline	Trifluralin	<0,0800	0,2800					<0,0800	<0,0800	0,0800	0,1000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide	Triazine	Atrazine									0,0300	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Fungicide	Triazole	Epoxiconazole									5,0000	0,3900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Fungicide	Strobilurin	Pyraclostrobin									5,0000	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Fungicide, Plant growth regulator	Triazole	Tebuconazole									5,0000	0,3900	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide	Isoxazolidinone	Clomazone									5,0000	0,4000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine									-	-	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide	Organophosphate	Chlorpyrifos									0,0300	0,2200	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide	Neonicotinoid	Thiamethoxam									5,0000	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Acaricide, Degradate	Carbamate	Methomyl									5,0000	0,2000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Nematicide	Carbamate	Carbosulfan									5,0000	-	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Acaricide	Organochlorine	Endosulfan I									0,0600	0,2200	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Insecticide, Acaricide	Organochlorine	Endosulfan II									0,0300	0,1000	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Degradate	Unclassified	Endosulfan sulfate									0,0800	0,2200	LOD/LOQ	UHPLC-MS/MS and GC-MS	39	Brazil	Berton et al., 2018
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		0,8000			0,2000	0,4000			n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Triazine	Atrazine									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Chloroacetamide	Alachlor									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Benzothiazinone	Bentazone									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Chloroacetamide	Metolachlor									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Thiocarbamate	Molinate									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Dinitroaniline	Pendimethalin									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Anilide	Propanil									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Triazine	Simazine									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Herbicide	Dinitroaniline	Trifluralin									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide, Veterinary substance	Organochlorine	Methoxychlor									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Degradate	Unclassified	2,4,6-Trichlorophenol									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide	Organochlorine	DDT									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Degradate	Unclassified	Heptachlor epoxide									n.i.			GC-MS	60	Brazil	Bianchi et al., 2017
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			<LOQ	<20%	0,0164	<20%			0,0004	0,0010	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Herbicide	Urea	Isoproturon			<LOQ	<20%	0,0062	<20%			0,0001	0,0001	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Herbicide	Phenylamide	Diuron			<LOQ	<20%	0,0022	<20%			0,0001	0,0005	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos									0,0001	0,0001	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb									0,0004	0,0010	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Degradate	Triazine	Deisopropylatrazine									0,0020	0,0050	LOD/LOQ	LC-MS/MS	30	Spain	Borrull et al., 2019
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	0,2000	0,2000							1,6000		IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Herbicide	Triazine	Atrazine	0,0100	0,1700							0,0190		IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Herbicide	Uracil	Bromacil	0,0300	0,0600							0,1600		IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Herbicide	Methoxytriazine	Prometon	0,0400	0,0600							0,1600		IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a

Herbicide	Chloroacetamide	Metolachlor	0,0100	0,0500			0,0400	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole					0,0041	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Fungicide	Phenylamide	Metalaxyl					0,1600	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Insecticide	Organophosphate	Chlorpyrifos					0,1200	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos					0,0800	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon					0,3200	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Insecticide, Plant growth regulator	Carbamate	Carbaryl					0,0600	IRL	GC-MS and HPLC-MS/MS	72	United States	Bradley et al., 2017a
Degradate	Unclassified	3,4-Dichloroaniline		80,0246		0,0183	0,0060	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	AMPA		9,5000		0,2950	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Phosphonoglycine	Glyphosate		7,9000		0,1300	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Pyridine compound	Triclopyr		5,6413		0,1479	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Triazine	Atrazine		5,1700		0,0349	0,0023	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Anilide	Propanil		3,0096		3,0096	0,0101	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor ESA		2,0000		0,2100	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Chloroacetamide	Acetochlor		1,8500		0,0491	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Chloroacetamide	Metolachlor		1,4900		0,0203	0,0015	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Phenylamide	Diuron		1,3620		0,0256	0,0032	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Metolachlor ESA		1,0000		0,1250	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Isoxazolidinone	Clomazone		0,9271		0,4668	0,0025	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Desethylatrazine		0,8510		0,0179	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide	Carboxamide	Boscalid		0,6781		0,0090	0,0028	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor SA		0,6700		0,0600	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Metolachlor OXA		0,6600		0,0400	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Benzenedicarboxylic acid	Dacthal		0,6150		0,0000	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deethylhydroxyatrazine		0,6100		0,1085	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Dinitroaniline	Pendimethalin		0,5780		0,0039	0,0020	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor OA		0,5600		0,0750	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Triazine	Hydroxyatrazine		0,5428		0,0344	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Triazinone	Metribuzin		0,5410		0,0184	0,0120	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		0,4114		0,0772	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide	Triazole	Propiconazole		0,4045		0,0644	0,0088	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Triazine	Simazine		0,4010		0,0179	0,0050	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	Thiobencarb		0,3429		0,3429	0,0019	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	sec-Acetochlor SA		0,3300		0,0400	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deisopropylatrazine		0,2866		0,0819	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor SAA		0,2800		0,1500	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide	Strobilurin	Azoxystrobin		0,2795		0,0281	0,0093	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Pyridine compound	Picloram		0,2765		0,2765	0,1000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,2760		0,0342	0,0009	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide	Triazole	Myclobutanil		0,2730		0,1614	0,006	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Hydroxymetolachlor		0,2700		0,0400	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide, Veterinary substance	Imidazole	Imazalil		0,2634		0,0521	0,0076	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Plant growth regulator	Carbamate	Carbaryl		0,2570		0,0135	0,0065	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Fungicide, Miticide	Benzimidazole	Benomyl		0,2559		0,0710	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b

Herbicide	Sulfonylurea	Sulfometuron-methyl	0,2480	0,0349	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Alkanamide	Napropamide	0,2434	0,0464	0,0082	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,2360	0,1845	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	EPTC	0,2240	0,0709	0,0015	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	trans-Propiconazole	0,2170	0,0174	0,0180	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Alachlor SA	0,2100	0,0250	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Desmethyl-diuron	0,2051	0,0272	0,0030	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Morpholine	Dimethomorph	0,1948	0,1527	0,0060	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Neonicotinoid	Thiamethoxam	0,1904	0,0161	0,0039	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Didealkylatrazine	0,1700	0,0740	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,1530	0,0238	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Phenylamide	Metalaxyl	0,1508	0,0437	0,0051	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Benzoic acid	Dicamba	0,1453	0,1453	0,1000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,1428	0,0275	0,0049	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Dacthal monoacid	0,1387	0,1387	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Neonicotinoid	Dinotefuran	0,1338	0,0125	0,0055	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Methoxytriazine	Prometon	0,1330	0,0070	0,0012	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,1302	0,0805	0,1200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	cis-Propiconazole	0,1300	0,0127	0,0080	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Metolachlor deschloro	0,1300	0,0800	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Aryloxyalkanoic acid	2,4-DB	0,1255	0,0768	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,1220	0,1220	0,0160	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	0,1185	0,0194	0,1200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Benzamide	Propyzamide	0,1134	0,1134	0,0050	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Hydroxyacetochlor	0,1100	0,0300	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Sulfonylurea	Chlorimuron-ethyl	0,1085	0,1085	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,1057	0,0427	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Uracil	Bromacil	0,1000	0,0280	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Chloroacetamide	Dimethenamid	0,1000	0,0300	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Organophosphate	Chlorpyrifos	0,0904	0,0003	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Benzothiazinone	Bentazone	0,0880	0,0187	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Diphenyl ether	Oxyfluorfen	0,0864	0,0048	0,0031	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Dicarboximide	Iprodione	0,0855	0,0304	0,0065	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Deethylcyanazine acid	0,0840	0,0840	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0663	0,0113	0,0062	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide	Organophosphate	Methidathion	0,0661	0,0661	0,0072	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor deschloro	0,0600	0,0450	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Dimethenamid ESA	0,0600	0,0250	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0554	0,0374	0,0037	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Dinitroaniline	Trifluralin	0,0473	0,0001	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Triazinone	Hexazinone	0,0466	0,0168	0,0084	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Organochlorine	p,p'-DDT	0,0451	0,0047	0,0040	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Strobilurin	Trifloxystrobin	0,0450	0,0450	0,0039	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Metconazole	0,0448	0,0448	0,0114	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b

Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0421	0,0255	0,0010	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Triazine	Propazine	0,0410	0,0360	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Hydroxysimazine	0,0400	0,0400	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Urea	Linuron	0,0400	0,0300	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Neonicotinoid	Acetamiprid	0,0395	0,0395	0,0036	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Strobilurin	Pyraclostrobin	0,0383	0,0383	0,0029	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	0,0369	0,0133	0,1400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Urea	Tebuthiuron	0,0358	0,0150	0,0280	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Fipronil sulfone	0,0340	0,0116	0,0035	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Sulfonylurea	Bensulfuron-methyl	0,0335	0,0335	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Anilinopyrimidine	Cyprodinil	0,0334	0,0334	0,0074	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0306	0,0276	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Flufenacet-ESA	0,0300	0,0300	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Fipronil sulfide	0,0291	0,0044	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	Cycloate	0,0287	0,0287	0,0011	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Triazine	Prometryn	0,0286	0,0159	0,0018	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	0,0282	0,0282	0,1200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0281	0,0153	0,0041	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Pyridazinone	Norflurazon	0,0274	0,0206	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Phenylpyrrole	Fludioxonil	0,0253	0,0234	0,0073	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Organochlorine	p,p'-DDE	0,0238	0,0032	0,0020	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Dinitrophenol	Dinoseb	0,0233	0,0233	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Tetraconazole	0,0219	0,0219	0,0082	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0218	0,0218	0,0047	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	DCPU	0,0204	0,0101	0,0043	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Alachlor ESA	0,0200		0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Organophosphate	Glufosinate	0,0200	0,0200	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Dimethenamid OXA	0,0200	0,0200	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Flufenacet-OXA	0,0200	0,0200	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Alachlor OA	0,0200	0,0200	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	sec-Alachlor SA	0,0200	0,0200	n.i.	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Phenylurea	Fluometuron	0,0175	0,0140	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Desulfinylfipronil amide	0,0172	0,0050	0,0290	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Uracil	Terbacil	0,0154	0,0154	0,0460	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0128	0,0008	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Disulfoton sulfone	0,0125	0,0125	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0111	0,0111	0,0036	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0104	0,0104	0,0016	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0097	0,0095	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Fipronil-desulfinyl	0,0090	0,0003	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	1-Naphthol	0,0088	0,0076	0,0500	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Chloroacetamide	Alachlor	0,0084	0,0083	0,0017	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	3,5-Dichloroaniline	0,0078	0,0078	0,0060	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Diazinon oxon	0,0071	0,0053	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b

Fungicide	Chloronitrile	Chlorothalonil	0,0065	0,0061	0,0121	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Degradate	Unclassified	Endosulfan sulfate	0,0052	0,0001	0,0050	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Acaricide, Insecticide	Bridged diphenyl	Tetradifon	0,0050	0,0025	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Alkanamide	Diphenamid	0,0047	0,0047	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	λ-Cyhalothrin	0,0022	0,0003	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Chlorophenyl	Pentachloronitrobenzene	0,0020	0,0011	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Isomer	Unclassified	cis-Chlordane	0,0016	0,0002	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Cyfluthrin	0,0010	0,0005	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Isomer	Unclassified	trans-Chlordane	0,0007	0,0001	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Isomer	Organochlorine	trans-Nonachlor	0,0004	0,0001	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,0003	0,0000	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Isomer	Organochlorine	cis-Nonachlor	0,0002	0,0000	0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0002	0,0001	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Dinitroaniline	Benfluralin	0,0001	0,0001	0,0004	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Pyrethroid	Permethrin			0,0034	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Acaricide	Sulphite ester	Propargite			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Bromoconazole			0,0032	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Cyproconazole			0,0112	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Difenoconazole			0,0105	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Oxazole	Famoxadone			0,0025	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Pyrimidine	Fenarimol			0,0065	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Fenbuconazole			0,0052	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Hydroxyanilide	Fenhexamid			0,0076	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Strobilurin	Fluoxastrobin			0,0051	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Flusilazole			0,0045	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Flutriafol			0,0042	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Imidazole	Triflumizole			0,0061	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Triazole	Triticonazole			0,0069	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide	Benzamide	Zoxamide			0,0035	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam			0,0044	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide, Bactericide	Phthalimide	Captan			0,0061	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl			0,0040	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide, Degradate	Triazole	Triadimefon			0,0089	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Fungicide; Degradate	Triazole	Triadimenol			0,0080	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	Butylate			0,0018	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Pyridine compound	Clopyralid			0,1400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Triazine	Cyanazine			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Aryloxyalkanoic acid	Dichlorprop			0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Sulfonylurea	Metsulfuron-methyl			0,1400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	Molinate			0,0032	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Urea	Neburon			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Sulfonylurea	Nicosulfuron			0,3200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Dinitroaniline	Oryzalin			0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Thiocarbamate	Pebulate			0,0023	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b
Herbicide	Chloroacetamide	Propachlor			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	United States	Bradley et al., 2017b

Herbicide	Phenylurea	Siduron	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide, Degradate	Nitrophenyl	Acifluorfen	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide, Plant growth regulator	Carbamate	Propham	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	cis-Permethrin	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Esfenvalerate	0,0039	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Etofenprox	0,0022	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Organophosphate	Fonofos	0,0048	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Organophosphate	Isofenphos	0,0140	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Organophosphate	Methyl parathion	0,0034	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Organophosphate	Parathion-methyl	0,0080	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Resmethrin	0,0057	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Tefluthrin	0,0010	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide	Pyrethroid	Tetramethrin	0,0029	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide	Organophosphate	Dicrotophos	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide	Pyrethroid	Fenpropathrin	0,0029	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Degradate	Organophosphate	Ethion	0,0046	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0017	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,1200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	0,0044	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Acaricide, Veterinary substance	Synthetic pyrethroid	Tau-fluvalinate	0,0053	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin	0,0035	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Mollusicide	Neonicotinoid	Thiacloprid	0,0038	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Nematicide	Organophosphate	Terbufos	0,0180	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0031	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Pyrethroid	Allethrin	0,0060	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Carbamate	Bendiocarb	0,0400	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin	0,0020	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	0,0056	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Juvenile hormone mimic	Methoprene	0,0064	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Veterinary substance	Pyrethroid	Phenothrin	0,0051	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	2,4-D methyl ester	0,2000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	2,6-Diethylaniline	0,0060	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	2-Chloro-2,6-diethylacetanilide	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	2-Ethyl-6-methylaniline	0,0100	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	3(4-Chlorophenyl)-1-methyl urea	0,1000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	3-Hydroxycarbofuran	0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Acetochlor hydroxy	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Alachlor deschloro	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Alachlor hydroxy	0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b

Degradate	Unclassified	Aldicarb sulfoxide			0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Azinphos-methyl oxon			0,0420	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Chlorpyrifos-oxon			0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Cyanazine acid			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Cyanazine amide			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deethylcyanazine			0,2000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deethylcyanazine amide			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deethyldeisopropylatrazine			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Triazine	Deisopropylatrazine			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Deisopropylhydroxyatrazine			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Desmethyl fluometuron			0,2000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Dimethenamid deschloro			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Dimethenamid hydroxy			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Ethion monoxon			0,0210	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Fenamiphos sulfone			0,0540	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Fenamiphos sulfoxide			0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Fipronil-desulfinyl			0,0016	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Malaoxon			0,0220	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Methyl paraoxon			0,0140	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Metolachlor hydroxy			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Pentachloroanisole			0,0002	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Phorate oxon			0,0270	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Phosmet oxon			0,0510	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Propachlor OXA			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Propachlor ESA			0,0500	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Terbufos oxon sulfone			0,0450	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Metabolitie	Unclassified	2-methyl-4-chlorophenol			0,0080	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Nematicide	Organophosphate	Fenamiphos			0,0300	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Plant growth regulator, Herbicide	Organophosphate	Tribufos			0,0180	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Imidazolinone	Imazethapyr			0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Aryloxyalkanoic acid	MCPB			0,2000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Dinitroaniline	Ethalfluralin			0,0030	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Urea	Fenuron			0,0600	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Oxyacetamide	Flufenacet			0,0200	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide	Cyclodiene	Flumetsulam			0,0800	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol			1,6000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	Oxychlordane			0,0020	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Herbicide derivative	Unclassified	Chloramben methyl ester			0,2000	RL	LC-MS and MS/MS, HPLC-MS and GC-MS	-	United States	Bradley et al., 2017b
Degradate	Unclassified	2,4,5-trichloro-6-hydroxybenzene-1,3-dicarbonitrile	39,1779	2,1712	0,0980	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	6,4065	0,9269	0,0620	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Pyridine compound	Triclopyr	3,5665	0,4059	0,0880	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Sulfonylurea	Sulfometuron-methyl	3,5092	0,5725	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	3,1993		0,0950	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Atrazine	3,0639	0,5372	0,0068	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019

Insecticide, Plant growth regulator	Carbamate	Carbaryl	2,1822	0,0060	0,0056	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Simazine	1,8462	0,3266	0,0072	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Methoxytriazine	Prometon	1,6382	0,0459	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Phenylamide	Diuron	1,1283	0,0448	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Benzoic acid	Dicamba	0,9889		2,4000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dideallkylatrazine	0,9706	0,2970	0,0240	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide, Degradate	Benzimidazole	Carbendazim	0,8785	0,1932	0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Chloroacetamide	Metolachlor	0,8749	0,0207	0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deisopropylatrazine	0,6265	0,1700	0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,5636	0,1367	0,0160	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Urea	Tebuthiuron	0,5526	0,0439	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Dinitroaniline	Oryzalin	0,5162	0,0276	0,0120	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	0,4870	0,3080	1,6000	IRL	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Triazole	1H-1,2,4-triazole	0,4573	0,0497	0,0220	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dacthal MTP	0,4261		2,7000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,3271	0,0601	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Organophosphate	Acephate	0,3210	0,1320	0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,2997		0,0001	IRL; RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,2742		0,0028	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Uracil	Bromacil	0,2194	0,1412	0,0056	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Triazole	Myclobutanil	0,2129	0,0064	0,0070	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Metolachlor ESA	0,1855	0,1213	0,0680	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Phenylurea	Siduron	0,1711	0,0054	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Desethylatrazine	0,1532	0,0723	0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,1298		0,0054	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,1153	0,0097	0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Sulfonylurea	Sulfosulfuron	0,1084	0,0100	0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazinone	Hexazinone	0,1030	0,0096	0,0036	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	4-methyl-2-propan-2-yl-1H-pyrimidin-6-one	0,0874		0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Dinitroaniline	Pendimethalin	0,0865		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Phenylamide	Metalaxyl	0,0857	0,0042	0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Methomyl oxime	0,0848		1,0000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Triazine	Hydroxysimazine	0,0771	0,0281	0,1000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxyatrazine	0,0770	0,0251	0,0080	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	0,0729		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	4-hydroxymethyl pendimethalin	0,0700		0,2130	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Desaminodiketo-metribuzin	0,0647		0,2000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Aryl triazolinone	Sulfentrazone	0,0622	0,0057	0,0180	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0614	0,0249	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Triazole	Metconazole	0,0574		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebuthiuron TP 108	0,0542	0,0228	0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Chloroacetamide	Dimethenamid	0,0535	0,0026	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	0,0527	0,0071	0,0180	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Metolachlor OXA	0,0521		0,1490	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Triazole	Propiconazole	0,0497	0,0108	0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxymetolachlor	0,0464	0,0012	0,0024	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0442		0,0036	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Benzothiazinone	Bentazone	0,0414	0,0096	0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fipronil amide	0,0399	0,0220	0,0092	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Phenylurea	Fluometuron	0,0392		0,0034	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Desmethyl-diuron	0,0368	0,0063	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Propazine	0,0367	0,0020	0,0032	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Pyrethroid	trans-Permethrin	0,0348		0,0038	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Imidazolinone	Imazamox	0,0348		0,0280	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Didemethyl hexazinone F	0,0279		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	1H-benzimidazol-2-amine	0,0277		0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019

Fungicide	Strobilurin	Azoxystrobin	0,0266	0,0076	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Pyrethroid	cis-Permethrin	0,0221		0,0042	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dimethenamid SAA	0,0213		0,1890	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Pyrazolium	Halosulfuron-methyl	0,0173		0,0220	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Organochlorine	1,2-Dichlorobenzene	0,0166		0,0280	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fipronil sulfonate	0,0151		0,0960	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	DCPU	0,0143		0,1440	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deisopropylhydroxyatrazine	0,0137		0,1000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0126	0,0057	0,0032	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fipronil sulfone	0,0122	0,0079	0,0056	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Acetochlor ESA	0,0118		n.i.	n.i.	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Benzamide	Propyzamide	0,0115		0,0024	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Acetochlor SAA	0,0111		0,1760	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Pyridazinone	Desmethyl norflurazon	0,0107		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fipronil-desulfinyl	0,0106	0,0044	0,0038	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fipronil sulfide	0,0106	0,0044	0,0042	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Cyanazine	0,0104		0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Strobilurin	Pyraclostrobin	0,0103	0,0007	0,0024	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deethylhydroxyatrazine	0,0098		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Metolachlor deschloro	0,0093	0,0026	0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	0,0092		0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Benzene-dicarboxamide	Flubendiamide	0,0082	0,0024	0,0044	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Chloroacetamide	Acetochlor	0,0079		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hexazinone Transformation Product B	0,0079	0,0032	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Didemethyl tebuthiuron	0,0075	0,0050	n.i.	n.i.	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Organostannic	Fentin	0,0064		0,0300	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Desulfinylfipronil amide	0,0057		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	DA-metribuzin	0,0054		0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Desmethyl fluometuron	0,0051		0,0036	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deiodo flubendiamide	0,0049		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Terbufos sulfoxide	0,0047		0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Strobilurin	Trifloxystrobin	0,0047		0,0028	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxydiazinon	0,0041		0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Pyridazinone	Norflurazon	0,0040		0,0034	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Organophosphate	Fonofos	0,0036		0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxyacetochlor	0,0035		0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Organophosphate	Chlorpyrifos	0,0035		0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Oxadiazine	Indoxacarb	0,0034		0,0052	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Malaoxon	0,0030		0,0024	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Terbufos oxon sulfoxide	0,0029		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Sulfonylurea	Nicosulfuron	0,0026		0,0120	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Anilide	Propanil	0,0021		0,0120	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Sulfonylurea	Chlorimuron-ethyl	0,0020		0,0088	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Organophosphate	Profenofos	0,0016		0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Benzoylurea	Diflubenzuron	0,0016		0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0015		0,0022	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deisopropyl prometryn	0,0013		0,0028	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Azinphos-methyl oxon	0,0013		0,0150	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Organophosphate	Disulfoton sulfoxide	0,0012		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide	Triazole	Tetraconazole	0,0010		0,0070	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Prometryn	0,0010		0,0042	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Diacylhydrazine	Tebufenozide	0,0009		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazine	Ametryn	0,0008		0,0026	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Chlorpyrifos-oxon	0,0008		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Alachlor ESA	0,0007		n.i.	n.i.	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Organophosphate	Dicrotophos	0,0006		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Nematicide, Insecticide, Fumigant, Fungicide	Halogenated alkane	Dibromochloropropane			0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Acaricide	Diphenyl oxazoline	Etoxazole			0,0042	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Acaricide	Sulphite ester	Propargite			0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Acaricide, Insecticide	Organometal	Fenbutatin oxide			0,1000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl			0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Chloroacetamide	Alachlor			0,0070	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Carbamate	Asulam			0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Thiocarbamate	Butylate			0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019

Herbicide	Sulfonylurea	Chlorsulfuron	0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Semicarbazone	Diflufenzopyr	0,0720	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Diphenyl ether	Lactofen	0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Triazinone	Metribuzin	0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Thiocarbamate	Molinate	0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Pyrimidinylsulfonyl urea	Orthosulfamuron	0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Diphenyl ether	Oxyfluorfen	0,5000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Sulfonylurea	Prosulfuron	0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Uracil	Terbacil	0,0210	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Thiocarbamate	Thiobencarb	0,0042	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Thiocarbamate	Triallate	0,0120	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	0,0790	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide	Organophosphate	Tebupirimphos	0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0190	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Organophosphate	Methidathion	0,0084	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Organophosphate	Naled	0,0560	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0024	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0046	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0080	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,0080	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Fumigant	Unclassified	1,2-Dibromoethane	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Nematicide	Unclassified	Chloropicrin	0,0180	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Nematicide	Organophosphate	Terbufos	0,0068	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Insecticide; Insect growth regulator	Benzoylurea	Novaluron	0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Isomer	Unclassified	cis-1,3-Dichloropropene	0,1000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	2-(1-Hydroxyethyl)-6-methylaniline	0,0940	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	2-amino-N-isopropylbenzamide	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	2-Chloro-2,6-diethylacetanilide	0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	2-mesyl-4-trifloromethylbenzoic acid	0,0092	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	3-Hydroxycarbofuran	0,0160	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	3-Phenoxybenzoic acid	0,0610	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	4-Chlorobenzylmethyl sulfoxide	0,0032	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	4-Hydroxy molinate	0,0070	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	4-Hydroxyhexazinone A	0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Acetochlor OA	0,0900	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Acetochlor SA	0,3200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Alachlor OA	0,0840	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Alachlor SAA	0,1690	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Aldicarb sulfoxide	0,0022	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Carboxy molinate	0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Chlorosulfonamide acid	0,0750	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Deisopropyldeethylatrazine	0,0240	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Diazinon oxon	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Diketo-metribuzin	0,2360	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Diketonitrile-isoxaflutole	0,0620	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dimethenamid OXA	0,0850	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dimethenamid SA	0,0790	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Disulfoton oxon	0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Disulfoton oxon sulfone	0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Disulfoton oxon sulfoxide	0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Disulfoton sulfone	0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	EPTC degradate R248723	0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019

Degradate	Unclassified	Fenamiphos sulfone		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Fenamiphos sulfoxide		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hexazinone Transformation Product C		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hexazinone Transformation Product D		0,2940	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hexazinone Transformation Product E		0,0760	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hexazinone Transformation Product G		0,0220	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxyalachlor		0,0060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Methyl paraoxon		0,0190	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Metolachlor hydroxy morpholinone		0,0100	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	O-Ethyl S-methyl S-propyl phosphorodithioate		0,0030	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	O-Ethyl S-propyl phosphorothioate		0,0640	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	O-Ethyl-O-methyl-S-propylphosphorothioate		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Oxamyl oxime		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Paraoxon		0,0034	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Phorate oxon		0,1000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Phorate oxon sulfone		0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Phorate oxon sulfoxide		0,0070	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Phorate sulfone		0,0090	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Organophosphate	Phorate sulfoxide		0,0046	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	sec-Acetochlor oxanilic acid		0,0520	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	sec-Alachlor oxanilic acid		0,1350	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Sulfosulfuron-ethyl sulfone		0,0028	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	TCPSA		0,0540	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebupirimfos oxon		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebuthiuron TP 104		0,0056	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebuthiuron TP 106		0,0760	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebuthiuron TP 109 (OH)		0,0380	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Terbufos oxon		0,0040	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Terbufos oxon sulfone		0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Terbufos sulfone		0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Nematicide	Organophosphate	Fenamiphos		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Nematicide, Bactericide	Halogenated hydrocarbon	1,3-Dichloropropene		0,2400	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Plant growth regulator, Herbicide	Dinitroaniline	Butralin		0,0050	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Plant growth regulator, Herbicide	Organophosphate	Tribufos		0,0020	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Soil sterilant, Fumigant, Insecticide	Inorganic compound	Bromomethane		0,2000	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Imidazolinone	Imazethapyr		0,0200	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Oxyacetamide	Isoxaflutole		0,0180	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Urea	Linuron		0,0056	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Thiocarbamate	EPTC		0,2060	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Cyclodiene	Flumetsulam		0,0170	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Alachlor SA		0,3600	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Dechlorofipronil		0,0038	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxy didemethyl fluometuron		0,0500	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxy monodemethyl fluometuron		0,0120	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Hydroxyfluometuron		0,0080	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Degradate	Unclassified	Tebuthiuron TP 109		0,0110	RLDQC	LC-MS/MS and GC/MS	-	United States	Bradley et al., 2019
Herbicide	Benzothiazinone	Bentazone	63,1000		RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	41,5000	0,0620	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	4-Hydroxychlorothaloni l	39,2000	0,0980	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Phenylamide	Diuron	25,0000	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Triazole	Myclobutanil	24,0000	0,0070	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Thiocarbamate	EPTC	19,7000	0,2060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Organophosphate	Acephate	10,4000	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Benzamide	Propyzamide	8,8300	0,0024	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Phenylamide	Metalaxyl	6,4000	0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Strobilurin	Azoxystrobin	4,3000	0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Strobilurin	Trifloxystrobin	3,6700	0,0028	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide, Degradate	Benzimidazole	Carbendazim	3,6500	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	3,5500	0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Sulfometuron-methyl	3,5100	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021

Fungicide	Strobilurin	Pyraclostrobin	3,3300		0,0024	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	3,2000		0,0950	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Diacylhydrazine	Methoxyfenozide	3,1700		0,0022	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Atrazine	3,0600		0,0068	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Imidazolinone	Imazamox	2,6800		0,0280	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Chloroacetamide	Metolachlor	2,4740		0,0090	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Metolachlor ESA	2,2700		0,0680	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Dinitroaniline	Oryzalin	2,2000		0,0120	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl	2,1800		0,0056	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	2,0800		0,0028	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	1,9500		0,0160	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Simazine	1,8500		0,0072	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Benzoic acid	Dicamba	1,7600		2,4000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Uracil	Bromacil	1,7300		0,0056	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	1,6600		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Benzenedicarboxylic acid	Dacthal monoacid	1,5600		2,7000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	DCPMU	1,0540		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Deisopropyldeethylatrazine	0,9710		0,0240	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Urea	Tebuthiuron	0,8610		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Methoxytriazine	Prometon	0,8550		0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Aryl triazolinone	Sulfentrazone	0,8520		0,0180	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Acetochlor SA	0,7180		0,3200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Metolachlor OXA	0,6800		0,1490	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Carbamate	Asulam	0,6640		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Triazine	Deisopropylatrazine	0,6270		0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Demethyl norflurazon	0,5420		0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Chloroacetamide	Dimethenamid	0,4400		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,4340		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Acetochlor OA	0,3910		0,0900	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	0,3340		0,0016	IRL	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Pyridazinone	Norflurazon	0,3190		0,0034	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Triazole	Propiconazole	0,3000		0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,3000		0,0001	IRL	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,2940		0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desulfinylfipronil amide	0,2550			RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Acetochlor SAA	0,2530		0,1760	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,2240		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxymetolachlor	0,1870		0,0024	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desaminodiketo-metribuzin	0,1860		0,2000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Dimethenamid SA	0,1850		0,0790	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	3-Phenoxybenzoic acid	0,1810		0,0610	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Triazole	Metconazole	0,1780		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Phenylurea	Siduron	0,1710		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,1690		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Benzene-dicarboxamide	Flubendiamide	0,1490		0,0044	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	DCPU	0,1420		0,1440	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Dinitroaniline	Pendimethalin	0,1400		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Triazine	Hydroxysimazine	0,1350		0,1000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,1150		0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Alachlor SA	0,1130		0,3600	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Sulfosulfuron	0,1080		0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desethylhidroxyatrazine	0,1060			RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxyatrazine	0,1030		0,0080	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazinone	Hexazinone	0,1030		0,0036	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Chlorsulfuron	0,1030		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desethylatrazine	0,0939			RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Imidazolinone	Imazethapyr	0,0917		0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Nicosulfuron	0,0864		0,0120	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	EPTC degradate R248722	0,0854		0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021

Degradate	Unclassified	Methomyl oxime	0,0848	1,0000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0744	0,0046	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Urea	Linuron	0,0734	0,0056	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	4-(Hydroxymethyl)pendimethalin	0,0700	0,2130	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Chloroacetamide	Acetochlor	0,0696	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fipronil amide	0,0655	0,0092	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Malaoxon	0,0652	0,0024	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Triazole	Tetraconazole	0,0620	0,0070	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0618	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 108	0,0542	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	0,0527	0,0180	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Dimethenamid SAA	0,0525	0,1890	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Dimethenamid OXA	0,0512	0,0850	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desamino-metribuzin	0,0502	0,0090	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 104	0,0498	0,0056	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Prometryn	0,0443	0,0042	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0442	0,0036	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Pyrazolium	Halosulfuron-methyl	0,0428	0,0220	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxydiazinon	0,0396	0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Oxamyl oxime	0,0392	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Phenylurea	Fluometuron	0,0392	0,0034	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Propazine	0,0367	0,0032	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Uracil	Terbacil	0,0352	0,0210	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Pyrethroid	trans-Permethrin	0,0348	0,0038	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Alachlor OA	0,0342	0,0840	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	2-amino-N-isopropylbenzamide	0,0300	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Deethylhydroxyatrazine	0,0284		RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Diazinon oxon	0,0280	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Didemethyl hexazinone F	0,0279	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Chlorosulfonamide acid	0,0271	0,0750	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazinone	Metribuzin	0,0269	0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	0,0232	0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Pyrethroid	cis-Permethrin	0,0221	0,0042	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Dechlorometolachlor	0,0216	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxyacetochlor	0,0202	0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Oxyacetamide	Isoxaflutole	0,0191	0,0180	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	0,0190	0,0790	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	0,0184	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Demethyl hexazinone B	0,0167	0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fipronil sulfonate	0,0151	0,0960	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fipronil sulfone	0,0126	0,0056	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Acetochlor ESA	0,0118		RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fenamiphos sulfoxide	0,0110	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0107	0,0190	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fipronil sulfide	0,0106	0,0042	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fipronil-desulfinyl	0,0106	0,0038	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Cyanazine	0,0104	0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Benzoylurea	Diflubenzuron	0,0076	0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Fungicide	Organostannic	Fentin	0,0064	0,0300	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Chlorpyrifos-oxon	0,0064	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0064	0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Acaricide	Diphenyl oxazoline	Etoxazole	0,0062	0,0042	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Nematicide	Organophosphate	Fenamiphos	0,0059	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desulfinylfipronil amide	0,0057	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desmethyl fluometuron	0,0051	0,0036	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Deiodo flubendiamide	0,0049	0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Terbufos sulfoxide	0,0047	0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0043	0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxyfluometuron	0,0039	0,0080	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0038	0,0080	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Organophosphate	Fonofos	0,0036	0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Diacylhydrazine	Tebufenozide	0,0035	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Oxadiazine	Indoxacarb	0,0034	0,0052	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021

Degradate	Unclassified	Terbufos oxon sulfone	0,0033	0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Fenamiphos sulfone	0,0032	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Phorate sulfone	0,0030	0,0090	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Terbufos oxon sulfoxide	0,0029	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Anilide	Propanil	0,0026	0,0120	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Terbufos sulfone	0,0026	0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 109	0,0025		RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0022	0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	3-Hydroxycarbofuran	0,0022	0,0160	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Chlorimuron-ethyl	0,0020	0,0088	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	O-Ethyl S-propyl phosphorothioate	0,0015		RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Deisopropyl prometryn	0,0013	0,0028	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Azinphos-methyl oxon	0,0013	0,0150	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Organophosphate	Disulfoton sulfoxide	0,0012	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Organophosphate	Methidathion	0,0012	0,0084	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Alachlor OA	0,0011	0,0840	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Disulfoton oxon sulfoxide	0,0011	0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Aldicarb sulfoxide	0,0009	0,0022	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0009	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Ametryn	0,0008	0,0026	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0008	0,0024	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebupirimfos oxon	0,0008	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Paraoxon	0,0006	0,0034	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Organophosphate	Dicrotophos	0,0006	0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide	Organophosphate	Tebupirimphos	0,0003	0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hexazinone Transformation Product G		0,0220	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxy didemethyl fluometuron		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxy monodemethyl fluometuron		0,0120	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Sulfosulfuron-ethyl sulfone		0,0028	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Semicarbazone	Diflufenzopyr		0,0720	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb		0,0080	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide; Insect growth regulator	Benzoylurea	Novaluron		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion		0,0054	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Disulfoton oxon		0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Nematicide	Organophosphate	Terbufos		0,0068	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Acaricide, Insecticide	Organometal	Fenbutatin oxide		0,1000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 109 (OH)		0,0380	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Isoxaflutole acid degradate RPA 203328		0,0092	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Diketonitrile-isoxaflutole		0,0620	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	sec-Acetochlor oxanilic acid		0,0520	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Chloroacetamide	Alachlor		0,0070	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 106		0,0760	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desethylhidroxyatrazine		0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Thiocarbamate	Butylate		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Pyrimidinylsulfonylurea	Orthosulfamuron		0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Thiocarbamate	Molinate		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Acaricide	Sulphite ester	Propargite		0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Disulfoton oxon sulfone		0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Disulfoton sulfone		0,0090	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Benzothiazinone	Bentazone		0,0090	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Organophosphate	Phorate sulfoxide		0,0046	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Phorate oxon sulfoxide		0,0070	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Phorate oxon sulfone		0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Phorate oxon		0,1000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	2-isopropyl-6-methyl-4-pyrimidinol		0,0200	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Thiocarbamate	Thiobencarb		0,0042	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate		0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Insecticide, Acaricide	Organophosphate	Naled		0,0560	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hexazinone Transformation Product D		0,2940	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Plant growth regulator, Herbicide	Dinitroaniline	Butralin		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021

Insecticide, Acaricide	Organophosphate	Profenofos		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Diphenyl ether	Oxyfluorfen		0,5000	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Alachlor SAA		0,1690	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Pyridine compound	Triclopyr		0,0880	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Terbufos oxon		0,0040	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Diketo-metribuzin		0,2360	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hydroxyalachlor		0,0060	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Tebuthiuron TP 109		0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Metolachlor hydroxy morpholinone		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Desethylatrazine		0,0110	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	sec-Alachlor oxanilic acid		0,1350	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	4-Hydroxy molinate		0,0070	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Carboxy molinate		0,0500	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	4-Hydroxyhexazinone A		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hexazinone Transformation Product E		0,0760	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Hexazinone Transformation Product C		0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	O-Ethyl S-methyl S-propyl phosphorodithioate		0,0030	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	O-Ethyl-O-methyl-S-propylphosphorothioate		0,0050	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Diphenyl ether	Lactofen		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Plant growth regulator, Herbicide	Organophosphate	Tribufos		0,0020	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Sulfonylurea	Prosulfuron		0,0100	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Degradate	Unclassified	Methyl paraoxon		0,0190	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Cyclodiene	Flumetsulam		0,0170	RLDQC	HPLC-MS/MS and GC-MS	-	United States	Bradley et al., 2021
Herbicide	Triazine	Atrazine	0,2964	0,0068	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,1942	0,0620	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazine	Simazine	0,1889	0,0072	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Imidazolinone	Imazamox	0,1013	0,0280	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	4-Hydroxychlorothalonil	0,0901	0,0980	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Chloroacetamide	Metolachlor	0,0793	0,0090	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Triazole	1H-1,2,4-triazole	0,0704	0,0220	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Strobilurin	Azoxystrobin	0,0643	0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Metolachlor ESA	0,0574	0,0680	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Benzothiazinone	Bentazone	0,0544	0,0090	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxyatrazine	0,0357	0,0080	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Triazole	Propiconazole	0,0325	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0315	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Organophosphate	Acephate	0,0315	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0277	0,0160	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazinone	Metribuzin	0,0228	0,0200	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Triazine	Deisopropylatrazine	0,0214	0,0200	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Uracil	Bromacil	0,0212	0,0056	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0173	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fipronil amide	0,0130	0,0092	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desethylatrazine	0,0119		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Phenylamide	Diuron	0,0103	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Triazine	Hydroxysimazine	0,0078	0,1000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Urea	Tebuthiuron	0,0075	0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Pyrethroid	trans-Permethrin	0,0075	0,0038	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Phenylamide	Metalaxyl	0,0062	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Demethyl norflurazon	0,0062	0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebuthiuron TP 108	0,0055	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Nicosulfuron	0,0053	0,0120	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Deisopropylhydroxyatrazine	0,0048		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	0,0048	0,0180	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazine	Propazine	0,0043	0,0032	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fipronil sulfone	0,0043	0,0056	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0042	0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fipronil-desulfinyl	0,0040	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Benzamide	Propyzamide	0,0039	0,0024	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fipronil sulfide	0,0028	0,0042	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b

Insecticide	Pyrethroid	cis-Permethrin	0,0023	0,0042	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Methoxytriazine	Prometon	0,0022	0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazinone	Hexazinone	0,0019	0,0036	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0018	0,0032	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	DCPMU	0,0017		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Dechlorometolachlor	0,0013	0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		0,0110	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Chlorpyrifos-oxon		0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Dechlorofipronil		0,0038	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Diazinon oxon		0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos		0,0520	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Dimethenamid SAA		0,1890	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hexazinone Transformation Product G		0,0220	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxy didemethyl fluometuron		0,0500	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxy monodemethyl fluometuron		0,0120	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxyfluometuron		0,0080	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Sulfosulfuron-ethyl sulfone		0,0028	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebupirimfos oxon		0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Thiocarbamate	Triallate		0,0120	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Pyrazolium	Halosulfuron-methyl		0,0220	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos		0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Terbufos sulfoxide		0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Semicarbazone	Diflufenzopyr		0,0720	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate		0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desulfinylfipronil amide		0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desulfinylfipronil amide		0,0070	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Diacylhydrazine	Tebufenozide		0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb		0,0080	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide; Insect growth regulator	Benzoylurea	Novaluron		0,0500	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion		0,0054	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Aryl triazolinone	Sulfentrazone		0,0180	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Triazole	Metconazole		0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Disulfoton oxon		0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Chlorosulfonamide acid		0,0750	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Nematicide	Organophosphate	Terbufos		0,0068	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxymetolachlor		0,0024	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Nematicide	Organophosphate	Ethoprophos		0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Acaricide, Insecticide	Organometal	Fenbutatin oxide		0,1000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Methomyl oxime		1,0000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebuthiuron TP 109 (OH)		0,0380	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Organophosphate	Dicrotophos		0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Oxyacetamide	Isoxaflutole		0,0180	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Strobilurin	Trifloxystrobin		0,0028	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Sulfosulfuron		0,0110	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Alachlor OA		0,3600	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Isoxaflutole acid degradate RPA 203328		0,0092	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl		0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Diketonitrile-isoxaflutole		0,0620	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Metolachlor OXA		0,1490	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	sec-Acetochlor oxanilic acid		0,0520	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Acaricide	Diphenyl oxazoline	Etoxazole		0,0042	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran		0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Chloroacetamide	Alachlor		0,0070	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Diacylhydrazine	Methoxyfenozide		0,0022	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebuthiuron TP 106		0,0760	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Malaoxon		0,0024	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Aldicarb sulfoxide		0,0022	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone		0,0200	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	3-Hydroxycarbofuran		0,0160	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b

Insecticide, Acaricide, Degradate	Carbamate	Methomyl	0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	0,0790	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Alachlor OA	0,0840	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Oxadiazine	Indoxacarb	0,0052	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Strobilurin	Pyraclostrobin	0,0024	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Acetochlor SA	0,3200	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Dinitroaniline	Oryzalin	0,0120	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Benzoic acid	Dicamba	2,4000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Acetochlor OA	0,0900	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Phenylurea	Siduron	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desethylhidroxyatrazine	0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Thiocarbamate	Butylate	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Dimethenamid SA	0,0790	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fipronil sulfonate	0,0960	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Pyrimidinylsulfonylurea	Orthosulfamuron	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Phenylurea	Fluometuron	0,0034	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazine	Cyanazine	0,0500	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Thiocarbamate	Molinate	0,0500	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Nematicide	Organophosphate	Fenamiphos	0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Acaricide	Sulphite ester	Propargite	0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,0020	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	DCPU	0,1440	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	4-Chlorobenzylmethyl sulfoxide	0,0032	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Disulfoton oxon sulfone	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Disulfoton oxon sulfoxide	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Disulfoton sulfone	0,0090	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Organophosphate	Disulfoton sulfoxide	0,0040	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Organophosphate	Phorate sulfoxide	0,0046	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Phorate sulfone	0,0090	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Phorate oxon sulfoxide	0,0070	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Phorate oxon sulfone	0,0200	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Phorate oxon	0,1000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Benzene-dicarboxamide	Flubendiamide	0,0044	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Pyridazinone	Norflurazon	0,0034	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Thiocarbamate	Thiobencarb	0,0042	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Organophosphate	Chlorpyrifos	0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	0,0110	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0110	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxydiazinon	0,0110	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Organophosphate	Naled	0,0560	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hexazinone Transformation Product D	0,2940	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desmethyl fluometuron	0,0036	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Oxamyl oxime	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Paraoxon	0,0034	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	O-Ethyl S-propyl phosphorothioate	0,0640	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fenamiphos sulfoxide	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Fenamiphos sulfone	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Urea	Linuron	0,0056	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0028	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Carbamate	Asulam	0,0500	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Plant growth regulator, Herbicide	Dinitroaniline	Butralin	0,0050	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Deisopropyldeethylatrazine	0,0240	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Chloroacetamide	Acetochlor	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desamino-metribuzin	0,0090	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Benzoylurea	Diflubenzuron	0,0060	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	3-Phenoxybenzoic acid	0,0610	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Dimethenamid OXA	0,0850	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Dinitroaniline	Pendimethalin	0,0100	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Organophosphate	Profenofos	0,0030	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Deisopropyl prometryn	0,0028	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Diphenyl ether	Oxyfluorfen	0,5000	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Alachlor SAA	0,1690	RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b

Degradate	Unclassified	Desaminodiketo-metribuzin					0,2000		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Pyridine compound	Triclopyr					0,0880		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Terbufos oxon					0,0040		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Terbufos oxon sulfone					0,0110		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Terbufos sulfone					0,0110		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Terbufos oxon sulfoxide					0,0040		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Diketo-metribuzin					0,2360		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Demethyl hexazinone B					0,0030		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Didemethyl hexazinone F					0,0100		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxyalachlor					0,0060		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	4-(Hydroxymethyl)pendimethalin					0,2130		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Uracil	Terbacil					0,0210		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine					0,0036		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebuthiuron TP 104					0,0056		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Tebuthiuron TP 109					0,0110		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate					0,0046		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hydroxyacetochlor					0,0200		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Metolachlor hydroxy morpholinone					0,0100		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Acetochlor SAA					0,1760		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Desethylatrazine					0,0110		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	sec-Alachlor oxanilic acid					0,1350		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Plant growth regulator	Carbamate	Carbaryl					0,0056		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Chlorsulfuron					0,0500		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	EPTC degradate R248722					0,0040		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	4-Hydroxy molinate					0,0070		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Carboxy molinate					0,0500		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Organostannic	Fentin					0,0300		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Anilide	Propanil					0,0120		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	4-Hydroxyhexazinone A					0,0030		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hexazinone Transformation Product E					0,0760		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Hexazinone Transformation Product C					0,0020		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazine	Prometryn					0,0042		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Deisopropylhydroxyatrazine					0,1000		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Sulfometuron-methyl					0,0040		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Thiocarbamate	EPTC					0,2060		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	O-Ethyl S-methyl S-propyl phosphorodithioate					0,0030		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	O-Ethyl-O-methyl-S-propylphosphorothioate					0,0050		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Diphenyl ether	Lactofen					0,0100		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Plant growth regulator, Herbicide	Organophosphate	Tribufos					0,0020		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Imidazolinone	Imazethapyr					0,0200		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Pyrethroid	Bifenthrin					0,0190		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Triazine	Ametryn					0,0026		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl					0,0080		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Chloroacetamide	Dimethenamid					0,0030		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Fungicide	Triazole	Myclobutanil					0,0070		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Benzenedicarboxylic acid	Dacthal monoacid					2,7000		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Chlorimuron-ethyl					0,0088		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	2-Aminobenzimidazole					0,0090		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA					0,0950		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Sulfonylurea	Prosulfuron					0,0100		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Organophosphate	Fonofos					0,0110		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Methyl paraoxon					0,0190		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Organophosphate	Methidathion					0,0084		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen					0,0030		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Degradate	Unclassified	Azinphos-methyl oxon					0,0150		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide	Organophosphate	Tebupirimphos					0,0020		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Insecticide, Acaricide	Pyridazinone	Pyridaben					0,0024		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Cyclodiene	Flumetsulam					0,0170		RLDQC	LC-MS/MS	-	United States	Bradley et al., 2021b
Herbicide	Phenylamide	Diuron	0,0084	13,8935	0,0145	1,6288	0,0006	0,0020	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Alachlor	0,0106	0,0550	0,0117	0,5030	0,0025	0,0083	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Penconazole	0,0039	0,3331	0,0196	0,1589	0,0010	0,0033	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018

Herbicide	Triazine	Atrazine	0,0087	0,4607	0,0230	0,1391	0,0020	0,0067	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Unclassified	Desmethyl-diuron	0,0079	0,0110		0,0910	0,0008	0,0028	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0281	0,0771		0,0526	0,0024	0,0081	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Acetochlor	0,0076	0,0404	0,0109	0,0304	0,0011	0,0037	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0055	0,0499		0,0188	0,0007	0,0023	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Metolachlor	0,0111	0,0244		0,0171	0,0010	0,0033	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Phenylamide	Metalaxyl	0,0040	0,0167	0,0070	0,0112	0,0008	0,0026	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Morpholine	Dimethomorph	0,0062	0,0163		0,0106	0,0005	0,0018	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Urea	Chlorotoluron	0,0170	0,0089		0,0055	0,0005	0,0018	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Unclassified	DCPU	0,0052	0,0078		0,0052	0,0016	0,0052	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0022	0,0071		0,0050	0,0004	0,0012	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Tetraconazole	0,0017	0,0089		0,0049	0,0004	0,0015	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Epoxiconazole	0,0023	0,0045		0,0038	0,0003	0,0010	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Strobilurin	Azoxystrobin				0,0010	0,0020	0,0066	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Urea	Linuron	0,0159	0,0159			0,0008	0,0026	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Simazine	0,0047	0,0047			0,0003	0,0009	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Urea	Isoproturon	0,0012	0,0012			0,0002	0,0008	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Phenylamide	Oxadixyl					0,0018	0,0060	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide	Imidazole	Prochloraz					0,0006	0,0020	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Fungicide, Plant growth regulator	Triazole	Tebuconazole					0,0009	0,0029	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Deisopropylatrazine					0,0015	0,0048	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Benzamide	Propyzamide					0,0017	0,0057	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Thiocarbamate	Prosulfocarb					0,0002	0,0008	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine					0,0011	0,0037	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Triazine	Desethylatrazine					0,0016	0,0052	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Unclassified	Terbuthylazine-desethyl					0,0017	0,0056	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Triazine	Hydroxysimazine					0,0004	0,0012	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Unclassified	Hydroxy-terbuthylazine					0,0005	0,0017	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Herbicide	Sulfonylurea	Flazasulfuron					0,0053	0,0178	LOD/LOQ	HPLC-MS/MS	44	Cameroon	Branchet et al., 2018
Degradate	Triazine	Hydroxyatrazine	0,3100	9,7000			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,2700	3,0000			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Triazine	Atrazine	0,3200	0,9600			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Degradate	Triazine	Desethylatrazine	0,0300	0,1700			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Degradate	Triazine	Deisopropylatrazine	0,0400	0,1300			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide, Insecticide, Acaricide, Fungicide	Dinitrophenol	DNOC	0,0200	0,1100			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Degradate, Impurity	Unclassified	2,4-Dichlorophenol	0,0100	0,0900			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide		0,0600			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,0300	0,0600			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0200	0,0400			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Benzothiazinone	Bentazone	0,0100	0,0300			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Intermediate	Unclassified	2,6-Dichlorophenol	0,0100	0,0100			0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Triazine	Cyanazine					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Dinitrophenol	Dinoseb					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Dinitroaniline	Pendimethalin					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Triazine	Simazine					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide, Degradate	Benzonitrile	Dichlobenil					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Metabolitie	Unclassified	2-methyl-4-chlorophenol					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Triazinone	Hexazinone					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Urea	Isoproturon					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Aryloxyalkanoic acid	Mecoprop					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Herbicide	Triazinone	Metamitron					0,0100		LOD	GC-MS and LC-MS/MS	4	China	Brauns et al., 2018
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin		<0,0005			0,0020		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Insecticide	Organochlorine	Aldrin		0,1100			0,0020		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Degradate	Organochlorine	p,p'-DDE	0,0060	0,0600			0,0020		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene		0,0060			0,0010		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Fungicide	Oxazole	Vinclozolin					0,0100		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Herbicide	Phenylamide	Diuron					0,0020		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Insecticide	Organochlorine	p,p'-DDT					0,0080		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Insecticide, Acaricide	Organochlorine	Endosulfan I					0,0200		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005

Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH							0,0100		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol							0,0040		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Herbicide	Triazine	Atrazine							0,0200		LOD	GC-MS and HPLC-ESI-MS	-	Spain	Brossa et al., 2005
Herbicide	Phenylamide	Diuron	0,0140	0,0590					0,0050	0,0170	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	0,0020	0,0240					0,0004	0,0010	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Herbicide	Triazine	Atrazine	0,0010	0,0220					0,0002	0,0010	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Herbicide	Triazine	Simazine	0,0010	0,0050					0,0004	0,0010	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl							0,0030	0,0100	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Herbicide	Urea	Isoproturon							0,0001	0,0003	MDL/MQL	LC-QLIT-MS/MS	51	Spain	Bueno et al., 2010
Insecticide, Acaricide, Metabolite	Organophosphate	Dimetoate					<0,0810		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH					<0,0580		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin					<0,0580		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Triazine	Atrazine					<0,0460		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
		Alochlor					<0,0310		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Insecticide	Organophosphate	Chlorpyrifos					<0,2900		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Fungicide	Chloronitrile	Chlorothalonil					<0,0210		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Phenylamide	Diuron					<0,0020		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide, Metabolite	Benzonitrile	Diclobenil					<0,0180		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin					<0,1550		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Urea	Linuron					<0,128		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Triazine	Simazine					<0,1270		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA					0,4470		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0500	0,1470			0,0980		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0890	0,1030			0,0960		n.i.		n.i.	GC-MS	4	Spain	Calderón-Preciado et al., 2011
Herbicide	Triazine	Atrazine			0,0065	0,0007	0,1550	0,0083	0,1000		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Herbicide	Phenylamide	Diuron			0,0011	0,0001	0,0126	0,0015	0,0003		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Degradate	Unclassified	3,4-Dichloroaniline			0,0002	0,0000	0,0066	0,0004	0,0002		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Fungicide, Degradate	Benzimidazole	Carbendazim			0,0002	0,0000	0,0042	0,0003	0,0001		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Fungicide	Dicarboximide	Iprodione							0,0001		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Fungicide	Imidazole	Prochloraz							0,0001		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Herbicide	Chloroacetamide	Acetochlor							0,0005		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Herbicide	Chloroacetamide	Alachlor							0,0006		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D							0,0002		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Herbicide	Urea	Linuron							0,0009		LQ	HPLC-MS/MS	20	France	Camilleri et al., 2015
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran							1,5100	5,0000	LOD/LOQ	HPLC-DAD	24	Brazil	Cancillier et al., 2020
Insecticide	Organophosphate	Methyl parathion							1,5100	5,0000	LOD/LOQ	HPLC-DAD	24	Brazil	Cancillier et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole							1,5100	5,0000	LOD/LOQ	HPLC-DAD	24	Brazil	Cancillier et al., 2020
Herbicide	Dinitroaniline	Trifluralin							1,5100	5,0000	LOD/LOQ	HPLC-DAD	24	Brazil	Cancillier et al., 2020
Herbicide	Dinitroaniline	Pendimethalin							2,2700	7,5000	LOD/LOQ	HPLC-DAD	24	Brazil	Cancillier et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0112	0,0317			0,0187		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0068	0,0200			0,0158		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Isomer	Unclassified	δ-HCH	0,0097	0,0226			0,0141		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Other substance	Organochlorine	α-HCH	0,0045	0,0251			0,0121		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide	Organochlorine	Heptachlor	0,0123	0,0379			0,0116		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide	Organochlorine	Aldrin	0,0127	0,0343			0,0095		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0114	0,0281			0,0093		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0074	0,0113			0,0086		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Degradate	Organochlorine	o,p'-DDD	0,0101	0,0323			0,0069		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Degradate	Organochlorine	p,p'-DDE	0,0145	0,0279			0,0065		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0112	0,0149			0,0028		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Degradate	Unclassified	Endosulfan sulfate	0,0112	0,0112			0,0005		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,0062	0,0062			0,0003		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0037	0,0037			0,0002		0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Isomer	Unclassified	trans-Chlordane							0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Insecticide	Organochlorine	p,p'-DDT							0,0000		LOD	GC-MS	22	China	Cao et al., 2021
Degradate	Unclassified	Metazachlor ESA		3,0000					n.i.		n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Metazachlor	1,3000	2,7000					n.i.		n.i.	LC-HRMS	-	Italy	Carere et al., 2021

Fungicide	Carbamate	Propamocarb		1,1000	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Metazachlor BH479-12		0,3000	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	2-Aminobenzimidazole	0,1000	0,1000	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Benzofuran	Ethofumesate		0,0800	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl		0,0500	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Dinitrophenol	Dinoseb		0,0400	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Metolachlor		0,0200	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,0070	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Phenylamide	Metalaxyl		0,0050	n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Hydroxyatrazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	3,5,6-trichloro-2-pyridinol			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	4-Chloroaniline			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	4-Isopropylaniline			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Acaricide, insecticide and nematicide	Avermectins	Abamectin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Neonicotinoid	Acetamiprid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Acetochlor			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazine	Ametryn			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazine	Atrazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Strobilurin	Azoxystrobin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Acylamino acid	Benalaxyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Veterinary substance	Carbamate	Bendiocarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Benzothiazinone	Bentazone			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Bifenox acid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Carboxamide	Boscalid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Pyrimidinol	Bupirimate			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Pyridazinone	Chloridazon			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Plant growth regulator	Quarternary ammonium	Chlormequat			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Chlorothalonil-4-hydroxy			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Urea	Chlorotoluron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Dimethylurea	Chloroxuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide, Plant growth regulator	Carbamate	Chlorpropham			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide, Other substance	Preservative, Biocide	Climbazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Isoxazolidinone	Clomazone			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Cyproconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Veterinary substance	Triazine	Cyromazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Desethylatrazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Triazine	Deisopropylatrazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Desphenyl-chloridazon			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Aryloxyalkanoic acid	Dichlorprop			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Difenoconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Benzoylurea	Diflubenzuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Carboxamide	Diflufenican			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Dimethachlor			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Dimethachlor CGA369873			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Dimethachlor ESA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Dimethachlor OXA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Dimethenamid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Dimethenamid ESA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Morpholine	Dodemorph			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Epoxiconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Ethion			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Carbamate	Fenoxycarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Piperidines	Fenpropidin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Morpholine	Fenpropimorph			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Urea	Fenuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Oxyacetamide	Flufenacet			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide	Benzoylurea	Flufenoxuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Strobilurin	Fluoxastrobin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Pyridazinone	Flurtamone			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Flusilazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazinone	Hexazinone			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Imidazolinone	Imazapyr			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Imidacloprid-guanidine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Imidacloprid-urea			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Oxadiazine	Indoxacarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Urea	Isoproturon			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Uracil	Lenacil			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Urea	Linuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Aryloxyalkanoic acid	Mecoprop			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021

Plant growth regulator, Herbicide	Quarternary ammonium	Mepiquat			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Mesotrione MNBA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazinone	Metamitron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Metazachlor OXA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Metconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide, Degradate	Carbamate	Methomyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Urea	Metobromuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Metolachlor CGA 357704			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Metolachlor ESA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Metolachlor OXA			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazinone	Metribuzin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Dinitroaniline	Oryzalin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Oxidiazole	Oxadiazon			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Organophosphate	Parathion-methyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Dinitroaniline	Pendimethalin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Pethoxamid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Phenylphosphate			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Phthalamic acid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Pyridine compound	Picolinafen			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Strobilurin type-methoxyacrylate	Picoxystrobin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Carbamate	Pirimicarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Imidazole	Prochloraz			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Chloroacetamide	Propachlor			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Anilide	Propanil			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Triazole	Propiconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazolone	Propoxycarbazone			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Benzamide	Propyzamide			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Thiocarbamate	Prosulfocarb			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Sulfonylurea	Prosulfuron			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Prothioconazole-desethio			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Strobilurin	Pyraclostrobin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Phosphorothiolate	Pyrazophos			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Quinoline	Quinmerac			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Quinoline	Quinoxyfen			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazine	Simazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triazine	Simazine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Morpholine	Spiroxamine			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Triketone	Sulcotrione			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Terbuthylazine-hydroxy			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Thiacloprid-amide			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide; Degradate	Triazole	Triadimenol			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Herbicide	Thiocarbamate	Triallate			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Fungicide	Strobilurin	Trifloxystrobin			n.i.	n.i.	LC-HRMS	-	Italy	Carere et al., 2021
Degradate	Unclassified	Alachlor OA	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Acetochlor	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Disulfoton sulfone	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Imidazolinone	Imazethapyr	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Urea	Neburon	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	<0,0500	<0,0500	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazine	Simazine	<0,0500	<0,0500	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Acetochlor OA	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Butachlor ESA	<0,0100	<0,0200	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Benzenedicarboxylic acid	Dacthal monoacid	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Metolachlor ESA	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Dinitroaniline	Oryzalin	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Propachlor ESA	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Propachlor OXA	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Alachlor	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Triazine	Deisopropylatrazine	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Fungicide	Strobilurin	Azoxystrobin	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Sulfonylurea	Chlorimuron-ethyl	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Thiocarbamate	EPTC	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Propachlor	<0,0200	<0,0200	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam	<0,0200	<0,0200	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Aryloxyalkanoic acid	2,4-DB	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Benzothiazinone	Bentazone	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Fipronil sulfide	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Fipronil sulfone	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Aldicarb sulfoxide	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Methoxytriazine	Atraton	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021

Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazine	Cyanazine	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Dimethachlor	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Dimethenamid	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Nematicide	Organophosphate	Ethoprophos	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazinone	Hexazinone	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Fungicide	Phenylamide	Metalaxyl	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Phenylurea	Monuron	<0,0100	<0,0100	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Methoxytriazine	Prometon	<0,0100	<0,0100	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazine	Propazine	<0,0100	<0,0100	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	<0,0100	1,2000	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Sulfonylurea	Sulfometuron-methyl	<0,0500	0,5960	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Uracil	Bromacil	<0,0500	0,4820	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Pyridine compound	Triclopyr	<0,0200	0,4800	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Phenylamide	Diuron	<0,0500	0,3390	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Urea	Tebuthiuron	<0,0100	0,2560	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl	<0,0100	0,1550	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Aryloxyalkanoic acid	Mecoprop	<0,0200	0,1280	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Diuron degradate	<0,0200	0,0802	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	<0,0200	0,0689	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	<0,0100	0,0640	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	<0,0500	0,0566	0,0500	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazinone	Metribuzin	<0,0200	0,0564	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Triazine	Atrazine	<0,0100	0,0496	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Desethylatrazine	<0,0200	0,0410	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Urea	Linuron	<0,0200	0,0362	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	3-Hydroxycarbofuran	<0,0100	0,0295	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Degradate	Unclassified	Dimethenamid ESA	<0,0200	0,0256	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin	<0,0200	0,0231	0,0200	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Chloroacetamide	Metolachlor	<0,0100	0,0167	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	<0,0100	0,0156	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Herbicide	Aryloxyalkanoic acid	Dichlorprop	<0,0100	0,0113	0,0100	RL	HPLC-MS/MS	-	United States	Cavallin et al., 2021
Insecticide	Organophosphate	Fenitrothion			0,0700	LOD	GC-FID	-	Iran	Chahkandi et al., 2019
Insecticide, Acaricide	Organophosphate	Phosalone			0,1000	LOD	GC-FID	-	Iran	Chahkandi et al., 2019
Insecticide, Acaricide	Organophosphate	Profenofos			0,0800	LOD	GC-FID	-	Iran	Chahkandi et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon			0,1000	LOD	GC-FID	-	Iran	Chahkandi et al., 2019
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion			0,1200	LOD	GC-FID	-	Iran	Chahkandi et al., 2019
Herbicide	Triazine	Atrazine		76,8000	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Triazinone	Metribuzin		17,1000	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Desethylatrazine		1,5000	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Triazine	Simazine		0,6870	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		0,0337	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide	Organophosphate	Chlorpyrifos		0,0171	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Triazine	Ametryn		0,0055	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Triazinone	Hexazinone		0,0046	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin		0,0041	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Chlorpyrifos-oxon		0,0037	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Triazine	Cyanazine		0,0018	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Organochlorine	p,p'-DDE		0,0012	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide	Organochlorine	p,p'-DDT		0,0009	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet		0,0008	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH		0,0006	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Isomer	Unclassified	cis-Chlordane		0,0005	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Endosulfan sulfate		0,0005	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,0004	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Heptachlor epoxide		0,0004	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Isomer	Unclassified	trans-Chlordane		0,0004	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Degradate	Organochlorine	p,p'-DDD		0,0004	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Isomer	Organochlorine	trans-Nonachlor		0,0003	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl		0,0002	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin		0,0001	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Herbicide	Benzenedicarboxylic acid	Dacthal		0,0001	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide	Organochlorine	Aldrin		0,0001	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Degradate	Organochlorine	o,p'-DDD		0,0001	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Isomer	Organochlorine	cis-Nonachlor		0,0001	n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019

Insecticide, Other substance	Organochlorine	α-HCH		0,0001				n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Oxychlordane		0,0001				n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Degradate	Unclassified	Endrin ketone		0,0000				n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide	Organochlorine	Heptachlor		0,0000				n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide	Organochlorine	Mirex		0,0000				n.i.	n.i.	HRGC-MS	-	United States	Cipoletti et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,7500	1,6100	0,0710	1,8500		0,5000	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Insecticide, Acaricide	Organochlorine	Endosulfan	0,3300	0,4200	0,0640	0,2400		0,2500	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Degradate	Organochlorine	p,p'-DDE	0,1000	0,9000	0,0610	0,0300		0,1000	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Insecticide	Organochlorine	p,p'-DDT	0,1300	0,8600	0,0120	0,6200		0,1000	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Insecticide	Organochlorine	Aldrin						0,3000	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin						0,3000	LD	GC-NiECD	50	Ghana	Darko et al., 2008
Herbicide	Triazine	Simazine	0,0241	3,1400				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Metolachlor ESA	0,0231	1,5500				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Acetochlor OA	0,0211	0,8960				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Metolachlor	0,0134	0,8670				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Pyridine compound	Triclopyr	0,0201	0,5810				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Imidazolinone	Imazethapyr	0,0198	0,4920				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Propachlor ESA	0,4590	0,4850				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Triazine	Atrazine	0,0100	0,3020				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Acetochlor	0,0241	0,2650				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Dimethenamid ESA	0,0212	0,2300				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0111	0,1790				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Dimethenamid	0,0130	0,1190				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Triazine	Deisopropylatrazine	0,0251	0,1160				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Urea	Tebuthiuron	0,0111	0,0865				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0257	0,0747				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Uracil	Bromacil		0,0676				0,0500	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Triazine	Desethylatrazine	0,0248	0,0568				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0234	0,0562				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide	Neonicotinoid	Thiamethoxam		0,0232				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin		0,0202				0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Phenylurea	Monuron		0,0158				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Propachlor OXA		0,0152				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Fungicide	Phenylamide	Metalaxyl		0,0133				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Benzothiazinone	Bentazone	0,0101	0,0126				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP		0,0123				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0107	0,0109				0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Fungicide	Strobilurin	Azoxystrobin						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Fungicide	Triazole	Propiconazole						0,0500	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Fungicide, Plant growth regulator	Triazole	Tebuconazole						0,0500	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Alachlor						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Methoxytriazine	Atraton						0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Sulfonylurea	Chlorimuron-ethyl						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Sulfonylurea	Chlorsulfuron						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Triazine	Cyanazine						0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Dimethachlor						0,0100	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Phenylamide	Diuron						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Thiocarbamate	EPTC						0,0200	RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017

Herbicide	Triazinone	Metribuzin						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Urea	Neburon						0,0500		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Dinitroaniline	Oryzalin						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Methoxytriazine	Prometon						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Propachlor						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Triazine	Propazine						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Sulfonylurea	Sulfometuron-methyl						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Degradate	Carbamate	Methomyl						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Nematicide	Organophosphate	Ethoprophos						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Plant growth regulator	Carbamate	Carbaryl						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	3-Hydroxycarbofuran						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Alachlor OA						0,0500		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Aldicarb sulfoxide						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Dacthal monoacid						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Disulfoton sulfone						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Diuron degradate						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Fipronil sulfide						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Fipronil sulfone						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Pyrimidinylsulfonylurea	Foramsulfuron						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Triazinone	Hexazinone						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Urea	Linuron						0,0200		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Degradate	Unclassified	Butachlor ESA						0,0100		RL	LC-MS	14	United States	Elliot and VanderMeulen, 2017
Herbicide	Chloroacetamide	Metolachlor		1,5300			0,0136	0,0400		RL	GC-MS	292	United States	Elliot et al., 2017
Herbicide	Triazine	Atrazine		0,8140			0,0184	0,0190		RL	GC-MS	292	United States	Elliot et al., 2017
Herbicide	Uracil	Bromacil		0,1610				0,1600		RL	GC-MS	292	United States	Elliot et al., 2017
Herbicide	Methoxytriazine	Prometon		0,0837				0,1600		RL	GC-MS	292	United States	Elliot et al., 2017
Insecticide, Plant growth regulator	Carbamate	Carbaryl		0,0716				0,0600		RL	GC-MS	292	United States	Elliot et al., 2017
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		0,0447				0,0041		RL	GC-MS	292	United States	Elliot et al., 2017
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,0362				0,3200		RL	GC-MS	292	United States	Elliot et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos		0,0359				0,0800		RL	GC-MS	292	United States	Elliot et al., 2017
Herbicide	Thiocarbamate	Molinate	0,0400	211,3800	0,0600	15,5600		0,0339	0,1129	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	6,2400	6,2400		6,2400		0,7397	2,4658	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021

Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,7200	8,6300	0,7200	4,9200	0,6194	2,0647	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,2000	18,8200		4,2100	0,1708	0,5693	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Phenylamide	Oxadixyl	2,7200	2,7200		2,7200	0,0848	0,2828	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Dinitroaniline	Trifluralin	0,0400	2,1600	0,2100	2,1600	0,0219	0,0730	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Propiconazole	0,0700	10,0800	0,1200	1,5300	0,0680	0,2266	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Oxidiazole	Oxadiazon	0,4000	4,3200	0,4500	1,5000	0,3647	1,2157	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Uracil	Lenacil	0,6400	1,9300	0,6400	1,3400	0,0849	0,2829	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Strobilurin	Azoxystrobin	0,0300	7,7100	0,0600	1,3200	0,0284	0,0947	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0300	6,3300	0,2100	1,1900	0,0248	0,0828	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Veterinary substance	Imidazole	Imazalil	0,2100	2,9200	0,8600	1,1900	0,0735	0,2451	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Degradate	Unclassified	4-Chloroaniline	0,0600	5,8400	0,1500	1,0200	0,0152	0,0508	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Degradate	Unclassified	3-Chloroaniline	0,0300	5,4300	0,1200	0,9800	0,0229	0,0762	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos	0,0500	1,2900	0,1500	0,9600	0,0496	0,1652	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Phenylamide	Diuron	0,0300	10,6400	0,4500	0,8100	0,0218	0,0726	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,1300	1,7200	0,2200	0,7000	0,1251	0,4170	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Pyridazinone	Chloridazon	0,1400	0,6800	0,5300	0,5500	0,1374	0,4580	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Sulfonylurea	Chlorsulfuron	0,0500	6,3300	0,0500	0,4900	0,0439	0,1462	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide	Carbamate	Pirimicarb	0,1300	1,8100	0,1700	0,4900	0,1223	0,4075	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	0,4400	0,4400	0,4400	0,4400	0,0340	0,1132	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Oxathiin	Flutolanil	0,0500	4,3900	0,1400	0,4200	0,0476	0,1588	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Degradate	Unclassified	Pentachlorobenzene	0,3300	0,5500		0,4200	0,1066	0,3554	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Propetamphos	0,2500	0,4700	0,3300	0,4000	0,1644	0,5479	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Degradate	Unclassified	Desethylatrazine	0,0200	9,5600	0,0500	0,3900	0,0201	0,0669	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Triketone	Mesotrione	0,0800	0,6300		0,3900	0,0355	0,1184	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide	Organophosphate	Quinalphos	0,0400	1,0500	0,1200	0,3800	0,0382	0,1274	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Plant growth regulator	Quarternary ammonium compound	Mepiquat chloride	0,0700	1,1600	0,1000	0,3700	0,0732	0,2439	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Nematicide	Organophosphate	Cadusafos	0,0800	0,6500	0,1800	0,3400	0,0597	0,1992	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0900	1,4600	0,0900	0,2900	0,0870	0,2901	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,1000	0,4200	0,1000	0,2800	0,0868	0,2894	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,2700	2,7500	0,2700	0,2700	0,0691	0,2303	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0400	1,4000	0,0600	0,2600	0,0423	0,1410	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide	Neonicotinoid	Acetamiprid	0,0300	2,8600	0,1200	0,2200	0,0252	0,0841	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Flutriafol	0,0800	0,3300	0,0800	0,2200	0,0683	0,2275	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Benzimidazole	Thiophanate-methyl	0,0300	0,5000	0,0400	0,2100	0,0212	0,0706	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,2100	0,2100		0,2100	0,0822	0,2740	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Strobilurin	Trifloxystrobin	0,2000	0,2000		0,2000	0,0155	0,0517	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Diphenyl ether	Aclonifen	0,0600	0,7500	0,0900	0,1900	0,0569	0,1896	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Dinitroaniline	Pendimethalin	0,0200	2,6000	0,0400	0,1800	0,0186	0,0620	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Imidazolinone	Imazamox	0,0400	0,7600	0,0700	0,1800	0,0401	0,1338	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Imidazole	Prochloraz	0,0300	0,5200	0,1100	0,1700	0,0027	0,0082	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazolinthione	Prothioconazole	0,1600	0,1800		0,1700	0,1367	0,4558	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Acaricide	Carboxamide	Hexythiazox	0,1600	0,1600		0,1600	0,0314	0,1046	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Morpholine	Spiroxamine	0,0600	0,2400		0,1500	0,0182	0,0607	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Epoxiconazole	0,0300	0,7600	0,0500	0,1400	0,0314	0,1047	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Triazine	Atrazine	0,0100	1,0200	0,0200	0,1300	0,0071	0,0237	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,3200	0,0200	0,0130	0,1300	0,0152	0,0506	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0200	0,1200	0,0300	0,1200	0,0178	0,0595	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Anilinopyrimidine	Cyprodinil	0,0400	0,2900	0,0700	0,1000	0,0348	0,1160	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Strobilurin	Pyraclostrobin	0,0200	0,1800	0,0300	0,1000	0,0163	0,0542	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0100	0,8700	0,0100	0,0700	0,0067	0,0223	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0200	0,2100	0,0300	0,0700	0,0210	0,0700	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Triazine	Prometryn	0,0100	0,2000	0,0600	0,0600	0,0095	0,0317	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide	Unclassified	Buprofezin	0,0600	0,0600		0,0600	0,0383	0,1278	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Morpholine	Fenpropimorph	0,0400	0,0600	0,0500	0,0600	0,0334	0,1114	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Penconazole	0,0600	0,0600		0,0600	0,0345	0,1149	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Phenylamide	Metalaxyl	0,0400	0,1000	0,0400	0,0500	0,0423	0,1410	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Nematicide	Organophosphate	Fenamiphos	0,0500	0,0500		0,0500	0,0489	0,1630	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Difenoconazole	0,0400	0,0400		0,0400	0,0338	0,1127	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Mandelamide	Mandipropamid	0,0400	0,0400		0,0400	0,0248	0,0827	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021

Insecticide, Acaricide	Organophosphate	Monocrotophos	0,0200	0,0700	0,0300	0,0300	0,0174	0,0581	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Other substance	Triazole	Hexaconazole	0,0300	0,0300		0,0300	0,0228	0,0760	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Quinoline	Quinoxyfen	0,0200	0,0300	0,0200	0,0300	0,0105	0,0348	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0100	0,0300		0,0200	0,0124	0,0412	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Triazine	Propazine	0,0100	0,0200	0,0100	0,0200	0,0087	0,0291	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide, Degradate	Triazine	Terbutryn	0,0100	0,0300	0,0100	0,0100	0,0038	0,0127	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Wood preservative	Unclassified	2,4,6-Tribromophenol					0,1736	0,5785	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Chloroacetamide	Acetochlor					0,0603	0,2008	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Chloroacetamide	Alachlor					0,0769	0,2563	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl					1,7247	5,7491	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Diphenyl ether	Bifenox					0,0859	0,2863	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Carboxamide	Boscalid					0,1340	0,4466	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Acaricide	Tetrazine	Clofentezine					0,0438	0,1461	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin					0,1358	0,4528	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Algistat, Herbicide, Other substance	Triazine	Cybutryne					0,0008	0,0027	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Veterinary substance	Triazine	Cyromazine					0,0347	0,1156	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon					0,0527	0,1757	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Morpholine	Dimethomorph					0,0151	0,0503	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Benzofuran	Ethofumesate					0,1148	0,3828	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Pyrimidine	Fenarimol					0,2104	0,7013	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion					0,3377	1,1256	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Nematicide	Benzamide, pyramide	Fluopyram					0,0095	0,0316	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Triazole	Fluquinconazole					0,0809	0,2698	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Nematicide	Organophosphate	Fosthiazate					2,7092	9,0306	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene					1,5802	5,2675	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Urea	Isoproturon					0,0184	0,0612	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Urea	Linuron					0,0386	0,1287	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					0,8947	2,9824	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos					0,2141	0,7135	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide	Organophosphate	Methidathion					0,6959	2,3197	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Acaricide, Degradate	Carbamate	Methomyl					0,0181	0,0605	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide	Diacylhydrazine	Methoxyfenozide					0,1357	0,4524	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Benzophenone	Metrafenone					0,0221	0,0735	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Phenylpyrazole	Pinoxaden					0,0068	0,0225	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide	Anilino pyrimidine	Pyrimethanil					0,0679	0,2264	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Triazine	Simazine					0,0066	0,0219	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Insecticide, Fungicide	Pyrazolium	Tolfenpyrad					0,0209	0,0698	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Sulfonylurea	Triasulfuron					0,0496	0,1654	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Fungicide, Algicide, Mollusicide	Organometal	Fentin					8,7200	29,0665	LOD/LOQ	UHPLC-MS/MS	300	Turkey	Emadian et al., 2021
Herbicide	Phenylamide	Diuron		17,6000			0,0500		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA		13,5900			0,1000		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		11,4800			0,1000		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Benzoic acid	Dicamba		3,0700			0,1000		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Methoxytriazine	Prometon		1,6000			0,0500		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Pyridine compound	Triclopyr		1,4800			0,1000		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Dinitroaniline	Oryzalin		1,0400			0,0500		RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013

Herbicide	Dinitroaniline	Pendimethalin	0,4000		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,4000		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,3600		0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,2800		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,2000		0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,1600		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,1300		0,0100	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Fipronil sulfone	0,1200		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Dinitroaniline	Prodiamine	0,1000		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Fipronil-desulfinyl	0,0900		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	0,0500		0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Fipronil amide	0,0500		0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Pyrethroid	cis-Permethrin	0,0400		0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Pyrethroid	Cyfluthrin	0,0400		0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Pyrethroid	trans-Permethrin	0,0300		n.i	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Pyrethroid	λ-Cyhalothrin	0,0200		0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Organophosphate	Chlorpyrifos	0,0100		0,0100	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Dinitroaniline	Benfluralin			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Uracil	Bromacil			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Triazinone	Metribuzin			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Pyridazinone	Norflurazon			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Diphenyl ether	Oxyfluorfen			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Triazine	Prometryn			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Triazine	Simazine			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Dinitroaniline	Trifluralin			0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Organophosphate	Fonofos			0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide	Organophosphate	Parathion-methyl			0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013

Insecticide	Pyrethroid	Resmethrin	0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide	Pyrethroid	Fenpropathrin	0,0050	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide	Organophosphate	Methidathion	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide	Organophosphate	Profenofos	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Mollusicide, Bird repellent	Carbamate	Methiocarb	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	3-Hydroxycarbofuran	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Aldicarb sulfoxide	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Triazine	Deisopropylatrazine	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Triazine	Desethylatrazine	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Diamino chlorotriazine	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Fipronil desulfinyl amide	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Degradate	Unclassified	Fipronil sulfide	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Nematicide	Organophosphate	Fenamiphos	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Plant growth regulator, Herbicide	Organophosphate	Tribufos	0,0300	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Triazinone	Hexazinone	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Dinitroaniline	Ethalfluralin	0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013

Herbicide	Triazine	Atrazine						0,0500	RL	GC-MSD, FPD, ECD and MS; HPLC-FD and MS; APCI-LC-MS/MS and LC-MS[1]	8 to 94	United States	Ensminger et al., 2013
Herbicide	Chloroacetamide	Metolachlor	0,0012	0,4400				0,0009	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Herbicide	Triazine	Atrazine	0,0007	0,3900				0,0003	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Herbicide	Chloroacetamide	Acetochlor	0,0012	0,1500				0,0009	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0003	0,0300				0,0003	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0005	0,0050				0,0005	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Fungicide	Dicarboximide	Iprodione						0,0140	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Herbicide	Chloroacetamide	Metazachlor						0,0170	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Insecticide	Organophosphate	Chlorpyrifos						0,7100	MRL	LC-MS/MS	68	United States	Fairbairn et al., 2016
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0001	0,0020				0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide	Organophosphate	Chlorpyrifos	0,0002	0,0011				0,0000052	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide, Other substance	Organochlorine	α-HCH	0,0006	0,0007				0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide	Organochlorine	p,p'-DDT	0,0001	0,0005				0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Degradate	Organochlorine	p,p'-DDE	0,0000	0,0003				0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0000	0,0000				0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH						0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Degradate	Organochlorine	o,p'-DDE						0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide, Degradate	Organochlorine	o,p'-DDD						0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide, Degradate	Organochlorine	p,p'-DDD						0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Insecticide	Organochlorine	o,p'-DDT						0,0000021	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Herbicide	Dinitroaniline	Pendimethalin						0,0000052	LOD	GC-MS	-	Italy	Ferrario et al., 2017
Degradate	Unclassified	Aldicarb sulfoxide	1,4000	10,9000				0,5000	LOD	HPLC-FD	-	United States	Foran et al., 1986
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	1,5000	4,9000				0,5000	LOD	HPLC-FD	-	United States	Foran et al., 1986
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,7000	2,1000				0,5000	LOD	HPLC-FD	-	United States	Foran et al., 1986
Herbicide	Triazine	Prometryn		0,0334				n.i.	n.i.	GC-MS	-	China	Gao et al., 2019
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide	0,0050	0,0560	0,0099	0,0160		0,0035	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Triazinone	Metamitron	0,0170	0,0270	0,0170	0,0270		0,0078	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Triazole	Propiconazole	0,0021	0,0200	0,0040	0,0096		0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Triazolinthione	Prothioconazole	0,0040	0,0190	0,0054	0,0098		0,0034	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0020	0,0087	0,0033	0,0067		0,0015	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Degradate	Unclassified	Desethylatrazine	0,0040	0,0081	0,0040	0,0081		0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Phenylamide	Diuron	0,0026	0,0076	0,0032	0,0039		0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Urea	Isoproturon	0,0014	0,0071	0,0026	0,0043		0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,0021	0,0071	0,0027	0,0033		0,0014	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Carboxamide	Boscalid	0,0022	0,0063	0,0043	0,0063		0,0017	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide, Degradate	Triazine	Terbutryn	0,0017	0,0052	0,0028	0,0029		0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Carbamate	Propamocarb	0,0014	0,0026		0,0022		0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide, Veterinary substance	Imidazole	Imazalil	0,0020	0,0024		0,0022		0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Dicarboximide	Iprodione	0,0020	0,0020		0,0020		0,0010	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Insecticide	Neonicotinoid	Acetamiprid						0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Triazine	Atrazine						0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Strobilurin	Azoxystrobin						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Pyridazinone	Chloridazon						0,0017	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Triazine	Cyanazine						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Anilinopyrimidine	Cyprodinil						0,0011	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl						0,0013	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Aryloxyalkanoic acid	Dichlorprop						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Morpholine	Fenpropimorph						0,0009	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Phenylpyrrole	Fludioxonil						0,0024	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Triazole	Flutriafol						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Mandelamide	Mandipropamid						0,0010	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Sulfonylurea	Mesosulfuron-methyl						0,0013	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Triazole	Penconazole						0,0011	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Triazine	Simazine						0,0013	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid						0,0017	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam						0,0018	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Herbicide	Sulfonylurea	Triflusulfuron-methyl						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021
Fungicide	Triazole	Triticonazole						0,0012	LOQ	LC-MS/MS	-	Sweden	Golovko et al., 2021

Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,2690			0,0900		0,0015		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Isomer	Unclassified	Chlorfenvinphos cis		0,1340			0,0270		0,0003		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,0530			0,0210		0,0003		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide	Organophosphate	Chlorpyrifos		0,0240			0,0060		0,0019		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Chloroacetamide	Metolachlor		0,0100			0,0050		0,0001		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide, Degradate	Triazine	Terbutryn		0,0130			0,0040		0,0015		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Acaricide	Organochlorine	Endosulfan II		0,0070			0,0030		0,0006		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Fungicide	Dicarboximide	Procymidone		0,0050			0,0030		0,0002		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Isomer	Unclassified	Chlorfenvinphos trans		0,0320			0,0020		0,0003		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Fungicide	Dicarboximide	Iprodione							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Fungicide	Oxazole	Vinclozolin							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Acaricide	Organophosphate	Methidathion							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Thiocarbamate	Molinate							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Veterinary substance	Organochlorine	Metoxychlor							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Acaricide	Organochlorine	Endosulfan I							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Degradate	Unclassified	Endosulfan sulfate							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Triazine	Atrazine							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Triazine	Simazine							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Chloroacetamide	Alachlor							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Dinitroaniline	Trifluralin							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide	Organochlorine	Aldrin							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Insecticide	Organochlorine	p,p'-DDT							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Degradate	Organochlorine	o,p'-DDE							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene							n.i.		MQL	GCxGC-ToF-MS	30	Spain	Gómez et al., 2012
Herbicide	Triazine	Atrazine	0,0120	0,1700					0,000003		LOD	GC-ECD and GC-MS	-	Spain	Gómez-Gutiérrez et al., 2006
Herbicide	Triazine	Simazine	0,0090	0,0590					0,000003		LOD	GC-ECD and GC-MS	-	Spain	Gómez-Gutiérrez et al., 2006
Herbicide	Thiocarbamate	Molinate		0,0263					0,000003		LOD	GC-ECD and GC-MS	-	Spain	Gómez-Gutiérrez et al., 2006
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0005	0,0056					0,000003		LOD	GC-ECD and GC-MS	-	Spain	Gómez-Gutiérrez et al., 2006
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0004	0,0012					0,000003		LOD	GC-ECD and GC-MS	-	Spain	Gómez-Gutiérrez et al., 2006
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur			0,1300	0,0100	0,8500	0,2000	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Herbicide	Quinolinecarboxylic acid	Quinclorac					0,5900	0,2000	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Herbicide	Pyrimidinyl carboxy	Bispyribac-sodium					0,2200	0,0100	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					0,2100	0,1000	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Herbicide	Triazine	Atrazine			0,1100	0,0100	0,1300	0,0100	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid					0,0700	0,0100	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Herbicide	Triazine	Simazine			0,0700	0,0100	0,0700	0,0100	0,0380	0,0130	LOD/LOQ	LC-MS/MS and GC-QqQ-MS	-	Brazil	Gonçalves et al., 2020
Herbicide	Triazine	Atrazine	0,0008	0,2989					0,0007		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Methoxytriazine	Prometon	0,0014	0,1686					0,0010		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0013	0,1651					0,0006		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0015	0,0680					0,0012		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Triazine	Simazine	0,0017	0,0657					0,0017		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Chloroacetamide	Acetochlor	0,0014	0,0470					0,0010		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0016	0,0327					0,0016		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Insecticide	Neonicotinoid	Dinotefuran	0,0015	0,0271					0,0015		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0021	0,0210					0,0018		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Insecticide	Neonicotinoid	Acetamiprid	0,0010	0,0076					0,0015		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Uracil	Bromacil	0,0017	0,0039					0,0015		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Chloroacetamide	Alachlor	0,0020	0,0034					0,0011		LOD	LC-QqQ-MS and LC-HRMS	-	United States	Guardian et al., 2021
Herbicide	Triazine	Simazine	0,0041	0,4620					0,0007	n.i.	MDL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Phenylamide	Diuron	0,0042	0,3250					n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion		0,1350					n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Triazinone	Hexazinone	0,0247	0,0837					0,0006	0,0031	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0056	0,0829					n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Imidazolinone	Imazapyr	0,0409	0,0642					n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Fungicide	Triazole	Propiconazole	0,0200	0,0610					n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Degradate	Unclassified	Endosulfan sulfate		0,0520					0,0001	0,0004	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide	Organochlorine	Endosulfan	0,0420	0,0489					0,0001	0,0003	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,0247	0,0402					0,0001	0,0006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016

Herbicide	Triazine	Atrazine		0,0380		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Degradate	Triazine	Deisopropylatrazine	0,0042	0,0366		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Organophosphate	Chlorpyrifos	0,0290	0,0314		0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Pyridazinone	Norflurazon		0,0302		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Unclassified	Fluridone		0,0279		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Fungicide	Strobilurin	Pyraclostrobin	0,0111	0,0220		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Neonicotinoid	Acetamiprid	0,0042	0,0136		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Sulfonylurea	Sulfometuron-methyl		0,0042		n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Benzenedicarboxylic acid	Dacthal				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Permethrin				n.i.	n.i.	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Fungicide	Chloronitrile	Chlorothalonil				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Fungicide	Pyrimidine	Fenarimol				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Fungicide, Degradate	Triazole	Triadimefon				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Chloroacetamide	Alachlor				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Thiocarbamate	Butylate				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Thiocarbamate	Cycloate				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Thiocarbamate	EPTC				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Chloroacetamide	Metolachlor				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Thiocarbamate	Molinate				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Alkanamide	Napropamide				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Thiocarbamate	Pebulate				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Dinitroaniline	Pendimethalin				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Pyridine compound	Picloram				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Methoxytriazine	Prometon				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Triazine	Prometryn				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Pyridine compound	Triclopyr				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide	Dinitroaniline	Trifluralin				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D				0,0018	0,0088	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Pyrethroid	Esfenvalerate				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Organophosphate	Parathion-methyl				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide	Pyrethroid	Bifenthrin				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide	Organophosphate	Disulfoton				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran				n.i.	n.i.	n.i.	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Organochlorine	Heptachlor				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide	Organochlorine	p,p'-DDT				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH				0,0000	0,0001	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH				0,0000	0,0001	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Degradate	Organochlorine	p,p'-DDD				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Other substance	Organochlorine	α-HCH				0,0000	0,0001	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Isomer	Unclassified	cis-Chlordane				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Isomer	Unclassified	trans-Chlordane				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Isomer	Organochlorine	trans-Nonachlor				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Isomer	Unclassified	δ-HCH				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Degradate	Unclassified	Heptachlor epoxide				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Degradate	Organochlorine	p,p'-DDE				0,0000	0,0000	MDL/ MQL	GFC-Florisl, GC-MS and LC-DAD	-	United States	Hapke et al., 2016
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,4090		0,0002		MQL	LC-MS/MS	72	Japan	Hashimoto et al., 2020
Herbicide	Aryloxyalkanoic acid	Mecoprop		0,1000		n.i.		n.i	CG-MS/MS	30	Germany	Heberer et al., 1998
Herbicide	Aryloxyalkanoic acid	Dichlorprop		0,1000		n.i.		n.i	CG-MS/MS	30	Germany	Heberer et al., 1998
Insecticide, Other substance	Organochlorine	α-HCH	0,0020	0,0045	0,0034	0,0002		DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0008	0,0008	0,0008	n.i.		DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013

Degradate	Organochlorine	p,p'-DDE	0,0002	0,0015		0,0007		0,0004	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Isomer	Unclassified	trans-Chlordane	0,0007	0,0007		0,0007		0,0004	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide	Organochlorine	p,p'-DDT	0,0003	0,0013		0,0006		0,0004	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0005	0,0006		0,0006		0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0004	0,0005		0,0004		0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Degradate	Organochlorine	o,p'-DDD						n.i.	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide	Organochlorine	o,p'-DDT						0,0002	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene						n.i.	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan II						0,0004	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Degradate	Unclassified	Endosulfan sulfate						0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Isomer	Unclassified	cis-Chlordane						0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide	Organochlorine	Aldrin						0,0002	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin						0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin						0,0004	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Insecticide	Organochlorine	Heptachlor						0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Degradate	Unclassified	Heptachlor epoxide						0,0003	DL	GC-ECD	-	Tanzania	Hellar-Kihampa et al., 2013
Degradate	Organochlorine	o,p'-DDE		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Degradate	Organochlorine	p,p'-DDE		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Degradate	Organochlorine	o,p'-DDD		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Degradate	Organochlorine	p,p'-DDD		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Organochlorine	o,p'-DDT		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Organochlorine	p,p'-DDT		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Other substance	Organochlorine	α-HCH		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Isomer	Unclassified	δ-HCH		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
		ε-HCH		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Isomer	Unclassified	trans-Chlordane		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Isomer	Unclassified	cis-Chlordane		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Organochlorine	Aldrin		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Cyclodiene	Isodrin		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Organochlorine	Heptachlor		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Isomer	Unclassified	cis-heptaclor epoxide		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide, Veterinary substance	Organochlorine	Metoxychlor		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Insecticide	Organochlorine	Mirex		<LOD				0,0009	LOQ	GC-ECD and GC-Florisil	22	Vietnan	Hoai et al., 2011
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D			0,0013	0,2100	0,0010	0,0006	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Insecticide	Organophosphate	Chlorpyrifos			0,0097	0,1800		0,0027	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon				0,0180		0,0010	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Herbicide	Triazine	Atrazine			0,0007	0,0160		0,0006	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin			0,0057	0,0003	0,0110	0,0002	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			0,0071	0,0003	0,0100	0,0001	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam						0,0002	MDL	UHPLC-MS/MS	-	New Zealand	Hougeman et al., 2019
Degradate	Unclassified	AMPA	0,3800	2,2800				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,0100	0,2400				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Phosphonoglycine	Glyphosate	0,0200	0,1900				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0100	0,1200				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide	0,0200	0,0900				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T	0,0100	0,0600				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0100	0,0500				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Benzothiazinone	Bentazone	0,0100	0,0500				n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013

Herbicide	Phenylamide	Diuron	0,0200	0,0400							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Urea	Linuron	0,0100	0,0400							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Chloroacetamide	Metolachlor	0,0100	0,0400							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Chloroacetamide	Metazachlor	0,0200	0,0400							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0100	0,0200							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0100	0,0200							n.i.		UHPLC-QqQ-MS/MS, GC-MSD and HPLC-FD	20	Netherlands	Houtman et al., 2013
Insecticide, Degradate	Organochlorine	o,p'-DDD	<MDL	0,0139	0,0001	0,0001	0,0019	0,0043	<MDL	0,0001	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	<MDL	0,0129	0,0000	0,0000	0,0014	0,0041	0,0000	0,0001	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide	Organochlorine	Aldrin	<MDL	0,0108	0,0000	0,0001	0,0013	0,0034	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<MDL	0,0077	0,0000	0,0000	0,0009	0,0024	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Isomer	Unclassified	trans-Chlordane	<MDL	0,0066	0,0000	0,0000	0,0007	0,0021	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Organochlorine	o,p'-DDE	<MDL	0,0028	0,0001	0,0002	0,0005	0,0009	0,0000	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Isomer	Unclassified	δ-HCH	<MDL	0,0263	0,0000	0,0001	0,0004	0,0008	0,0000	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan II	<MDL	0,0027	0,0000	0,0000	0,0003	0,0008	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	<MDL	0,0027	0,0001	0,0001	0,0003	0,0008	0,0001	0,0001	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide	Organochlorine	p,p'-DDT	<MDL	0,0008	0,0003	0,0002	0,0003	0,0003	0,0003	0,0003	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	<MDL	0,0027	0,0000	0,0001	0,0003	0,0008	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide	Organochlorine	o,p'-DDT	<MDL	0,0012	0,0000	0,0000	0,0002	0,0004	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Veterinary substance	Organochlorine	Methoxychlor	<MDL	0,0014	<MDL		0,0001	0,0004	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Unclassified	Endosulfan sulfate	<MDL	0,0007	0,0000	0,0000	0,0001	0,0002	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Isomer	Unclassified	cis-Chlordane	<MDL	0,0005	0,0000	0,0001	0,0001	0,0002	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Unclassified	Heptachlor epoxide	<MDL	0,0007	<MDL		0,0001	0,0002	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	<MDL	0,0008	0,0000	0,0000	0,0001	0,0002	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan I	<MDL	0,0008	0,0000	0,0001	0,0001	0,0003	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Unclassified	Endrin aldehyde	<MDL	0,0005	0,0000	0,0000	0,0001	0,0002	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Organochlorine	p,p'-DDE	<MDL	0,0004	0,0000	0,0001	0,0001	0,0001	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Degradate	Organochlorine	p,p'-DDD	<MDL	0,0006	0,0000	0,0000	0,0001	0,0002	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Other substance	Organochlorine	α-HCH	<MDL	0,0002	0,0000	0,0000	0,0000	0,0001	<MDL	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide	Organochlorine	Heptachlor	<MDL	0,0001	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Degradate	Unclassified	Endrin ketone	<MDL	0,0001	<MDL		0,0000	0,0000	<MDL	<MDL	0,0000	MDL	GC-ECD	17	China	Huang et al., 2021
Insecticide, Nematicide	Organophosphate	Terbufos									1,5000	5,0000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide	Organophosphate	Methyl parathion									1,1000	3,5000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Herbicide	Chloroacetamide	Metolachlor									1,4000	4,6000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide	Organophosphate	Chlorpyrifos									1,5000	4,9000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide	Organochlorine	Aldrin									1,5000	5,0000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Degradate	Organochlorine	p,p'-DDE									1,4000	4,7000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin									1,5000	5,0000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide, Degradate	Organochlorine	p,p'-DDD									1,5000	5,0000	LOD/LOQ	GC-MS	-	Brazil	Huelsmann et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	<0,0008	<0,0008							0,0006	0,0019	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Herbicide, Degradate	Triazine	Terbutryn	<0,0004	<0,0004							0,0004	0,0013	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Herbicide	Diphenyl ether	Aclonifen	0,0012	0,0084							0,0012	0,0039	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Fungicide	Quinoline	Quinoxyfen	0,0004	0,0035							0,0008	0,0026	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Herbicide	Diphenyl ether	Bifenox	<0,0012	0,0018							0,0012	0,0039	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Algistat, Herbicide, Other substance	Triazine	Cybutryne	<0,0006	0,0011							0,0006	0,0019	LOD/LOQ	LC-MS/MS	-	Romania	Iancu et al., 2016
Insecticide, Degradate	Organochlorine	o,p'-DDD			<0,0059		<0,0059		<0,0059	<0,0059	0,0059		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide, Degradate	Organochlorine	p,p'-DDD			<0,0048		<0,0048		<0,0048	<0,0048	0,0048		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide	Organochlorine	o,p'-DDT			<0,0042		<0,0042		<0,0042	<0,0042	0,0042		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Degradate	Organochlorine	o,p'-DDE			<0,0030		<0,0030		<0,0030	<0,0030	0,0030		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide	Organochlorine	p,p'-DDT	<0,0050	0,0180	<0,0050		0,0053	0,0018	<0,0050	<0,0050	0,0050		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Degradate	Organochlorine	p,p'-DDE	<0,0030	0,0100	0,0014	0,0010	0,0032	0,0010	<0,0030	<0,0030	0,0030		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	<0,0026	0,0072	0,0026	0,0001	0,0027	0,0006	<0,0026	<0,0026	0,0026		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<0,0010	0,0100	0,0011	0,0002	0,0022	0,0020	<0,0010	0,0010	0,0010		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide, Other substance	Organochlorine	α-HCH	<0,0009	0,0100	0,0016	0,0002	0,0020	0,0022	<0,0009	<0,0009	0,0009		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide	Organochlorine	Aldrin	<0,0010	0,0063	0,0010	0,0001	0,0014	0,0010	<0,0010	<0,0010	0,0010		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Degradate	Unclassified	Heptachlor epoxide	<0,0012	0,0032	0,0013	0,0003	0,0013	0,0003	<0,0012	<0,0012	0,0012		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Insecticide	Organochlorine	Heptachlor	<0,0008	0,0032	0,0008	0,0001	0,0009	0,0004	<0,0008	<0,0008	0,0008		LOD	GC-ECD	127	Argentina	Janniot et al., 1994
Fungicide	Quinoline	Quinoxyfen	0,0003	0,0065							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Herbicide	Diphenyl ether	Bifenox	0,0010	0,0040							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Herbicide	Diphenyl ether	Aclonifen	0,0010	0,0020							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Herbicide, Degradate	Triazine	Terbutryn	0,0000	0,0009							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Algistat, Herbicide, Other substance	Triazine	Cybutryne	0,0000	0,0007							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0000	0,0004							0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Acaricide	Organochlorine	Dicofol									0,5000		LOD	HPLC-MS/MS	-	Ireland	Jones et al., 2019
Fungicide, Degradate	Benzimidazole	Carbendazim			0,0026	0,0962	0,1540	0,1180			0,0000	0,0000	LOD/LOQ	LC-MS/MS	-	Thailand	Juksu et al., 2019
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole			0,0022	0,0038	0,0080	0,0045			0,0000	0,0000	LOD/LOQ	LC-MS/MS	-	Thailand	Juksu et al., 2019

Fungicide, Other substance	Preservative, Biocide	Climbazole			0,0000	0,0001	LOD/LOQ	LC-MS/MS	-	Thailand	Juksu et al., 2019
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D esters		<0,0050	n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide	Triazine	Atrazine	0,0500	42,0000	n.i.			GC-ECD	-	United States	Junk et al., 1976
Degradate	Organochlorine	DDE	0,0005	3,9200	n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		0,2490	n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T		0,1520	n.i.			GC-ECD	-	United States	Junk et al., 1976
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0006	0,0760	n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T (esters)		0,0480	n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide	Chloroacetamide	Alachlor			n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide	Thiocarbamate	Butylate			n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide	Chloroacetamide	Propachlor			n.i.			GC-ECD	-	United States	Junk et al., 1976
Insecticide, Fungicide	Unclassified	Tetrachlorodibenzodioxin			n.i.			GC-ECD	-	United States	Junk et al., 1976
Herbicide	Triazinone	Hexazinone	0,0170	1,5310	0,0029		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0030	1,0770	0,0030		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Veterinary substance	Carbamate	Bendiocarb	0,0040	0,6640	0,0040		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazine	Ametryn	0,0170	0,5890	0,0020		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0080	0,5230	0,0070		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazinone	Metribuzin	0,0020	0,1870	0,0015		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazine	Simazine	0,0020	0,1610	0,0010		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Imidacloprid-guanidine	0,0040	0,1520	0,0036		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Phenylamide	Metalaxyl	0,0020	0,1370	0,0020		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Morpholine	Dodemorph	0,0080	0,1260	0,0080		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Benzofuran	Ethofumesate	0,0180	0,1090	0,0150		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Hydroxyatrazine	0,0040	0,0780	0,0030		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Plant growth regulator, Herbicide	Quarternary ammonium	Mepiquat	0,0070	0,0470	0,0038		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Metolachlor	0,0020	0,0470	0,0015		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0030	0,0320	0,0025		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0010	0,0240	0,0010		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0020	0,0200	n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Neonicotinoid	Acetamiprid	0,0040	0,0190	0,0025		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazine	Atrazine	0,0030	0,0130	0,0020		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Desethylatrazine	0,0030	0,0130	n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA		0,0130	0,0045		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	0,0020	0,0130	0,0018		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Plant growth regulator	Quarternary ammonium	Chlormequat		0,0120	0,0040		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Triazine	Deisopropylatrazine	0,0060	0,0120	0,0050		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Phenylamide	Diuron	0,0030	0,0100	n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Strobilurin	Azoxystrobin	0,0020	0,0020	0,0020		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Urea	Fenuron	0,0020	0,0020	0,0015		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Chlorothalonil-4-hydroxy	0,0010	0,0010	0,0008		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	2-Aminobenzimidazole			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	3,5,6-trichloro-2-pyridinol			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	4-Isopropylaniline			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Acaricide, insecticide and nematicide	Avermectins	Abamectin			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Acetochlor			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Acylamino acid	Benalaxyl			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Benzothiazinone	Bentazone			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Bifenox acid			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Carboxamide	Boscalid			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Pyrimidinol	Bupirimate			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Plant growth regulator	Carbamate	Carbaryl			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Pyridazinone	Chloridazon			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Urea	Chlorotoluron			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Dimethylurea	Chloroxuron			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide, Plant growth regulator	Carbamate	Chlorpropham			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Isoxazolidinone	Clomazone			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Degradate	Neonicotinoid	Clothianidin			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Cyproconazole			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Veterinary substance	Triazine	Cyromazine			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Terbuthylazine-desethyl			0,0025		MDL	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Aryloxyalkanoic acid	Dichlorprop			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Difenoconazole			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Benzoylurea	Diflubenzuron			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Carboxamide	Diflufenican			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Dimethachlor			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Dimethachlor ESA			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Dimethachlor OXA			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Dimethenamid ESA			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Dinitrophenol	Dinoseb			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Epoxiconazole			n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020

Insecticide, Acaricide, Degradate	Organophosphate	Ethion					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Thiourea	Ethylenethiourea					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Carbamate	Fenoxycarb					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Piperidines	Fenpropidin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Morpholine	Fenpropimorph					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Oxyacetamide	Flufenacet					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Acaricide	Benzoylurea	Flufenoxuron					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Strobilurin	Fluoxastrobin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Pyridazinone	Flurtamone					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Flusilazole					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Imidacloprid-urea					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Urea	Isoproturon					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Uracil	Lenacil					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Urea	Linuron					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Aryloxyalkanoic acid	Mecoprop					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazinone	Metamitron					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Metazachlor					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Metazachlor ESA					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Metazachlor OXA					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Metconazole					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Methyl-desphenyl-chloridazon					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Metolachlor ESA					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Metolachlor OXA					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Myclobutanil					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	N,N-Dimethylsulfamide					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Dinitroaniline	Oryzalin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Oxidiazole	Oxadiazon					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Organophosphate	Parathion-methyl					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Dinitroaniline	Pendimethalin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Pethoxamid					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Phthalamic acid					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Pyridine compound	Picolinafen					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Strobilurin type-methoxyacrylate	Picoxystrobin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Carbamate	Pirimicarb					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Imidazole	Prochloraz					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Chloroacetamide	Propachlor					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Carbamate	Propamocarb					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Anilide	Propanil					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Triazole	Propiconazole					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazolone	Propoxycarbazone					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Benzamide	Propyzamide					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Thiocarbamate	Prosulfocarb					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Prothioconazole-desethio					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Strobilurin	Pyraclostrobin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Phosphorothiolate	Pyrazophos					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Quinoline	Quinmerac					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Quinoline	Quinoxyfen					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triazine	Simazine					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Morpholine	Spiroxamine					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Triketone	Sulcotrione					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Terbuthylazine-hydroxy					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Degradate	Unclassified	Thiacloprid-amide					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide; Degradate	Triazole	Triadimenol					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Herbicide	Thiocarbamate	Triallate					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide	Strobilurin	Trifloxystrobin					n.i.		n.i.	LC-HRMS	-	Kenya	Kandie et al., 2020
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0010	0,0330			0,0010		LOD	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0050	0,0150			0,0010		LOD	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide, Other substance	Organochlorine	α-HCH	0,0020	0,0080			0,0010		LOD	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0040	0,0060			0,0010		LOD	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide	Organochlorine	Aldrin					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Degradate	Organochlorine	p,p'-DDE					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide	Organochlorine	Heptachlor					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Isomer	Unclassified	cis-Chlordane					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Isomer	Unclassified	trans-Chlordane					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide	Organochlorine	o,p'-DDT					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide	Organochlorine	p,p'-DDT					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide, Degradate	Organochlorine	p,p'-DDD					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Insecticide	Organochlorine	Mirex					n.i.		n.i.	GC-ECD	-	Canada	Kauss and Hamdy 1985
Herbicide	Triazine	Atrazine		7,3000			0,0070		LOD	LC-MS	75	United States	Kolpin et al., 2010
Degradate	Triazine	Desethylatrazine		1,1740			0,0140		LOD	LC-MS	75	United States	Kolpin et al., 2010
Herbicide	Triazine	Atrazine	0,0021	0,0035		0,0015	0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Degradate	Triazine	Desethylatrazine	0,0034	0,0034		0,0034	0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Herbicide	Chloroacetamide	Metolachlor	0,0028	0,0028		0,0010	0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0011	0,0028		0,0019	0,0010	0,0033	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Herbicide	Triazine	Propazine					0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Herbicide	Triazine	Simazine					0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Degradate	Triazine	Deisopropylatrazine					0,0100	0,0333	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016
Degradate	Unclassified	Terbuthylazine-desethyl					0,0020	0,0067	LOD/LOQ	GC-MS	4	Slovenia	Koroša et al., 2016

Degradate	Unclassified	Flufenacet-ESA	6,2000	0,2440	0,0200	0,9920	0,2000	0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Metazachlor ESA	2,8000	0,1790	0,0080	0,8710	0,0900	0,0100	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Metazachlor OXA	4,8000	0,2630	0,0100	0,8160	0,1000	0,0100	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Oxyacetamide	Flufenacet	5,4000			0,5290	0,0900	0,0025	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Flufenacet-OXA	5,6000	0,0719	0,0060	0,1690	0,0200	0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Metolachlor OXA	1,1000	0,0422	0,0030	0,1690	0,0100	0,0100	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Metolachlor ESA	0,6000	0,0394	0,0020	0,1560	0,0080	0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Dimethenamid ESA	1,0000			0,1140	0,0100	0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,6000			0,0752	0,0080	0,0025	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	AMPA	0,6000			0,0739	0,0070	0,0083	0,1000	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Dimethachlor ESA	0,2000	0,0196	0,0008	0,0707	0,0080	0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,5000			0,0520	0,0060	0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Metazachlor	0,6000			0,0473	0,0070	0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Fungicide	Carboxamide	Boscalid	0,1000	0,0128	0,0007	0,0436	0,0040	0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Hydroxyatrazine	0,0500	0,0210	0,0020	0,0243	0,0020	0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Benzothiazinone	Bentazone	0,0500			0,0086	0,0006	0,0025	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	23,7000					0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Phosphonoglycine	Glyphosate	1,7000					0,0330	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Dimethenamid OXA	1,5000					0,0100	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Dimethenamid	0,7000					0,0050	0,0500	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Sulfonylurea	Metsulfuron-methyl	0,5000					0,0025	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Chloridazon-desphenyl	0,2000					0,1000	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Dimethachlor OXA	0,2000					0,0250	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	CGA 357704	0,1000					0,0100	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	S-Metolachlor-NOA	0,1000					0,0250	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Deisopropylhydroxyatrazine	0,0900					0,0100	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Urea	Chlorotoluron	0,0600					0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Saccharin	0,0600					0,0100	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Urea	Isoproturon	0,0300					0,0025	0,0250	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Desphenyl chloridazon degradate	0,0200					0,0050	0,2000	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	CGA 368208	0,0200					0,0050	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0200					0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Dimethachlor	0,0100					0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	CGA 50720	0,0100					0,0100	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0100					0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl	0,0100					0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Benzamide	0,0030					0,0250	n.i.	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Desmethylisoproturon	0,0030					0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Acetochlor						0,0100		LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Acetochlor OA						0,0050	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Chloroacetamide	Alachlor						0,0100	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Alachlor OA						0,0050	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Triazine	Atrazine						0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Desethylatrazine						0,0050	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Deethylhydroxyatrazine						0,0050	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Triazine	Deisopropylatrazine						0,0050	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Deethyldeisopropylatrazine						0,0100	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Fungicide	Phthalimide	Folpet						n.i.	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Pyridazinone	Chloridazon						0,0025	0,0500	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Didesmethyl-Isoproturon						0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	CGA 37735						0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	CGA 50267						0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Herbicide	Triazine	Terbumeton						0,0025	0,0500	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl						0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	2-Hydroxy-desethyl-terbuthylazine						0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Terbuthylazine-hydroxy						0,0025	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide	Neonicotinoid	Acetamiprid						0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	IM-1-4						0,0050	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran						0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin						0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	TZMU						0,0250	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate						0,0025	0,0500	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	Imidacloprid-urea						0,0025	0,0100	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021

Degradate	Unclassified	Imidacloprid-Olefin								0,0500	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Degradate	Unclassified	6-Chloronicotinic-Acid								0,0100	0,1000	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate								0,0025	0,0200	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam								0,0050	0,0050	LOD/LOQ	HPLC-MS/MS	237	France	Le Cor et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,0040	0,0448					0,0135	0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0000	0,0029					0,0000	0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Degradate	Unclassified	Heptachlor epoxide	0,0000	0,0012					0,0000	0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0000	0,0007					0,0000	0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Insecticide	Organochlorine	Heptachlor		0,0000						0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Insecticide, Veterinary substance	Organochlorine	Methoxychlor								0,0000	0,0000	LOD/LOQ	GC-HRMS	168	Korea	Lee et al., 2014
Herbicide	Triazine	Atrazine	0,0600	0,8100						n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Triazine	Simazine		0,1300						n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0500	0,1000						n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Phthalimide	Captafol								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Morpholine	Fenpropimorph								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Triazole	Flusilazole								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Triazole	Flutriafol								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Phthalimide	Folpet								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Dicarboximide	Iprodione								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Carbamate	Mancozeb								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Imidazole	Prochloraz								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Triazole	Propiconazole								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide	Oxazole	Vinclozolin								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide, Degradate	Benzimidazole	Carbendazim								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Fungicide; Degradate	Triazole	Triadimenol								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Chloroacetamide	Alachlor								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Triazole	Amitrole								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Pyridazinone	Chloridazon								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Urea	Chlorotoluron								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Thiocarbamate	Diallate								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Aryloxyphenoxypropionate	Diclofop-methyl								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Phenylamide	Diuron								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Chloroacetamide	Metolachlor								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Carbamate	Phenmedipham								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Dinitroaniline	Trifluralin								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide, Degradate	Hydroxybenzonitrile	Ioxynil								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Acaricide	Organophosphate	Parathion								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Urea	Isoproturon								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Herbicide	Benzofuran	Ethofumesate								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH								n.i.		LOD	HRGC-MS and HPLC-UV	-	France	Legrand et al., 1991
Insecticide, Veterinary substance	Pyrethroid	Permethrin			0,0188	0,0041	0,9420	1,0700		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide	Pyrethroid	λ-Cyhalothrin			0,0184	0,0034	0,3070	0,3290		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Degradate	Unclassified	Fipronil sulfone			0,0467	0,0136	0,1040	0,1150		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Acaricide	Pyrethroid	Bifenthrin			0,0248	0,0108	0,0969	0,0585		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil			0,0330	0,0086	0,0685	0,0683		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin			0,0392	0,0067	0,0653	0,0644		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide	Pyrethroid	Cyfluthrin			0,0232	0,0031	0,0448	0,0330		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide	Pyrethroid	Esfenvalerate			0,0172	0,0031	0,0301	0,0215		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Degradate	Unclassified	Fipronil-desulfinyl			0,0234	0,0065	0,0293	0,0178		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Degradate	Unclassified	Fipronil sulfide			0,0196	0,0042	0,0245	0,0150		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin			0,0152	0,0027	0,0241	0,0199		n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide	Organophosphate	Chlorpyrifos								n.i.			GC-MS/MS	-	United States	Liao et al., 2017

Insecticide, Acaricide	Pyrethroid	Fenpropathrin									n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon									n.i.			GC-MS/MS	-	United States	Liao et al., 2017
Insecticide, Other substance	Organochlorine	α-HCH	0,0001	0,0130	0,0015	0,0016	0,0072	0,0031			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0005	0,0115	0,0010	0,0008	0,0038	0,0030			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0008	0,0050	0,0011	0,0003	0,0032	0,0009			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide	Organochlorine	p,p'-DDT	0,0007	0,0021	0,0011	0,0003	0,0015	0,0004			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide	Organochlorine	o,p'-DDT	0,0002	0,0041	0,0009	0,0004	0,0015	0,0001			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide	Organochlorine	Aldrin	0,0001	0,0025	0,0007	0,0005	0,0013	0,0016			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Isomer	Unclassified	δ-HCH	0,0001	0,0008	0,0002	0,0001	0,0006	0,0001			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide	Organochlorine	Heptachlor	0,0000	0,0012	0,0004	0,0006	0,0003	0,0004			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Degradate	Organochlorine	p,p'-DDE	0,0001	0,0006	0,0002	0,0001	0,0003	0,0002			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0000	0,0002	0,0001	0,0000	0,0001	0,0001			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0000	0,0003	0,0001	0,0000	0,0001	0,0001			0,0000		LOD	GC-NiECD	64	China	Liu et al., 2020
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0001	0,0208							0,0001		LOD	LC-MS/MS	-	China	Liu et al., 2021
Herbicide	Triazine	Atrazine	0,0001	0,0039							0,0000		LOD	LC-MS/MS	-	China	Liu et al., 2021
Herbicide	Urea	Isoproturon		1,9590			0,0520		0,0040		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide	Phenylamide	Diuron		0,8640			0,0410		0,0100		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D		1,2210			0,0220		0,0030		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Fungicide, herbicide and insecticide	Unclassified	2,4-dinitrophenol		0,1740			0,0180		0,0100		0,0010		RL	LC-MS/MS		Union European	Loos et al., 2009
Herbicide	Aryloxyalkanoic acid	Mecoprop		0,1940			0,0150				0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide	Benzothiazinone	Bentazone		0,2500			0,0140		0,0040		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide	Triazine	Simazine		0,1690			0,0100				0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Degradate	Unclassified	Terbuthylazine-desethyl		0,0760			0,0100		0,0040		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,1240			0,0090		0,0020		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Degradate	Unclassified	Desethylatrazine		0,0800			0,0070				0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Herbicide	Triazine	Atrazine		0,0460			0,0030		0,0010		0,0010		RL	LC-MS/MS	122	Union European	Loos et al., 2009
Insecticide	Neonicotinoid	Acetamiprid		0,0344			0,0176	0,0103			0,0300		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,0317			0,0119	0,0067			0,0400		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide, Degradate	Neonicotinoid	Clothianidin		0,0295			0,0076	0,0065			0,0700		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam		0,0296			0,0048	0,0098			0,0600		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide	Neonicotinoid	Dinotefuran		0,0201			0,0024	0,0095			0,0300		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram		0,0102			0,0016	0,0032			0,0400		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid									0,0400		LOD	UPLC-MS/MS	16	China	Lu et al., 2020
Herbicide	Triazine	Atrazine									0,0020	0,0070	LOD/LOQ	LC-MS/MS	153	Spain	Luque-Espinar et al., 2015
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0000	0,0444			0,0061		0,0044		0,0000		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam	<MDL	0,2360			0,0043		0,0011		0,0000		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide	Neonicotinoid	Acetamiprid	0,0003	0,0120			0,0027		0,0025		0,0000		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram	<MDL	0,0035			0,0005		0,0003		0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin	<MDL	0,0105			0,0004		0,0001		0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Degradate	Unclassified	Desmethyl-acetamiprid	<MDL	0,0010			0,0002		0,0002		0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	<MDL	0,0003			0,0000		0,0000		0,0000		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide	Neonicotinoid	Dinotefuran									0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide, Aphicide	Pyridine compound	Flonicamid									0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide	Neonicotinoid	Imidaclothiz									0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Insecticide	Sulfoximine	Sulfoxaflor									0,0001		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Degradate	Unclassified	5-hydroxy imidacloprid									0,0000		MDL	UPLC-MS/MS	120	China	Mahai et al., 2019
Fungicide, Wood preservative; Antifouling agent	Sulphamide	Tolylfluanid		0,2016							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Carbamate	Phenmedipham	0,0132	0,1956							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Tetronic acid	Spiromesifen	0,0150	0,1684							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Phosphonoglycine	Glyphosate	0,0201	0,1096							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	0,0318	0,0952							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Insect growth regulator	Unclassified	Halofenozide	0,0009	0,0926							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Semicarbazone	Metaflumizone	0,0213	0,0852							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Parathion	0,0680	0,0798							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Chloroacetamide	Metolachlor	0,0087	0,0702							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Oxathiin	Flutolanil	0,0265	0,0645							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Oxadiazine	Indoxacarb	0,0226	0,0612							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Benfuracarb	0,0168	0,0596							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Nicosulfuron	0,0252	0,0541							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Rimsulfuron	0,0329	0,0477							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0030	0,0461							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator	Carbamate	Propham	0,0124	0,0402							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Oxidiazole	Oxadiazon	0,0052	0,0401							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Cyanoacetamide oxime	Cymoxanil	0,0294	0,0363							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Ethion	0,0004	0,0351							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0016	0,0343							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion	0,0155	0,0321							n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022

Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0162	0,0314	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0006	0,0274	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl	0,0052	0,0270	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Fenuron	0,0089	0,0233	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide, Insecticide	Quinazoline	Fenazaquin	0,0017	0,0224	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Degradate	Unclassified	Terbuthylazine-desethyl	0,0005	0,0220	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Oxazole	Famoxadone	0,0111	0,0216	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Degradate	Unclassified	3,5-Dichlorobenzoic acid	0,0081	0,0211	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Organophosphate	Temephos	0,0015	0,0210	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0030	0,0202	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Molluscicide, Acaricide	Carbamate	Mexacarbate	0,0001	0,0174	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0025	0,0167	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Dimethylurea	Chloroxuron	0,0007	0,0156	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0016	0,0150	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Tetraconazole	0,0059	0,0139	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Nematicide, Degradate, Veterinary substance	Avermectinas	Avermectin B1a	0,0041	0,0138	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Organophosphate	Parathion-methyl	0,0090	0,0137	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Organophosphates	Coumaphos		0,0133	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Phenthoate	0,0009	0,0109	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Organophosphate	Isofenphos-methyl	0,0032	0,0105	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0006	0,0103	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Pyrimidine	Fenarimol	0,0001	0,0099	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Bromuconazole	0,0004	0,0095	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Hydrazine carboxylate	Bifenazate	0,0023	0,0089	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Thiocarbamate	Cycloate	0,0001	0,0087	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Veterinary substance	Imidazole	Imazalil	0,0036	0,0086	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Oxadiazolone/phenylurea	Dimefuron	0,0000	0,0084	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Methacrifos	0,0031	0,0083	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Organophosphate	Propetamphos	0,0036	0,0077	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Diniconazole	0,0032	0,0067	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Degradate	Triazine	Terbutryn	0,0036	0,0067	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Carbamate	Thiofanox	0,0009	0,0066	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Penconazole	0,0001	0,0065	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Hydroxyanilide	Fenhexamid	0,0009	0,0063	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Carboxamide	Boscalid	0,0013	0,0061	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Aphicide	Pyridine compound	Flonicamid	0,0007	0,0057	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Pyrethroid	Etofenprox	0,0041	0,0056	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Carbamate	Iprovalicarb	0,0002	0,0054	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Trietazine	0,0017	0,0053	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Unclassified	Buprofezin	0,0033	0,0053	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Chlorophenyl	Tolclofos-methyl	0,0019	0,0051	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Organophosphate	Chlorpyrifos	0,0025	0,0051	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Benzoylurea	Flufenoxuron		0,0049	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzothiazinone	Bentazone		0,0049	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Phenylamide	Diuron	0,0002	0,0047	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	N-phenylphtalamides	Flumioxazin	0,0011	0,0047	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Aryloxyalkanoic acid	2,4-DB	0,0009	0,0047	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator	Carbamate	Chlorpropham	0,0015	0,0045	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Nematicide	Organophosphate	Terbufos	0,0003	0,0044	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Other susbtance	Anilinopyrimidine	Mepanipyrim	0,0004	0,0044	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Mevinphos	0,0014	0,0043	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Bitertanol	0,0034	0,0043	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Cycluron	0,0005	0,0043	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Uracil	Lenacil	0,0006	0,0042	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Methoprotryne	0,0009	0,0042	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyridine compound	Picloram	0,0005	0,0036	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide	Pyrazolium	Tebufenpyrad	0,0011	0,0035	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Atrazine	0,0007	0,0033	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazinone	Metamitron	0,0012	0,0033	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Unclassified	Triadimenol isomer	0,0004	0,0033	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Phenylurea	Pencycuron	0,0003	0,0033	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Organophosphate	Trichlorfon	0,0005	0,0033	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0009	0,0031	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Myclobutanil	0,0005	0,0030	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Plant derived	Rotenone	0,0009	0,0030	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0001	0,0029	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Other substance	Triazole	Hexaconazole	0,0005	0,0029	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Propazine	0,0003	0,0027	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	0,0022	0,0027	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0018	0,0027	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Fenoxycarb	0,0005	0,0025	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0013	0,0024	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022

Fungicide, Degradate	Triazole	Triadimefon	0,0004	0,0024	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0002	0,0024	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyrimidinylsulfonyl urea	Foramsulfuron	0,0002	0,0024	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Thiocarbamate	Prosulfocarb	0,0011	0,0024	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Benzophenone	Metrafenone		0,0023	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Fenbuconazole	0,0005	0,0023	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Mecarbam		0,0023	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Flusilazole	0,0003	0,0022	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Monolinuron	0,0006	0,0022	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Epoxiconazole	0,0010	0,0022	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Degradate	Triazine	Deisopropylatrazine	0,0001	0,0021	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Cyproconazole	0,0008	0,0021	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Micro-organism derived	Spinosyn A		0,0020	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Neonicotinoid	Thiamethoxam	0,0001	0,0020	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0017	0,0020	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Anilinopyrimidine	Cyprodinil	0,0012	0,0019	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Neonicotinoid	Acetamiprid		0,0019	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Diphenyl ether	Aclonifen	0,0001	0,0019	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Prometryn	0,0004	0,0018	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Cyclohexanedione	Clethodim	0,0004	0,0018	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Chlorotoluron	0,0003	0,0017	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Unclassified	Propiconazole stereo isomer	0,0006	0,0017	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazinone	Metribuzin	0,0003	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin	Azoxystrobin	0,0003	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Furathiocarb	0,0001	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0009	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0001	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzofuran	Ethofumesate	0,0007	0,0016	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Algistat, Herbicide, Other substance	Triazine	Cybutryne	0,0007	0,0015	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0001	0,0015	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam		0,0013	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Isoproturon	0,0001	0,0012	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Quinalphos	0,0002	0,0012	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Other substance , Veterinary substance	Organophosphate	Phoxim	0,0007	0,0012	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,0002	0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Algicide	Unclassified	Quinoclamine	0,0005	0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Imidazole	Prochloraz	0,0008	0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Oxyacetamide	Flufenacet	0,0003	0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Aryloxyphenoxypropionate	Propaquizafop		0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Unclassified	Tepraloxydim isomer	0,0008	0,0011	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Plant growth regulator, Herbicide, Other substance	Phenylurea	Thidiazuron	0,0001	0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Thiocarbamate	Molinate	0,0000	0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Azaconazole	0,0001	0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl		0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Larvicide, Veterinary substance	Benzoylurea	Triflumuron		0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	0,0001	0,0010	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Pyrimidinol	Bupirimate	0,0002	0,0009	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Tetramic acid	Spirotetramat	0,0001	0,0009	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Triticonazole	0,0004	0,0009	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Isoxazolidinone	Clomazone	0,0004	0,0009	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Uracil	Bromacil	0,0003	0,0009	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide	Sulphite ester	Propargite		0,0008	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Imidazole	Fenamidone	0,0007	0,0008	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Phenylamide	Oxadixyl	0,0004	0,0008	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Metsulfuron-methyl	0,0002	0,0008	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0002	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Diphenyl ether	Bifenox	0,0004	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Benzamide	Fluopicolide	0,0005	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos	0,0001	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin	Pyraclostrobin	0,0004	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Fenobucarb	0,0002	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Quinoline	Quinoxyfen	0,0001	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Phosalone	0,0001	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Pirimicarb	0,0003	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Phenylpyrrole	Fludioxonil	0,0001	0,0007	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Chloroacetamide	Dimethachlor	0,0002	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Diacylhydrazine	Tebufenozide	0,0002	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Carbamate	Diethofencarb	0,0000	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Simazine	0,0005	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Benzamide	Zoxamide	0,0000	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Carbamate	Carbetamide	0,0002	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0001	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Piperidines	Fenpropidin	0,0002	0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Morpholine	Spiroxamine		0,0006	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Aminocarb		0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Acylalanine	Furalaxyl	0,0001	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Methoxytriazine	Prometon	0,0001	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Plant growth regulator	Phosphorothiolate	Isoprothiolane	0,0003	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Oxathiin	Carboxin		0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzamide	Isoxaben	0,0002	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Metconazole	0,0001	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Thifensulfuron-	0,0001	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Carbamate	Desmedipham		0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Imidazole	Triflumizole	0,0011	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Unclassified	Difenoconazole isomer	0,0002	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyridine compound	Picolinafen		0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022

Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	0,0002	0,0005	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Methabenzthiazuron	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Carbamate	Propamocarb	0,0000	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Plant growth regulator; Fungicide	Triazole	Paclobutrazol	0,0002	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0002	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Dioxacarb	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Phenylurea	Fluometuron	0,0004	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Fluquinconazole		0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide; Veterinary substance	Carbamate	Promecarb	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Degradate	Pyrimidinol	Ethirimol	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Nematicide	Organophosphate	Fenamiphos	0,0001	0,0004	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Degradate	Unclassified	Malaoxon		0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol		0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Carboxamide	Diflufenican	0,0000	0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Linuron	0,0001	0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Molluscicide, Ovicide	Carbamate	Thiodicarb		0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0000	0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Oxyacetamide	Isoxaflutole		0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0001	0,0003	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T	0,0001	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Metoxuron	0,0001	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Phosphamidon	0,0000	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Seed treatment	Benzimidazole	Fuberidazole	0,0001	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Tebuthiuron	0,0001	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Triasulfuron		0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Acylamino acid	Benalaxyl		0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator	Phenoxipropionic acid	Fenoprop	0,0001	0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Cyclodiene	Flumetsulam		0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Mesosulfuron-methyl		0,0002	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Degradate	Nitrophenyl	Acifluorfen		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Benzoylurea	Diflubenzuron		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Neonicotinoid	Dinotefuran	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Monocrotophos	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzamide	Propyzamide		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Methoxytriazine	Secbumeton	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Amide	Beflubutamid	0,0001	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Profenofos	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Thiadiazolylurea	Ethidimuron	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyridazinone	Chloridazon	0,0001	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,0001	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide, Seed treatment, Bactericide	Anilide	Pyracarbolid	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Dinitrophenol	Dinoseb	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Urea	Metobromuron		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Quinoline	Quinmerac		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,0000	0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin type-methoxyacrylate	Picoxystrobin		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Chloroacetamide	Metazachlor		0,0001	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos		0,0000	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0000	0,0000	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Organophosphate	Acephate		0,0000	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Pyridine	Pymetrozine	0,0000	0,0000	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazolobenzothiazole	Tricyclazole		0,0000	n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Carbamate	Alanycarb			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Amidosulfuron			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Organophosphate	Azamethiphos			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide, Miticide	Bridged diphenyl	Benzoximate			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyrimidinyl carboxy compound	Bispyribac-sodium			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Nematicide	Carbamate	Carbosulfan			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazolone	Carfentrazone-ethyl			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzoic acid	Chloramben			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Anthranilic diamide	Chlorantraniliprole			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Chlorsulfuron			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzenedicarboxylic acid	Dacthal			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide	Tetrazine	Clofentezine			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Triazine	Cyanazine			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Cyanoimidazole	Cyazofamid			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Plant growth regulator	Organochlorine	Dalapon			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Benzoic acid	Dicamba			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Morpholine	Dimethomorph			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin	Dimoxystrobin			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Flazasulfuron			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Benzene-dicarboxamide	Flubendiamide			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin	Fluoxastrobin			n.i.	n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022

Plant growth regulator	Phenylurea	Forchlorfenuron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Unclassified	Fosthiazate isomer				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Pyrazolium	Halosulfuron-methyl				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Insect Growth Regulator	Benzoylurea	Hexaflumuron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide	Carboxamide	Hexythiazox				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide	Unclassified	Hydramethylnon				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Triazole	Ipconazole				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Veterinary substance	Benzoylurea	Lufenuron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Mandelamide	Mandipropamid				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Aryloxyalkanoic acid	Mecocrop-P				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Phenylamide	Metalaxyl				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Methidathion				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide, Degradate	Carbamate	Methomyl				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide; Insect growth regulator	Benzoylurea	Novaluron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Oxasulfuron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Dinitroaniline	Pendimethalin				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Phenylpyridazine	Pyridate				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Thiophene	Silthiofam				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Acaricide, Insecticide	Tetronic acid	Spirodiclofen				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Aryl triazolinone	Sulfentrazone				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Veterinary substance	Benzoylurea	Teflubenzuron				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Cyclohexadione	Tralkoxydim				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide	Sulfonylurea	Tribenuron-methyl				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Strobilurin	Trifloxystrobin				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Isomer	Triazole	Uniconazole-P		0,0016		n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Insecticide, Acaricide	Organophosphate	Vamidothion				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Fungicide	Oxazole	Vinclozolin				n.i.		n.i.	UHPLC-QToF-MS	-	Croatia	Malev et al., 2022
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,0140	0,3870	0,1130	0,0030	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0310	0,3280	0,1110	0,0050	0,0180	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide, Plant growth regulator, Degradate	Alkylchlorophenoxy	2,4-D	0,0160	0,0660	0,0420	0,0070	0,0110	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Aryloxyalkanoic acid	Dichlorprop			0,0230	0,0070	0,0090	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Acaricide	Organophosphate	Methacrifos			0,0220	0,0130	0,0200	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor			0,0220	0,0060	0,0090	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Degradate	Unclassified	Diuron isocyanate			0,0210	0,0040	0,0090	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Chlorpyrifos	0,0150	0,0210	0,0180	0,0070	0,0130	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Triazine	Atrazine			0,0170	0,0030	0,0050	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Benzoic acid	Chloramben			0,0170	0,0100	0,0130	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide, Plant growth regulator	Auxin	Clofibric acid	0,0070	0,0220	0,0150	0,0030	0,0040	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Triazine	Simazine			0,0130	0,0090	0,0120	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Benzoic acid	Dicamba			0,0130	0,0070	0,0090	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0050	0,0090	0,0070	0,0020	0,0030	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Chloroacetamide	Alachlor			0,0070	0,0040	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Fonofos			0,0060	0,0020	0,0050	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0040	0,0080	0,0050	0,0020	0,0030	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Bromophos-ethyl			0,0040	0,0010	0,0030	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide, Degradate	Triazine	Terbutryn	0,0450	0,0540		0,0020	0,0220	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Fungicide	Chlorophenyl	Tolclofos-methyl				0,0030	0,0050	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Triazine	Ametryn				0,0100	0,0140	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Methoxytriazine	Prometon				0,0100	0,0180	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Triazine	Prometryn				0,0080	0,0130	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Triazine	Propazine				0,0160	0,0260	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Fenitrothion				0,0070	0,0100	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Parathion-methyl				0,0410	0,0840	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl				0,0120	0,0200	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl				0,0060	0,0070	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide	Aryloxyalkanoic acid	2,4-DB				0,0090	0,0150	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene				0,0040	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organochlorine	Aldrin				0,0050	0,0150	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organochlorine	Heptachlor				0,0030	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin				0,0030	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Degradate	Organochlorine	DDE				0,0020	0,0050	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Degradate	Unclassified	Heptachlor epoxide				0,0040	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Degradate	Unclassified	Pentachlorobenzene				0,0070	0,0080	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Insecticide	Organophosphate	Bromophos				0,0040	0,0060	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Isomer	Unclassified	cis-Chlorfenvinphos				n.i.	n.i.	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010

Isomer	Unclassified	trans-Chlorfenvinphos						n.i.	n.i.	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Herbicide, Fungicide, Bactericide, Degradate, Algicide, Other substance	Alkylchlorophenoxy							0,0150		LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
		2,4,5-T							0,0190					
Herbicide, Plant growth regulator	Phenoxipropionic acid	Fenoprop						0,0060	0,0120	LOD/LOQ	GCxGC-QToF-MS	-	Spain	Matamoros et al., 2010
Degradate	Unclassified	2,4,6-Trichlorophenol	0,0020	0,0040				<0,0001		DL	GC-MS	-	Canada	McCarthy et al., 1997
Herbicide	Benzothiazinone	Bentazone	0,0922	0,1849				0,0000	0,0000	LOD/LOQ	LC-HRMS	-	China	Meng et al., 2020
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0393	0,0974				0,0000	0,0000	LOD/LOQ	LC-HRMS	-	China	Meng et al., 2020
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0074	0,0668				0,0000	0,0000	LOD/LOQ	LC-HRMS	-	China	Meng et al., 2020
Herbicide	Triazine	Prometryn	0,0296	0,0539				0,0000	0,0000	LOD/LOQ	LC-HRMS	-	China	Meng et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0030	0,0295				0,0000	0,0000	LOD/LOQ	LC-HRMS	-	China	Meng et al., 2020
Fungicide, Degradate	Benzimidazole	Carbendazim	<0,0010	0,0121				0,0010		LQ	LC-MS/MS	4	Germany	Merel et al., 2018
Herbicide	Phosphonoglycine	Glyphosate	<0,0020	3,0000	0,1090	0,0269		0,0020	0,0100	m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Herbicide	Triazine	Atrazine	<0,0040	0,6660	0,0292	0,0111		0,0040		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Degradate	Unclassified	Desethylatrazine	<0,0040	0,1920	0,0187	<0,0040		0,0040		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam	<0,0010	0,0420	0,0038	0,0016		0,0010		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin	<0,0010	0,0700	0,0036	<0,0010		0,0010		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Degradate	Unclassified	AMPA	<0,0100	0,6560		<0,0100		0,0100		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	<0,0012	0,0110		<0,0012		0,0012		m-LOD	UHPLC-MS/MS	68	Canada	Montiel-Léon et al., 2019
Degradate	Unclassified	Chloridazon-desphenyl		2,2000				0,1200		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazinone	Metamitron		1,5000				0,0250		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Benzoic acid	Dicamba		1,4000				0,0250		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Benzamide	Propyzamide		1,4000				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	S-Metolachlor		0,9600				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Thiocarbamate	Prosulfocarb		0,6900				0,0100		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Desamino-metamitron		0,6800				0,0080		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyridazinone	Chloridazon		0,6700				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,6300				0,0090		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Metazachlor ESA		0,5200				0,0070		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Benzothiazinone	Bentazone		0,4900				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyalkanoic acid	Mecocrop-P		0,4700				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Phenylamide	Metalaxyl-M		0,3800				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Isoproturon		0,3500				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazine	Atrazine		0,3450				0,0080		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Anilinopyrimidine	Cyprodinil		0,3300				0,0050		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Metolachlor ESA		0,3100				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyalkanoic acid	MCPB		0,2900				0,0070		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Benzofuran	Ethofumesate		0,2900				0,0030		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Oxyacetamide	Flufenacet		0,2900				0,0030		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA		0,2700				0,0070		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Propachlor ESA		0,2700				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Trinexapac		0,2700				0,2000		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Linuron		0,2700				0,0090		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carbamate	Carbetamide		0,2300				0,0500		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Propachlor		0,2200				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Chloridazon-methyl-desphenyl		0,2100				0,0070		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Metazachlor		0,1780				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Metazachlor OXA		0,1700				0,0100		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Propachlor OXA		0,1700				0,1500		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Phenylurea	Pencycuron		0,1600				0,0030		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Carbamate	Propamocarb		0,1600				0,0003		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Cyclohexanedione	Cycloxydim		0,1600				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carbamate	Asulam		0,1400				0,1400		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Azoxystrobin free acid		0,1400				0,0030		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	DMSA		0,1400				0,0070		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Uracil	Lenacil		0,1400				0,0090		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Metolachlor OXA		0,1300				0,0090		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Strobilurin	Azoxystrobin		0,1200				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazinone	Metribuzin		0,1200				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Cyproconazole		0,0980				0,0005		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triketone	Sulcotrione		0,0910				0,0030		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Anilino pyrimidine	Pyrimethanil		0,0890				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Plant growth regulator	Triazole	Tebuconazole		0,0860				0,0020		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Pethoxamid		0,0800				0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Degradate	Unclassified	N-(2,4-dimethylphenyl) formamide	0,0800	0,0750	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Alkanamide	Napropamide	0,0780	0,0060	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0780	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Propiconazole	0,0650	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0650	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0650	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Epoxiconazole	0,0640	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Morpholine	Dimethomorph	0,0610	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Strobilurin	Pyraclostrobin	0,0610	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyrimidinylsulfonylurea	Foramsulfuron	0,0610	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triketone	Mesotrione	0,0610	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Carboxamide	Boscalid	0,0550	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Pyridine	Pymetrozine	0,0540	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Terbuthylazine-desethyl	0,0540	0,0080	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Phenylamide	Diuron	0,0520	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triketone	Tembotrione	0,0500	0,0005	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyridine compound	Fluroxypyr	0,0490	0,0080	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Carbamate	Pirimicarb	0,0480	0,0004	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide	0,0480	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Fluazifop free acid	0,0480	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Neonicotinoid	Thiamethoxam	0,0470	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0450	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Nicosulfuron	0,0440	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0430	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Hydroxybenzonitrile	Ioxynil	0,0410	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Flufenacet-ESA	0,0380	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Imidazolinone	Imazamox	0,0360	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Triazine	Terbutryn	0,0340	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Triazine	Desethylatrazine	0,0340	0,0060	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Prothioconazole-desethio	0,0320	0,0008	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Difenoconazole	0,0300	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Benzophenone	Metrafenone	0,0290	0,0080	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazine	Simazine	0,0290	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Diacylhydrazine	Tebufenozide	0,0290	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Triazine	Hydroxyatrazine	0,0280	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Atrazin-desethyl-2-hydroxy	0,0270	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Desamino-metribuzin	0,0260	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Phenylpyrrole	Fludioxonil	0,0250	0,0070	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Mandelamide	Mandipropamid	0,0240	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Dimethachlor ESA	0,0240	0,0150	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Hydroxyanilide	Fenhexamid	0,0230	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil	0,0230	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Carbamate	Benthiavalicarb isopropyl	0,0220	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Desmethyl-diuron	0,0220	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazolopyrimidine	Metosulam	0,0210	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0210	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-Hydroxy-desethyl-terbuthylazine	0,0210	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Chlorotoluron	0,0200	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Desnitro-imidaclopride	0,0190	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Imidazole	Fenamidone	0,0180	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Piperidines	Fenpropidin	0,0180	0,0008	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Morpholine	Spiroxamine	0,0160	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0160	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Morpholine	Fenpropimorph	0,0150	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Myclobutanil	0,0150	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	0,0150	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3,5-dibromo-4-hydroxybenzoic acid	0,0150	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Carbamate	Iprovalicarb	0,0140	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Dimethenamid	0,0140	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0140	0,0005	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Isoproturon-monodemethyl	0,0140	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Bifenox acid	0,0130	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Degradate	Unclassified	Dimethenamid ESA	0,0130	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Strobilurin	Trifloxystrobin	0,0120	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide safener	Unclassified	Mefenpyr-diethyl	0,0120	0,0005	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Strobilurin	Fluoxastrobin	0,0110	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	0,0110	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Triflusulfuron-methyl	0,0100	0,0004	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Veterinary substance	Triazine	Cyromazine	0,0100	0,0080	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Metolachlor morpholinone	0,0100	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0092	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Dimethenamid OXA	0,0089	0,0060	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Mesosulfuron-methyl	0,0087	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Other susbtance	Anilinopyrimidine	Mepanipyrim	0,0078	0,0060	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Monolinuron	0,0075	0,0004	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Thiacloprid-amide	0,0075	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0070	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3-Phenoxybenzoic acid	0,0069	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Hydroxysimazine	0,0059	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Dimethachlor	0,0056	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Cyclohexadione	Tepraloxydim	0,0049	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Dinitroaniline	Oryzalin	0,0048	0,0002	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	0,0046	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0044	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Sulfonylurea	Thifensulfuron	0,0042	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Isoxazolidinone	Clomazone	0,0035	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Amidosulfuron	0,0027	0,0002	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Uracil	Terbacil	0,0022	0,0002	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Oxadiazolone/phenylurea	Dimefuron	0,0018	0,0009	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0014	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Acaricide, insecticide and nematicide	Avermectins	Abamectin		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Azaconazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Phenylamide	Benalaxyl-M		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Pyrimidinol	Bupirimate		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Chloronitrile	Chlorothalonil		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Cyanoimidazole	Cyazofamid		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Amidoxine	Cyflufenamid		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Cyanoacetamide oxime	Cymoxanil		0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Sulphamide	Dichlofluanid		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Carbamate	Diethofencarb		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Quinone	Dithianon		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Guanidine	Dodine		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Oxazole	Famoxadone		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Fenbuconazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Fluquinconazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Flusilazole		0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Phthalimide	Folpet		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Organophosphate	Fosetyl		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Dicarboximide	Iprodione		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Benzanilide	Mepronil		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Metconazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazole	Penconazole		0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Strobilurin type-methoxyacrylate	Picoxystrobin		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Imidazole	Prochloraz		0,2000	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Triazolinthione	Prothioconazole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Pyridine	Pyrifenox		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Quinoline	Quinoxyfen		0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Benzimidazole	Thiophanate-methyl		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Benzotriazine	Triazoxide		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Imidazole	Triflumizole		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Piperazine	Triforine		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Oxazole	Vinclozolin		n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Fungicide	Carbamate	Zineb	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide	Benzamide	Zoxamide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Bactericide	Phthalimide	Captan	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Bactericide	Quinoline	Oxyquinoline	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Degradate	Carbamate	Ethylene bisisothiocyanate sulphide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Other substance	Disinfectant, Preservative	2-phenylphenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Repellent	Carbamate	Ziram	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Repellent, Degradate	Carbamate	Thiram	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Veterinary substance	Imidazole	Imazalil	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Wood preservative; Antifouling agent	Sulphamide	Tolylfluanid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide; Degradate	Triazole	Triadimenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Diphenyl ether	Aclonifen	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Chloroacetamide	Alachlor	0,0700	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Amide	Beflubutamid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Diphenyl ether	Bifenox	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Uracil	Bromacil	0,0300	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Uracil	Butafenacil	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazolone	Carfentrazone-ethyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carbanilate	Chlorbufam	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Cyclohexanedione	Clethodim	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Clodinafop-propargyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyridine compound	Clopyralid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazine	Cyanazine	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Cycluron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carbamate	Desmedipham	0,0300	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carboxamide	Diflufenican	0,0200	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Bipyridylium	Diquat	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Fenoxaprop-ethyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Flazasulfuron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazolopyrimidine	Florasulam	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Fluazifop-P-butyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	N-phenylphtalamides	Flumioxazin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Flupyrsulfuron-methyl-sodium	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyrrolidine	Flurochloridone	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Organophosphate	Glufosinate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Phosphonoglycine	Glyphosate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Haloxyfop-P-methyl ester	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Iodosulfuron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Iodosulfuron-methyl-sodium	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Urea	Metoxuron	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Metsulfuron-methyl	0,0350	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Thiocarbamate	Orbencarb	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Oxidiazole	Oxadiargyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Diphenyl ether	Oxyfluorfen	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Carbamate	Phenmedipham	0,0300	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Phenylpyrazole	Pinoxaden	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Propaquizafop	0,0150	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Phenylpyridazine	Pyridate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Aryloxyphenoxypropionate	Quizalofop-P-ethyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Rimsulfuron	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Sulfosulfuron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Thifensulfuron-methyl	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Tribenuron-methyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Pyridine compound	Triclopyr	0,1300	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Dinitroaniline	Trifluralin	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Sulfonylurea	Tritosulfuron	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide safener	Unclassified	Isoxadifen-ethyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Algicide	Unclassified	Quinoclamine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Dessicant	Phenylpyrazole	Pyraflufen-ethyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Benzonitrile	Dichlobenil	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Degradate	Sulfonylurea	Mesosulfuron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide, Plant growth regulator	Carbamate	Chlorpropham	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Insecticide	Organophosphate	Acephate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Neonicotinoid	Acetamiprid	0,0040	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Organophosphate	Chlorpyrifos	0,2000	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Pyrethroid	Cyfluthrin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Benzoylurea	Diflubenzuron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Organophosphate	Fenitrothion	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Carbamate	Fenoxycarb	0,0150	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Oxadiazine	Indoxacarb	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Unclassified	Nitroguanidin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Unclassified	Thiocyclam hydrogen oxalate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Carbamoyltriazole	Triazamate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Hydrazine carboxylate	Bifenazate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Unclassified	Buprofezin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	0,2000	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Organophosphate	Methidathion	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Organophosphate	Mevinphos	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Organophosphate	Phosalone	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Degradate	Organometal	Cyhexatin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,2000	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Aphicide	Pyridine compound	Flonicamid	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Fungicide, Herbicide, Fumigant	Dithiocarbamate	Dazomet	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Nematicide	Organophosphate	Terbufos	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Veterinary substance	Benzoylurea	Teflubenzuron	0,0500	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide; Insect growth regulator	Benzoylurea	Novaluron	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	(S)-5-methyl-5-phenylimidazolidine-2,4-dione	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Triazole	1-(2-(2-chloro-4-(4-chloro-phenoxy)-phenyl)-2-1H-(1,2,4)triazol-yl)-ethanol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	1-(3,5-dichlorophenyl)-5-isopropyl biuret	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-(4-chlorophenyl)-2-hydroxy-N-[2-(3-methoxy-4-prop-2-ynyloxy-phenyl)-ethyl]-acetamide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-(6-(2-cyanophenoxy)pyrimidin-4-yloxy)benzoic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-amino-4,6-dimethylpyrimidine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-amino-4-methoxy-6-methyl-1,3,5-triazine	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-Aminobenzimidazole	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-isopropyl-6-methyl-4-pyrimidinol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	2-methyl-2-(4-(2-methyl-3-piperidin-1-yl-propyl)-phenyl)-propionic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3-(2-((1H-1,2,4-triazol-1-yl)methyl)-2-(2,4-dichlorophenyl)-1,3-dioxolan-4-yl)propan-1-ol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3-(4-cyclopropyl-6-methylpyrimidin-2-ylamino)phenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3,5,6-trichloro-2-pyridinol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3,5-dichloro-2,4-difluoroaniline	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3-Hydroxycarbofuran	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	3-Ketocarbofuran	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Amino-pyrimidine	4-cyclopropyl-6-methyl-pyrimidine-2-ylamine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	4-hydroxy-2,5,6-trichloroisophtalonitrile	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Aldicarb sulfoxide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	AMPA	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Benthiavalicarb-M03	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Benthiavalicarb-M05	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Carbofuran phenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	CGA 353042	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	CGA 355190	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Chlorothalonil sulphonic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Degradate	Triazine	Deisopropylatrazine	0,0300	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Dimethachlor OXA	0,0150	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Diuron-desdimethy	0,0070	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Ethofumesate-2-keto	0,0200	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Thiourea	Ethylenethiourea	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Fenpropimorph carboxylic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Fipronil amide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Fipronil sulfide	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Fipronil sulfone	0,0060	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Flufenacet-OXA	0,0070	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	HEC-5725-carboxylic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	HEC-5725-des-chlorophenyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid dimer	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid M06	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-5-hydroxy	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-AMCP	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-desnitro-olefin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-dihydroxy-guanidin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-formyl-AMCP	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-nitrosimine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-nitroso	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid-urea	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Imidacloprid degradate M14	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Irgarol-descyclopropyl	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Isoproturon-didemethyl	0,0050	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Methiocarb sulfone	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Carbamate	Methiocarb sulfoxide	0,0100	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Methomyl oxime	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	methyl N-(2{[1-(4-chlorophenyl)-1H-pyrazol-3-yl] oxymethyl} phenyl)carbamate	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	N,N-dimethyl-N'-phenylsulfamide	0,0030	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	N-demethyl phenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	N-methyl-N-nitroguanidine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	NOA 407476	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Pencycuron-PB-amine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Phthalic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Phthalimide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Pirimicarb phenol	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	PMPA	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Prochloraz formyl urea	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	RH 96595	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Tetrahydrophthalamic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Tetrahydrophthalimide	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Thiacloprid sulfonic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Azole	Triazole acetic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	TZMU	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	TZNG	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Metabolitie	Unclassified	4-(2-cyanophenoxy)-6-hydroxypyrimidine	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Metabolitie	Unclassified	4-(N'-(3,5-dimethylbenzoyl-N-(1,1-dimethylethyl)hydrazinocarbonyl)phenyl acetic acid	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Plant growth regulator	Quarternary ammonium compound	Mepiquat chloride	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Plant growth regulator, Herbicide	Dinitroaniline	Butralin	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Algistat, Herbicide, Other substance	Triazine	Cybutryne	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Fungicide, Bactericide, Biocide	Heteroaramatic	Octhilinone	0,0010	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Herbicide	Triazine	Prometryn	0,0020	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide	Hydrazone	Hydramethylnon	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Propetamphos	n.i.	LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014

Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur						n.i.		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Other substance , Veterinary substance	Organophosphate	Phoxim						n.i.		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Veterinary substance	Pyrethroid	Phenothrin						n.i.		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Acaricide	Organochlorine	Endosulfan						0,0010		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Degradate 3 (imidacloprid)						n.i.		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Degradate	Unclassified	Degradate 4 (imidacloprid)						n.i.		LOQ	LC-ESI-HRMS/MS	-	Switzerland	Moschet et al., 2014
Insecticide, Other substance	Organochlorine	α-HCH	7,0000	26,8000				0,0080		LOD	GC-ECD	-	India	Najam et al., 2010
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	7,1000	23,0000				0,0200		LOD	GC-ECD	-	India	Najam et al., 2010
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	10,0000	22,8000				0,0080		LOD	GC-ECD	-	India	Najam et al., 2010
Insecticide	Organochlorine	Aldrin						0,0080		LOD	GC-ECD	-	India	Najam et al., 2010
Insecticide	Organochlorine	DDT						0,0120		LOD	GC-ECD	-	India	Najam et al., 2010
Degradate	Organochlorine	p,p'-DDE						0,0080		LOD	GC-ECD	-	India	Najam et al., 2010
Degradate	Unclassified	Endosulfan sulfate	0,0132	0,0326				0,1100	0,0290	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide	Organophosphate	Chlorpyrifos	0,0183	0,0278				0,0100	0,0300	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0113	0,0229				0,0030	0,0110	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Fungicide	Oxazole	Vinclozolin						0,0040	0,0140	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl						0,0040	0,0090	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos						0,0120	0,0410	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Degradate	Unclassified	Pentachloroanisole						0,0080	0,0220	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan II						0,0220	0,0620	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin						0,0190	0,0690	MDL/ MQL	GC-QqQ-MS	40	Spain	Nallanthigal et al., 2013
Degradate	Unclassified	Heptachlor epoxide		1,5700	0,0233	0,6676		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide	Organochlorine	Heptachlor		1,3400	0,0466	0,4466		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide	Organochlorine	p,p'-DDT		1,2800	0,1766	0,4266		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Herbicide	Dinitroaniline	Pendimethalin		1,0600		0,3533		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Termiticide, Veterinary substance	Pyrethroid	Fenvalerate		0,6000	0,1333	0,3466		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin		0,6300	0,0400	0,2100		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Degradate	Organochlorine	p,p'-DDE		0,1400	0,0333	0,0700		0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Herbicide	Diphenyl ether	Oxyfluorfen						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide	Organophosphate	Chlorpyrifos						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide	Pyrethroid	λ-Cyhalothrin						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide	Organophosphate	Profenofos						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide	Organochlorine	Endosulfan						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Degradate	Organochlorine	p,p'-DDD						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Insecticide, Other substance	Organochlorine	α-HCH						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Isomer	Unclassified	δ-HCH						0,0000		LOD: µg g−1	GLC-ECD and FPD	27	Sudan and South Sudan	Nesser et al., 2016
Herbicide	Dinitroaniline	Trifluralin	<LOD	<LOD				0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Chloroacetamide	Alachlor	<LOD	<LOD				0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Triazine	Simazine	<LOD	<LOD				0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Triazine	Atrazine	<LOD	<LOD				0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022

Insecticide, Other substance	Organochlorine	α-HCH	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Isomer	Unclassified	δ-HCH	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organochlorine	p,p'-DDT	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organochlorine	o,p'-DDT	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Degradate	Organochlorine	o,p'-DDD	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Degradate	Organochlorine	o,p'-DDE	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organochlorine	p,p'-DDT	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Degradate	Organochlorine	p,p'-DDD	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Degradate	Organochlorine	p,p'-DDE	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organochlorine	Aldrin	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Cyclodiene	Isodrin	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide	Organochlorine	Endosulfan I	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide	Organochlorine	Endosulfan II	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Diphenyl ether	Aclonifen	<LOD	<LOD					0,0100	0,0300	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Diphenyl ether	Bifenox	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Algistat, Herbicide, Other substance	Triazine	Cybutryne	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organochlorine	Heptachlor	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Degradate	Unclassified	Heptachlor epoxide	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide, Degradate	Triazine	Terbutryn	<LOD	<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	<LOD	<LOD					0,0500	0,1000	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Urea	Isoproturon	<LOD	<LOD					0,9500	2,8600	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	<LOD	<LOD					0,0500	0,1000	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	<LOD	<LOD					0,0005	0,0010	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Herbicide	Phenylamide	Diuron	<LOD	1,3700					0,2500	0,7500	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide	Organophosphate	Chlorpyrifos		<LOD					0,0050	0,0100	LOD/LOQ	GC-MS and LC-MS/MS	8	Ukraine	Nikolopoulou et al., 2022
Insecticide, Other substance	Organochlorine	α-HCH					0,2350	0,3010	n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,1960	0,2770	n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Isomer	Unclassified	δ-HCH					0,1630	0,4600	n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Degradate	Organochlorine	p,p'-DDD					0,1500	0,4240	n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Isomer	Unclassified	cis-Chlordane					0,0410	0,1170	n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Isomer	Unclassified	trans-Chlordane							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Degradate	Organochlorine	p,p'-DDE							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide	Organochlorine	p,p'-DDT							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan I							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan II							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Degradate	Unclassified	Endosulfan sulfate							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide	Organochlorine	Heptachlor							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Degradate	Unclassified	Heptachlor epoxide							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Degradate	Unclassified	Endrin aldehyde							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Insecticide	Organochlorine	Aldrin							n.i.		n.i.	GC-ECD	144	Nigeria	Ogbeide et al., 2019
Degradate	Unclassified	AMPA		4,3000			1,6000		0,5000		LOQ	LC-MS/MS	38	Australia	Okada et al. 2020
Herbicide	Phosphonoglycine	Glyphosate		4,8000			1,1000		0,5000		LOQ	LC-MS/MS	38	Australia	Okada et al. 2020
Insecticide	Organochlorine	Aldrin					1,1530	0,0089	0,0079	0,0240	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH			0,0395	0,0097	1,0850	0,0120	0,0065	0,0200	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021

Insecticide, Veterinary substance	Pyrethroid	Cypermethrin			0,0578	0,0150	0,6440	0,0054	0,0140	0,0420	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide	Organophosphate	Chlorpyrifos			0,1590	0,0079	0,5410	0,0053	0,0460	0,1410	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Isomer	Unclassified	ζ-HCH			0,0752	0,0100	0,2480	0,0042	0,0031	0,0094	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH			0,1200	0,0055	0,2260	0,0110	0,0290	0,0890	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Other substance	Organochlorine	α-HCH					0,1830	0,0052	0,0055	0,0170	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Fungicide	Chloronitrile	Chlorothalonil			0,1150	0,0009	0,1280	0,0004	0,0140	0,0440	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Veterinary substance	Organochlorine	Methoxychlor			0,0540	0,0011	0,0775	0,0150	0,0012	0,0037	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Phenylamide	Diuron			0,0338	0,0038	0,0526	0,0024	0,0000	0,0000	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene			0,0290	0,0003	0,0464	0,0066	0,0010	0,0031	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Degradate	Organochlorine	p,p'-DDD					0,0392	0,0007	0,0066	0,0200	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Fungicide	Anilino pyrimidine	Pyrimethanil			0,0013	0,0053	0,0342	0,0037	0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide	Organochlorine	o,p'-DDT					0,0240	0,0005	0,0013	0,0039	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin			0,0148	0,0056	0,0192	0,0051	0,0047	0,0140	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Degradate	Organochlorine	p,p'-DDE			0,0081	0,0006	0,0128	0,0098	0,0023	0,0070	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine			0,0063	0,0120	0,0081	0,0073	0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide	Carbamate	Pirimicarb			0,0026	0,0140	0,0028	0,0022	0,0004	0,0012	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Urea	Isoproturon			0,0035	0,0180	0,0017	0,0032	0,0000	0,0000	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan I							0,0061	0,0180	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan II							0,0076	0,0230	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin							0,0320	0,0970	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Chloroacetamide	Alachlor							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Triazine	Ametryn							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Carbamate	Asulam							0,0001	0,0002	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Triazine	Atrazine							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Degradate	Unclassified	Desethylatrazine							0,0007	0,0021	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Degradate	Triazine	Deisopropylatrazine							0,0027	0,0083	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Fungicide	Strobilurin	Azoxystrobin							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Sulfonylurea	Bensulfuron-methyl							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Benzothiazinone	Bentazone							0,0005	0,0015	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl							0,0013	0,0040	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran							0,0001	0,0004	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos							0,0002	0,0007	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Urea	Chlorotoluron							0,0003	0,0008	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide, Plant growth regulator	Carbamate	Clorprofame							0,0003	0,0010	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate							0,0004	0,0013	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid							0,0003	0,0010	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Urea	Linuron							0,0026	0,0077	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion							0,0045	0,0140	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Fungicide	Phenylamide	Metalaxyl							0,0001	0,0018	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb							0,0006	0,0016	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Degradate	Unclassified	Methiocarb sulfone							0,0005	0,0034	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Degradate	Carbamate	Methiocarb sulfoxide							0,0011	0,0000	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Urea	Metobromuron							0,0000	0,0003	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Chloroacetamide	Metolachlor							0,0001	0,0003	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Urea	Monolinuron							0,0001	0,0003	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur							0,0000	0,0001	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide	Thiocarbamate	Thiobencarb							0,0007	0,0021	MDL/MQL	GC-MS/MS and UHPLC-MS/MS	15	Portugal	Paíga et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	<0,0158	0,0361					0,0053	0,0158	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al,, 2021
Fungicide	Triazole	Flutriafol	<0,0070	<0,0070					0,0023	0,0070	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Sulfonylurea	Metsulfuron-methyl	<0,0070	<0,0070					0,0023	0,0070	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0043	<0,0045					0,0015	0,0045	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Benzoylurea	Diflubenzuron	<0,0120	<0,0120					0,0040	0,0120	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021

Insecticide, Acaricide	Organophosphate	Profenofos	<0,0110	<0,0110	0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Nematicide	Organophosphate	Terbufos	<0,0104	<0,0104	0,0035	0,0104	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Imidazolinone	Imazethapyr	0,5780	0,5780	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0530	0,5440	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organochlorine	DDT	<LOQ	0,2500	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Triazine	Simazine	0,0090	0,2090	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Triazolobenzothiazole	Tricyclazole	0,0021	0,1870	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Chloroacetamide	Metolachlor	<0,015	0,1380	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Benzimidazole	Thiophanate-methyl	0,0159	0,1320	0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Triazole	Cyproconazole	<0,0010	0,1230	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Triazine	Atrazine	0,0010	0,1000	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	<0,0010	0,0891	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Plant growth regulator, Herbicide	Pyridazine	Maleic hydrazide	<0,0120	0,0824	0,0040	0,0120	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0010	0,0700	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Triazole	Epoxiconazole	<0,0150	0,0509	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Acaricide	Pyrethroid	Bifenthrin	<0,0150	0,0487	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Metabolite	Organochlorine	DDD	<0,0150	0,0428	0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam	0,0184	0,0311	0,0035	0,0105	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Phenylamide	Diuron	0,0010	0,0042	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T			0,0045	0,0134	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Acaricide, insecticide and nematicide	Avermectins	Abamectin			0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organophosphate	Acephate			0,0033	0,0100	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Chloroacetamide	Alachlor			0,0017	0,0051	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb			0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone			0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Degradate	Unclassified	Aldicarb sulfoxide			0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organochlorine	Aldrin			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide, Miticide	Benzimidazole	Benomyl			0,0116	0,0350	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl			0,0007	0,0020	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organochlorine	Chlordane			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Sulfonylurea	Chlorimuron-ethyl			0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Chloronitrile	Chlorothalonil			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organophosphate	Chlorpyrifos			0,0039	0,0116	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin			0,0167	0,0501	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Degradate	Organochlorine	DDE			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin			0,0017	0,0051	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Triazole	Difenoconazole			0,0150	0,0450	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan			0,0167	0,0501	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Sulfonylurea	Etoxisulfuron			0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organophosphate	Fenitrothion			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Aryloxyphenoxypropionate	Fenoxaprop-ethyl			0,0031	0,0094	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion			0,0036	0,0108	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil			0,0033	0,0100	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin			0,0167	0,0501	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Acaricide, Metabolite	Organophosphate	Methamidophos			0,0034	0,0102	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Triazinone	Metamitron			0,0020	0,0060	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Thiocarbamate	Molinate			0,0030	0,0090	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide	Organophosphate	Parathion-methyl			0,0100	0,0300	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Dinitroaniline	Pendimethalin			0,0050	0,0150	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Permethrin			0,0250	0,0750	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Triketone	Tembotrione			0,0034	0,0102	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Fungicide	Triazole	Tetraconazole			0,0043	0,0130	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Insecticide, Molluscicide, Ovicide	Carbamate	Thiodicarb			0,0037	0,0110	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Herbicide	Dinitroaniline	Trifluralin			0,0017	0,0051	LOD/LOQ	LC-QToF-MS and GC-MS/MS	35	Brazil	Perin et al., 2021
Degradate	Unclassified	Metolachlor ESA	0,0803		0,0000		MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021

Herbicide	Triazine	Atrazine	0,0335	0,0339			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Degradate	Triazine	Deisopropylatrazine	0,0112	0,0154			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Degradate	Unclassified	Hydroxyatrazine	0,0108	0,0124			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Triazine	Simazine	0,0145	0,0075			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0018	0,0053			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Organochlorine	Fomesafen	0,0009	0,0018			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Degradate	Unclassified	AMPA		0,0008			0,0002	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0003	0,0004			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,0001			0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide	Anthranilic diamide	Chlorantraniliprole		0,0001			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Chloroacetamide	Dimethenamid		0,0001			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Fungicide	Pyrazolium	Fluxapyroxad		0,0001			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Triazinone	Hexazinone		0,0000			0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide	Neonicotinoid	Acetamiprid					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Benzothiazinone	Bentazone					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide, Degradate	Neonicotinoid	Clothianidin					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Triazine	Cyanazine					0,0003	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Cyclodiene	Flumetsulam					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Phosphonoglycine	Glyphosate					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Imidazolinone	Imazethapyr					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Urea	Linuron					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Fungicide	Triazole	Metconazole					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Triazinone	Metribuzin					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Herbicide	Triazine	Prometryn					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Fungicide	Triazole	Propiconazole					0,0005	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Fungicide	Anilino pyrimidine	Pyrimethanil					0,0001	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam					0,0000	MDL	UHPLC-HRMS	-	Canada	Picard et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		1,0160	0,1420	0,0386	n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,4450	0,0749	0,0237	n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0025	0,1929	0,0641	0,0320	n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	3-Hydroxycarbofuran		0,1021	0,0107		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide	Pyrethroid	Bifenthrin		0,0453	0,0087	0,0001	n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		0,0224	0,0076	0,0048	n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin		0,0638	0,0070		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Urea	Isoproturon		0,0674	0,0067		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Organophosphate	Chlorpyrifos		0,0243	0,0051		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos		0,0112	0,0036		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide, Veterinary substance	Imidazole	Imazalil		0,0183	0,0034		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Neonicotinoid	Acetamiprid		0,0122	0,0029		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	Terbuthylazine-hydroxy		0,0116	0,0025		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam		0,0108	0,0011		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole		0,0078	0,0008		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Veterinary substance	Pyrethroid	Fluvalinate		0,0013	0,0001		n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Chloroacetamide	Acetochlor					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide	Pyrethroid	Acrinathrin					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Chloroacetamide	Alachlor					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Triazine	Atrazine					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	Desethylatrazine					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Triazine	Deisopropylatrazine					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide	Unclassified	Buprofezin					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Degradate	Neonicotinoid	Clothianidin					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Organophosphates	Coumaphos					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Organophosphate	Dichlofenthion					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	2,4-dimethylphenylformamide					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	2,4-dimethylphenyl-N'-methylformamidine					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Ethion					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Pyrethroid	Etofenprox					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Organophosphate	Fenitrothion					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	Fenthion sulfone					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Metabolite	Organophosphate	Fenthion sulfoxide					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Acaricide	Carboxamide	Hexythiazox					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Chloroacetamide	Metolachlor					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Thiocarbamate	Molinate					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate					n.i.	n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020

Insecticide, Acaricide	Organophosphate	Parathion								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Organophosphate	Parathion-methyl								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide	Imidazole	Prochloraz								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Anilide	Propanil								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Triazine	Propazine								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Triazine	Simazine								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Micro-organism derived	Spinosyn A								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Insecticide	Micro-organism derived	Spinosyn D								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide	Triazine	Terbumeton								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	Terbumeton-desethyl								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Degradate	Unclassified	Terbuthylazine-desethyl								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide, Degradate	Triazine	Terbutryn								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Fungicide	Chlorophenyl	Tolclofos-methyl								n.i.		n.i.	UHPLC-QqQ-MS	120	Saudi Arabia	Picó et al., 2020
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine				<MDL				0,0021		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Organophosphate	Chlorpyrifos				0,0200	0,0040			0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Ametryn								0,0004		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Methoxytriazine	Prometon								0,0003		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Prometryn								0,0001		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Propazine								0,0013		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Methoxytriazine	Secbumeton								0,0025		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Simazine								0,0177		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Simetryn								0,0008		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide, Degradate	Triazine	Terbutryn								0,0001		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Cyfluthrin								0,0022		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide	Pyrethroid	Bifenthrin								0,0018		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide	Organophosphate	Carbophenothion								0,0003		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide	Organophosphate	Parathion								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Ethion								0,0001		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin								0,0021		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Veterinary substance	Organochlorine	Metoxychlor								0,0031		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Degradate	Unclassified	Endrin ketone								0,0002		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Organochlorine	Heptachlor								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Organochlorine	o,p'-DDT								0,0002		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Organochlorine	p,p'-DDT								0,0017		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide	Organochlorine	Endosulfan I								0,0001		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide	Organochlorine	Endosulfan II								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH								0,0004		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin								0,0001		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Isomer	Unclassified	cis-Chlordane								0,0002		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Isomer	Unclassified	trans-Chlordane								0,0004		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Degradate	Unclassified	Endosulfan sulfate								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Degradate	Unclassified	Heptachlor epoxide								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Degradate	Organochlorine	o,p'-DDE								0,0000		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide	Triazine	Atrazine								0,0012		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Fenvalerate I								0,0039		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Deltamethrin I								0,0055		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Permethrin I								0,0023		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Phenothrin I								0,0004		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Phenothrin II								0,0008		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Permethrin II								0,0049		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Deltamethrin II								0,0016		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Insecticide	Pyrethroid	Fenvalerate II								0,0074		MDL	APGC-QToF-MS	-	Spain	Pintado-Herrera et al., 2014
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	0,0340	0,1260	<LOQ	<LOQ		<LOQ	0,0280	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Carbamate	Propamocarb		0,0460	<LOQ	<LOQ		<LOQ	<LOQ	0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Terbuthylazine-desethyl		0,0130		<LOQ			<LOQ	0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Algistat, Herbicide, Other substance	Triazine	Cybutryne		0,0050		<LOQ			<LOQ	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0280	16,8660	<LOQ	4,8430		<LOQ	2,6230	0,0003	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Phenylamide	Diuron	0,0160	2,1270	0,0270	0,9280		0,0220	0,8050	0,0005	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Triazole	Propiconazole	0,0050	0,5800	<LOQ	0,2760		<LOQ	0,2540	0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0150	0,8550	<LOQ	0,2290		<LOQ	0,0380	0,0005	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0050	0,4470	<LOQ	0,1310		<LOQ	0,1490	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019

Herbicide, Degradate	Triazine	Terbutryn	0,0050	0,4940	<LOQ	0,0950	<LOQ	0,1490	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Benzothiazinone	Bentazone	0,0070	0,5070	0,0210	0,0910	0,0070	0,0200	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Chlorotoluron	0,0050	0,2280	<LOQ	0,0820	<LOQ	0,0100	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Thiocarbamate	Prosulfocarb	0,0050	0,3640	<LOQ	0,0760	0,0060	0,0130	0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0050	0,4150	<LOQ	0,0740	<LOQ	0,0080	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0050	0,1860	<LOQ	0,0740	<LOQ	0,0310	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0050	0,1560	<LOQ	0,0460	<LOQ	0,0600	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Isoproturon	0,0050	0,1480	<LOQ	0,0370	<LOQ	0,0210	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Fenuron	0,0680	0,0900		0,0310		<LOQ	0,0010	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Simazine	0,0060	0,4560	0,0070	0,0300	0,0080	0,0910	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Phenylamide	Metalaxyl	0,0060	0,0610	0,0050	0,0210	<LOQ	0,0100	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Terbuthylazine-hydroxy	0,0300	0,0430		0,0190		0,0130	n.i.	n.i.	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Aryloxyalkanoic acid	Mecoprop	0,0050	0,0400	<LOQ	0,0170	<LOQ	0,0150	0,0003	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Chloroacetamide	Metazachlor		0,0460	<LOQ	0,0090	<LOQ	<LOQ	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0050	0,0150	0,0050	0,0080	<LOQ	0,0070	0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide	Neonicotinoid	Acetamiprid	0,0060	0,0150	<LOQ	0,0060	<LOQ	<LOQ	0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0050	0,0210		0,0050		<LOQ	0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Benzamide	Propyzamide		0,0360					0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Atrazine		0,0050					0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T							0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP							0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Aryloxyalkanoic acid	2,4-DB							0,0010	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Hydroxyatrazine							0,0100	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Deisopropylhydroxyatrazine							0,0100	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Terbuthylazine-hydroxy							0,0010	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	3-Hydroxycarbofuran							0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Chloroacetamide	Acetochlor							0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb							0,0100	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Methoxytriazine	Atraton							0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl							0,0025	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Strobilurin	Azoxystrobin							0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Degradate	Hydroxybenzonitrile	Bromoxynil							0,0010	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Plant growth regulator	Carbamate	Carbaryl							0,0003	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran							0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos							0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Dimethylurea	Chloroxuron							0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin							0,0100	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Rodenticide	Pryimidinamine	Crimidine							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Cyanazine							0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Cyclohexanedione	Cycloxydim							0,0010	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Anilinopyrimidine	Cyprodinil							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Desethylatrazine							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Terbuthylazine-desethyl							0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Triazine	Deisopropylatrazine							0,0100	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Aryloxyalkanoic acid	Dichlorprop							0,0003	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Thiocarbamate	EPTC							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Oxyacetamide	Flufenacet							0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Pyridine compound	Fluroxypyr							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Acaricide	Carboxamide	Hexythiazox							0,0050	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Degradate	Hydroxybenzonitrile	Ioxynil							0,0003	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide	Carbamate	Isoprocarb							0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Linuron							0,0050	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion							0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Aryloxyalkanoic acid	MCPB							0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triketone	Mesotrione							0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazinone	Metamitron							0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Methabenzthiazuron							0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019

Insecticide, Acaricide	Organophosphate	Methidathion			0,0010	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Degradate	Carbamate	Methomyl			0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Metobromuron			0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Chloroacetamide	Metolachlor			0,0003	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Metolachlor ESA			0,0050	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide	Carbamate	Metolcarb			0,0025	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Metoxuron			0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazinone	Metribuzin			0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide	Organophosphate	Mevinphos			0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Monolinuron			0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl			0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Degradate	Unclassified	Paraoxon			0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Phenylurea	Pencycuron			0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol			0,0150	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Chloroacetamide	Pethoxamid			0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Carbamate	Phenmedipham			0,0005	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Imidazole	Prochloraz			0,0005	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Methoxytriazine	Prometon			0,0005	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Prometryn			0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Propazine			0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Plant growth regulator	Carbamate	Propham			0,0025	0,0150	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide	Quinoline	Quinoxyfen			0,0025	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triazine	Sebuthylazine			0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Triketone	Sulcotrione			0,0025	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Urea	Tebuthiuron			0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine			0,0003	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole			0,0003	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid			0,0010	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam			0,0050	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Molluscicide, Ovicide	Carbamate	Thiodicarb			0,0025	0,0250	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Herbicide	Pyridine compound	Triclopyr			0,0050	0,0050	LOD/LOQ	UHPLC-MS/MS	105	Spain	Quintana et al., 2019
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0800	0,0950	0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Atrazine	0,0580	0,0650	0,0060		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,0480	0,0030		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,0400	0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Dinitroaniline	Pendimethalin		0,0350	0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide	Triazole	Myclobutanil	0,0250	0,0280	0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Diphenyl ether	Oxyfluorfen		0,0100	0,0020		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide	Acylamino acid	Benalaxyl			0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide	Chloronitrile	Chlorothalonil			0,0060		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide	Triazole	Flusilazole			0,0020		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide	Oxazole	Vinclozolin			0,0040		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Chloroacetamide	Alachlor			0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Ametryn			0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Carboxamide	Diflufenican			0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Prometryn			0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Propazine			0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Simazine			0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Triazine	Trietazine			0,0030		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide	Dinitroaniline	Trifluralin			0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide, Degradate	Triazine	Terbutryn			0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Herbicide, Degradate, Plant growth regulator	Aryloxyphenoxypropionate	Clodinafop			0,0080		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide	Organophosphate	Parathion-methyl			0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide	Organophosphate	Methidathion			0,0080		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide	Organophosphate	Parathion			0,0030		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide	Pyridazinone	Pyridaben			0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide, Degradate	Organophosphate	Ethion			0,0020		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013

Insecticide, Veterinary substance	Organochlorine	Methoxychlor					0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Nematicide	Organophosphate	Fenamiphos					0,0080		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene					0,0080		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide	Organochlorine	Aldrin					0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide	Organochlorine	Chlordane					0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide	Organochlorine	Heptachlor					0,0010		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide	Organochlorine	p,p′-DDT					0,0030		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan I					0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan II					0,0060		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,0030		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin					0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Degradate	Organochlorine	p,p'-DDD					0,0020		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Insecticide, Other substance	Organochlorine	α-HCH					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Isomer	Unclassified	δ-HCH					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Degradate	Unclassified	Endosulfan sulfate					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Degradate	Unclassified	Heptachlor epoxide					0,0070		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Degradate	Organochlorine	p,p'-DDE					0,0050		LOD	GC-MS/MS	-	Chile	Retamal et al., 2013
Fungicide, Plant growth regulator	Triazole	Tebuconazole	<0,0001	0,4470		0,0017	0,0050	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide	Triazine	Simazine	<0,0001	0,2610		0,0019	0,0060	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Fungicide, Degradate	Benzimidazole	Carbendazim	<0,0000	0,1180		0,0021	0,0030	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide	Phenylamide	Diuron	<0,0001	0,1090		0,0229	0,0060	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide	Triazine	Terbutryn	<0,0000	0,0454		0,0007	0,0030	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Fungicide	Triazole	Propiconazole	<0,0002	0,0218		0,0050	0,0050	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	<0,0000	0,0212		0,0008	0,0020	0,0050	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	<0,0000	0,0212		0,0027	0,0050	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide	Urea	Chlorotoluron	<0,0000	0,0200		0,0011	0,0030	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	<0,0000	0,0161		0,0003	0,0030	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Herbicide	Triazinone	Metribuzin	<0,0000	0,0153		0,0005	0,0010	0,0030	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Fungicide	Morpholine	Spiroxamine	<0,0001	0,0038		0,0038	0,0050	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,0000	0,0021		0,0001	0,0010	0,0030	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide	Carbamate	Pirimicarb	<0,0000	0,0004		0,0001	0,0010	0,0030	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran					0,0010	0,0030	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide	Organophosphate	Chlorpyrifos					0,0100	0,0200	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					0,0050	0,0500	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Acaricide	Carbamate	Metolcarb					0,0030	0,1000	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide	Micro-organism derived	Spinosyn A					0,0030	0,0100	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl					0,0200	0,0500	LOD/LOQ	LC-MS/MS	48	Spain	Rico et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0420	0,5350			0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0020	0,2140			0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	<0,0002	0,0280			0,0001	0,0002	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0003	0,0270			0,0001	0,0002	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Triazine	Atrazine	0,0030	0,0250			0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Phenylamide	Diuron	0,0010	0,0130			0,0005	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	<0,0015	0,0120			0,0001	0,0005	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0020	0,0090			0,0001	0,0001	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0030	0,0050			0,0005	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Urea	Tebuthiuron	0,0020	0,0030			0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	<0,0013	0,0030			0,0003	0,0013	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Degradate	Unclassified	Hydroxyatrazine					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Triazine	Ametryn					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Fungicide	Strobilurin	Azoxystrobin					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021

Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Degradate	Unclassified	Desethylatrazine					0,0005	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Degradate	Triazine	Deisopropylatrazine					0,0005	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Triazinone	Hexazinone					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Triazine	Simazine					0,0005	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole					0,0001	0,0010	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl					0,0001	0,0004	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Dinitroaniline	Pendimethalin					0,0050	0,0500	LOD/LOQ	HPLC-MS and GC-MS	-	Brazil	Rico et al., 2021
Herbicide	Uracil	Bromacil	0,0010	0,0160			0,0002	0,0007	LOD/LOQ	LC-MS/MS	-	South Africa	Rimayi et al., 2018
Degradate	Triazine	Desethylatrazine					n;i	n.i.	LOD/LOQ	LC-MS/MS	-	South Africa	Rimayi et al., 2018
Insecticide, Veterinary substance	Triazine	Cyromazine		≤LOD		≤LOD	0,0024	0,0079	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Methoxytriazine	Prometon		4,8055	1,4099	4,8055	0,0003	0,0011	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate		5,1669	0,0680	1,9086	0,0077	0,0254	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine		0,8940	0,0026	0,2279	0,0006	0,0020	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Plant growth regulator, Fungicide, Insecticide	Amine	Diphenylamine		0,2204	0,0578	0,1489	0,0012	0,0038	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Hydroxyanilide	Fenhexamid		0,1312	0,0106	0,1312	0,0031	0,0101	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Amide	Napropamide-M		0,1228	0,0680	0,1228	0,0013	0,0043	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phenylurea	Fluometuron		0,2721	0,0104	0,0799	0,0011	0,0035	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Propazine		0,0791	0,0488	0,0791	0,0006	0,0020	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Terbuthylazine-desethyl		0,1756	0,0161	0,0786	0,0003	0,0011	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon		0,2345	≤LOD	0,0615	0,0000	0,0000	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Simazine		0,1952		0,0563	0,0002	0,0005	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organochlorine	Endosulfan II		0,0366		0,0366	0,0001	0,0003	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Diphenyl ether	Oxyfluorfen		0,0915	0,0028	0,0302	0,0000	0,0001	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene		0,0796	0,0024	0,0201	0,0001	0,0002	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Carboxamide	Diflufenican		0,0158	0,0067	0,0158	0,0007	0,0022	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Organochlorine	Metoxychlor		0,0154	0,0005	0,0154	0,0001	0,0003	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Other substance	Organochlorine	α-HCH		0,0151	0,0046	0,0151	0,0001	0,0003	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Chlorpyrifos		0,0669	0,0060	0,0138	0,0002	0,0005	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phenylamide	Diuron		0,0194	0,0015	0,0078	0,0001	0,0003	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Plant growth regulator	Triazole	Tebuconazole		0,0142	0,0022	0,0056	0,0007	0,0022	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Degradate	Triazine	Terbutryn		0,0053		0,0053	0,0004	0,0013	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Pentachlorobenzene		0,0054	0,0024	0,0047	0,0000	0,0000	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Isomer	Unclassified	δ-HCH		0,0045		0,0045	0,0001	0,0004	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Chloroacetamide	Alachlor		0,0034		0,0034	0,0008	0,0027	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organochlorine	p,p'-DDT		0,0034	0,0006	0,0034	0,0000	0,0001	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin		0,0032		0,0032	0,0008	0,0028	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH		0,0028	0,0017	0,0028	0,0002	0,0006	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Atrazine		0,0022		0,0022	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Organochlorine	p,p'-DDE		0,0046	0,0005	0,0021	0,0001	0,0002	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH		0,0019		0,0019	0,0001	0,0005	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Benzoic acid	1,2,4-TCB		0,0026	0,0007	0,0017	0,0002	0,0006	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos		0,0018	0,0005	0,0015	0,0003	0,0010	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Dicarboximide	Procymidone		0,0013	0,0006	0,0013	0,0009	0,0030	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Plant growth regulator	Imidazolinone	Imazaquin		0,0013		0,0013	0,0003	0,0011	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide; Algicide	Chlorinated alkene	Hexachlorobutadiene		0,0013	0,0005	0,0013	0,0001	0,0003	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	XMC					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Acaricide, Insecticide	Organophosphate	Isocarbophos					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Acaricide	Carboxamide	Hexythiazox					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Acaricide	Pyrazolium	Tebufenpyrad					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Acaricide, Insecticide	Quinazoline	Fenazaquin					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014

Fungicide	Strobilurin	Azoxystrobin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Acylamino acid	Benalaxyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Bitertanol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Bromuconazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Pyrimidinol	Bupirimate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Cyanoacetamide oxime	Cymoxanil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Cyproconazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Anilinopyrimidine	Cyprodinil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Chlorophenyl	Dicloran	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Carbamate	Diethofencarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Difenoconazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Morpholine	Dimethomorph	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Organophosphate	Edifenphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Pyrimidine	Fenarimol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Fluquinconazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Flutriafol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Dicarboximide	Iprodione	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Phenylamide	Metalaxyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Myclobutanil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Phenylamide	Oxadixyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Triazole	Penconazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Imidazole	Prochloraz	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Carbamate	Propamocarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Anilino pyrimidine	Pyrimethanil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Quinoline	Quinoxyfen	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Morpholine	Spiroxamine	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Benzimidazole	Thiophanate-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Morpholine	Tridemorph	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Strobilurin	Trifloxystrobin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide	Imidazole	Triflumizole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, herbicide and insecticide	Unclassified	2,4-dinitrophenol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Degradate	Benzimidazole	Carbendazim	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Degradate	Triazole	Triadimefon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Seed treatment	Benzimidazole	Fuberidazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Veterinary substance	Imidazole	Imazalil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide, Veterinary substance, Other substance	Quinoline	Ethoxyquin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Fungicide; Degradate	Triazole	Triadimenol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Diphenyl ether	Aclonifen	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Ametryn	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazole	Amitrole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Organophosphate	Anilofos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Benzothiazinone	Bentazone	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Diphenyl ether	Bifenox	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Uracil	Bromacil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phenylurea	Buturon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazolone	Carfentrazone-ethyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Chlorbromuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Pyridazinone	Chloridazon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Chlorotoluron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Dimethylurea	Chloroxuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Benzoic acid	Dicamba	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Aryloxyalkanoic acid	Dichlorprop	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phenylurea	Difenoxuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Aryloxyphenoxypropionate	Fluazifop-P-butyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Unclassified	MCPA sodium	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Metobromuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Metoxuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phenylurea	Monuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phthalamate	Naptalam	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Neburon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Pyridazinone	Norflurazon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Oxidiazole	Oxadiazon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Prometryn	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014

Herbicide	Anilide	Propanil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Benzamide	Propyzamide	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Quinoline	Quinmerac	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Aryloxyphenoxypropionate	Quizalofop-P-ethyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Simetryn	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Sulfonylurea	Sulfometuron-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazine	Trietazine	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Dinitroaniline	Trifluralin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Insecticide, Acaricide, Fungicide	Dinitrophenol	DNOC	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Plant growth regulator	Carbamate	Chlorpropham	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Acephate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Neonicotinoid	Acetamiprid	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Aminocarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Bromophos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Bromophos-ethyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Butocarboxim	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Dichlofenthion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Benzoylurea	Diflubenzuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Ethiofencarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Phenylpyrazole	Ethiprole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Pyrethroid	Etofenprox	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Fenitrothion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Fenobucarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Fenoxycarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Oxadiazine	Indoxacarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Cyclodiene	Isodrin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Isoprocarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organophosphate	Parathion-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Carbamate	Pirimicarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organothiophosphate	Pyridaphenthion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Micro-organism derived	Spinosad	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Tetronic acid	Spiromesifen	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Neonicotinoid	Thiamethoxam	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Unclassified	Thiocyclam	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Pyrethroid	λ-Cyhalothrin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Unclassified	Buprofezin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Carbamate	Butoxycarboxim	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Demeton-S-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Benzoylurea	Flufenoxuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Mecarbam	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Methidathion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Carbamate	Metolcarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Mevinphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Monocrotophos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Parathion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Phosalone	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Pyridazinone	Pyridaben	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organophosphate	Quinalphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Ethion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Miticide	Thiourea	Diafenthiuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014

Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Termiticide, Veterinary substance	Pyrethroid	Fenvalerate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Benzoylurea	Lufenuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide, Veterinary substance	Organophosphate	Tetrachlorvinphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Insect Growth Regulator	Benzoylurea	Hexaflumuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Larvicide, Veterinary substance	Benzoylurea	Triflumuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Plant growth regulator	Carbamate	Carbaryl	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Benzimidazole	Albendazole	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Carbamate	Bendiocarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Benzoylurea	Teflubenzuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Organophosphate	Trichlorfon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance	Pyrethroid	α-Cypermethrin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide; Veterinary substance	Carbamate	Promecarb	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	2,4-Dimethylphenol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	2-phenylphenol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Aldicarb sulfoxide	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	AMPA	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Triazine	Desethylatrazine	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Fluazifop	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Imazalil degradate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Malaoxon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Carbamate	Methiocarb sulfoxide	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Metabolitie	Unclassified	2-methyl-4-chlorophenol	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Nematicide	Organophosphate	Fenamiphos	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Plant growth regulator	Unclassified	1-naphtalene-acetamide	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Pyridine compound	Fluroxypyr	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Phosphonoglycine	Glyphosate	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Imidazolinone	Imazapyr	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Isoproturon	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Uracil	Lenacil	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Aryloxyalkanoic acid	Mecoprop	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Triazinone	Metamitron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide	Urea	Fenuron	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organochlorine	Aldrin	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide	Organochlorine	Heptachlor	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Acaricide	Organochlorine	Endosulfan I	n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014

Insecticide, Avicide, Rodenticide	Organochlorine	Endrin					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Degradate	Unclassified	Endosulfan sulfate					n.i.	n.i.	LOD/LOQ	LC-QToF-MS and GC-MS/MS	83	Spain	Robles-Molina et al., 2014
Herbicide, Degradate	Triazine	Terbutryn	<LOQ	0,4310			0,0015	0,0051	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<LOQ	0,0014			0,0002	0,0007	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos					0,0004	0,0012	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Degradate	Unclassified	Pentachlorobenzene					0,0002	0,0006	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Dinitroaniline	Trifluralin					0,0001	0,0004	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene					0,0004	0,0014	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Chloroacetamide	Alachlor					0,0005	0,0015	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide	Organochlorine	Heptachlor					0,0003	0,0009	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Degradate	Unclassified	Heptachlor epoxide					0,0013	0,0044	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan I					0,0005	0,0016	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Oxidiazole	Oxadiazon					0,0001	0,0003	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan II					0,0012	0,0040	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Diphenyl ether	Aclonifen					0,0015	0,0049	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Fungicide	Quinoline	Quinoxyfen					0,0003	0,0010	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Diphenyl ether	Bifenox					0,0009	0,0029	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin					0,0003	0,0009	LOD/LOQ	GC-MS/MS	57	Spain	Rubirola et al., 2019
Herbicide	Triazine	Atrazine	0,0460	0,0520			0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Degradate	Triazine	Desethylatrazine	0,0240	0,0360			0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Chloroacetamide	Metolachlor	0,0060	0,0120			0,0040		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Degradate	Triazine	Deisopropylatrazine	0,0030	0,0110			0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Cyanazine	0,0030	0,0100			0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Simazine	0,0060	0,0090			0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Ametryn					0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazinone	Metribuzin					0,0008		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Prometryn					0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Propazine					0,0004		LOD	GC-NPD and LC-APCI-MS	-	Canada	Sabik and Jeannot, 1998
Herbicide	Triazine	Atrazine			0,0260	0,0910	0,0002		DL	GC-MS	-	Canada	Sabik et al., 2003
Degradate	Triazine	Desethylatrazine			0,0250	0,0800	0,0003		DL	GC-MS	-	Canada	Sabik et al., 2003
Degradate	Triazine	Deisopropylatrazine			0,0070	0,0380	0,0003		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Chloroacetamide	Metolachlor			0,0080	0,0250	0,0001		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Triazine	Cyanazine			<DL	0,0130	0,0008		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Triazine	Simazine			<DL	0,0070	0,0002		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Triazine	Ametryn					0,0006		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Triazine	Prometryn					0,0008		DL	GC-MS	-	Canada	Sabik et al., 2003
Herbicide	Triazine	Propazine					0,0002		DL	GC-MS	-	Canada	Sabik et al., 2003
Insecticide	Organophosphate	Fonofos					0,0001		DL	GC-MS	-	Canada	Sabik et al., 2003
Insecticide, Acaricide, Degradate	Organophosphate	Ethion					0,0002		DL	GC-MS	-	Canada	Sabik et al., 2003
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon					0,0001		DL	GC-MS	-	Canada	Sabik et al., 2003
Insecticide	Organophosphate	Malathion					0,0002		DL	GC-MS	-	Canada	Sabik et al., 2003
Degradate	Organochlorine	o,p'-DDE		<0027			0,0003		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<0,0074	0,0246			0,0028		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	<0,0054	0,0080			0,0018		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide	Organochlorine	p,p'-DDT	<0,0009	0,0062			0,0003		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide, Degradate	Organochlorine	p,p'-DDD	<0,0009	0,0048			0,0003		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide	Organochlorine	Mirex	<0,0006	0,0046			0,0002		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	<0,0018	0,0034			0,0006		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Isomer	Unclassified	trans-Chlordane	<0,0020	0,0030			0,0007		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Isomer	Unclassified	cis-Chlordane	<0,0020	0,0026			0,0007		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin		0,0020			0,0003		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide, Degradate	Organochlorine	o,p'-DDD		0,0012			0,0002		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide	Organochlorine	Aldrin					0,0007		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide	Organochlorine	Heptachlor					0,0006		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Insecticide	Organochlorine	o,p'-DDT					0,0003		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Degradate	Organochlorine	p,p'-DDE					0,0009		LOD	GC-MS	56	Malaysia	Santhi and Mustafa, 2013
Degradate	Unclassified	Endosulfan sulfate	0,0005	0,0043			0,0002		LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Organochlorine	Heptachlor	0,0002	0,0033			0,0002		LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Organophosphate	Chlorpyrifos	0,0002	0,0008			0,0001		LOD	GC-ECD	34	Argentina	Schreiber et al., 2013

Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0001	0,0005					0,0001	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0000	0,0004					0,0000	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Degradate	Organochlorine	p,p'-DDE	0,0001	0,0003					0,0001	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0001	0,0003					0,0001	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0001	0,0002					0,0001	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Fungicide	Substituted benzene	Chloroneb							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Fungicide	Chloronitrile	Chlorothalonil							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Fungicide	Aromatic hydrocarbon	Etridiazole							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Herbicide	Benzenedicarboxylic acid	Dacthal							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Herbicide	Chloroacetamide	Propachlor							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Herbicide	Dinitroaniline	Trifluralin							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Pyrethroid	cis-Permethrin							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Pyrethroid	trans-Permethrin							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Acaricide, Miticide	Organochlorine	Chlorobenzilate							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Veterinary substance	Organochlorine	Methoxychlor							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Degradate	Unclassified	Endrin aldehyde							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Organochlorine	Aldrin							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide	Organochlorine	p,p'-DDT							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Acaricide	Organochlorine	Endosulfan II							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Degradate	Organochlorine	p,p'-DDD							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Insecticide, Other substance	Organochlorine	α-HCH							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Isomer	Unclassified	cis-Chlordane							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Isomer	Unclassified	trans-Chlordane							0,1	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Isomer	Unclassified	δ-HCH							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Degradate	Unclassified	Heptachlor epoxide							n.i.	LOD	GC-ECD	34	Argentina	Schreiber et al., 2013
Herbicide	Triazine	Atrazine	<0,0050	<0,0050					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,0050	<0,0050					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Herbicide	Urea	Linuron	<0,0050	<0,0050					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Herbicide	Triazine	Simazine	<0,0050	<0,0050					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Insecticide	Organophosphate	Chlorpyrifos	<0,0100	<0,0100					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Degradate	Unclassified	2-phenylphenol	<0,0100	<0,0100					n.i.	n.i.	LC-MS/MS and GC-MS/MS	-	Australia	Scott et al., 2018
Herbicide	Pyridazinone	Chloridazon	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	0,0250	LOQ	LC-MS/MS	-	Germany	Seitz and Winzenbacher, 2017
Degradate	Unclassified	N,N-Dimethylsulfamide	<LOQ	0,0300	<LOQ	<LOQ	<LOQ	<LOQ	0,0250	LOQ	LC-MS/MS	-	Germany	Seitz and Winzenbacher, 2017
Degradate	Unclassified	Desphenyl-chloridazon	0,0500	0,4200	0,0800	0,3700	0,0900	0,3500	0,0250	LOQ	LC-MS/MS	-	Germany	Seitz and Winzenbacher, 2017
Degradate	Unclassified	Methyl-desphenyl-chloridazon	0,0600	0,1200	0,0800	0,0900	0,0800	0,0900	0,0250	LOQ	LC-MS/MS	-	Germany	Seitz and Winzenbacher, 2017
Herbicide	Triazine	Atrazine	0,1300	0,2000					0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Chloroacetamide	Metolachlor		0,1500					0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Insecticide, Veterinary substance	Pyrethroid	Permethrin							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Fungicide	Chloronitrile	Chlorothalonil							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Chloroacetamide	Acetochlor							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Chloroacetamide	Alachlor							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Thiocarbamate	Butylate							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Triazine	Cyanazine							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Chloroacetamide	Dimethenamid							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Thiocarbamate	EPTC							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Triazinone	Metribuzin							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Pyridazinone	Norflurazon							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Dinitroaniline	Pendimethalin							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Methoxytriazine	Prometon							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Chloroacetamide	Propachlor							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Triazine	Propazine							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Triazine	Simazine							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Herbicide	Dinitroaniline	Trifluralin							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Insecticide	Organophosphate	Chlorpyrifos							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Insecticide	Organophosphate	Tebupirimphos							0,1000	LOD	GC-MS	-	United States	Sellin Jefries et al., 2011

Insecticide	Pyrethroid	Tefluthrin					0,1000		LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Insecticide, Nematicide	Organophosphate	Terbufos					0,1000		LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Degradate	Triazine	Deisopropylatrazine					0,1000		LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Degradate	Triazine	Desethylatrazine					0,1000		LOD	GC-MS	-	United States	Sellin Jefries et al., 2011
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb					15,1000	50,0000	LOD/LOQ	HPLC-DAD	-	Brazil	Silva et al., 2019
Insecticide	Organophosphate	Methyl parathion					1,5000	5,0000	LOD/LOQ	HPLC-DAD	-	Brazil	Silva et al., 2019
Herbicide	Chloroacetamide	Metolachlor					1,5000	5,0000	LOD/LOQ	HPLC-DAD	-	Brazil	Silva et al., 2019
Herbicide	Phenylamide	Diuron					1,5000	5,0000	LOD/LOQ	HPLC-DAD	-	Brazil	Silva et al., 2019
Degradate	Unclassified	2-phenylphenol	0,0366	0,0366	0,0366	0,0366	0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Butylate	0,0158	0,0158	0,0158	0,0158	0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Metolachlor	0,0094	0,0210	0,0152	0,0158	0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Unclassified	1,4-Dichlorobenzene	0,0014	0,0014	0,0014	0,0014	0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0004	0,0010	0,0007	0,0007	0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Other substance	Organochlorine	α-HCH	0,0006	0,0006	0,0006	0,0006	0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0005	0,0005	0,0005	0,0005	0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0002	0,0004	0,0003	0,0002	0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Organochlorine	p,p'-DDE	0,0001	0,0002	0,0002	0,0002	0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	2,3,4,6-Tetrachlorophenol					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide; Degradate	Substituted benzene	2,6-Dichlorobenzamide					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	3-Hydroxycarbofuran					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Plant growth regulator	Plant derived	6-Benzylaminopurine					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Acephate					0,0500		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Neonicotinoid	Acetamiprid					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Acetochlor					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrethroid	Acrinathrin					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Other substance	Organochlorine	α-HCH					0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Alachlor					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide, Degradate	Carbamate	Aldicarb sulfone					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organochlorine	Aldrin					0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Pyrethroid	Allethrin					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Acetamide	Allidochlor					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Ametryn					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Amino-chlornitrofen					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Amidine	Amitraz					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Amidine	Amitraz					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Organophosphate	Anilofos					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Atrazine					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Azaconazole					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Organophosphate	Azamethiphos					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl					0,0500		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Strobilurin	Azoxystrobin					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Acylamino acid	Benalaxyl					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Carbamate	Bendiocarb					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Benfluralin					0,0250		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Benzofuran	Benfuresate					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide safener	Benzoxazine	Benoxacor					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Organophosphate	Bensulide					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Benzothiazinone	Bentazone					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,0001		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Hydrazine carboxylate	Bifenazate					0,1000		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Diphenyl ether	Bifenox					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrethroid	Bifenthrin					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Bioresmethrin					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Other substance	Ether	Bis(2-chloroethyl)ether					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Nematicide, Insecticide	Organochlorine	DCIP					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Bitertanol					0,0100		MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Herbicide	Uracil	Bromacil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Amide	Bromobutide	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Bromophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Benzilate	Bromopropylate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Bromuconazole	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyrimidinol	Bupirimate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Unclassified	Buprofezin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Butachlor	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Uracil	Butafenacil	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Organophosphate	Butamifos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Cadusafos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazole	Cafenstrole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phthalimide	Captafol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Bactericide	Phthalimide	Captan	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Carbamate	Carbetamide	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Carbophenothion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Oxathiin	Carboxin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazolone	Carfentrazone-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Acaricide, Miticide, Insecticide	Carbamate	Chinomethionat	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Chlorethoxyfos	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Miticide	Pyrrole	Chlorfenapyr	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide, Miticide, Insecticide	Bridged diphenyl	Chlorfenson	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Chlorfenvinphos trans	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Chlorfenvinphos cis	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyridazinone	Chloridazon	0,1000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Sulfonylurea	Chlorimuron-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Chlormephos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Nitrophenyl	Chlornitrofen	0,0250	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
		Chlorobenzilate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Substituted benzene	Chloroneb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Chloronitrile	Chlorothalonil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Plant growth regulator	Carbamate	Chlorpropham	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Miticide	Bridged diphenyl	Chloropropylate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Chlorpyrifos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Benzenedicarboxylic acid	Dacthal	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Cineole	Cinmethylin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	cis-Chlordane	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Organochlorine	cis-Nonachlor	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Tetrazine	Clofentezine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Isoxazolidinone	Clomazone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Phenoxy acid	Clomeprop	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphates	Coumaphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Rodenticide	Pryimidinamine	Crimidine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Cyanazine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Cyanofenphos	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Cyanophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Cycloate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Amidoxine	Cyflufenamid	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cyfluthrin I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cyfluthrin II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cyfluthrin III	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cyfluthrin IV	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyphenoxypropionate	Cyhalofop-butyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	λ-Cyhalothrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	λ-Cyhalothrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cypermethrin I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cypermethrin II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cypermethrin III	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Cypermethrin IV	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Cyproconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Fungicide	Anilinopyrimidine	Cyprodinil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Triazine	Cyromazine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Metabolite	Organophosphate	Dichlorvos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Demeton-S-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Metabolite	Organophosphate	Demeton-S-methylsulphon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Carbamate	Desmedipham	0,5000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	ô-HCH	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Dialifos	0,2500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Diazinon oxon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Degradate	Benzonitrile	Dichlobenil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Dichlofenthion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Sulphamide	Dichlofluanid	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Dichlofluanid degradate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Algicide	Quinone	Dichlone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Bactericide, Wood preservative	Conazole	Diclobutrazol	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Insecticide	Amide	Diclocymet	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyphenoxypropionate	Diclofop-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyridazinone	Diclomezine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Chlorophenyl	Dicloran	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Sulfonanilide	Diclosulam	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Organochlorine	Dicofol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Dicofol degradate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Dicrotophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Carbamate	Diethofencarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Paraoxon	0,0250	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Difenoconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Fungicide	Pyrazolium	Difenzoquat metilsulfate	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Carboxamide	Diflufenican	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Dimepiperate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Methylthiotriazine	Dimethametryn	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Dimethenamid	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
		Dimethipin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Dimethomorph E	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Isomer	Morpholine	Dimethomorph Z	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Dimetylvinphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Diniconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitrophenol	Dinoseb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Insect Growth Regulator	Diphenyl ether	Diofenolan	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Dioxabenzofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Alkanamide	Diphenamid	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Organophosphate	Ditalimfos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyridine	Dithiopyr	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Organophosphate	Edifenphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Endosulfan sulfate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Endrin aldehyde	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Endrin ketone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	EPN	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	EPN oxon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	EPTC	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Esfenvalerate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Esprocarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Ethalfluralin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Insecticide	Carbamate	Ethiofencarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Ethion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Benzofuran	Ethofumesate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Veterinary substance, Other substance	Quinoline	Ethoxyquin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Plant Growth Regulator	Unclassified	Ethychlozate	0,1000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Anilide	Etobenzanid	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Etofenprox	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Diphenyl oxazoline	Etoxazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Etoxazole degradate	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Aromatic hydrocarbon	Etridiazole	0,0250	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Etrimfos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Oxazole	Famoxadone	1,0000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Thiophosphate	Famphur	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Imidazole	Fenamidone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Nematicide	Organophosphate	Fenamiphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyrimidine	Fenarimol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Fenbuconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Fenbuconazole lactone A	0,0050	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Fenbuconazole lactone B	0,0050	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Organophosphate	Fenchlorphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Fenitrothion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Fenitrothion oxon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	Fenobucarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide, Insecticide	Thiocarbamate	Fenothiocarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Amide	Fenoxanil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyphenoxypropionate	Fenoxaprop-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	Fenoxycarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrethroid	Fenpropathrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Morpholine	Fenpropimorph	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Fensulfothion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Termiticide, Veterinary substance	Pyrethroid	Fenvalerate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyrimidine	Ferimzone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryaminopropionic acid	Flamprop-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide, Miticide	Methoxyacrylate strobilurin	Fluacrypyrim	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrethroid	Flucythrinate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phenylpyrrole	Fludioxonil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Benzoylurea	Flufenoxuron dec	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dicarboximide	Flumiclorac-pentyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	N-phenylphtalamides	Flumioxazin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Fluquinconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Unclassified	Fluridone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Flusilazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Flusilazole degradate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Sulfonanilide	Flusulfamide	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Isourazole	Fluthiacet-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Oxathiin	Flutolanil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Flutriafol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Pyrethroid	Fluvalinate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phthalimide	Folpet	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Fonofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Fosthiazate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Unclassified	Fthalide	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyrazolium	Furametpyr	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Furametpyr degradate	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide safener	Unclassified	Furilazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrethroid	Halfenprox	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organochlorine	Heptachlor	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Heptachlor epoxide	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Other substance	Triazole	Hexaconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazinone	Hexazinone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Carboxamide	Hexythiazox	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Oxazole	Hymexazol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Veterinary substance	Imidazole	Imazalil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Imidazolinone	Imazamethabenz-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Imibenconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Unclassified	Indanofan	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Oxadiazine	Indoxacarb	0,2500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Organophosphate	Iprobenfos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Dicarboximide	Iprodione	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Iprodione degradate	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Isazofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acarcicide, Insecticide	Organophosphate	Isocarbophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Isofenphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Isofenphos oxon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	Isoprocarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Isopropalin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Plant growth regulator	Phosphorothiolate	Isoprothiolane	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide safener	Unclassified	Isoxadifen-ethyl	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Isoxathion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Isoxathion oxon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Uracil	Lenacil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Leptophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyalkanoic acid	MCPA-thioethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyalkanoic acid	MCPB-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Mecarbam	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Oxyacetamide	Mefenacet	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phenylamide	Metalaxyl-M	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide safener	Unclassified	Mefenpyr-diethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Other susbtance	Anilinopyrimidine	Mepanipyrim	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Benzanilide	Mepronil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phenylamide	Metalaxyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Methacrifos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Methidathion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Methomyl oxime	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Juvenile hormone mimic	Methoprene	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Organochlorine	Methoxychlor	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Phenylurea	Methyldymron	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Methyl parathion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Metominostrobin E	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Metominostrobin Z	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazinone	Metribuzin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Metribuzin-DA	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Desaminodiketo-metribuzin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Diketo-metribuzin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Mevinphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Molinate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Monocrotophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Myclobutanil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Naled	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Alkanamide	Napropamide	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Nereistoxin oxalate degradate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Herbicide	Dinitroaniline	Nitralin	0,2500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Diphenyl ether	Nitrofen	0,0250	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Unclassified	Nitrothal-isopropyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyridazinone	Norflurazon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Novaluron degradate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Degradate	Organochlorine	o,p'-DDD	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Organochlorine	o,p'-DDE	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organochlorine	o,p'-DDT	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Oryzalin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Oxidiazole	Oxadiazon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phenylamide	Oxadixyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Oxpoconazole-formyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Oxpoconazole fumarate	0,5000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Oxychlordane	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Diphenyl ether	Oxyfluorfen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organochlorine	p,p'-DDT	0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Plant growth regulator; Fungicide	Triazole	Paclobutrazol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Parathion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Pebulate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Penconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phenylurea	Pencycuron	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Pendimethalin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Chlorophenyl	Pentachloronitrobenzene	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Unclassified	Pentoxazone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Permethrin I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Permethrin II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Phenmedipham degradate	0,2500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Phenothrin I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Phenothrin II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Phenthoate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Phosalone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Phosphamidon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyridine compound	Picolinafen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Organophosphate	Piperophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	Pirimicarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Pretilachlor	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Bactericide; Wood preservative	Benzisothiazole	Probenazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Imidazole	Prochloraz	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Dicarboximide	Procymidone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Profenofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Plant growth regulator	Synthetic jasmonate	Prohydrojasmon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Prometryn	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Propachlor	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Carbamate	Propamocarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Anilide	Propanil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Propaphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Sulphite ester	Propargite	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Propazine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Propetamphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Plant growth regulator	Carbamate	Propham	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Propiconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Benzamide	Propyzamide	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Insecticide	Organophosphate	Prothiofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide, Veterinary substance	Organophosphate	Pyraclofos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Strobilurin	Pyraclostrobin	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Dessicant	Phenylpyrazole	Pyraflufen-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Phosphorothiolate	Pyrazophos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyrazolium	Pyrazoxyfen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Plant derived	Pyrethrin I	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Plant derived	Pyrethrin II	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Plant derived	Pyrethrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Fungicide	Thiocarbamate	Pyributicarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organothiophosphate	Pyridaphenthion	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Phenylpyridazine	Pyridate	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Pyrifenox E	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Pyrifenox Z	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Pyrimidinamine	Pyrimidifen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Pyriminobac-methyl E	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	Pyriminobac-methyl Z	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Pyrroloquinoline	Pyroquilon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Quinalphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Algicide	Unclassified	Quinoclamine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Quinoline	Quinoxyfen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryloxyphenoxypropionate	Quizalofop-ethyl	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Silafluofen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Simazine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Conazole	Simeconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Simetryn	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide, Insecticide	Tetronic acid	Spirodiclofen	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Morpholine	Spiroxamine	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Aryl triazolinone	Sulfentrazone	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Sulfotep	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Sulprofos	0,1000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Carbamate	Swep	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Microbiocide, Other substance	Mercaptobenzothiazole	TCMTB	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide	Pyrazolium	Tebufenpyrad	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Organophosphate	Tebupirimphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Bactericide	Benzanilide/Phthalamic acid	Tecloftalam	0,0200	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Plant growth regulator	Chlorophenyl	Tecnazene	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Tefluthrin	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Organophosphate	Temephos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Uracil	Terbacil	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Unclassified	Terbcarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Nematicide	Organophosphate	Terbufos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide, Degradate	Triazine	Terbutryn	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Veterinary substance	Organophosphate	Tetrachlorvinphos	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazole	Tetraconazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Acaricide, Insecticide	Bridged diphenyl	Tetradifon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Pyrethroid	Tetramethrin	0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Chloroacetamide	Thenylchlor	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Neonicotinoid	Thiamethoxam	0,1000	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Carboxamide	Thifluzamide	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Thiobencarb	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Unclassified	Thiocyclam	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide	Organophosphate	Thiometon	0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018

Fungicide	Chlorophenyl	Tolclofos-methyl			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Fungicide	Pyrazolium	Tolfenpyrad			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Wood preservative; Antifouling agent	Sulphamide	Tolylfluanid			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Tolylfluanid degradate			0,0500	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Degradate	Unclassified	Tralomethrin degradate			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Unclassified	trans-Chlordane			0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Organochlorine	trans-Nonachlor			0,0001	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide, Degradate	Triazole	Triadimefon			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide; Degradate	Triazole	Triadimenol			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Thiocarbamate	Triallate			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Sulfonylurea	Tribenuron-methyl			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Plant growth regulator, Herbicide	Organophosphate	Tribufos			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Benzamide	Trichlamid			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide, Veterinary substance	Organophosphate	Trichlorfon			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Pyridine compound	Triclopyr			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Triazolobenzothiazole	Tricyclazole			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Morpholine	Tridemorph			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Strobilurin	Trifloxystrobin			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Imidazole	Triflumizole			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Dinitroaniline	Trifluralin			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Isomer	Triazole	Uniconazole-P			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Oxazole	Vinclozolin			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	XMC			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Insecticide	Carbamate	Xylylcarb			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Fungicide	Benzamide	Zoxamide			0,0100	MDL	GC-MS and GC-MS/MS	18	Serbia	Škrbić et al., 2018
Herbicide	Triazine	Atrazine	0,0020	38,0000	0,0023	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Chloroacetamide	Metolachlor	0,0032	11,0000	0,0015	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Triazine	Simazine	0,0042	9,2100	0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Phenylamide	Metalaxyl	0,0017	0,3560	0,0051	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0080	0,3160	0,0037	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Hydroxyanilide	Fenhexamid	0,0158	0,3150	0,0076	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0055	0,1530	0,0065	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Strobilurin	Azoxystrobin	0,0010	0,1140	0,0031	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0103	0,0571	0,0047	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Dicarboximide	Iprodione	0,0469	0,0469	0,0044	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Propiconazole	0,0406	0,0406	0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Dinitroaniline	Pendimethalin	0,0085	0,0374	0,0023	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Carboxamide	Boscalid	0,0104	0,0363	0,0028	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Myclobutanil	0,0313	0,0313	0,0060	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Chloronitrile	Chlorothalonil	0,0158	0,0311	0,0041	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Fipronil desulfinyl amide	0,0090	0,0202	0,0032	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Methoxytriazine	Prometon	0,0011	0,0192	0,0025	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Alkanamide	Napropamide	0,0121	0,0175	0,0082	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	3,4-Dichloroaniline	0,0092	0,0145	0,0083	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0013	0,0141	0,0029	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Triazinone	Hexazinone	0,0137	0,0137	0,0084	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Fipronil sulfide	0,0117	0,0117	0,0018	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Fipronil sulfone	0,0083	0,0116	0,0035	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Fipronil-desulfinyl	0,0044	0,0081	0,0016	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Dinitroaniline	Trifluralin	0,0024	0,0024	0,0021	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Chloroacetamide	Alachlor			0,0017	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Allethrin			0,0060	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Dinitroaniline	Benfluralin			0,0020	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Butylate			0,0018	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Bactericide	Phthalimide	Captan			0,0102	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran			0,0031	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Organophosphate	Chlorpyrifos			0,0021	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Chlorpyrifos-oxon			0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Isoxazolidinone	Clomazone			0,0025	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Cycloate			0,0011	RL	GC-MS	370	United States	Smalling et al., 2021

Insecticide	Pyrethroid	Cyfluthrin	0,0052	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Aryloxyphenoxypropionate	Cyhalofop-butyl	0,0019	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin	0,0020	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	0,0056	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Cyproconazole	0,0047	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Anilinopyrimidine	Cyprodinil	0,0074	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Benzenedicarboxylic acid	Dacthal	0,0020	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin	0,0035	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0009	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Diazinon oxon	0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Difenoconazole	0,0105	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Morpholine	Dimethomorph	0,0060	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	EPTC	0,0015	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Pyrethroid	Esfenvalerate	0,0039	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Dinitroaniline	Ethalfluralin	0,0030	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Pyrethroid	Etofenprox	0,0022	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Oxazole	Famoxadone	0,0025	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Pyrimidine	Fenarimol	0,0065	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Fenbuconazole	0,0052	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide	Pyrethroid	Fenpropathrin	0,0041	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam	0,0044	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Phenylpyrrole	Fludioxonil	0,0073	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Strobilurin	Fluoxastrobin	0,0095	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Flusilazole	0,0045	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Flutriafol	0,0042	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Veterinary substance	Imidazole	Imazalil	0,0105	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	0,0040	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0037	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Malaoxon	0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Metconazole	0,0052	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide	Organophosphate	Methidathion	0,0072	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Juvenile hormone mimic	Methoprene	0,0064	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Organophosphate	Parathion-methyl	0,0034	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Molinate	0,0032	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Diphenyl ether	Oxyfluorfen	0,0031	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0041	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Organochlorine	p,p'-DDE	0,0036	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Organochlorine	p,p'-DDT	0,0040	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Pebulate	0,0023	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Pentachloroanisole	0,0047	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Chlorophenyl	Pentachloronitrobenzene	0,0031	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Permethrin	0,0034	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Veterinary substance	Pyrethroid	Phenothrin	0,0051	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	0,0044	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Triazine	Prometryn	0,0018	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Anilide	Propanil	0,0101	RL	GC-MS	370	United States	Smalling et al., 2021
Acaricide	Sulphite ester	Propargite	0,0061	RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Benzamide	Propyzamide	0,0050	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Strobilurin	Pyraclostrobin	0,0029	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0054	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0041	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Pyrethroid	Resmethrin	0,0057	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Acaricide, Veterinary substance	Synthetic pyrethroid	Tau-fluvalinate	0,0053	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Organophosphate	Tebupirimphos	0,0019	RL	GC-MS	370	United States	Smalling et al., 2021
Degradate	Unclassified	Tebupirimfos oxon	0,0028	RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide	Pyrethroid	Tefluthrin	0,0042	RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Tetraconazole	0,0056	RL	GC-MS	370	United States	Smalling et al., 2021
Acaricide, Insecticide	Bridged diphenyl	Tetradifon	0,0038	RL	GC-MS	370	United States	Smalling et al., 2021

Insecticide	Pyrethroid	Tetramethrin					0,0029		RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Thiobencarb					0,0019		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide, Degradate	Triazole	Triadimefon					0,0089		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide; Degradate	Triazole	Triadimenol					0,0080		RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Thiocarbamate	Triallate					0,0024		RL	GC-MS	370	United States	Smalling et al., 2021
Plant growth regulator, Herbicide	Organophosphate	Tribufos					0,0031		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Strobilurin	Trifloxystrobin					0,0047		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Imidazole	Triflumizole					0,0061		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Triazole	Triticonazole					0,0069		RL	GC-MS	370	United States	Smalling et al., 2021
Fungicide	Benzamide	Zoxamide					0,0035		RL	GC-MS	370	United States	Smalling et al., 2021
Herbicide	Uracil	Bromacil					0,0800		RL	GC-MS	370	United States	Smalling et al., 2021
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0200	0,3700			0,0270		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0140	0,2400			0,0260		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Organochlorine	Aldrin		0,1000			0,0530		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0080	0,0130			0,0100		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Acetochlor					0,0080		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Alachlor					0,0110		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Atrazine					0,0050		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Thiocarbamate	Butylate					0,0920		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Fungicide	Chloronitrile	Chlorothalonil					0,0180		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Cyanazine					0,2270		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Degradate	Unclassified	Desethylatrazine					0,0380		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Degradate	Triazine	Deisopropylatrazine					0,1320		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Dimethenamid					0,0130		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Thiocarbamate	EPTC					0,0990		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Fungicide	Phenylamide	Metalaxyl					0,0070		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid					0,0040		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate					0,0150		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Dinotefuran					0,0110		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam					0,0210		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Acetamiprid					0,0070		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Degradate	Neonicotinoid	Clothianidin					0,0090		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Metolachlor					0,0090		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Triazinone	Metribuzin					0,0180		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Pyridazinone	Norflurazon					0,0130		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Dinitroaniline	Pendimethalin					0,0140		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Veterinary substance	Pyrethroid	Permethrin					0,0420		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Methoxytriazine	Prometon					0,0360		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Propachlor					0,0230		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Propazine					0,0070		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Simazine					0,0070		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Pyrethroid	Tefluthrin					0,0340		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Nematicide	Organophosphate	Terbufos					0,1830		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Dinitroaniline	Trifluralin					0,0160		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Degradate	Organochlorine	p,p'-DDE					0,0070		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Organochlorine	p,p'-DDT					0,0190		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Other substance	Organochlorine	α-HCH					0,0360		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,0340		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Isomer	Unclassified	δ-HCH					0,0510		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Insecticide	Organochlorine	Heptachlor					0,0260		MDL	GC-MS and LC-MS/MS	-	Kazakhstan	Snow et al., 2020
Herbicide	Oxidiazole	Oxadiazon		<MQL			0,0130	0,0520	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb		<MQL			0,0002	0,0005	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Herbicide	Thiocarbamate	Triallate	0,1770	0,5130			0,0170	0,0520	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0043	0,3400			0,0020	0,0061	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam	0,0047	0,2150			0,0012	0,0037	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0260	0,1590			0,0000	0,0001	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0028	0,0307			0,0002	0,0007	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Insecticide	Neonicotinoid	Acetamiprid					0,0003	0,0010	MDL/ MQL	UHPLC-MS/MS and GC-MS	120	Portugal	Sousa et al., 2019
Herbicide	Chloroacetamide	S-metolachlor	<LOD	<LOD		<LOD	0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide	Organophosphate	Chlorpyrifos	<LOD	<LOD		<LOD	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	<LOD	<LOD		<LOD	0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010

Herbicide	Triazine	Atrazine	<LOD	<LOD	<LOD	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Urea	Isoproturon	<LOD	0,3280	0,1620	0,0100		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Chloroacetamide	Alachlor	<LOD	0,0759	0,0462	0,0080		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Degradate	Triazine	Desethylatrazine	<LOD	0,2910	0,0379	0,0080		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Dinitroaniline	Trifluralin	<LOD	0,0868	0,0199	0,0080		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide	Organophosphate	Methidathion	<LOD	0,0320	0,0170	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<LOD	0,0315	0,0100	0,0080		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Degradate	Unclassified	Malaoxon	<LOD	0,0642	0,0090	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion	<LOD	0,0381	0,0077	0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	<LOD	0,0295	0,0070	0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	<LOD	0,0149	0,0014	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	<LOD	0,0085	0,0008	0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Fungicide	Phosphorothiolate	Pyrazophos				0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Phenylamide	Diuron				0,0150		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Triazine	Simazine				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide	Organophosphate	Parathion-methyl				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide	Organophosphate	Phosalone				0,0020		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide	Organophosphate	Quinalphos				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl				0,0080		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos				0,0120		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
		Fenuron				0,0040		LOD	GC-FTD	-	Greece	Stamatis et al., 2010
Herbicide	Thiocarbamate	Molinate	0,0028	0,5493		0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzothiazinone	Bentazone	0,0013	0,5302		0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Ametryn	0,0483	0,1570		0,0017	0,0057	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0059	0,0991		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Benfuracarb		0,0642		0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Plant growth regulator	Organochlorine	Dalapon	0,0021	0,0518		0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0148	0,0434		0,0011	0,0035	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Aphicide	Pyridine compound	Flonicamid		0,0417		0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Carbamate	Diethofencarb		0,0405		0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Pyridine	Pymetrozine	0,0051	0,0317		0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Carbamate	Methomyl		0,0312		0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0042	0,0273		0,0005	0,0018	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzoic acid	Chloramben	0,0043	0,0252		0,0000	0,0001	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Diphenyl ether	Aclonifen		0,0203		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Other substance	Triazole	Hexaconazole	0,0073	0,0172		0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Ipconazole	0,0088	0,0147		0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Bitertanol		0,0120		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyridine compound	Picloram	0,0053	0,0114		0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Myclobutanil	0,0102	0,0107		0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Veterinary substance, Other substance	Quinoline	Ethoxyquin	0,0026	0,0094		0,0013	0,0043	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Thiocarbamate	Prosulfocarb	0,0017	0,0079		0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Carbamate	Propoxur		0,0071		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,0070		0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Plant growth regulator	Phenylurea	Forchlorfenuron		0,0068		0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Dioxacarb		0,0066		0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Fenbuconazole	0,0035	0,0064		0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzoic acid	Dicamba	0,0010	0,0062		0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Linuron	0,0013	0,0062		0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Chloroacetamide	Metolachlor	0,0010	0,0050		0,0006	0,0022	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Pyrimidine	Fenarimol	0,0024	0,0049		0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Cycluron	0,0016	0,0046		0,0001	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Nematicide	Carbamate	Carbosulfan	0,0027	0,0045		0,0001	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017

Fungicide	Triazole	Propiconazole	0,0030	0,0042		0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Cyclohexadione	Tralkoxydim		0,0042		0,0012	0,0042	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Amidosulfuron		0,0040		0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP	0,0016	0,0038		0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Monocrotophos		0,0036		0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0018	0,0035		0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide	Pyrazolium	Tebufenpyrad		0,0035		0,0005	0,0018	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Nematicide	Organophosphate	Terbufos		0,0035		0,0062	0,0206	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole	0,0033	0,0034		0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Fenoxycarb		0,0025		0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Oxathiin	Carboxin		0,0024		0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Cyclohexadione	Tepraloxydim		0,0022		0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Mevinphos		0,0018		0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide, Veterinary substance	Benzenamine	Cymiazol		0,0016		0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Neonicotinoid	Thiamethoxam		0,0016		0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Degradate	Triazine	Desethylatrazine	0,0011	0,0014		0,0019	0,0062	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Veterinary substance	Imidazole	Imazalil	0,0010	0,0014		0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide; Veterinary substance	Carbamate	Promecarb		0,0013		0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Phenylamide	Oxadixyl		0,0012		0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Degradate	Triazine	Deisopropylatrazine		0,0012		0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Cyanazine		0,0011		0,0016	0,0054	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Thiophene	Silthiofam		0,0011		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Tetraconazole		0,0010		0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Triasulfuron		0,0010		0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazinone	Metribuzin		0,0009		0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Simazine		0,0002		0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Chloroacetamide	Dimethachlor		0,0002		0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Methoprotryne		0,0001		0,0007	0,0022	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide, Insecticide	Tetronic acid	Spirodiclofen				0,0006	0,0019	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acarcicide, Insecticide	Organophosphate	Isocarbophos				0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide	Tetrazine	Clofentezine				0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide	Carboxamide	Hexythiazox				0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide, Insecticide	Quinazoline	Fenazaquin				0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide, Insecticide	Pyrazolium	Fenpyroximate				0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Acaricide, Miticide	Bridged diphenyl	Benzoximate				0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Algistat, Herbicide, Other substance	Triazine	Cybutryne				0,0007	0,0025	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Azaconazole				0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin	Azoxystrobin				0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Acylamino acid	Benalaxyl				0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Carboxamide	Boscalid				0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Bromuconazole				0,0012	0,0040	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Pyrimidinol	Bupirimate				0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Cyanoimidazole	Cyazofamid				0,0002	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Cyanoacetamide oxime	Cymoxanil				0,0000	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Cyproconazole				0,0009	0,0031	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Anilinopyrimidine	Cyprodinil				0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Difenoconazole				0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Morpholine	Dimethomorph				0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin	Dimoxystrobin				0,0006	0,0018	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Diniconazole				0,0009	0,0029	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Epoxiconazole				0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Oxazole	Famoxadone				0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Imidazole	Fenamidone				0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Hydroxyanilide	Fenhexamid				0,0006	0,0019	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Piperidines	Fenpropidin				0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Phenylpyrrole	Fludioxonil				0,0012	0,0039	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Benzamide	Fluopicolide				0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin	Fluoxastrobin				0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Fluquinconazole				0,0008	0,0027	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Flusilazole				0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Flutriafol				0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Acylalanine	Furalaxyl				0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Carbamate	Iprovalicarb				0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017

Fungicide	Mandelamide	Mandipropamid	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Phenylamide	Metalaxyl	0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Metconazole	0,0007	0,0025	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Benzophenone	Metrafenone	0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Penconazole	0,0010	0,0032	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Phenylurea	Pencycuron	0,0010	0,0033	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin type-methoxyacrylate	Picoxystrobin	0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Imidazole	Prochloraz	0,0008	0,0025	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Dicarboximide	Procymidone	0,0009	0,0031	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Carbamate	Propamocarb	0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Quinazolinone	Proquinazid	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin	Pyraclostrobin	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Anilino pyrimidine	Pyrimethanil	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Quinoline	Quinoxyfen	0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Morpholine	Spiroxamine	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Chlorophenyl	Tolclofos-methyl	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazolobenzothiazole	Tricyclazole	0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Strobilurin	Trifloxystrobin	0,0006	0,0019	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Imidazole	Triflumizole	0,0008	0,0027	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Triazole	Triticonazole	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide	Benzamide	Zoxamide	0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Acaricide	Phenylpyridinamine	Fluazinam	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl	0,0012	0,0039	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Degradate	Pyrimidinol	Ethirimol	0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Degradate	Triazole	Triadimefon	0,0007	0,0022	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Other susbtance	Anilinopyrimidine	Mepanipyrim	0,0850	0,0844	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Plant growth regulator	Phosphorothiolate	Isoprothiolane	0,0002	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Seed treatment	Benzimidazole	Fuberidazole	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Seed treatment, Bactericide	Anilide	Pyracarbolid	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide, Wood preservative; Antifouling agent	Sulphamide	Tolylfluanid	0,0084	0,0281	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Fungicide; Degradate	Triazole	Triadimenol	0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Aryloxyalkanoic acid	2,4-DB	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Atrazine	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Amide	Beflubutamid	0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Diphenyl ether	Bifenox	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyrimidinyl carboxy compound	Bispyribac	0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Uracil	Bromacil	0,0012	0,0040	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Carbamate	Carbetamide	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazolone	Carfentrazone-ethyl	0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyridazinone	Chloridazon	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Chlorotoluron	0,0003	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Dimethylurea	Chloroxuron	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Chlorsulfuron	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Cyclohexanedione	Clethodim	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Isoxazolidinone	Clomazone	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Thiocarbamate	Cycloate	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Carbamate	Desmedipham	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Aryloxyalkanoic acid	Dichlorprop	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Carboxamide	Diflufenican	0,0007	0,0025	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Oxadiazolone/phenylurea	Dimefuron	0,0010	0,0033	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Dinitrophenol	Dinoseb	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Thiadiazolylurea	Ethidimuron	0,0015	0,0050	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	N-phenylphtalamides	Flumioxazin	0,0011	0,0036	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyrazolium	Halosulfuron-methyl	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzamide	Isoxaben	0,0001	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Methabenzthiazuron	0,0000	0,0001	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Metobromuron	0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Metoxuron	0,0017	0,0058	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Monolinuron	0,0008	0,0028	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Phenylurea	Monuron	0,0022	0,0074	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Nicosulfuron	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Oxidiazole	Oxadiazon	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Oxasulfuron	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017

Herbicide	Dinitroaniline	Pendimethalin	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Carbamate	Phenmedipham	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyridine compound	Picolinafen	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Methoxytriazine	Prometon	0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Prometryn	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Aryloxyphenoxypropionate	Propaquizafop	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Propazine	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzamide	Propyzamide	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Phenylpyridazine	Pyridate	0,0076	0,0254	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Quinolinecarboxylic acid	Quinclorac	0,0020	0,0065	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Quinoline	Quinmerac	0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Rimsulfuron	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Methoxytriazine	Secbumeton	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Aryl triazolinone	Sulfentrazone	0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Tebuthiuron	0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Thifensulfuron-methyl	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Tribenuron-methyl	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazine	Trietazine	0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Algicide	Unclassified	Quinoclamine	0,0001	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Degradate	Nitrophenyl	Acifluorfen	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Degradate	Sulfonylurea	Metsulfuron	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Degradate	Triazine	Terbutryn	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphate	Acephate	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Neonicotinoid	Acetamiprid	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Alanycarb	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Aminocarb	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Butocarboxim	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Anthranilic diamide	Chlorantraniliprole	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphate	Chlorpyrifos	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphates	Coumaphos	0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Benzoylurea	Diflubenzuron	0,0009	0,0030	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Neonicotinoid	Dinotefuran	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Pyrethroid	Etofenprox	0,0006	0,0021	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Fenobucarb	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Benzene-dicarboxamide	Flubendiamide	0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Furathiocarb	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Unclassified	Hydramethylnon	0,0011	0,0037	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Oxadiazine	Indoxacarb	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphate	Isofenphos-methyl	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Diacylhydrazine	Methoxyfenozide	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphate	Parathion-methyl	-	-	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Carbamate	Pirimicarb	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Micro-organism derived	Spinosyn A	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Micro-organism derived	Spinosyn D	0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Tetronic acid	Spiromesifen	0,0005	0,0017	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Tetramic acid	Spirotetramat	0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Diacylhydrazine	Tebufenozide	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Azinphos-ethyl	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Hydrazine carboxylate	Bifenazate	0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Pyrethroid	Bifenthrin	0,0012	0,0041	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Unclassified	Buprofezin	0,0006	0,0019	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Chlorpyrifos-methyl	0,0076	0,0254	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Disulfoton	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Benzoylurea	Flufenoxuron	0,0000	0,0001	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Mecarbam	0,0008	0,0027	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Methacrifos	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Methidathion	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Parathion	-	-	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Phenthoate	0,0007	0,0022	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Phosalone	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Phosphamidon	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Profenofos	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Pyridazinone	Pyridaben	0,0008	0,0027	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017

Insecticide, Acaricide	Organophosphate	Quinalphos	0,0008	0,0028	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Carbamate	Thiofanox	0,0007	0,0024	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide	Organophosphate	Vamidothion	0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Ethion	0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Nematicide	Carbamate	Aldicarb	0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Nematicide	Carbamate	Oxamyl	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos	0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos	0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Benzoylurea	Lufenuron	0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	0,0005	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Propetamphos	0,0012	0,0041	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Insect growth regulator	Unclassified	Halofenozide	0,0009	0,0029	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Insect Growth Regulator	Benzoylurea	Hexaflumuron	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Larvicide, Veterinary substance	Benzoylurea	Triflumuron	0,0004	0,0013	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Mollusicide	Neonicotinoid	Thiacloprid	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Mollusicide, Acaricide	Carbamate	Mexacarbate	0,0001	0,0002	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Molluscicide, Bird repellent	Carbamate	Methiocarb	0,0007	0,0023	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Molluscicide, Ovicide	Carbamate	Thiodicarb	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Nematicide	Organophosphate	Ethoprophos	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Nematicide	Organophosphate	Fosthiazate	0,0004	0,0012	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Other substance , Veterinary substance	Organophosphate	Phoxim	0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Organophosphate	Azamethiphos	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin	0,0013	0,0042	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Semicarbazone	Metaflumizone	0,0013	0,0043	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Unclassified	Pyriproxyfen	0,0002	0,0007	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Benzoylurea	Teflubenzuron	0,0086	0,0286	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Organophosphate	Temephos	0,0000	0,0001	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance	Organophosphate	Trichlorfon	0,0003	0,0011	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion	0,0008	0,0028	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide; Insect growth regulator	Benzoylurea	Novaluron	0,0076	0,0254	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Isomer	Unclassified	2,3,5-Trimethacarb	0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Isomer	Triazole	Uniconazole-P	0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Degradate	Unclassified	3,5-Dichlorobenzoic acid	0,0001	0,0004	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Degradate	Unclassified	Terbuthylazine-desethyl	0,0019	0,0064	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017

Degradate	Unclassified	Malaoxon					0,0001	0,0003	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Nematicide	Organophosphate	Fenamiphos					0,0006	0,0020	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Plant growth regulator, Herbicide, Other substance	Phenylurea	Thidiazuron					0,0000	0,0000	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Plant growth regulator; Fungicide	Triazole	Paclobutrazol					0,0009	0,0031	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Pyrimidinylsulfonyl urea	Foramsulfuron					0,0008	0,0028	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Isoproturon					0,0003	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Oxyacetamide	Isoxaflutole					0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Uracil	Lenacil					0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Mesosulfuron-methyl					0,0005	0,0016	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Phenylamide	Diuron					0,0002	0,0006	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Benzofuran	Ethofumesate					0,0004	0,0015	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Urea	Fenuron					0,0001	0,0005	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Sulfonylurea	Flazasulfuron					0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Cyclodiene	Flumetsulam					0,0003	0,0010	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Phenylurea	Fluometuron					0,0011	0,0038	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Triazinone	Metamitron					0,0002	0,0009	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Herbicide	Chloroacetamide	Metazachlor					0,0002	0,0008	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Nematicide, Degradate, Veterinary substance	Avermectinas	Avermectin B1a					0,0086	0,0285	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide, Acaricide, Nematicide, Degradate, Veterinary substance	Avermectinas	Avermectin B1b					0,0004	0,0014	LOD/LOQ	UHPLC-QToF-MS	-	Macedonia	Stipaničev et al., 2017
Insecticide	Organophosphate	Acephate	0,1800	4,4700	1,6700		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos	0,0400	1,6800	0,7900		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Degradate	Unclassified	Deisopropylhydroxyatrazine	0,0500	0,4700	0,2200		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Degradate	Unclassified	Deethylhydroxyatrazine	0,0500	0,3800	0,1800		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Degradate	Unclassified	Hydroxyatrazine	0,0500	0,1800	0,0900		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide	Chloroacetamide	Metolachlor	0,0010	0,0700	0,0200		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide	Benzothiazinone	Bentazone	0,0030	0,0600	0,0200		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide	Triazine	Atrazine	0,0080	0,0400	0,0200		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	0,0020	0,0300	0,0100		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Degradate	Unclassified	Desethylatrazine	0,0050	0,0200	0,0100		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0010	0,0200	0,0100		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide	Urea	Isoproturon	0,0010	0,0300	0,0030		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Degradate	Triazine	Deisopropylatrazine	0,0020	0,0100	0,0010		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide	Triazine	Simazine	0,0030	0,0040	0,0010		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0010	0,0020	0,0003		0,0001	0,0004	MDL/LOQ	LC-MS/MS	-	China	Sun et al., 2018
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0010	0,2770	0,0370	0,0690	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0010	0,0790	0,0130	0,0180	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide, Other substance	Organochlorine	α-HCH	0,0030	0,0150	0,0070	0,0040	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin		0,0160	0,0050	0,0100	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH		0,0370	0,0040	0,0090	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide	Organochlorine	Aldrin		0,0130	0,0010	0,0030	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Insecticide	Organochlorine	Heptachlor		0,0070	0,0010	0,0020	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Degradate	Unclassified	Heptachlor epoxide		0,0010	0,0002	0,0004	0,0030		LOQ	GC-MSD	-	Poland	Tomza-Marciniak and Witczak, 2010
Acaricide, Insecticide	Quinazoline	Fenazaquin					0,0500	0,1800	LOD/LOQ	GC-MS	2	Turkey	Turan et al., 2020
Degradate	Unclassified	Hydroxyatrazine		<0,0040			0,0040	0,0080	MDL/RL	LC-MS/MS	17	United States	Thompson et al., 2021
Degradate	Unclassified	Metolachlor ESA		0,0919			0,0340	0,0680	MDL/RL	LC-MS/MS	17	United States	Thompson et al., 2021
Herbicide	Triazine	Atrazine		0,0153			0,0034	0,0068	MDL/RL	LC-MS/MS	17	United States	Thompson et al., 2021
Herbicide	Chloroacetamide	Metolachlor		0,0096			0,0045	0,0090	MDL/RL	LC-MS/MS	17	United States	Thompson et al., 2021
Degradate	Unclassified	Desethylatrazine		0,0086			0,0055	0,0110	MDL/RL	LC-MS/MS	17	United States	Thompson et al., 2021
Herbicide	Triazine	Atrazine	0,0200	0,0800			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Fungicide, Other substance	Phenol	o-Phenylphenol		0,0600			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide	Triazine	Simazine		0,0300			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide	Chloroacetamide	Metazachlor		0,0200			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide, Degradate	Benzonitrile	Dichlobenil	0,0070	0,0100			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide	Chloroacetamide	Metolachlor		0,0060			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide	Thiocarbamate	Triallate					n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002

Herbicide, Degradate	Triazine	Terbutryn			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Herbicide	Benzofuran	Ethofumesate			n.i.			GC-AED-MS	-	Netherlands	van Stee et al., 2002
Insecticide, Degradate	Neonicotinoid	Clothianidin	<MDL	<MDL	0,0001	0,1000	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Fungicide, Degradate	Benzimidazole	Carbendazim	0,0007	0,1670	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	3,5,6-trichloro-2-pyridinol	0,0018	0,1280	0,0001	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide	Triazine	Atrazine	0,0039	0,1160	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,0012	0,0320	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Hydroxyatrazine	0,0029	0,0213	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide	Neonicotinoid	Acetamiprid	0,0003	0,0186	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Desmethyl-acetamiprid	<MDL	0,0173	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Triazine	Deisopropylatrazine	0,0061	0,0170	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Fipronil sulfone	0,0000	0,0165	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,0000	0,0159	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Fipronil-desulfinyl	0,0000	0,0145	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil	0,0000	0,0144	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Desethylatrazine	0,0015	0,0085	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Imidacloprid-urea	0,0003	0,0063	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Desnitro-imidaclopride	0,0002	0,0060	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Deethyldeisopropylatrazine	0,0005	0,0059	0,0001	0,1000	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide, Plant growth regulator and Degradate	Alkylchlorophenoxy	2,4-D	0,0010	0,0056	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0001	0,0054	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide	Benzothiazinone	Bentazone	0,0001	0,0047	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Fipronil sulfide	0,0000	0,0032	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Terbuthylazine-desethyl	0,0001	0,0024	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide	Neonicotinoid	Thiamethoxam	<MDL	0,0018	0,0001	0,1000	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	Fipronil amide	<MDL	0,0006	0,0000	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	<MDL	0,0003	0,0000	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide	Triazine	Simazine	<MDL	0,0003	0,0000	n.i.	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide	Neonicotinoid	Dinotefuran			n.i.	0,0500	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Aphicide	Pyridine compound	Flonicamid			n.i.	0,0500	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			n.i.	0,1000	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Veterinary substance	Neonicotinoid	Nitenpyram			n.i.	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide	Sulfoximine	Sulfoxaflor			n.i.	0,0500	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid			n.i.	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Degradate	Unclassified	5-hydroxy imidacloprid			n.i.	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide	Aryloxyalkanoic acid	Mecoprop			n.i.	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide	Aryloxyalkanoic acid	Dichlorprop			n.i.	0,0200	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide, Plant growth regulator	Chlorophenoxy acid	2,4,5-T			n.i.	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Herbicide, Plant growth regulator	Phenoxipropionic acid	2,4,5-TP			n.i.	0,0100	MDL/ LOQ	UPLC-MS/MS	8	Vietnan	Wan et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,0013	0,0038	0,0086		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Degradate	Unclassified	Endosulfan sulfate	0,0002	0,0010	0,0010		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Degradate	Organochlorine	p,p'-DDE	0,0000	0,0009	0,0003		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Isomer	Unclassified	trans-Chlordane	0,0001	0,0009	0,0015		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Isomer	Unclassified	cis-Chlordane	0,0000	0,0007	0,0008		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0000	0,0007	0,0033		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Degradate	Unclassified	Endrin aldehyde	0,0004	0,0006	0,0136		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0002	0,0006	0,0031		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide	Organochlorine	p,p'-DDT	0,0000	0,0006	0,0005		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0000	0,0005	0,0013		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Isomer	Unclassified	δ-HCH		0,0004	0,0052		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Isomer	Organochlorine	trans-Nonachlor	0,0000	0,0004	0,0014		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Veterinary substance	Organochlorine	Methoxychlor	0,0001	0,0004	0,0020		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Other substance	Organochlorine	α-HCH		0,0002	0,0011		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide	Organochlorine	Heptachlor	0,0000	0,0002	0,0004		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0001	0,0001	0,0018		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide	Organochlorine	Aldrin	0,0001	0,0001	0,0040		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Degradate	Unclassified	Heptachlor epoxide	0,0000	0,0001	0,0004		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Isomer	Organochlorine	cis-Nonachlor	0,0000	0,0001	0,0023		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide, Acaricide	Organochlorine	Endosulfan I			0,0035		MDL	GC-MS	56	Singapore	Wang and Kelly, 2017

Insecticide, Avicide, Rodenticide	Organochlorine	Endrin								0,0080	MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Degradate	Unclassified	Endrin ketone								0,0067	MDL	GC-MS	56	Singapore	Wang and Kelly, 2017
Insecticide	Organophosphate	Chlorpyrifos			0,0326	0,0107	0,0676	0,0236		0,0060	MDL	HPLC–DAD	10	Malaysia	Wee et al., 2016
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon			0,0292	0,0058	0,0372	0,0526		0,0030	MDL	HPLC–DAD	10	Malaysia	Wee et al., 2016
Insecticide, Acaricide	Organophosphate	Quinalphos			0,0126	0,0178	0,0352	0,0498		0,0030	MDL	HPLC–DAD	10	Malaysia	Wee et al., 2016
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,0000	0,0000						0,0000	MDL	LC-MS/MS	-	Malaysia	Wee et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,0380			0,0131			0,0020	LOD	LC-MS/MS	120	United States	Williams and Sweetman, 2018
Insecticide	Neonicotinoid	Thiamethoxam		0,0600			0,0106			0,0020	LOD	LC-MS/MS	120	United States	Williams and Sweetman, 2018
Insecticide, Degradate	Neonicotinoid	Clothianidin		0,0370			0,0086			0,0020	LOD	LC-MS/MS	120	United States	Williams and Sweetman, 2018
Insecticide	Neonicotinoid	Acetamiprid								0,0020	LOD	LC-MS/MS	120	United States	Williams and Sweetman, 2018
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid								0,0020	LOD	LC-MS/MS	120	United States	Williams and Sweetman, 2018
Fungicide	Triazine	Anilazine	<LOD	<LOD					<LOD	0,0700	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide	Dicarboximide	Iprodione	<LOD	<LOD					<LOD	0,0700	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide	Phenylamide	Metalaxyl	<LOD	<LOD					<LOD	0,0700	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide	Phenylurea	Pencycuron	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide, Degradate	Benzimidazole	Carbendazim	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide, Degradate	Triazole	Triadimefon	<LOD	<LOD					<LOD	0,0700	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Chloroacetamide	Alachlor	<LOD	<LOD					<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Benzothiazinone	Bentazone	<LOD	<LOD					<LOD	0,0200	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Urea	Benzthiazuron	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Uracil	Bromacil	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Carbamate	Carbetamide	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridazinone	Chloridazon	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Benzoic acid	Dicamba	<LOD	<LOD					<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Dinitrophenol	Dinoseb	<LOD	<LOD					<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Benzofuran	Ethofumesate	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyrrolidine	Flurochloridone	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridine compound	Fluroxypyr-meptyl	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Carbamate	Karbutilate	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Aryloxyalkanoic acid	Mecoprop	<LOD	<LOD					<LOD	0,0200	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Urea	Methabenzthiazuron	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Diphenyl ether	Nitrofen	<LOD	<LOD					<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Chloroacetamide	Propachlor	<LOD	<LOD					<LOD	0,2000	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Anilide	Propanil	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Triazine	Propazine	<LOD	<LOD					<LOD	0,0200	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Benzamide	Propyzamide	<LOD	<LOD					<LOD	0,0700	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Quinoline	Quinmerac	<LOD	<LOD					<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013

Herbicide	Triazine	Simazine	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Urea	Tebuthiuron	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Dinitroaniline	Trifluralin	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide, Degradate	Aryloxyalkanoic acid	MCPA	<LOD	<LOD		<LOD	0,0200	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide, Plant growth regulator	Carbamate	Chlorpropham	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide, Plant growth regulator	Organochlorine	Dalapon	<LOD	<LOD		<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide	Benzoylurea	Diflubenzuron	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Acaricide, Degradate	Carbamate	Methomyl	<LOD	<LOD		<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<LOD	<LOD		<LOD	0,0800	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Nematicide, Acaricide, Degradate	Carbamate	Carbofuran	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Veterinary substance	Benzoylurea	Teflubenzuron	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Degradate, Herbicide	Aryloxyphenoxypropionate	Fenoxaprop	<LOD	<LOD		<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Triazinone	Hexazinone	<LOD	<LOD		<LOD	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Aryloxyalkanoic acid	MCPB	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Triazinone	Metamitron	<LOD	<LOD		<LOD	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide, Herbicide, Fungicide, Molluscicide, Plant growth regulator, Wood preservative	Organochlorine	Pentachlorophenol	<LOD	<LOD		<LOD	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridine compound	Clopyralid	0,0400	3,5000		0,3800	0,0300	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridine compound	Picloram	0,0400	2,1000		0,2400	0,0300	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Urea	Fenuron	0,2200	0,3300		0,2800	0,0400	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridine compound	Triclopyr	0,2500	0,2900		0,2700	0,0800	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Pyridine compound	Fluroxypyr	0,0600	0,2000		0,0700	0,0500	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Herbicide	Triazine	Atrazine	0,0200	0,0600		0,0300	0,0100	LOD	UPLC-QqQ-DAD and UPLC-QqQ, HPLC-MS and DAD, and GC-MS	60	China	Wolf et al., 2013
Insecticide	Organophosphate	Fenitrothion					0,3500	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide	Organophosphate	Parathion					0,2100	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide	Organophosphate	Quinalphos					0,3700	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos					0,5600	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate					0,2200	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					0,2600	LOD	GC-FPD	-	China	Xiao et al., 2006
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<0,0007	<0,0007	<0,0007	<0,0007	0,0002	0,0008	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Benzothiazinone	Bentazone	0,0015	0,8506	0,2259	0,0601	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Chloroacetamide	Acetochlor	0,0022	0,6775	0,0807	0,0291	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Veterinary substance	Organophosphate	Trichlorfon	0,0443	0,0443	0,0443	0,0443	0,0003	0,0011	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0021	0,1217	0,0419	0,0323	0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Carbamate	Isoprocarb	0,0005	0,0391	0,0085	0,0033	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Chloroacetamide	Butachlor	0,0081	0,0081	0,0081	0,0081	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019

Insecticide	Neonicotinoid	Acetamiprid	0,0001	0,0666	0,0080		0,0026	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Carbamate	Fenobucarb	0,0003	0,0227	0,0056		0,0032	0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,0006	0,0500	0,0050		0,0018	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dimethoate	0,0006	0,0078	0,0033		0,0035	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Organophosphate	Acephate	0,0006	0,0088	0,0031		0,0025	0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide	Organophosphate	Profenofos	0,0014	0,0035	0,0025		0,0025	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate	0,0001	0,0049	0,0016		0,0015	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Unclassified	Terbufos sulfone	0,0016	0,0016	0,0016		0,0016	0,0001	0,0003	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Diacylhydrazine	Tebufenozide	0,0004	0,0050	0,0015		0,0008	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Organophosphate	Anilofos	0,0001	0,0038	0,0009		0,0002	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Thiocarbamate	Molinate	0,0001	0,0010	0,0003		0,0002	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Triazine	Deisopropylatrazine	0,0003	0,0003	0,0003		0,0003	0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Carbamate	Asulam						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Triazine	Propazine						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide	Carbamate	Terbucarb						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Organophosphate	Oxydemeton-methyl						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide	Pyridine	Pymetrozine						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide	Organophosphate	Monocrotophos						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide	Organophosphate	Vamidothion						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos						0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide, Degradate	Organophosphate	Methamidophos						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Insecticide, Molluscicide, Ovicide	Carbamate	Thiodicarb						0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Unclassified	Aldicarb sulfoxide						0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Unclassified	Terbuthylazine-desethyl						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Unclassified	Fenamiphos sulfone						0,0000	0,0000	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Unclassified	Fenamiphos sulfoxide						0,0000	0,0001	MOD/ MOQ	UPLC-ESI-QqQ-MS/MS	25	China	Xu et al., 2019
Degradate	Organochlorine	p,p'-DDE	0,0016	0,0015	0,0460	0,0244		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide	Organochlorine	o,p'-DDT	0,0041	0,1610	0,0352	0,0291		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH		0,1200	0,0313	0,0227		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0123	0,0605	0,0311	0,0156		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide	Organochlorine	Aldrin	0,0017	0,0324	0,0230	0,0081		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Herbicide	Chloroacetamide	Metolachlor	0,0155	0,0272	0,0227	0,0052		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Degradate	Unclassified	Endosulfan sulfate	0,0047	0,0514	0,0226	0,0124		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0014	0,0273	0,0124	0,0088		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide	Organochlorine	p,p'-DDT		0,0300	0,0114	0,0052		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin		0,0141	0,0080	0,0043		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Other substance	Organochlorine	α-HCH	0,0013	0,0178	0,0076	0,0036		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Isomer	Unclassified	trans-Chlordane	0,0005	0,0308	0,0073	0,0129		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Herbicide	Dinitroaniline	Trifluralin	0,0034	0,0052	0,0045	0,0013		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Degradate, Veterinary substance	Pyrethroid	Deltamethrin		0,0063	0,0043	0,0013		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Degradate	Unclassified	Heptachlor epoxide	0,0005	0,0120	0,0041	0,0029		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Veterinary substance	Organochlorine	Metoxychlor		0,0216	0,0041	0,0037		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Isomer	Unclassified	cis-Chlordane	0,0003	0,0082	0,0029	0,0020		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide, Termiticide, Veterinary substance	Pyrethroid	Fenvalerate		0,0032	0,0023	0,0006		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Herbicide	Chloroacetamide	Alachlor		0,0057	0,0017	0,0021		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide	Organophosphate	Chlorpyrifos	0,0003	0,0019	0,0015	0,0004		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,0001	0,0138	0,0015	0,0119		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Degradate	Unclassified	Endrin aldehyde		0,0050	0,0015	0,0007		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Herbicide	Diphenyl ether	Nitrofen		0,0023	0,0013	0,0004		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin		0,0019	0,0013	0,0002		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Isomer	Unclassified	δ-HCH	0,0004	0,0046	0,0012	0,0007		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide	Organochlorine	Heptachlor	0,0007	0,0085	0,0010	0,0031		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Acaricide	Organochlorine	Dicofol		0,0026	0,0009	0,0008		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide	Organochlorine	Endosulfan II		0,0122	0,0007	0,0022		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin		0,0045	0,0006	0,0029		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Degradate	Organochlorine	p,p'-DDD		0,0021	0,0006	0,0016		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Herbicide	Chloroacetamide	Acetochlor		0,0015	0,0006	0,0004		n.i.			GC-μECD	-	China	Xue and Xu, 2006
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0001	0,0001				n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Insecticide, Other substance	Organochlorine	α-HCH	0,0001	0,0001				n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000

Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0000	0,0001					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Insecticide, Degradate	Organochlorine	p,p'-DDD	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Degradate	Organochlorine	p,p'-DDE	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Insecticide	Organochlorine	p,p'-DDT	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Isomer	Unclassified	trans-Chlordane	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Isomer	Unclassified	δ-HCH	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Isomer	Organochlorine	trans-Nonachlor	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Isomer	Unclassified	cis-Chlordane	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Insecticide	Organochlorine	Heptachlor	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Fungicide, Biocide, Degradate, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Degradate	Unclassified	Oxychlordane	0,0000	0,0000					n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Isomer	Organochlorine	cis-Nonachlor							n.i.			GC-ECD	-	Egypt	Yamashita et al., 2000
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0401	0,1540			0,0783	0,0382	0,0725	0,0001	LOQ	LC-MS/MS	14	China	Yi et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam	0,0163	0,0702			0,0502	0,0167	0,0532	0,0000	LOQ	LC-MS/MS	14	China	Yi et al., 2019
Insecticide	Neonicotinoid	Acetamiprid	0,0062	0,0771			0,0360	0,0276	0,0344	0,0000	LOQ	LC-MS/MS	14	China	Yi et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0131	0,0380			0,0253	0,0061	0,0252	0,0000	LOQ	LC-MS/MS	14	China	Yi et al., 2019
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0004	0,0030			0,0012	0,0007	0,0010	0,0001	LOQ	LC-MS/MS	14	China	Yi et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon			<MDL		0,2502			0,0311	MDL	HPLC-DAD	-	Malaysia	Zainuddin et al. 2020
Insecticide, Acaricide	Organophosphate	Quinalphos			<MDL		0,1982			0,0419	MDL	HPLC-DAD	-	Malaysia	Zainuddin et al. 2020
Insecticide	Organophosphate	Chlorpyrifos			<MDL		0,1619			0,0201	MDL	HPLC-DAD	-	Malaysia	Zainuddin et al. 2020
Herbicide	Urea	Chlorotoluron			0,0052	0,0060	0,0218	0,0308		0,0000	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Insecticide, Acaricide, Degradate	Organophosphate	Dichlorvos			0,0024	0,0000	0,0365	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Herbicide	Triazine	Propazine			0,0005	0,0000	0,0106	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Fungicide	Phenylamide	Metalaxyl			0,0038	0,0000	0,0099	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Herbicide	Triazine	Atrazine			0,0023	0,0000	0,0059	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Insecticide, Acaricide, Degradate	Organophosphate	Omethoate			0,0031	0,0000	0,0041	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Herbicide	Triazine	Ametryn			0,0002	0,0000	0,0006	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon			0,0005	0,0000	0,0005	0,0000		0,0000	LOQ	HPLC-MS/MS	-	China	Zhang et al. 2021b
Degradate	Organochlorine	p,p'-DDE	0,0110	0,0211						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide	Organochlorine	Heptachlor	0,0077	0,0165						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide	Organochlorine	Aldrin	0,0055	0,0155						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Degradate	Unclassified	Heptachlor epoxide	0,0077	0,0145						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,0062	0,0134						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,0060	0,0110						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Isomer	Unclassified	δ-HCH	0,0034	0,0082						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,0040	0,0071						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Degradate	Chlorinated hydrocarbon	Dieldrin	0,0043	0,0054						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide	Organochlorine	p,p'-DDT	0,0011	0,0044						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Other substance	Organochlorine	α-HCH	0,0021	0,0035						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Insecticide, Degradate	Organochlorine	p,p'-DDD		0,0012						0,0000	LOD	GC-ECD	-	China	Zhang et al., 2014
Fungicide	Triazole	Epoxiconazole			0,0007	0,0004	0,0028	0,0038		0,0001	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Herbicide	Triazine	Atrazine			0,0008	0,0007	0,0018	0,0007		0,0000	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Herbicide	Urea	Isoproturon			0,0003	0,0001	0,0015	0,0021		0,0000	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Insecticide	Organophosphate	Chlorpyrifos			0,0009	0,0006	0,0012	0,0014		0,0000	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Herbicide	Triazine	Simazine			0,0009	0,0006	0,0012	0,0004		0,0000	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Molluscicide	Cyclo-octane	Metaldehyde								0,0020	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Permethrin								0,0001	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin								0,0014	LOD	GC-MSD	12	Scotland	Zhang et al., 2016
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,0008	0,1620						0,0001	LOQ	LC-MS/MS	-	China	Zhang et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam	0,0062	0,0882						0,0000	LOQ	LC-MS/MS	-	China	Zhang et al., 2019
Insecticide	Neonicotinoid	Acetamiprid	0,0031	0,0676						0,0000	LOQ	LC-MS/MS	-	China	Zhang et al., 2019
Insecticide, Degradate	Neonicotinoid	Clothianidin	0,0006	0,0672						0,0000	LOQ	LC-MS/MS	-	China	Zhang et al., 2019
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid	0,0002	0,0124						0,0001	LOQ	LC-MS/MS	-	China	Zhang et al., 2019
Fungicide, Veterinary substance	Benzimidazole	Thiabendazole		<MDL						0,0001	0,3100	MDL/ MQL	LC-MS/MS	-	China	Zhang et al., 2021
Plant growth regulator, Herbicide	Auxin	Clofibric acid								0,0005	1,8000	MDL/ MQL	LC-MS/MS	-	China	Zhang et al., 2021

*Pesticide group and chemical group: PPDB (https://sitem.herts.ac.uk/aeru/ppdb/en/index.htm); PubChem (https://pubchem.ncbi.nlm.nih.gov/); Echa (https://echa.europa.eu/pt/home); EPA (https://comptox.epa.gov/dashboard). [1] Analysis technique - analytes exclusion with results presented together. n.i.: not informed; n.c.: not conclusive; LOD: limit of detection; LOQ: limit of quantification; RLDQC: reporting limit by DQCALC software; MDL: method detection limit; MQL: method quantification limit; MOD: minimum order detection; MOQ: minimum order quantity; MRL: minimum reporting limit; RL: reporting limit; IRL: interim reporting limit; LQ: limit of quantification; DL: Detection limit; LC: Liquid Chromatographic; HPLC: High Performance Liquid Chromatography; UHPLC: Ultra High Performance Liquid Chromatography; UPLC: Ultra Performance Liquid Chromatography; GC: Gas Chromatography; GFC: Gravity-Flow Chromatography; GLC: Gas Liquid Chromatography; APGC: Atmospheric Pressure Gas Chromatography; APCI: Atmospheric Pressure Chemical Ionization; GCxGC: Two Dimensional Gas Chromatography; HRGC: High Resolution Gas Chromatography; MS: Mass Spectrometry; MS/MS: Tandem Mass Spectrometry; FID: Flame Ionization Detector; DAD: Diode Array Detector; ECD: Electron Capture Detector; FPD: Flam Photometric Detector; HRMS: High Resolution Mass Spectrometry; HRMS/MS: High Resolution Teem Mass Spectrometry; MSD: Mass Selective Detector; FD: Fluorescence Detector; FTD: Flame Thermionic Detector; μECD: micro-cell Electron Capture Detector; AED: Atomic Emission Detection; NPD: Nitrogen-Phosphorus Detection; UV: Ultraviolet Detection; QToF: Time of Flight; QqQ: Triple Quadrupole; QLIT: Quadruple Linear Ion Trap; ESI: Electrospray Ionization.

Table S2. Pesticide concentrations (µg/L) in surface freshwater using passive sampling

Pesticide group*	Chemical group*	Pesticide	Minimum	Maximum	Mean (min.)	SD	Mean (max.)	SD	Limit 1	Limit 2	Limit Type	Analysis Technique	Device	N	Days	Country	Reference
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,001360	0,110830	0,042710		0,050730		0,000110	0,001000	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide	Organophosphate	Chlorpyrifos		0,124690	0,019020		0,027900		0,000020	0,002000	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Herbicide	Benzamide	Propyzamide	0,006150	0,051370			0,022230		0,000070	0,000160	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Metabolite	Organochlorine	p,p'-DDE		0,031790	0,001730		0,015430		0,000290	0,000500	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Acaricide, Metabolite	Organophosphate	Dimethoate	0,000160	0,054460	0,002180		0,009650		0,000040	0,000050	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide, Metabolite	Benzimidazole	Carbendazim	0,000930	0,023070	0,004730		0,008720		0,000120	0,000240	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid		0,032000	0,001690		0,006590		0,000190	0,001120	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide; Metabolite	Triazole	Triadimenol		0,009440			0,004620		0,000180	0,002110	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet		0,026840	0,002310		0,004470		0,000240	0,001320	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion		0,019690			0,003940		0,000210	0,000390	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Acaricide, Metabolite	Carbamate	Methomyl		0,020340	0,001050		0,003560		0,000110	0,001110	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Plant growth regulator	Carbamate	Carbaryl		0,012730	0,001290		0,002610		0,000230	0,001220	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide	Phenylamide	Metalaxyl	<LOQ	0,006110			0,002510		0,000100	0,000820	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Nematicide	Organophosphate	Ethoprophos		0,011360			0,001920		0,000040	0,000190	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Herbicide	Triazine	Simazine		0,007110			0,001650		0,000010	0,000320	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide	Triazole	Penconazole		0,008380	0,000240		0,001620		0,000010	0,000170	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide, Plant growth regulator	Triazole	Tebuconazole		0,007000			0,001170		0,000270	0,001140	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Herbicide	Triazine	Atrazine	0,000280	0,001620	0,000800		0,000960		0,000030	0,000280	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Herbicide	Chloroacetamide	Alachlor		0,004470			0,000750		0,000050	0,000700	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide, Other substance	Triazole	Hexaconazole		0,002000	0,000390		0,000420		0,000170	0,001280	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide	Carbamate	Pirimicarb		0,000510	0,000070		0,000170		0,000020	0,000030	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide	Strobilurin	Azoxystrobin	<LOQ	<LOQ					0,000140	0,001000	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Nematicide, Acaricide, Metabolite	Carbamate	Carbofuran	<LOQ	<LOQ					0,000460	0,001000	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide	Neonicotinoid	Thiamethoxam		<LOQ					0,000280	0,001050	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Fungicide	Morpholine	Dimethomorph							0,000300	0,001580	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Acaricide, Veterinary substance	Organophosphate	Chlorfenvinphos							0,000040	0,000230	LOD/LOQ	LC-QqQ-LIT-MS/MS	POCIS	n.c.	14	Lebanon	Aisha et al., 2017
Insecticide, Other substance	Organochlorine	α-HCH			<MQL		<MQL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Pyrethroid	cis-Permethrin			<MQL		<MQL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organochlorine	p,p'-DDT			<MQL		<MQL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH			<MQL		<MQL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor			<MQL		<MQL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine			<MDL		<MDL		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Atrazine			0,023000		2,100000		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Chloroacetamide	Metolachlor			0,000730		0,097000		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Triazine	Desethylatrazine			0,008300		0,059000		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Simazine			0,008100		0,038000		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Triazine	Deisopropylatrazine			0,018000		0,019000		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Methoxytriazine	Prometon			0,001100		0,003200		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide	Organochlorine	Endosulfan II			0,000550		0,002900		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Methoxytriazine	Atraton			<MDL		0,001900		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH			<MQL		0,000620		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide	Organochlorine	Endosulfan			<MQL		0,000550		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organochlorine	o,p'-DDT			0,000015		0,000480		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin			0,000100		0,000300		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Unclassified	Pentachloroanisole			0,000056		0,000230		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Dinitroaniline	Trifluralin			0,000003		0,000200		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organophosphate	Chlorpyrifos			0,000048		0,000180		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Unclassified	Heptachlor epoxide			0,000064		0,000170		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Metabolite	Organochlorine	o,p'-DDD			0,000029		0,000110		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Isomer	Unclassified	δ-HCH			0,000029		0,000094		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin			0,000055		0,000088		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Organochlorine	p,p'-DDE			0,000057		0,000088		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Fungicide, Biocide, Metabolite, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene			0,000038		0,000083		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Isomer	Unclassified	cis-Chlordane			0,000017		0,000072		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Isomer	Unclassified	trans-Chlordane			0,000018		0,000067		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organochlorine	Heptachlor			0,000007		0,000054		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Isomer	Organochlorine	trans-Nonachlor			0,000035		0,000052		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organochlorine	Mirex			0,000005		0,000026		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Metabolite	Organochlorine	p,p'-DDD			<MQL		0,000022		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Benzenedicarboxylic acid	Dacthal			<MQL		0,000021		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Organochlorine	o,p'-DDE			0,000009		0,000013		n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009

Isomer	Organochlorine	cis-Nonachlor			0,000010	0,000011	n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Unclassified	Oxychlordane			0,000003	0,000009	n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Chloroacetamide	Acetochlor					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Chloroacetamide	Alachlor					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Ametryn					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Thiocarbamate	EPTC					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazinone	Metribuzin					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Dinitroaniline	Pendimethalin					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Prometryn					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Propazine					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Triazine	Simetryn					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide, Metabolite	Triazine	Terbutryn					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organophosphate	Fonofos					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Organophosphate	Parathion-methyl					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide	Pyrethroid	trans-Permethrin					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Metabolite	Unclassified	Endosulfan sulfate					n.i.			GC-ECD and MSD	POCIS and SPMD	n.i.	31 to 49	United States	Alvarez et al., 2009
Herbicide	Uracil	Bromacil					0,000980	0,0049	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon					0,000130	0,00067	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Isomer	Unclassified	δ-HCH					0,000003	0,000013	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Herbicide	Triazine	Atrazine	0,004100	4,100000		0,350000	0,000270	0,00023	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Plant growth regulator	Carbamate	Carbaryl	0,041000	0,230000		0,120000	0,000840	0,0042	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide, Metabolite	Organophosphate	Dichlorvos	0,085000	0,150000		0,120000	0,003100	0,015	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Fungicide	Phenylamide	Metalaxyl	0,120000	0,120000		0,120000	0,001200	0,0061	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Herbicide	Methoxytriazine	Prometon	0,002000	0,058000		0,014000	0,000140	0,00071	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	0,001800	0,001800		0,001800	0,000028	0,000081	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,000140	0,004700		0,001100	0,000130	0,00041	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	0,000310	0,000950		0,000540	0,000240	0,00068	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Pyrethroid	trans-Permethrin	0,000120	0,001300		0,000440	0,000120	0,00036	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Metabolite	Organochlorine	p,p'-DDE	0,000001	0,006200		0,000430	0,000001	0,0000042	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Degradate	Unclassified	Pentachloroanisole	0,000025	0,005200		0,000420	0,000001	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Pyrethroid	Tefluthrin	0,000140	0,000810		0,000390	0,000002	0,0000074	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Acaricide	Organochlorine	Endosulfan	0,000031	0,002400		0,000380	0,000022	0,00011	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Other substance	Organochlorine	α-HCH	0,000370	0,000370		0,000370	0,000005	0,000024	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Metabolite	Unclassified	Endosulfan sulfate	0,000078	0,001100		0,000360	0,000032	0,00016	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Organochlorine	Mirex	0,000350	0,000350		0,000350	0,000001	0,0000061	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Pyrethroid	cis-Permethrin	0,000012	0,001400		0,000340	0,000007	0,000022	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Metabolite	Organochlorine	o,p'-DDE	0,000008	0,001300		0,000240	0,000008	0,0000022	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Organophosphate	Chlorpyrifos	0,000110	0,000980		0,000240	0,000098	0,00026	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin	0,000006	0,001400		0,000220	0,000001	0,0000063	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor	0,000051	0,000700		0,000220	0,000049	0,00013	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Metabolite	Organochlorine	p,p'-DDD	0,000002	0,002900		0,000210	0,00000078	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Isomer	Unclassified	cis-Chlordane	0,000001	0,001700		0,000200	0,00000078	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	0,000040	0,001900		0,000180	0,000035	0,00037	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Isomer	Organochlorine	cis-Nonachlor	0,000005	0,001300		0,000120	0,0000042	0,000012	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Herbicide	Dinitroaniline	Trifluralin	0,000003	0,000370		0,000120	0,0000002	0,00000099	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Isomer	Unclassified	trans-Chlordane	0,000002	0,000900		0,000110	0,00000078	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Metabolite	Unclassified	Heptachlor epoxide	0,000010	0,000820		0,000110	0,00000077	0,0000071	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021

Fungicide, Biocide, Metabolite, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,000001	0,000850			0,000095		0,00000077	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Herbicide	Benzenedicarboxylic acid	Dacthal	0,000019	0,000370			0,000090		0,0000087	0,000043	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide, Metabolite	Organochlorine	o,p'-DDD	0,000003	0,001900			0,000085		0,00000083	0,0000042	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Organochlorine	p,p'-DDT	0,000030	0,000190			0,000074		0,000028	0,000076	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Organochlorine	Heptachlor	0,000068	0,000068			0,000068		0,00000082	0,0000041	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Isomer	Organochlorine	trans-Nonachlor	0,000013	0,000420			0,000064		0,000012	0,000034	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Insecticide	Organochlorine	o,p'-DDT	0,000012	0,000140			0,000032		0,000025	0,00003	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Metabolite	Unclassified	Oxychlordane	0,000002	0,000170			0,000027		0,00000077	0,0000039	MDL/MQL	GC-ECD	POCIS and SPMD	460	26-36	United States	Alvarez et al., 2021
Herbicide	Phenylamide	Diuron	0,000600	0,369400	0,008600		0,213400		0,000600	0,002000	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Atrazine	0,000400	0,043000	0,002700		0,020900		0,002000	0,006700	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Unclassified	Desmethyl-diuron	0,001100	0,017200	0,006600		0,015900		0,000800	0,002800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Metolachlor	0,000100	0,015700	0,001000		0,010500		0,001000	0,003300	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Acetochlor	0,000500	0,074000	0,002000		0,008100		0,001100	0,003700	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide, Metabolite	Benzimidazole	Carbendazim	0,001800	0,013800	0,004700		0,006500		0,000700	0,002300	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Phenylamide	Metalaxyl	0,002200	0,008000	0,004000		0,006400		0,000800	0,002600	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,002200	0,006800	0,003500		0,005100		0,002400	0,008100	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,000600	0,005600	0,002400		0,004700		0,000900	0,002900	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Chloroacetamide	Alachlor	0,002500	0,005200			0,003900		0,002500	0,008300	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Strobilurin	Azoxystrobin	0,002700	0,003100			0,002900		0,002000	0,006600	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Unclassified	DCPU	0,000800	0,003600	0,001100		0,002700		0,001600	0,005200	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Phenylamide	Oxadixyl	0,001400	0,003200			0,002300		0,001800	0,006000	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Urea	Linuron	0,001100	0,003100			0,002300		0,000800	0,002600	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Urea	Chlorotoluron	0,000400	0,001000			0,000700		0,000500	0,001800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Simazine	0,000600	0,000700			0,000600		0,000300	0,000900	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Penconazole	0,000400	0,000700			0,000500		0,001000	0,003300	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Anilino pyrimidine	Pyrimethanil	0,000300	0,000600			0,000500		0,000400	0,001200	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Deisopropylatrazine	0,004500	0,004500					0,001500	0,004800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Urea	Isoproturon	0,000700	0,002700					0,000200	0,000800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Tetraconazole	0,001400	0,001400					0,000400	0,001500	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Thiocarbamate	Prosulfocarb	0,000400	0,000400					0,000200	0,000800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Triazole	Epoxiconazole	0,000100	0,000100					0,000300	0,001000	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Morpholine	Dimethomorph							0,000500	0,001800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Fungicide	Imidazole	Prochloraz							0,000600	0,002000	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Sulfonylurea	Flazasulfuron							0,005300	0,017800	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Benzamide	Propyzamide							0,001700	0,005700	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine							0,001100	0,003700	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Triazine	Desethylatrazine							0,001600	0,005200	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Unclassified	Desethyl-terbuthylazine							0,001700	0,005600	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Triazine	Hydroxysimazine							0,000400	0,001200	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Metabolite	Unclassified	Hydroxy-terbuthylazine							0,000500	0,001700	LOD/LOQ	HPLC-MS/MS	POCIS	36	20 ± 3	Cameroon	Branchet et al., 2018
Herbicide	Triazine	Atrazine			0,000600	0,000400	0,520000	0,147000	0,001300		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Insecticide, Metabolite	Neonicotinoid	Clothianidin			0,000310	0,000100	0,031700	0,004800	0,000690		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Insecticide	Neonicotinoid	Thiamethoxam			0,000390	0,000300	0,028900	0,020000	0,008000		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			0,000220	0,000080	0,014100	0,001600	0,120000		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Insecticide	Organophosphate	Chlorpyrifos							0,002000		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon							0,004500		LOD	LC-MS/MS	POCIS	127	14-21	Canada	Challis et al. 2018b
Herbicide	Triazine	Atrazine			0,001900	0,000200	1,249500	0,458000	n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Insecticide	Neonicotinoid	Thiamethoxam			0,001200	0,000400	0,471300	0,158400	n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Herbicide, Plant growth regulator and Metabolite	Alkylchlorophenoxy	2,4-D			0,004600	0,001600	0,197700	0,015000	n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Insecticide, Metabolite	Neonicotinoid	Clothianidin			0,001600	0,000700	0,169900	0,017900	n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid			0,000400	0,000200	0,023800	0,002600	n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Insecticide	Organophosphate	Chlorpyrifos							n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon							n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Plant growth regulator, Herbicide	Auxin	Clofibric acid							n.i.			LC-MS/MS	o-DGT	n.c.	13 to 21	Canada	Challis et al., 2018
Herbicide	Triazine	Prometryn					0,047200		n.i.		n.i.	GC-MS	HECAM	6	5	China	Gao et al., 2019
Herbicide	Dinitroaniline	Trifluralin			<LOQ		<LOQ		0,000005	0,000007	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	Esfenvalerate					<LOQ		0,000061	0,000140	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH					<LOQ		0,000036	0,000085	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin			<LOQ		<LOQ		0,000003	0,000012	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Metabolite, Veterinary substance	Pyrethroid	Deltamethrin					<LOQ		0,000018	0,000054	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin					<LOQ		0,000032	0,000065	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor			<LOQ		<LOQ		0,000003	0,000013	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Isomer	Organochlorine	cis-Nonachlor			<LOQ		<LOQ		0,000002	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Isomer	Unclassified	trans-Chlordane			<LOQ		<LOQ		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Isomer	Unclassified	cis-Chlordane					<LOQ		0,000002	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016

Metabolite	Unclassified	Heptachlor epoxide	<LOQ		<LOQ		0,000005	0,000015	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Metabolite	Unclassified	Oxychlordane	<LOQ		<LOQ		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide, Plant growth regulator and Metabolite	Alkylchlorophenoxy	2,4-D	0,170000		0,250000		0,001800	0,008800	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide	Sulfonylurea	Metsulfuron-methyl			0,070000		0,002100	0,010000	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide	Triazine	Simazine	0,002800		0,036000		0,000730		MDL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide	Sulfonylurea	Chlorsulfuron	0,026000		0,027000		0,001500	0,007600	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Fungicide	Anilino pyrimidine	Pyrimethanil	0,002800		0,015000		0,000340		MDL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide	Triazinone	Hexazinone	0,002900		0,015000		0,000620	0,003100	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Acaricide	Organochlorine	Endosulfan	0,000590		0,012000		0,000059	0,000280	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Metabolite	Unclassified	Endosulfan sulfate	0,002800		0,009500		0,000079	0,000400	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Acaricide	Organochlorine	Endosulfan II	0,000530		0,009400		0,000120	0,000580	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Metabolite	Organochlorine	p,p'-DDE	0,000027		0,001000		0,000007	0,000021	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Metabolite	Organochlorine	p,p'-DDD	0,000009		0,000340		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Organochlorine	p,p'-DDT	0,000007		0,000326		0,000003	0,000007	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin	0,000081		0,000310		0,000010	0,000024	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Organophosphate	Chlorpyrifos	<LOQ		0,000200		0,000005	0,000026	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	Cyfluthrin	0,000130		0,000140		0,000047	0,000100	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Metabolite	Organochlorine	o,p'-DDD	0,000260		0,000077		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Metabolite	Unclassified	Pentachloroanisole	0,000044		0,000077		0,000016	0,000038	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Organochlorine	o,p'-DDT	0,000025		0,000039		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Fungicide, Biocide, Metabolite, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,000009		0,000012		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Metabolite	Organochlorine	o,p'-DDE	0,000007		0,000009		0,000001	0,000006	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Isomer	Organochlorine	trans-Nonachlor	<LOQ		0,000008		0,000002	0,000007	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide	Benzenedicarboxylic acid	Dacthal					0,000005	0,000023	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	cis-Permethrin					0,000017	0,000045	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Organochlorine	Heptachlor					0,000001	0,000007	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Organochlorine	Mirex					0,000002	0,000009	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	Tefluthrin					0,000004	0,000011	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	trans-Permethrin					0,000015	0,000044	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide	Pyrethroid	λ-Cyhalothrin					0,000016	0,000042	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Acaricide	Pyrethroid	Bifenthrin					0,000002	0,000009	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH					0,000012	0,000058	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Insecticide, Other substance	Organochlorine	α-HCH					0,000015	0,000058	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Isomer	Unclassified	δ-HCH					0,000006	0,000032	MDL/MQL	GFC-Florisl, GC-MS and LC-DAD	POCIS and SPMD	n.c.	58 to 66	United States	Hapke et al., 2016
Herbicide, Plant growth regulator and Metabolite	Alkylchlorophenoxy	2,4-D	0,000390		0,074000	0,002400	0,000030		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Insecticide	Organophosphate	Chlorpyrifos	0,005100	0,002400	0,049000	0,033000	0,002700		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,000370		0,008600	0,001100	0,000990		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,000630	0,000310	0,007700	0,004700	0,000020		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Insecticide, Metabolite	Neonicotinoid	Clothianidin	0,001000	0,000600	0,007400	0,004100	0,000170		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Herbicide	Triazine	Atrazine	0,000067	0,000009	0,006800	0,003000	0,000010		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Insecticide	Neonicotinoid	Thiamethoxam			0,001300	0,000900	0,000190		MDL	UHPLC-MS/MS	POCIS, o-DGT and MPT	46	22-24	New Zealand	Hougeman et al., 2019
Herbicide	Triazine	Atrazine	0,170300	0,004400	4,812900	0,045400	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Chloroacetamide	Acetochlor	0,012300	0,000600	3,460400	0,101300	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Metabolite	Triazine	Deisopropylatrazine	0,119000	0,003900	0,736500	0,013200	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Chloroacetamide	Metolachlor	0,022600	0,001100	0,514200	0,020300	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Metabolite	Triazine	Desethylatrazine	0,067000	0,000300	0,382000	0,007000	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Chloroacetamide	Dimethenamid	0,005700	0,000200	0,150900	0,008000	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Triazine	Propazine	0,004000	0,000800	0,045500	0,000800	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Triazine	Simazine	0,000400	0,000500	0,019300	0,000050	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Methoxytriazine	Prometon	0,003900	0,005500	0,006300	0,000200	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Chloroacetamide	Alachlor	0,000300	0,000020	0,002500	0,000100	0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013

Insecticide, Veterinary substance	Pyrethroid	Permethrin						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Fungicide	Chloronitrile	Chlorothalonil						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Thiocarbamate	Butylate						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Triazine	Cyanazine						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Thiocarbamate	EPTC						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Triazinone	Metribuzin						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Pyridazinone	Norflurazon						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Dinitroaniline	Pendimethalin						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Chloroacetamide	Propachlor						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Herbicide	Dinitroaniline	Trifluralin						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Insecticide	Pyrethroid	Tefluthrin						0,5 ng		LOD	GC-MS	POCIS	n.i.	14	United States	Knight et al., 2013
Insecticide, Metabolite, Veterinary substance	Pyrethroid	Deltamethrin			0,011000	0,001130	0,018500	0,003600	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Veterinary substance	Phenylpyrazole	Fipronil			0,005770	0,000482	0,009870	0,002700	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Metabolite	Unclassified	Fipronil-desulfinyl			0,004580	0,000509	0,008100	0,001890	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Metabolite	Unclassified	Fipronil sulfone			0,003690	0,000585	0,007110	0,001330	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Metabolite	Unclassified	Fipronil sulfide			0,003750	0,000369	0,006750	0,001460	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide	Pyrethroid	Esfenvalerate			0,003810	0,000509	0,005610	0,000891	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Acaricide	Pyrethroid	Bifenthrin			0,002810	0,000350	0,004650	0,002180	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Veterinary substance	Pyrethroid	Permethrin			0,002220	0,000287	0,003200	0,000634	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide	Pyrethroid	λ-Cyhalothrin			0,001290	0,000123	0,002360	0,001060	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin			0,001180	0,000046	0,001640	0,000265	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide	Pyrethroid	Cyfluthrin			0,000496	0,000043	0,000724	0,000198	n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide	Organophosphate	Chlorpyrifos							n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Acaricide	Pyrethroid	Fenpropathrin							n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon							n.i.		GC-MS/MS	PU	n.c.	4	United States	Liao et al., 2017
Insecticide	Pyrethroid	trans-Permethrin	<MQL	<MQL					0,000011	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Acaricide	Organochlorine	Endosulfan II	<MQL	<MQL					0,000230	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin	<MQL	<MQL					0,000013	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Metabolite	Organochlorine	p,p'-DDD		<MQL					0,000059	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Isomer	Organochlorine	cis-Nonachlor	<MQL	<MQL					0,000010	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Isomer	Organochlorine	trans-Nonachlor		<MQL					0,000008	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Unclassified	Heptachlor epoxide		<MQL					0,000016	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Unclassified	Oxychlordane		<MQL					0,000002	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Unclassified	Endosulfan sulfate	<MQL	0,000590					0,000210	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,000120	0,000580					0,000022	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Pyrethroid	Tefluthrin	<MQL	0,000260					0,000090	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Herbicide	Benzenedicarboxylic acid	Dacthal	<MQL	0,000065					0,000008	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Isomer	Unclassified	cis-Chlordane	<MQL	0,000055					0,000014	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Unclassified	Pentachloroanisole	<MQL	0,000055					0,000007	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Metabolite	Organochlorine	o,p'-DDD	<MQL	0,000047					0,000014	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Fungicide, Biocide, Metabolite, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene							0,000015	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Herbicide	Dinitroaniline	Trifluralin			-				0,000027	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Organophosphate	Chlorpyrifos							0,000025	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Pyrethroid	cis-Permethrin							0,000086	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Organochlorine	Heptachlor							0,000001	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Organochlorine	Mirex							0,000003	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Organochlorine	o,p'-DDT							0,000051	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide	Organochlorine	p,p'-DDT							0,000130	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon							0,003000	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH							0,000057	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH							0,000160	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin							0,000037	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Other substance	Organochlorine	α-HCH							0,000200	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Insecticide, Veterinary substance	Organochlorine	p,p'-Methoxychlor							0,000043	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Isomer	Unclassified	trans-Chlordane							0,000009	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Isomer	Unclassified	δ-HCH							0,000170	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Organochlorine	o,p'-DDE							0,000029	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Metabolite	Organochlorine	p,p'-DDE							0,000056	MDL	GC-ECD	SPMD	10	50 to 87	United States	Mast et al., 2012
Herbicide	Triazine	Atrazine			0,025420		0,140390		n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Metabolite	Organochlorine	p,p'-DDE			0,000950		0,002550		n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide	Organochlorine	Chlordane			0,001110		0,002050		n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide, Metabolite	Organochlorine	p,p'-DDD			<LOD		0,000430		n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Metabolite	Unclassified	Heptachlor epoxide			0,000140		0,000370		n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate							n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide, Acaricide, Metabolite	Organophosphate	Dimethoate							n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Herbicide	Benzamide	Propyzamide							n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide, Acaricide	Organophosphate	Disulfoton							n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide	Organophosphate	Methyl parathion							n.i.			polyethylene strip and porous cartridges	5	28	United States	Penland et al., 2018
Insecticide, Nematicide, Acaricide, Metabolite	Carbamate	Carbofuran							0,001000	0,003000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide	Organophosphate	Chlorpyrifos	<0,000100	0,396000					0,010000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019

Herbicide	Phenylamide	Diuron	<0,000101	0,995000					0,006000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid	0,000850	0,342000					0,005000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide	Triazinone	Metribuzin	<0,00002	0,439000					0,001000	0,003000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Fungicide, Plant growth regulator	Triazole	Tebuconazole	0,000210	0,077100					0,005000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Fungicide, Metabolite	Benzimidazole	Carbendazim	0,000780	0,273000					0,003000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide	Urea	Chlorotoluron	<0,00005	0,098000					0,003000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide	Triazine	Simazine	0,000130	0,159000					0,006000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide, Acaricide, Metabolite	Organophosphate	Dimethoate	<0,00003	0,351000					0,002000	0,005000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide, Metabolite	Triazine	Terbutryn	<0,00005	0,077500					0,003000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide	Carbamate	Pirimicarb	<0,00002	0,003690					0,001000	0,003000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Fungicide	Triazole	Propiconazole	<0,00025	0,027500					0,005000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide	Micro-organism derived	Spinosyn A	<0,00005	0,105000					0,003000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	0,000250	0,121000					0,003000	0,010000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,00002	0,009450					0,001000	0,003000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion							0,005000	0,050000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Insecticide, Acaricide	Carbamate	Metolcarb							0,003000	0,100000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl							0,020000	0,050000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Fungicide	Morpholine	Spiroxamine							0,005000	0,020000	LOD/LOQ	LC-MS/MS	POCIS	12	14	Spain	Rico et al., 2019
Herbicide	Triazine	Atrazine			0,001110	0,000700	0,001190	0,000800	0,005000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Veterinary substance	Neonicotinoid	Imidacloprid					0,001150	0,000100	0,010000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Metabolite	Organophosphate	Dimethoate			0,000360	0,000100	0,000740	0,000100	0,015000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Metolachlor			0,000476		0,000722	0,000500	0,009000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Acetamiprid					0,000180	0,000100	0,007000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Chloroacetamide	Acetochlor							0,011000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide	Pyrethroid	Bifenthrin									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Carboxamide	Boscalid									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Nematicide, Acaricide, Metabolite	Carbamate	Carbofuran									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Organophosphate	Chlorpyrifos									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Metabolite	Neonicotinoid	Clothianidin							0,009000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Veterinary substance	Pyrethroid	Cyhalothrin									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Anilinopyrimidine	Cyprodinil									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Metabolite, Veterinary substance	Pyrethroid	Deltamethrin									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Degradate	Triazine	Desethylatrazine							0,038000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Deisopropylatrazine							0,132000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Dinotefuran							0,011000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Phenylpyrrole	Fludioxonil									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Phenylamide	Metalaxyl							0,007000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide	Organophosphate	Methidathion									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Triazinone	Metribuzin							0,018000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Acaricide	Organophosphate	Parathion									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Organophosphate	Parathion-methyl									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Dinitroaniline	Pendimethalin							0,014000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Veterinary substance	Pyrethroid	Permethrin							0,042000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Anilino pyrimidine	Pyrimethanil									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide	Quinoline	Quinoxyfen									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide, Plant growth regulator	Triazole	Tebuconazole									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide, Molluscicide	Neonicotinoid	Thiacloprid							0,004000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Fungicide, Degradate	Triazole	Triadimefon									MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Neonicotinoid	Thiamethoxam							0,021000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Propazine							0,007000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Herbicide	Triazine	Simazine							0,007000		MDL	GC-MS and LC-MS/MS	POCIS and CLAM	8	14	Kazakhstan	Snow et al., 2020
Insecticide	Organophosphate	Fenitrothion	<0,0014	<0,0052					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Organophosphate	Parathion-methyl	<0,00094	<0,0011					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide, Degradate	Triazine	Terbutryn	<0,0005	<0,00084					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Pyridine compound	Clopyralid	<0,00047	<0,00056					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Dimethachlor	<0,00009	<0,00026					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Degradate	Triazine	Desethylatrazine	<0,00015	<0,00023					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazine	Cyanazine	<0,00013	<0,00021					n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019

Herbicide	Methylthiotriazine	Desmetryn	<0,00013	<0,0002	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Triazole	Epoxiconazole	<0,00007	<0,00018	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Triazole	Flusilazole	<0,00011	<0,00018	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazine	Propazine	<0,00009	<0,00015	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Isoxazolidinone	Clomazone	<0,00006	<0,00014	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Pyridine compound	Fluroxypyr	<0,00012	<0,00014	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Urea	Chlorotoluron	<0,00012	<0,00014	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Malathion	<0,00012	<0,00014	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazinone	Metamitron	<0,00012	<0,00014	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	<0,0000023	<0,000091	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Mollusicide	Organophosphate	Azinphos-methyl	<0,00005	<0,00006	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Organophosphate	Fonofos	<0,00005	<0,00006	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Sulfonylurea	Chlorsulfuron	<0,00005	<0,00006	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazinone	Metribuzin	<0,00005	<0,00006	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet	<0,00005	<0,00006	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Metazachlor	<0,00002	<0,00005	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Plant growth regulator	Carbamate	Carbaryl	<0,00002	<0,00003	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Dinitroaniline	Pendimethalin	<0,00002	<0,00003	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazine	Simazine	<0,00003	<0,00003	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Nematicide	Organophosphate	Terbufos	<0,00002	<0,00003	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide	Organophosphate	Disulfoton	<0,00003	<0,00002	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazolopyrimidine	Florasulam	<0,000005	<0,00002	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Pyridazinone	Chloridazon	<0,00002	<0,00002	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Veterinary substance	Organophosphate	Temephos	<0,00001	<0,00002	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Aryloxyphenoxypropionate	Fenoxaprop-ethyl	<0,00001	<0,00001	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Morpholine	Fenpropimorph	<0,00001	<0,00001	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Sulfonylurea	Tribenuron-methyl	<0,00001	<0,00001	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Isomer	Unclassified	δ-HCH	<0,0000012	<0,0000012	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	<0,00003	0,052800	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazine	Prometryn	<0,00013	0,017240	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Phenylamide	Diuron	<0,00013	0,005640	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide, Metabolite	Benzimidazole	Carbendazim	0,000060	0,003930	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Triazole	Propiconazole	<0,00002	0,003520	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Phenylamide	Metalaxyl	<0,00012	0,003480	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide	Imidazole	Prochloraz	<0,00001	0,001790	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Urea	Linuron	<0,00048	0,001050	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Metabolite	Organophosphate	Dimethoate	<0,00006	0,000790	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Acetochlor	<0,00005	0,000780	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Propachlor	<0,00005	0,000650	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Metolachlor	<0,00013	0,000620	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide, Plant growth regulator	Triazole	Tebuconazole	<0,00013	0,000610	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide, Microbiocide, Algicide	Triazine	Terbuthylazine	<0,00003	0,000590	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Triazine	Atrazine	<0,00003	0,000570	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Urea	Isoproturon	0,000070	0,000500	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Organophosphate	Chlorpyrifos	<0,00013	0,000380	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Chloroacetamide	Alachlor	<0,00023	0,000280	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Carbamate	Pirimicarb	<0,00001	0,000060	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Other substance	Organochlorine	α-HCH	<0,000006	0,000021	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Fungicide, Biocide, Metabolite, Wood preservative	Chlorinated hydrocarbon	Hexachlorobenzene	0,000002	0,000020	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Metabolite	Organochlorine	p,p'-DDE	0,000002	0,000017	n.i.	n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019

Insecticide, Metabolite	Organochlorine	p,p'-DDD	<0,0000005	0,000016	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<0,0000023	0,000015	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide, Metabolite	Organochlorine	o,p'-DDD	<0,0000005	0,000006	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Organochlorine	o,p'-DDT	0,000001	0,000004	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Insecticide	Organochlorine	p,p'-DDT	0,000001	0,000004	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Degradate	Unclassified	Pentachlorobenzene	<0,000005	0,000003	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Metabolite	Organochlorine	o,p'-DDE	<0,0000004	0,000001	n.i.		n.i.	GC-MS/MS and HPLC-MS/MS	POCIS and SPMD	48	28-43	Bosnia and Herzegovina	Toušová et al., 2019
Herbicide	Diphenyl ether	Oxyfluorfen	0,440000	16,800000	0,099000	0,130000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Fungicide, Other substance	Triazole	Hexaconazole	3,090000	11,430000	0,208000	0,284000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Triazine	Atrazine	0,960000	10,720000	0,057000	0,068000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Chloroacetamide	Alachlor	0,370000	4,880000	0,032000	0,050000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Metabolite	Organochlorine	p,p'-DDD	0,080000	2,880000	0,013000	0,017000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Veterinary substance, Avicide	Organophosphate	Fenthion		2,540000	0,023000	0,032000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Fungicide, Bactericide	Strobilurin	Kresoxim-methyl		2,210000	0,145000	0,163000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Fungicide	Dicarboximide	Procymidone		2,090000	0,186000	0,208000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Isomer	Unclassified	δ-HCH	0,640000	1,650000	0,016000	0,020000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Triazolone	Carfentrazone		1,490000	0,020000	0,028000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Alkanamide	Napropamide		1,140000	0,037000	0,055000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH		0,970000	0,029000	0,035000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide, Nematicide	Organophosphate	Triazophos	0,320000	0,920000	0,143000	0,211000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin		0,540000	0,039000	0,048000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Metabolite	Organochlorine	p,p'-DDE	0,190000	0,490000	0,029000	0,044000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Triazine	Propazine	0,060000	0,430000	0,013000	0,018000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide, Repellent, Veterinary substance	Organophosphate	Diazinon	0,130000	0,290000	0,021000	0,028000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide	Organophosphate	Pirimiphos-methyl		0,100000	0,009000	0,012000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Fungicide	Imidazole	Prochloraz			0,802000	0,557000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Dinitroaniline	Trifluralin			0,033000	0,024000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide	Organophosphate	Chlorpyrifos			0,118000	0,081000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide	Organophosphate	Disulfoton			0,169000	0,139000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan I			0,255000	0,195000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide	Organochlorine	Endosulfan II			0,784000	0,572000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide, Nematicide	Organophosphate	Phorate			0,051000	0,038000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Acaricide, Veterinary substance	Organophosphate	Phosmet			0,107000	0,084000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019

Insecticide, Avicide, Rodenticide	Organochlorine	Endrin						0,242000	0,194000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Other substance	Organochlorine	α-HCH						0,044000	0,037000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Insecticide, Veterinary substance	Organochlorine	Methoxychlor						0,091000	0,067000	LOD/LOQ	GC-MS	Plastic bottles containing HF-LPME	40	8 to 10	Brazil	Valenzuela et al., 2019
Herbicide	Urea	Chlorotoluron		0,001340	0,000690	0,005850	0,005690	0,000070		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Insecticide	Organophosphate	Chlorpyrifos		0,000600	0,000820	0,002090	0,002350	0,000320		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Herbicide	Triazine	Atrazine		0,000210	0,000140	0,001830	0,000710	0,000050		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Fungicide	Triazole	Epoxiconazole		0,000660	0,000990	0,001330	0,001830	0,000050		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Herbicide	Urea	Isoproturon		0,000190	0,000330	0,000870	0,000780	0,000020		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Herbicide	Triazine	Simazine		0,000220	0,000180	0,000320	0,000220	0,000020		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Molluscicide	Cyclo-octane	Metaldehyde						0,002280		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Permethrin						0,001530		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Insecticide, Veterinary substance	Pyrethroid	Cypermethrin						0,000140		LOD	GC-MSD	POCIS	12	30	Scotland	Zhang et al., 2016
Insecticide	Organochlorine	Aldrin	<DL	<DL				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Acaricide	Organochlorine	Endosulfan II	<DL	<DL				0,000012		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Metabolite	Unclassified	Endosulfan sulfate	<DL	<DL				0,000007		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Avicide, Rodenticide	Organochlorine	Endrin	<DL	<DL				0,000006		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Other substance	Organochlorine	α-HCH	<DL	<DL				0,000121		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	β-HCH	<DL	<DL				0,000113		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Acaricide, Veterinary substance	Organochlorine	γ-HCH	<DL	<DL				0,000158		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Metabolite	Unclassified	Oxychlordane	<DL	<DL				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Metabolite	Organochlorine	p,p'-DDE	0,000002	0,000071				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Metabolite	Chlorinated hydrocarbon	Dieldrin	0,000014	0,000045				0,000005		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Metabolite	Unclassified	Heptachlor epoxide	0,000005	0,000038				0,000005		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Isomer	Unclassified	trans-Chlordane	0,000003	0,000031				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Metabolite	Organochlorine	p,p'-DDD	0,000003	0,000025				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide, Acaricide	Organochlorine	Endosulfan I	0,000018	0,000023				0,000013		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Isomer	Unclassified	cis-Chlordane	0,000003	0,000020				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Isomer	Organochlorine	trans-Nonachlor	0,000004	0,000016				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide	Organochlorine	p,p'-DDT	0,000002	0,000013				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Isomer	Organochlorine	cis-Nonachlor	0,000004	0,000011				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide	Organochlorine	o,p'-DDT	0,000002	0,000007				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020
Insecticide	Organochlorine	Heptachlor	<DL	0,000004				0,000003		MQL	GCxGC-μECD	PED	30	28-29	Canada	Zhang et al., 2020

*Pesticide group and chemical group: PPDB (https://sitem.herts.ac.uk/aeru/ppdb/en/index.htm); PubChem (https://pubchem.ncbi.nlm.nih.gov/); Echa (https://echa.europa.eu/pt/home); EPA (https://comptox.epa.gov/dashboard). n.i.: not informed; LOD: limit of detection; LOQ: limit of quantification; MDL: method detection limit; MQL: method quantification limit; LC: Liquid Chromatographic; HPLC: High Performance Liquid Chromatographic; UHPLC: Ultra High Performance Liquid Chromatography; GC: Gas Chromatographic; GCxGC: Two Dimensional Gas Chromatography; GFC: Gravity-Flow Chromatography; MS: Mass Spectrometry; MS/MS: Tandem Mass Spectrometry; MSD: Mass Selective Detector; DAD: Diode Array Detector; ECD: Electron Capture Detector; μECD: micro-cell Electron Capture Detector; QqQ: Triple Quadrupole; LIT: Linear Ion Trap.

ANEXO II

toxics

MDPI

Article

Relationship between Pesticide Standards for Classification of Water Bodies and Ecotoxicity: A Case Study of the Brazilian Directive

Esmeralda Pereira de Araújo [1], Eloisa Dutra Caldas [2,*] and Eduardo Cyrino Oliveira-Filho [3,*]

[1] Faculty of Planaltina—FUP, University of Brasilia—UnB, Federal District, Planaltina 73345-010, Brazil
[2] Toxicology Laboratory, Faculty of Health Sciences, University of Brasília—UnB, Federal District, Brasília 70910-900, Brazil
[3] Brazilian Agricultural ReseArch. Corporation—Embrapa Cerrados, Federal District, Planaltina 73310-970, Brazil
* Correspondence: eloisa@unb.br (E.D.C.); eduardo.cyrino@embrapa.br (E.C.O.-F.)

Abstract: The objective of this study was to evaluate if the maximum values (MVs) for pesticides in surface freshwater included in CONAMA directive 357/2005 are safe for aquatic biota, comparing them with ecotoxicology data published in the literature. The terms "aquatic toxicity", "chronic" "acute", "LC_{50}", "EC_{50}", "NOEL", "NOEC" and the name of each pesticide were used for searches on the research platforms. Data from 534 tests reported in 37 published articles and three ecotoxicological databases were included in this study; 24% of the tests were carried out with producer organisms, 34% with primary consumers and 42% with secondary consumers. Microcrustaceans of the *Daphnia* genus and the fishes *Pimephales promelas* and *Oncorhynchus mykiss* were the organisms most used. Atrazine, alachlor and metolachlor were the most investigated pesticides. Atrazine and alachlor are approved in Brazil, with atrazine ranking fourth among the most used pesticides in the country. The results indicated that of the 27 pesticides included in the standard directive, 17 have a risk quotient (RQ) higher than the level of concern for at least one ecotoxicological parameter and may not protect the aquatic biota. The insecticide malathion, used in various agricultural crops in Brazil, was the one that presented the highest RQs (3125 and 3,125,000 for freshwaters classified as 1/2 and 3, respectively), related to a LC_{50} (96 h) of 0.000032 µg/L in *Chironomus ramosus*. The results indicate that CONAMA directive 357/2005 should be updated in line with the current use of pesticides in the country, and the MVs should be re-evaluated so that they do not represent toxicity for the aquatic biota.

Keywords: environmental toxicology; pesticide limits; water bodies; water quality

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1. Introduction

The environmental behavior of pesticides, especially in relation to their transport and stability in water bodies, can have impact on human health and on the environment [1,2]. Toxic pesticide levels in aquatic systems may eliminate aquatic species, reduce biodiversity and compromise the functioning of ecosystems [3]. Aiming to provide protection, the regulatory jurisdictions of different countries establish limit values for pesticides in matrices such as soil, drinking water and agricultural commodities [4]. However, the regulation of these contaminants in surface freshwater is still limited in most countries [5]. Pesticide standards for surface freshwater are necessary in order to maintain the protection of the aquatic ecosystem and of human health against possible toxicological effects.

Directive 2013/39/EU of the European Union establishes environmental quality standards (EQS) for priority substances and other pollutants, including pesticides, in surface water, and it also establishes biota EQS for substances that are not very soluble in water and that accumulate in the organisms [6]. In the United States, the EPA's Office of Pesticide Programs establishes Aquatic Life Benchmarks that are specific for each biota [7]. In Brazil,

CONAMA directive No. 357, from 17 MArch. 2005, determines the quality parameters, including the establishment of maximum values (MV) for pesticides in surface freshwater classes 1/2 and 3, which are destined for multiple uses (Table S1). Classes 1 and 2 can be destined for the protection of aquatic biota, but this may not be their predominant use [8]. For example, class 2 water can also be used for supplying human consumption, primary-contact recreation, aquiculture and fishing. Even so, in accordance with the Directive and independently of its uses, class 2 water may not have characteristics that represent a chronic toxic effect on the biota. On the other hand, class 3 water does not include protection of aquatic biota among its uses, although the water within this class cannot exert an acute toxic effect on organisms. However, there are few water bodies that have been approved for inclusion in a determined class [9], and in this situation all freshwater is considered class 2 [8]. In other words, most Brazilian surface freshwater is class 2.

The toxic effects of pesticides on biota are evaluated in Brazil during the registration of new pesticides, using the data from ecotoxicological tests with non-target organisms [10], which could fit in a prospective approach, pre-registration [3]. Environmental data are used during the re-evaluation of the pesticide, which could be considered a retrospective approach. For aquatic organisms, the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) requests studies with algae, microcrustaceans and fish, and the results are extrapolated for use in the whole taxon. Considering the trophic levels, some of the model organisms used in tests are the algae *Raphidocelis subcapitata* and *Scenedesmus subspicatus* (producer organisms), the microcrustaceans of the *Daphnia* genus (primary consumer) and the fish *Danio rerio* (secondary consumer) [11].

Although ecotoxicological studies are carried out under laboratory-controlled conditions and may not reflect the biotic and abiotic conditions in aquatic ecosystems [12,13], they are used to derive concentration levels that are safe or can cause toxicity for the biota. The studies have acceptable levels of uncertainty, and are used in the decisions making process by some regulatory agencies [13–15]. However, this is not the case in CONAMA directive 357/2005, which does not consider the evaluation conducted by IBAMA. Furthermore, the basis for the establishment of MVs and how the compounds were selected are not publicly available [16].

Bearing in mind that the use of pesticides has grown in Brazil, as well as worldwide [17,18], and that the number of authorized substances has also increased in the country [19], it is important to consider the potential impact on the aquatic biota arising from the use of these products. In addition, the presence in water of organochloride pesticides that are already banned in most countries (persistent organic pollutants, POPs) can also represent a toxic effect on aquatic organisms. Thus, the objective of this study was to evaluate if the maximum values (MVs) for pesticides in surface freshwater found in the Brazilian regulations (CONAMA directive 357/2005) are safe for aquatic biota, comparing them with ecotoxicology data published in the literature to calculate risk quotients (RQ).

2. Materials and Methods

In order to carry out this study, reseArch. was done in the Web of Science, Scopus and Google Scholar databases, using the descriptors "aquatic toxicity", "chronic" "acute", "LC_{50}", "EC_{50}", "NOEL", "NOEC" and the name of each pesticide listed in Table 1. Selection criteria were studies conducted with surface freshwater aquatic organisms and pesticides included in the CONAMA directive. Additionally, data on the ecotoxicity of these substances were searched in the Pesticide Properties Database [20], NORMAN Ecotoxicology Database [21] and Aquatic Life Benchmarks [7], which cover a large range of organisms and pesticides and have been used by other authors [22,23].

Table 1. Pesticides included in CONAMA standard directive 357/05 for surface freshwater: registration situation in Brazil or persistent organic pollutant (POP) and maximum value concentrations according to the water use classification.

Pesticide [a]	Current Situation [b,c]	Maximum Value, µg/L [a]	
		Class 1/2	Class 3
Alachlor	Registered: Environmental class II [c]	20	-
Atrazine	Registered: Environmental class I–III [c]	2	2
Carbaryl	Registered: Environmental class II [c]	0.02	70
2,4-D	Registered: Environmental class I–III [c]	4	30
Glyphosate	Registered: Environmental class I–III [c]	65	280
Malathion	Registered: Environmental class I–IV [c]	0.1	100
Simazine	Registered: Environmental class II–III [c]	2	-
Trifuraline	Registered: Environmental class I–II [c]	0.2	-
2,4,5-TP (fenoprop)	Not registered	10	10
Metolachlor	Not registered	10	-
Methoxychlor	Not registered	0.03	20
Demeton (demeton-O, demeton-S)	Not registered	0.1	14
Gution (azinphos methyl)	Not registered	0.005	0.005
Parathion	Not registered	0.04	35
2,4,5–T	Not registered	2	2
Aldrin	POP	0.005	0.03
Chlordane (cis, trans)	POP	0.04	0.3
DDT (p,p′-DDT, p,p′-DDE, p,p′-DDD)	POP	0.002	1
2,4-Dichlorophenol	POP	0.3	-
Dieldrin	POP	0.005	0.03
Endosulfan (I, II, sulphate)	POP	0.056	0.22
Endrin	POP	0.004	0.2
Heptachlor +heptachlor epoxide	POP	0.000039/0.01	0.03
Hexachlorobenzene	POP	0.00029/0.0065	-
Lindane (γ-HCH)	POP	0.02	2
Pentachlorophenol	POP	3/9	9
Toxaphene	POP	0.00028/0.01	0.21

[a] Brazil [8]; [b] ANVISA [24] and [c] MAPA [19]; Environmental classification—I: extremely hazardous, II: highly hazardous, III; moderately hazardous; IV: slightly hazardous [19]; POP=persistent organic pollutant, United Nations Stockholm Convention (http://chm.pops.int/TheConvention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx (accessed on 24 November 2022)).

To evaluate whether the maximum pesticide values in surface water (MV) established by CONAMA Directive 357/2005 are safe for aquatic organisms, the risk quotient (RQ) for each pesticide was estimated by dividing its MV by the relevant toxicological endpoint (chronic or acute) (RQ = ML/endpoint) [25]. The endpoints to estimate the acute risk were LC_{50} (lethal concentration) and EC_{50} (effective concentration); the endpoints to estimate the chronic risk were LOEC (lowest observed effect concentration), NOAEC (no observed adverse effect concentration), NOEC (no observed effect concentration), LOEC (lowest observed effect concentrations), PNOEC (predicted no effect concentration) or MATC (maximum acceptable toxicant concentrations). Risk may exist when the RQ is higher than the Level of Concern (LOC) as established by the EPA [25], which is 0.5 for acute high risk and 1 for chronic risk to aquatic animals, and 1 for acute risk to plants.

The organisms used in the tests were classified according to trophic levels (producer, primary consumer and secondary consumer) in the aquatic ecosystem. The aquatic organisms most used in the tests were also identified, as well the quantitative measure of tests carried out for each pesticide.

3. Results and Discussion

The data included in this study were obtained from 37 papers [26–62] and three databases [7,20,21] (Supplementary Material). The papers were retrieved from 20 scientific journals, mainly Environmental Contamination Toxicology and Chemistry (six papers) and

Ecotoxicology and Environmental Safety (five papers) and were published in the period of 1981 to 2021. The number of journals in the first quartile of quality were: three of the 18 journals in Web of Science database, eight out of 19 journals in Scopus. Journals retrieved from Google Scholar have h5 index ranging from 12 (Annales de Limnologie-International Journal of Limnology) to 225 (Science of the Total Environment). All the studies were conducted in a laboratory setting, but this information is not included in the three databases, which are updated online.

Out of the total of 534 tests with aquatic organisms included in the studies, 24% were carried out with producing organisms, 34% with primary consumers and 42% with secondary consumers. The producers form the base of the aquatic food chain and are food for the primary consumers, which play an important cycling role in the environment and are food for the secondary consumers, which are the vertebrate organisms that form the aquatic ecosystem [11]. To confirm the toxic effect of a substance for regulatory purposes, it is recommended that an evaluation be carried out of with at least three species that represent the aquatic ecosystem, and they should ideally come from different trophic levels of the food chain [11,63]. However, many studies are not done for a regulatory purpose, and some evaluated the toxicity of one or more pesticides towards only one species [31,40,41,47,48]. Very few studies, however, are conducted with species that are representatives of the Brazilian ecosystems.

From the set of 534 tests, 82% (439) classified the organisms at genus or species level. Some species from the genera *Najas* sp. and *Anabaena* sp., and 14 other species (10 producers, 2 primary consumers and 2 secondary consumers) are native in Brazil [64–67]. About 21% of the studies used the genus *Daphnia* and the species *Daphnia magna* (crustaceans), indicating that this group is the model most often used, followed by the fish species *Pimephales promelas* (9%) and *Oncorhynchus mykiss* (8%) (Figure 1). A review of European laboratory protocols for the ecotoxicity of systemic pesticides and microbial toxins in genetically modified plants also found these organisms as the most often considered in the directives [68].

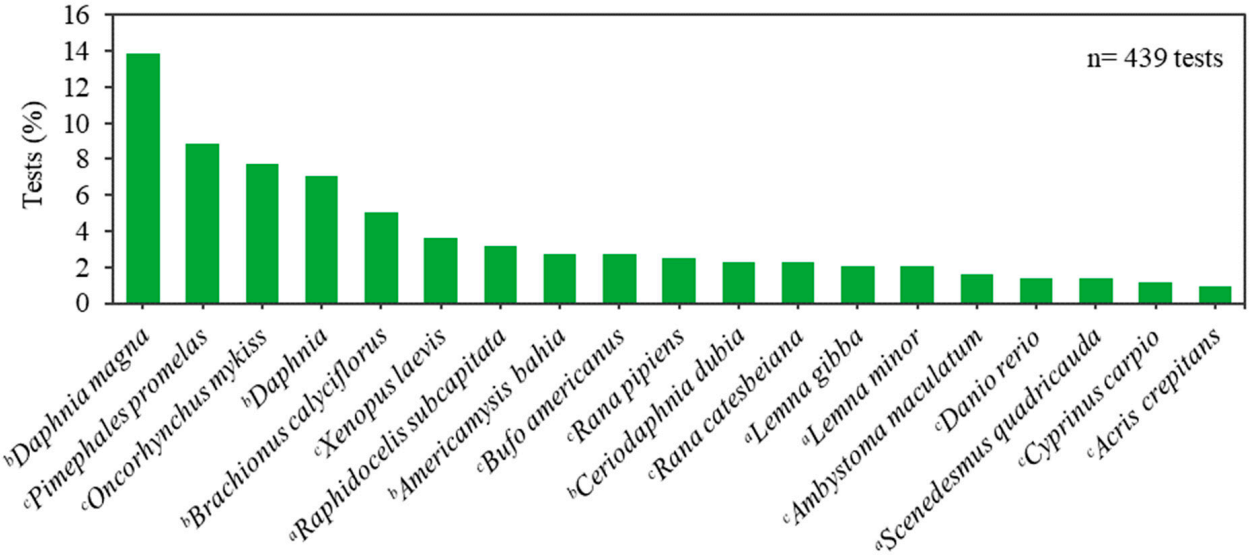

Figure 1. Freshwater species most used in the ecotoxicological studies with pesticides included in CONAMA standard directive 357/05. [a] Producer organism; [b] Primary consumer; [c] Secondary consumer.

Figure 2 shows that most of the ecotoxicity tests were conducted with atrazine (10%; the majority with producers), alachlor (9%; the majority with producers and secondary consumers) and metolachlor (7%; the majority with producers). In a review of 146 studies on pesticides in surface freshwater, Araújo et al. [5] showed that, historically, these pesticides are among the most investigated in water worldwide, and that in general atrazine was also the active ingredient detected at the highest concentrations. Atrazine, the fourth most

sold active ingredient in Brazil [69], and alachlor are registered in the country for pre- and/or post-emergence use in a variety of crops [24], while the use of metolachlor was prohibited in 2010 [70]. Table 1 shows that the environmental classification for the pesticides approved in Brazil varies from I (extremely hazardous) for atrazine, 2,4-D, glyphosate, malathion and trifluraline, to IV (slightly hazardous) for malathion, depending on the product formulation [19]. It should be noted that, in addition to atrazine and alachlor, only six of the 27 pesticides included in CONAMA 357/2005 are still approved for use in the country (carbaryl, 2,4-D, glyphosate, malathion, simazine and trifluraline), and 12 are considered POPs (Table 1).

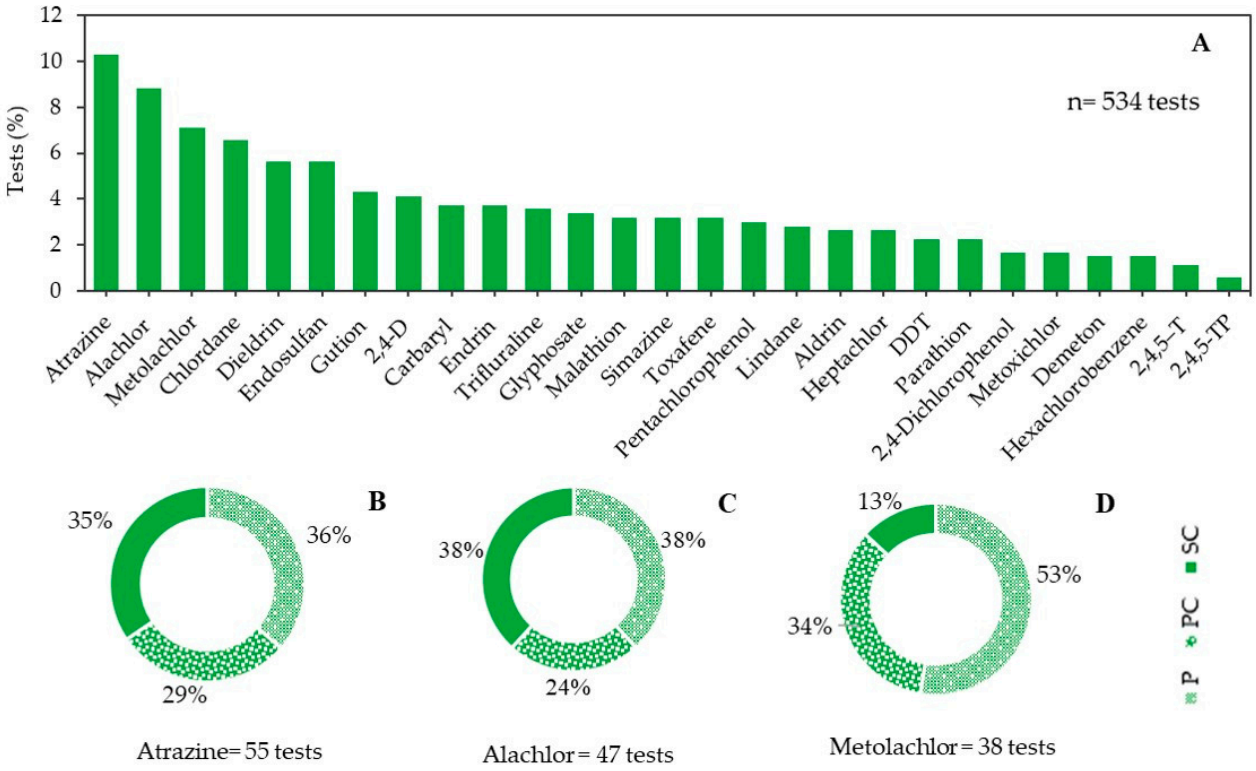

Figure 2. (**A**) Percentage of tests conducted with the pesticides listed in the tests shown in CONAMA standard directive 357/05. (**B**–**D**) Percentage of tests conducted with the pesticides in producer (P), primary consumer (PC) and secondary consumer organisms (SC).

Table 2 shows the 17 pesticides that have a RQ higher than the LOC for at least one organism tested, indicating that the biota may not be protected when present in an aquatic environment with concentrations at the legal levels. Although the MVs in the directive for water quality in Brazil were established to classify different water uses (classes) and not specifically for the protection of the biota, the results of this study indicate that these levels should be reviewed.

Considering the trophic levels, the group of secondary consumers is the one that shows a RQ higher than 1 (Table 2). This result may have arisen because the representatives of the genus *Daphnia* (crustaceans) were the organisms most used in tests (Figure 1). Indeed, the pesticides that presented the greatest toxicity were the insecticides malathion and endosulfan, with LC_{50} (96 h) of 0.000032 (RQ of 3,125,000 for class 3 water) and 0.00036 µg/L (RQ of 611), respectively, for the larvae of the aquatic insect *Chironomus ramosus* [52]. Malathion has also the highest chronic RQ for invertebrates and *Daphnia magna* (1666.7; Table 2).

Table 2. Pesticides listed in CONAMA directive 357/05, for which the risk quotient is higher than the level of concern (LOC) for at least one tested organism. LOC = 0.5 for acute risk to aquatic animals; LOC = 1 for chronic risk to aquatic animals and 1 for acute risk to plants [7].

Pesticide	Risk Quotient Class 1,2/3 (µg/L)	Endpoint: Concentration (µg/L)	Tested Organism	Reference
Alachlor	3/-	EC_{50} (72 h): 6.69	*Raphidocelis subcapitata* [a]	[26]
	2/-	EC_{50} (96 h): 10	*Raphidocelis subcapitata* [a]	[27]
	2/-	EC_{50} (7 d)-biomass: 10	*Lemna minor* [a]	[20]
	12.2/-	EC_{50} (<10 d): 1.64	Nonvascular plants [a]	[7]
	8.7/-	EC_{50} (<10 d): 2.3	Vascular plants [a]	[7]
Aldrin	-/3	NOEC-ratio of ovigerous to non-ovigerous females: 0.01	*Brachionus calyciflorus* [b]	[31]
	-/1.8	LC_{50} (96 h): 0.017	*Pimephales promelas* [c]	[21]
Dieldrin	5/30	LOEC-population growth rate: 0.001	*Brachionus calyciflorus* [b]	[31]
	5/30	NOEC-ratio of ovigerous to non-ovigerous females: 0.001	*Brachionus calyciflorus* [b]	[31]
	-/3	LOEC-ratio of ovigerous to non-ovigerous females: 0.01	*Brachionus calyciflorus* [b]	[31]
Atrazine	2/2	EC_{50} (<10 d): <1	Nonvascular plants [a]	[7]
Carbaryl	-/1.2	NOEC-resting egg production: 60	*Brachionus calyciflorus* [b]	[37]
	-/3.5	NOEC-resting egg hatching rate: 20	*Brachionus calyciflorus* [b]	[37]
	-/1.2	LOEC-resting egg hatching rate: 60	*Brachionus calyciflorus* [b]	[37]
	-/41.2	EC_{50} or LC_{50} (48 or 96 h): 1.7	Invertebrates [b]	[7]
	-/140	NOAEC: 0.5	Invertebrates [b]	[7]
	-/10.9	EC_{50} (48 h): 6.4	*Daphnia pulex* [b]	[20]
	-/12.3	LC_{50} (96 h): 5.7	*Americamysis bahia* [b]	[20]
	-/11.7	NOAEC: 6	Fish [c]	[7]
Chlordane	-/2.4	LC_{50} (96 h): 0.127	*Neocaridina denticulate* [b]	[43]
	-/1.7	NOEC (14 d)-survival: 0.18	*Ceriodaphnia dubia* [b]	[44]
	-/1.7	NOEC (14 d)- number of offspring per female: 0.18	*Ceriodaphnia dubia* [b]	[44]
	-/1.7	NOEC (21 d)- number of offspring per female: 0.18	*Daphnia magna* [b]	[44]
	-/4.3	LC_{50} (48 h)-trans: 0.07	*Daphnia* [b]	[21]
	-/7.5	LC_{50} (96 h)-trans: 0.04	*Pimephales promelas* [c]	[21]
2,4-D	-/1	LOEC: 29	*Hyalella meinerti* [b]	[48]
	-/1	NOEC: <29	*Hyalella meinerti* [b]	[48]
	1.2/9.3	LC_{50} (48 h): 3.22	*Daphnia* [b]	[21]
	1.5/11.6	LC_{50} (96 h): 2.59	*Pimephales promelas* [c]	[21]
Demeton	-/1.3	EC_{50} (48 h) [d]: 10.4	*Daphnia pulex* [b]	[20]
	-/1.6	LC_{50} (48 h) [d1]: 8.62	*Daphnia* [b]	[21]
	-/3.2	LC_{50} (96 h) [d1]: 4.43	*Pimephales promelas* [c]	[21]
	-/3.2	LC_{50} (48 h) [d2]: 4.44	*Daphnia* [b]	[21]
DDT	-/1	EC_{50} (48 h) [e]: 1	*Bosmina longirostris* [b]	[20]
Endosulfan	5.6/22	NOAEC: 0.01	Invertebrates [b]	[7]
	0.6/2.2	LC_{50} (96 h): 0.1	Fish [c]	[7]
	2.4/9.6	NOAEC: 0.023	Fish [c]	[7]
	155.6/611.1	LC_{50} (96 h): 0.00036	*Chironomus ramosus* [b]	[52]
	112/440	NOEC (28 d): 0.0005	*Cyprinodon variegatus* [c]	[20]

Table 2. *Cont.*

Pesticide	Risk Quotient Class 1,2/3 (µg/L)	Endpoint: Concentration (µg/L)	Tested Organism	Reference
Endrin	-/1.1	LC_{50} (48 h): 0.19	*Daphnia* [b]	[21]
	2/100	LC_{50} (96 h): 0.002	*Pimephales promelas* [c]	[21]
	-/1.7	NOEC (21 d): 0.12	*Cyprinodon variegatus* [c]	[20]
Glyphosate	5.4/23.3	EC_{50} (7 d): 12	*Lemna gibba* [a]	[20]
Lindane	-/2	EC_{50} or LC_{50} (48 or 96 h): 1	*Invertebrates* [b]	[7]
	-/1.2	LC_{50} (96 h): 1.7	Fish [c]	[7]
	-/0.7	LC_{50} (96 h): 2.9	*Oncorhynchus mykiss* [c]	[20]
Malathion	1/1020.4	EC_{50} or LC_{50} (48 or 96 h): 0.098	Invertebrates [b]	[7]
	1.7/1666.7	NOAEC: 0.06	Invertebrates [b]	[7]
	-/111.1	LC_{50} (48 h): 0.9	*Daphnia magna* [b]	[57]
	-/4.9	LC_{50} (48 h): 20.32	*Daphnia* [b]	[21]
	-/142.9	EC_{50} (48 h): 0.7	*Daphnia magna* [b]	[20]
	1.7/1666.7	NOEC (21 d): 0.06	*Daphnia magna* [b]	[20]
	-/66.7	LC_{50} (96 h): 1.5	*Americamysis bahia* [b]	[20]
	-/24.4	LC_{50} (96 h): 4.1	Fish [c]	[7]
	-/11.6	NOAEC: 8.6	Fish [c]	[7]
	3125/3,125,000	LC_{50} (96 h): 0.000032	*Chironomus ramosus* [b]	[52]
	-/22.3	LC_{50} (96 h): 4.48	*Pimephales promelas* [c]	[21]
	-/5.6	LC_{50} (96 h): 18	*Oncorhynchus mykiss* [c]	[20]
	-/1.1	NOEC (21 d): 91	*Oncorhynchus mykiss* [c]	[20]
Metolachlor	1.3/-	EC_{50} (<10 d): 8	Nonvascular Plants [a]	[7]
	10/-	NOAEC: 1	Invertebrates [b]	[7]
Metoxichlor	-/0.7	LC_{50} (48 h): 30	*Daphnia* [b]	[21]
	-/14.3	EC_{50} or LC_{50} (48 or 96 h): 1.4	Invertebrates [b]	[7]
	-/25.6	EC_{50} (48 h): 0.78	*Daphnia magna* [b]	[20]
	-/20	NOEC (21 d): 1	*Daphnia magna* [b]	[20]
	-/1.3	LC_{50} (96 h): 15	Fish [c]	[7]
Parathion	-/92.1	LC_{50} (48 h): 0.38	*Daphnia magna* [b]	[57]
	-/46.7	LC_{50} (48 h): 0.75	*Daphnia* [b]	[21]
	-/14	EC_{50} (48 h): 2.5	*Daphnia magna* [b]	[20]
	-/350	NOEC (21 d): 0.1	*Daphnia magna* [b]	[20]
	-/318.2	LC_{50} (96 h): 0.11	*Americamysis bahia* [b]	[20]

d: day; h: hour; LC_{50}: lethal concentration; EC_{50}: effective concentration; LOEC: lowest observed effect concentration; NOAEC: no observed adverse effect concentration; NOEC: no observed effect concentration; LOEC: lowest observed effect concentrations. [a] Producer organism; [b] Primary consumer; [c] Secondary consumer; [d] Demeton; [d1] Isomer S; [d2] Isomer O; [e] Degradation product of DDE. All ecotoxicological studies were conducted in a laboratory setting, except for Refs. [7,20,21], where this information was not available.

Malathion was the seventh most commonly sold pesticide in Brazil in 2020 (15,702.11 ton) [69] and is registered for use on 23 crops, including vegetables, fruits and cereals [24]. Due to its persistence in the environment, the organochlorine endosulfan was prohibited in countries that are signatories of the Stockholm Convention, is classified as a POP [71] and its monitoring in water bodies still takes place in many countries [8,72]. In directive 2013/39/EU of the European Union, the endosulfan annual average are 0.005 and 0.0005 µg/L for inland surface waters and other surface waters, respectively, and the maximum allowable concentration are 0.01 and 0.004 µg/L, respectively [6]. These limits are more restrictive than the CONAMA 357/2005 MVs, but are still above the LC_{50} for *Chironomus ramosus* larvae (Table 2).

Various studies evaluated the levels of pesticides in surface freshwaters in Brazilian states, finding maximum concentrations that were equal to or lower than the MV established by the CONAMA directive (Table 1), with one exception (2,4-D for class 1/2). Pires et al. [73] detected glyphosate (2.3 µg/L) in Pará, Severo et al. [74] found atrazine (2 µg/L) and 2,4-D

(30 µg/L, MV of 4 µg/L) in Rio Grande do Sul, Souza et al. [75] found atrazine (0.26 µg/L), Vieira et al. [76] detected atrazine (0.2 µg/L) and malathion (0.05 µg/L) in Paraná and Machado et al. [77] confirmed the occurrence of atrazine (0.32 µg/L) in São Paulo. However, the maximum concentrations detected for atrazine, 2,4-D, and malathion [74–77] are higher than the ecotoxicological parameters included in this study (Table 2) and may represent a toxic effect on the biota. This also shows the importance of considering the data on ecotoxicity in the Brazilian legislation for pesticides in surface water.

The need for a legislation revision identified in this study is corroborated by Brovini et al. [78] using monitoring data and the RQ approach. According to the authors, although most of the environmental concentrations were below the MLs, they were enough to pose a high risk for the aquatic ecosystems. In addition, using monitoring data, Albuquerque et al. [16] observed the potential risk to aquatic life for 59% of the pesticides with the occurrence data in Brazil, and the highest RQs were found for insecticides, which agrees with the present work.

4. Conclusions

Of the 27 pesticides in the Brazilian directive for the classification of surface freshwater (CONAMA 357/2005), 17 have RQs higher than the LOC for at least one of the tested organisms, indicating that the MVs are not safe for the biota. Many of these pesticides, including the persistent organochlorines, have been banned in Brazil and are considered POPs; however, the herbicides alachlor, atrazine, 2,4-D and glyphosate, as well as the insecticides carbaryl and malathion, are still authorized in the country. Thus, it is necessary to review the MVs established in the legislation, so that the objectives for the uses of water classes 1/2 and 3 are preserved, in addition to the protection of aquatic ecosystems.

Furthermore, in addition to the 12 POPs, seven pesticides included in the Brazilian directive are no longer registered in the country. This indicates a necessary revision of the legislation, taking into account the pesticides that are currently most used and most found in water bodies in the country. In this context, this study may guide similar work in other countries and can help in the management of standard directives related to the uses of surface freshwaters, as well as in managing the protection and/or maintenance of aquatic ecosystems.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/toxics10120767/s1, Table S1: Brazilian surface freshwater classes and their respective uses, in accordance with CONAMA standard directive 357/2005 [8]. Table S2: Pesticides listed in CONAMA directive 357/05, for which the risk quotient is higher than the level of concern (LOC) for at least one tested organism. LOC = 0.5 for acute risk of aquatic animals; LOC = 1 for chronic risk of aquatic animals and 1 for acute risk of plants [7]

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Supplementary Materials: Relationship between Pesticide Standards for Classification of Water Bodies and Ecotoxicity: A Case Study of the Brazilian Directive

Esmeralda Pereira de Araújo, Eloisa Dutra Caldas and Eduardo Cyrino Oliveira-Filho

Table S1. Brazilian surface freshwater classes and their respective uses, in accordance with CONAMA standard directive 357/2005[1].

Special class	Class 1	Class 2	Class 3	Class 4
Human supply after disinfection	Human supply after simplified treatment	Human supply after conventional treatment	Human supply after advanced conventional treatment	Navigation
Preservation of the natural equilibrium of aquatic communities	Protection of aquatic communities	Protection of aquatic communities	Irrigation of arboreal, cereal and forage crops	Landscape harmony
Preservation of aquatic environments in completely protected conservation units	Primary contact recreation	Primary contact recreation	Amateur fishing	
	Irrigation of vegetables that are consumed raw and fruit that develops roots in the ground and is eaten raw without removing the skin	Irrigation of vegetables, fruiting plants and those in parks, gardens, sports grounds and leisure areas in which the public can have direct contact	Secondary contact recreation	
	Protection of aquatic communities in Indigenous Lands	Aquiculture and fishing	Provision of water for rearing animals	

Table S2: Ecotoxicology data for the pesticides listed in CONAMA standard directive 357/05 and the the risk quotient (RQ) is higher than the level of concern (LOC) for at least one tested organism. LOC = 0.5 for acute risk of aquatic animals; LOC = 1 for chronic risk of aquatic animals and 1 for acute risk for of plants [2].

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
P	Alachlor	**2.99**	-	EC50 (72h): 6.69	*Raphidocelis subcapitata*	n.i.	[3]
P	Alachlor	**2**	-	EC50 (96h): 10	*Raphidocelis subcapitata*	n.i.	[4]
P	Alachlor	0.7692	-	EC50 (96h): 26	*Chlorella vulgaris*	n.i.	[4]
P	Alachlor	0.0434	-	EC50 (96h): 461	*Chlamydomonas reinhardi*	n.i.	[4]
P	Alachlor	0.0151	-	EC50 (96h): 1328	*Scenedesmus quadricauda*	n.i.	[4]
P	Alachlor	0.0067	-	EC50 (96h): >3000	*Microcystis sp.*	n.i.	[4]
P	Alachlor	0.0067	-	EC50 (96h): >3000	*Anabaena flosque*	n.i.	[4]
P	Alachlor	0.0415	-	EC50 (14d): 482	*Lemna minor*	n.i.	[4]
P	Alachlor	0.2353	-	EC50 (14d): 85	*Ceratophyllum demersum*	n.i.	[4]
P	Alachlor	0.0067	-	EC50 (14d): >3000	*Elodea canadensis*	n.i.	[4]
P	Alachlor	0.0067	-	EC50 (14d): >3000	*Myriophyllum heterophyllum*	n.i.	[4]
P	Alachlor	0.0342	-	EC50 (14d): 584	*Najas sp.*	n.i.	[4]
P	Alachlor	**2**	-	EC50 (7d)-biomass: 10	*Lemna minor*	n.i.	[5]
P	Alachlor	0.0207	-	EC50 (72h)-growth: 966	*Scenedesmus quadricauda*	n.i.	[5]
P	Alachlor	**1**	-	NOEC (96h)-growth: 20	*Chlorella pyrenoidosa*	n.i.	[5]
P	Alachlor	**12.20**	-	EC50 (<10d): 1.64	Nonvascular Plants	n.i.	[6]
P	Alachlor	0.0070	-	EC50 (72h): 2868.12	Algae	n.i.	[7]
PC	Alachlor	0.0029	-	LC50 (48h): 6900.92	*Daphnia*	n.i.	[7]
P	Alachlor	**8.70**	-	EC50 (<10d): 2.3	Vascular plants	n.i.	[6]
PC	Alachlor	0.0080	-	EC50 or LC50 (48 or 96h): 2500	Invertebrates	n.i.	[6]
PC	Alachlor	0.1818	-	NOAEC: 110	Invertebrates	n.i.	[6]
PC	Alachlor	0.0027	-	EC50 (48h): 7500	*Daphnia magna*	Neonate	[3]
PC	Alachlor	0.0042	-	EC50 (48h): 4790	*Hyalella azteca*	Juvenile	[8]
PC	Alachlor	0.0032	-	EC50 (48h): 6300	*Ceriodaphnia dubia*	Neonate	[8]
PC	Alachlor	0.0010	-	EC50 (48h): 21000	*Daphnia magna*	Neonate	[8]
PC	Alachlor	0.0027	-	EC50 (96h): 7400	*Physa gyrina*	Juvenile	[8]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
PC	Alachlor	0.0021	-	EC50 (96h): 9370	*Lymnaea stagnalis*	Juvenile	[8]
PC	Alachlor	0.0019	-	EC50 (24h): 10300	*Thamnocephalus platyurus*	Nauplii or early-instar juvenile	[8]
SC	Alachlor	0.0017	-	LC50 (96h): 11500	*Rana pipiens*	Larvae-early	[9]
SC	Alachlor	0.0057	-	LC50 (96h): 3500	*Rana pipiens*	Larvae-late	[9]
SC	Alachlor	0.0051	-	LC50 (96h): 3900	*Bufo americanus*	Larvae-early	[9]
SC	Alachlor	0.0061	-	LC50 (96h): 3300	*Bufo americanus*	Larvae-late	[9]
SC	Alachlor	0.0022	-	LC50 (96h): 9100	*Oncorhynchus mykiss*	n.i.	[9]
SC	Alachlor	0.0012	-	LC50 (96h): 16700	*Ictalurus punctatus*	n.i.	[9]
SC	Alachlor	0.0100	-	PNOEC (30d): 2000	*Rana pipiens*	Larvae-early	[9]
SC	Alachlor	0.0426	-	PNOEC (30d): 470	*Rana pipiens*	Larvae-late	[9]
SC	Alachlor	0.0143	-	PNOEC (30d): 1400	*Bufo americanus*	Larvae-early	[9]
SC	Alachlor	0.0426	-	PNOEC (30d): 470	*Bufo americanus*	Larvae-late	[9]
PC	Alachlor	0.0020	-	EC50 (48h): 10000	*Daphnia magna*	n.i.	[5]
SC	Alachlor	0.0111	-	LC50 (96h): 1800	Fish	n.i.	[6]
SC	Alachlor	0.1070	-	NOAEC: 187	Fish	n.i.	[6]
SC	Alachlor	0.0524	-	LC50 (96h): 381.9	*Oreochromis niloticus*	2.5 months old	[10]
SC	Alachlor	0.0571	-	MATC: 350	*Oreochromis niloticus*	2.5 months old	[10]
SC	Alachlor	0.0143	-	PNOEC (30d): 1400	*Oncorhynchus mykiss*	n.i.	[9]
SC	Alachlor	0.0211	-	PNOEC (30d): 950	*Ictalurus punctatus*	n.i.	[9]
SC	Alachlor	0.0111	-	LC50 (96h): 1800	*Oncorhynchus mykiss*	n.i.	[5]
SC	Alachlor	0.0043	-	LC50 (96h): 4607.91	*Pimephales promelas*	n.i.	[7]
P	Aldrin	0.0050	0.0300	NOEC (24h)- population growth rate: 1	*Brachionus calyciflorus*	Adult	[11]
P	Aldrin	0.0005	0.0030	LOEC-population growth rate: 10	*Brachionus calyciflorus*	Adult	[11]
P	Aldrin	0.5000	**3**	NOEC-ratio of ovigerous females to non-ovigerous females: 0.01	*Brachionus calyciflorus*	Adult	[11]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Aldrin	0.0500	0.3000	LOEC-ratio of ovigerous females to non-ovigerous females: 0.1	*Brachionus calyciflorus*	Adult	[11]
P	Aldrin	0.0002	0.0010	EC50: 31.12	*Brachionus calyciflorus*	Adult	[11]
P	Aldrin	0.0115	0.0688	EC50 (72h): 0.436	Algae	n.i.	[7]
PC	Aldrin	0.0521	0.3125	LC50 (48h): 0.096	*Daphnia*	n.i.	[7]
PC	Aldrin	0.0002	0.0011	EC50 (48h): 28	*Daphnia magna*	n.i.	[5]
SC	Aldrin	0.0500	0.3000	NOEC-growth: 0.1	*Danio rerio*	Juvenile	[12]
SC	Aldrin	0.0050	0.0300	OEC-growth: 1	*Danio rerio*	Juvenile	[12]
SC	Aldrin	0.0003	0.0016	LC50 (96h): 18.5	*Cyprinus carpio*	n.i.	[13]
SC	Aldrin	0.0002	0.0011	LC50 (96h): 27	*Puntius ticto*	n.i.	[13]
SC	Aldrin	0.2941	**1.76**	LC50 (96h): 0.017	*Pimephales promelas*	n.i.	[7]
SC	Aldrin	0.0011	0.0065	LC50 (96h): 4.6	*Lepomis macrochirus*	n.i.	[5]
P	Dieldrin	0	0	NOEC-population growth rate: 0	*Brachionus calyciflorus*	Adult	[11]
P	Dieldrin	**5.00**	**30**	LOEC-population growth rate: 0.001	*Brachionus calyciflorus*	Adult	[11]
P	Dieldrin	**5.00**	**30**	NOEC-ratio of ovigerous females to non-ovigerous females: 0.001	*Brachionus calyciflorus*	Adult	[11]
P	Dieldrin	0.5000	**3**	LOEC-ratio of ovigerous females to non-ovigerous females: 0.01	*Brachionus calyciflorus*	Adult	[11]
P	Dieldrin	0.00001	0.00003	EC50: >>1000	*Brachionus calyciflorus*	Adult	[11]
P	Dieldrin	0.0077	0.0462	EC50 (72h): 0.65	Algae	n.i.	[7]
P	Dieldrin	0.0001	0.0003	EC50 (72h)-growth: 100	*Chlorella pyrenoidosa*	n.i.	[5]
PC	Dieldrin	0.0263	0.1579	LC50 (48h): 0.19	*Daphnia*	n.i.	[7]
PC	Dieldrin	0.00002	0.0001	LC50 (48h): 250	*Daphnia magna*	n.i.	[5]
PC	Dieldrin	0.0008	0.0050	LC50 (24h): >6	*Hyalella azteca*	Adult	[14]
SC	Dieldrin	0.0003	0.0020	LC50 (21d): 14.9	*Xenopus laevis*	Embryo-larval	[15]
SC	Dieldrin	0.0001	0.0007	LC50 (4d): 40.4	*Xenopus laevis*	Tadpole	[15]
SC	Dieldrin	0.0001	0.0009	LC50 (21d): 34.4	*Rana catesbeiana*	Embryo-larval	[15]
SC	Dieldrin	0.0006	0.0034	LC50 (4d): 8.7	*Rana catesbeiana*	Tadpole	[15]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
SC	Dieldrin	0.0001	0.0004	LC50 (4d): 71.3	*Rana pipiens*	Tadpole	[15]
SC	Dieldrin	0.0008	0.0050	NOAEL (4d): 6	*Xenopus laevis*	Embryo larval-length	[15]
SC	Dieldrin	0.0002	0.0012	LOAEL (4d): 24.1	*Xenopus laevis*	Embryo larval-length	[15]
SC	Dieldrin	0.0002	0.0009	NOAEL (4d): 31.6	*Xenopus laevis*	Tadpole-mortality	[15]
SC	Dieldrin	0.0001	0.0004	LOAEL (4d): 82.9	*Xenopus laevis*	Tadpole-mortality	[15]
SC	Dieldrin	0.0002	0.0012	LOAEL (4d): 25.4	*Rana catesbeiana*	Embryo larval-mortality	[15]
SC	Dieldrin	0.0005	0.0027	NOAEL (4d): 11	*Rana catesbeiana*	Embryo larval-mortality	[15]
SC	Dieldrin	0.0004	0.0027	LOAEL (4d): 11.2	*Rana catesbeiana*	Tadpole-mortality	[15]
SC	Dieldrin	0.0013	0.0075	NOAEL (4d): 4	*Rana catesbeiana*	Tadpole-mortality	[15]
SC	Dieldrin	0.0042	0.0250	LOAEL (10d): 1.2	*Xenopus laevis*	Tadpole chronic-mortality	[15]
SC	Dieldrin	0.0063	0.0375	NOAEL (10d): 0.8	*Xenopus laevis*	Tadpole chronic-mortality	[15]
SC	Dieldrin	0.0012	0.0073	LOAEL (28d): 4.1	*Rana pipiens*	Tadpole chronic-mortality	[15]
SC	Dieldrin	0.0026	0.0158	NOAEL (28d): 1.9	*Rana pipiens*	Tadpole chronic-mortality	[15]
SC	Dieldrin	0.0005	0.0031	LC50 (96h): 9.7	*Cyprinus carpio*	n.i.	[13]
SC	Dieldrin	0.0003	0.0017	LC50 (96h): 18	*Puntius ticto*	n.i.	[13]
SC	Dieldrin	0.0042	0.0250	LC50 (96h): 1.2	*Oncorhynchus mykiss*	n.i.	[5]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Atrazine	0.0004	0.0004	LC50 (7d): 5270	*Lemna minor*	n.i.	[16]
P	Atrazine	**2**	**2**	EC50 (<10d): <1	Nonvascular Plants	n.i.	[6]
P	Atrazine	0.4348	0.4348	EC50 (<10d): 4.6	Vascular plants	n.i.	[6]
P	Atrazine	0.00002	0.00002	LC50 (7d): >100000	*Azolla caroliniana*	n.i.	[16]
P	Atrazine	0.0171	0.0171	EC50 (96h): 117	*Raphidocelis subcapitata*	n.i.	[4]
P	Atrazine	0.0213	0.0213	EC50 (96h): 94	*Chlorella vulgaris*	n.i.	[4]
P	Atrazine	0.0114	0.0114	EC50 (96h): 176	*Chlamydomonas reinhardi*	n.i.	[4]
P	Atrazine	0.0118	0.0118	EC50 (96h): 169	*Scenedesmus quadricauda*	n.i.	[4]
P	Atrazine	0.0222	0.0222	EC50 (96h): 90	*Microcystis sp.*	n.i.	[4]
P	Atrazine	0.0007	0.0007	EC50 (96h): 3000	*Anabaena flosque*	n.i.	[4]
P	Atrazine	0.0217	0.0217	EC50 (14d): 92	*Lemna minor*	n.i.	[4]
P	Atrazine	0.0909	0.0909	EC50 (14d): 22	*Ceratophyllum demersum*	n.i.	[4]
P	Atrazine	0.0952	0.0952	EC50 (14d): 21	*Elodea canadensis*	n.i.	[4]
P	Atrazine	0.0152	0.0152	EC50 (14d): 132	*Myriophyllum heterophyllum*	n.i.	[4]
P	Atrazine	0.0833	0.0833	EC50 (14d): 24	*Najas sp.*	n.i.	[4]
P	Atrazine	0.0001	0.0001	LC50 (24h): 39200	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0063	0.0063	NOEC-population growth rate: 320	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0016	0.0016	LOEC-population growth rate: 1280	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0250	0.0250	NOEC-resting egg hatching rate: 80	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0063	0.0063	LOEC-resting egg hatching rate: 320	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0250	0.0250	NOEC-resting egg production: 80	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.0063	0.0063	LOEC-resting egg production: 320	*Brachionus calyciflorus*	Adult	[17]
P	Atrazine	0.1361	0.1361	LC50 (96h): 14.7	*Scenedesmus obliquus*	n.i.	[18]
P	Atrazine	0.0294	0.0294	EC50 (72h): 68.02	Algae	n.i.	[7]
P	Atrazine	0.0339	0.0339	EC50 (72h)-growth: 59	*Raphidocelis subcapitata*	n.i.	[5]
P	Atrazine	0.1053	0.1053	EC50 (7d)-biomass: 19	*Lemna gibba*	n.i.	[5]
P	Atrazine	0.0200	0.0200	NOEC (96h)-growth: 100	Green algae	n.i.	[5]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
PC	Atrazine	0.0028	0.0028	EC50 or LC50 (48 or 96h): 720	Invertebrates	n.i.	[6]
PC	Atrazine	0.0333	0.0333	NOAEC: 60	Invertebrates	n.i.	[6]
PC	Atrazine	0.0002	0.0002	LC50 (96h): 9900	*Paratya australiensis*	n.i.	[19]
PC	Atrazine	0.00003	0.00003	LC50 (48h): 60600	*Daphnia carinata*	n.i.	[18]
SC	Atrazine	0.00004	0.00004	LC50 (96h): 47600	*Rana pipiens*	Larvae-early	[9]
SC	Atrazine	0.0001	0.0001	LC50 (96h): 14500	*Rana pipiens*	Larvae-late	[9]
SC	Atrazine	0.0001	0.0001	LC50 (96h): 26500	*Bufo americanus*	Larvae-early	[9]
SC	Atrazine	0.0002	0.0002	LC50 (96h): 10700	*Bufo americanus*	Larvae-late	[9]
SC	Atrazine	0.0001	0.0001	LC50 (96h): 20500	*Oncorhynchus mykiss*	n.i.	[9]
SC	Atrazine	0.0001	0.0001	LC50 (96h): 23800	*Ictalurus punctatus*	n.i.	[9]
SC	Atrazine	0.0004	0.0004	PNOEC (30d): 5100	*Rana pipiens*	Larvae-early	[9]
SC	Atrazine	0.0031	0.0031	PNOEC (30d): 650	*Rana pipiens*	Larvae-late	[9]
SC	Atrazine	0.0011	0.0011	PNOEC (30d): 1900	*Bufo americanus*	Larvae-early	[9]
SC	Atrazine	0.0029	0.0029	PNOEC (30d): 690	*Bufo americanus*	Larvae-late	[9]
PC	Atrazine	0.00003	0.00003	LC50 (96h): 77900	*Pacifastacus leniusculus*	Juvenile	[20]
PC	Atrazine	0.0001	0.0001	LC50 (48h): 30031.17	*Daphnia*	n.i.	[7]
PC	Atrazine	0.00002	0.00002	LC50 (48h): 85000	*Daphnia magna*	n.i.	[5]
PC	Atrazine	0.0080	0.0080	LOEC (21d): 250	*Daphnia magna*	n.i.	[5]
PC	Atrazine	0.0020	0.0020	LC50 (96h): 1000	*Americamysis bahia*	n.i.	[5]
SC	Atrazine	0.0004	0.0004	LC50 (96h): 5300	Fish	n.i.	[6]
SC	Atrazine	0.4000	0.4000	NOAEC: 5	Fish	n.i.	[6]
SC	Atrazine	0.0010	0.0010	PNOEC (30d): 2000	*Oncorhynchus mykiss*	n.i.	[9]
SC	Atrazine	0.0005	0.0005	PNOEC (30d): 4300	*Ictalurus punctatus*	n.i.	[9]
SC	Atrazine	0.0002	0.0002	LC50 (96h): 9620	*Silurana tropicalis*	Tadpole	[21]
SC	Atrazine	0.0002	0.0002	LC50 (96h): 10200	*Rhamdia quelen*	Fingerling	[22]
SC	Atrazine	0.0001	0.0001	LC50 (96h): 13918.28	*Pimephales promelas*	n.i.	[7]
SC	Atrazine	0.0004	0.0004	LC50 (96h): 4500	*Oncorhynchus mykiss*	n.i.	[5]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
SC	Atrazine	0.0010	0.0010	NOEC (21d): 2000	*Oncorhynchus mykiss*	n.i.	[5]
P	Carbaryl	0.000005	0.0171	LC50 (24h): 4100	*Brachionus calyciflorus*	Adult	[17]
P	Carbaryl	0.00003	0.1061	EC50 (<10d): 660	Nonvascular Plants	n.i.	[6]
P	Carbaryl	0.0003	**1.17**	NOEC-resting egg production: 60	*Brachionus calyciflorus*	Adult	[17]
P	Carbaryl	0.0001	0.3889	LOEC-resting egg production: 180	*Brachionus calyciflorus*	Adult	[17]
P	Carbaryl	0.0010	**3.50**	NOEC-resting egg hatching rate: 20	*Brachionus calyciflorus*	Adult	[17]
P	Carbaryl	0.0003	**1.17**	LOEC-resting egg hatching rate: 60	*Brachionus calyciflorus*	Adult	[17]
P	Carbaryl	0.00001	0.0226	EC50 (72h): 3099.64	Algae	n.i.	[7]
P	Carbaryl	0.000001	0.0051	EC50 (7d)-biomass: 13700	*Lemna gibba*	n.i.	[5]
P	Carbaryl	0.00003	0.1167	EC50 (72h)-growth: 600	*Chlorella spp.*	n.i.	[5]
PC	Carbaryl	0.0118	**41.18**	EC50 or LC50 (48 or 96h): 1.7	Invertebrates	n.i.	[6]
PC	Carbaryl	0.0400	**140**	NOAEC: 0.5	Invertebrates	n.i.	[6]
PC	Carbaryl	0.000001	0.0025	LC50 (48h): 28475.68	*Daphnia*	n.i.	[7]
PC	Carbaryl	0.0031	**10.94**	EC50 (48h): 6.4	*Daphnia pulex*	n.i.	[5]
PC	Carbaryl	0.0001	0.2800	NOEC (21d): 250	*Daphnia magna*	n.i.	[5]
PC	Carbaryl	0.0035	**12.28**	LC50 (96h): 5.7	*Americamysis bahia*	n.i.	[5]
SC	Carbaryl	0.0001	0.3182	LC50 (96h): 220	Fish	n.i.	[6]
SC	Carbaryl	0.0033	**11.67**	NOAEC: 6	Fish	n.i.	[6]
SC	Carbaryl	0.000002	0.0076	LC50 (96h): 9233.63	*Pimephales promelas*	n.i.	[7]
SC	Carbaryl	0.00001	0.0269	LC50 (96h): 2600	*Pimephales promelas*	n.i.	[5]
SC	Carbaryl	0.0001	0.3333	NOEC (34d): 210	*Pimephales promelas*	n.i.	[5]
P	Chlordane (cis e trans)	0.0002	0.0013	EC50 (72h): 235.72	Algae	n.i.	[7]
P	Chlordane	0.0714	0.5357	EC50 (72h)-cis: 0.56	Algae	n.i.	[7]
P	Chlordane	0.0714	0.5357	EC50 (72h)-trans: 0.56	Algae	n.i.	[7]
PC	Chlordane	0.3150	**2.36**	LC50 (96h): 0.127	*Neocaridina denticulata*	Juvenile	[23]
PC	Chlordane	0.0138	0.1034	NOEC (7d)-longevity: 2.9	*Ceriodaphnia dubia*	Neonate and adult	[24]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
PC	Chlordane	0.0057	0.0429	LOEC (7d)-longevity: 7	*Ceriodaphnia dubia*	Neonate and adult	[24]
PC	Chlordane	0.0041	0.0309	EC50 (21d)-longevity: 9.72	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.0138	0.1034	NOEC (21d)-longevity: 2.9	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.0057	0.0429	LOEC (21d)-longevity: 7	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.2222	**1.67**	NOEC (14d)-survival: 0.18	*Ceriodaphnia dubia*	Neonate and adult	[24]
PC	Chlordane	0.0323	0.2419	EC50 (14d)-survival: 1.24	*Ceriodaphnia dubia*	Neonate and adult	[24]
PC	Chlordane	0.0548	0.4110	LOEC (14d)-survival: 0.73	*Ceriodaphnia dubia*	Neonate and adult	[24]
PC	Chlordane	0.0142	0.1068	EC50 (21d)-survival: 2.81	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.0220	0.1648	NOEC (21d)-survival: 1.82	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.0138	0.1034	LOEC (21d)-survival: 2.9	*Daphnia magna*	Neonate and adult	[24]
PC	Chlordane	0.2222	**1.67**	NOEC (14d)- number of offspring per female: 0.18	*Ceriodaphnia dubia*	Adult	[24]
PC	Chlordane	0.0548	0.4110	LOEC (14d)- number of offspring per female: 0.73	*Ceriodaphnia dubia*	Adult	[24]
PC	Chlordane	0.0105	0.0789	EC50 (14d)-number of offspring per female: 3.8	*Ceriodaphnia dubia*	Adult	[24]
PC	Chlordane	0.2222	**1.67**	NOEC (21d)- number of offspring per female: 0.18	*Daphnia magna*	Adult	[24]
PC	Chlordane	0.0548	0.4110	LOEC (21d)- number of offspring per female: 0.73	*Daphnia magna*	Adult	[24]
PC	Chlordane	0.0260	0.1948	EC50 (21d)-number of offspring per female: 1.54	*Daphnia magna*	Adult	[24]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
PC	Chlordane	0.0030	0.0224	EC50 (48h): 13.4	*Daphnia magna*	Neonate and <24h old	[25]
PC	Chlordane	0.0548	0.4110	LOEC (21d)-reproduction. number of offspring per female and brood size and on body length: 0.73	*Daphnia magna*	Neonate and <24h old	[25]
PC	Chlordane	0.0040	0.0297	EC50 (21d)-population growth rate: 10.1	*Daphnia magna*	Neonate and <24h old	[25]
PC	Chlordane	0.0009	0.0069	LC50 (48h): 43.63	*Daphnia*	n.i.	[7]
PC	Chlordane	0.0059	0.0446	LC50 (48h)-cis: 6.73	*Daphnia*	n.i.	[7]
PC	Chlordane	**0.57**	**4.29**	LC50 (48h)-trans: 0.07	*Daphnia*	n.i.	[7]
PC	Chlordane	0.0001	0.0005	EC50 (48h): 590	*Daphnia magna*	n.i.	[5]
PC	Chlordane	0.0006	0.0043	LOEC (21d): 70	*Daphnia magna*	n.i.	[5]
SC	Chlordane	0.0010	0.0077	LC50 (96h): 39	*Cyprinus carpio*	n.i.	[13]
SC	Chlordane	0.0008	0.0058	LC50 (96h): 52	*Puntius ticto*	n.i.	[13]
SC	Chlordane	0.0011	0.0081	LC50 (96h): 37.23	*Pimephales promelas*	n.i.	[7]
SC	Chlordane	0.0057	0.0428	LC50 (96h)-cis: 7.0089	*Pimephales promelas*	n.i.	[7]
SC	Chlordane	**1.00**	**7.50**	LC50 (96h)-trans: 0.04	*Pimephales promelas*	n.i.	[7]
SC	Chlordane	0.0004	0.0033	LC50 (96h): 90	*Oncorhynchus mykiss*	n.i.	[5]
P	2.4-D	0.00001	0.00004	LC50 (7d): 708350	*Azolla caroliniana*	n.i.	[26]
P	2.4-D	0.0134	0.1003	EC50 (<10d): 299.2	Vascular plants	n.i.	[6]
P	2.4-D	0.0017	0.0127	EC50 (24h)-growth rate: >2360	*Lemna minor*	n.i.	[27]
P	2.4-D	0.0017	0.0127	NOEC-growth rate: >2360	*Lemna minor*	n.i.	[27]
P	2.4-D	0.0003	0.0024	EC50 (72h): 12400.38	Algae	n.i.	[7]
P	2.4-D	0.0002	0.0012	EC50 (72h): 24200	*Raphidocelis subcapitata*	n.i.	[5]
P	2.4-D	0.0015	0.0111	EC50 (7d): 2700	*Lemna gibba*	n.i.	[5]
P	2.4-D	0.00004	0.0003	NOEC (96h)-growth: 100000	*Chlorella vulgaris*	n.i.	[5]
PC	2.4-D	0.0002	0.0012	EC50 or LC50 (48 or 96h): 25000	Invertebrates	n.i.	[6]
PC	2.4-D	0.00004	0.0003	LC50 (96h): >100000	*Hyalella meinerti*	7-14 days	[28]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
PC	2.4-D	0.1379	**1.03**	LOEC: 29	*Hyalella meinerti*	7-14 days	[28]
PC	2.4-D	0.1379	**1.03**	NOEC: <29	*Hyalella meinerti*	7-14 days	[28]
PC	2.4-D	**1.24**	**9.32**	LC50 (48h): 3.22	*Daphnia*	n.i.	[7]
PC	2.4-D	0.00003	0.0002	EC50 (48h): 134200	*Daphnia magna*	n.i.	[5]
PC	2.4-D	0.0001	0.0006	NOEC (21d): 46200	*Daphnia magna*	n.i.	[5]
SC	2.4-D	0.00005	0.0004	LC50 (96h): 81000	*Heteropneustes fossilis*	n.i.	[29]
SC	2.4-D	0.00003	0.0002	LC50 (96h): 122000	*Clarias batrachus*	n.i.	[29]
SC	2.4-D	0.00004	0.0003	LC50 (96h): 107000	*Channa punctatus*	n.i.	[29]
SC	2.4-D	0.00001	0.0001	LC50 (48h): 302000	*Culex pipiens fatigans*	Larvae	[29]
SC	2.4-D	**1.54**	**11.58**	LC50 (96h): 2.59	*Pimephales promelas*	n.i.	[7]
SC	2.4-D	0.00004	0.0003	LC50 (96h): 100000	*Pimephales promelas*	n.i.	[5]
SC	2.4-D	0.0001	0.0011	NOEC(28d): 27200	*Oryzias latipes*	n.i.	[5]
PC	Demeton (Demeton O + S)	0.0096	**1.35**	EC50 (48h): 10.4	*Daphnia pulex*	n.i.	[5]
SC	Demeton	0.0001	0.0088	LC50(96h): 1600	*Oncorhynchus mykiss*	n.i.	[5]
P	Demeton-S	0.0000	0.0005	EC50 (72h): 26127.64	Algae	n.i.	[7]
PC	Demeton-S	0.0116	**1.62**	LC50 (48h): 8.62	*Daphnia*	n.i.	[7]
SC	Demeton-S	0.0226	**3.16**	LC50 (96h): 4.43	*Pimephales promelas*	n.i.	[7]
P	Demeton-O	0.00001	0.0021	EC50 (72h): 6740.82	Algae	n.i.	[7]
PC	Demeton-O	0.0225	**3.15**	LC50 (48h): 4.44	*Daphnia*	n.i.	[7]
SC	Demeton-O	0.00004	0.0053	LC50 (96h): 2635.9	*Pimephales promelas*	n.i.	[7]
P	2.4-Dichlorophenol	0.00004	-	EC50 (72h); 6797.1	Algae	n.i.	[7]
P	2.4-Dichlorophenol	0.0002	-	EC50(7d)-biomass: 1500	*Lemna gibba*	n.i.	[5]
P	2.4-Dichlorophenol	0.0001	-	EC50 (72h)-growth: 3440	*Raphidocelis subcapitata*	n.i.	[5]
PC	2.4-Dichlorophenol	0.0001	-	LC50 (48h): 2570.63	*Daphnia*	n.i.	[7]
PC	2.4-Dichlorophenol	0.0001	-	EC50 (48h): 2800	*Daphnia magna*	n.i.	[5]
SC	2.4-Dichlorophenol	0.0010	-	MATC-survival: 290	*Pimephales promelas*	Early-juvenile	[30]
SC	2.4-Dichlorophenol	0.00005	-	LC50 (192h): 6500	*Pimephales promelas*	30-35 days old	[31]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	2.4-Dichlorophenol	0.00003	-	LC50 (96h): 9728.8	*Pimephales promelas*	n.i.	[7]
SC	2.4-Dichlorophenol	0.0001	-	LC50 (96h): 2630	*Oncorhynchus mykiss*	n.i.	[5]
SC	DDT (p.p′-DDT. p.p′-DDE. p.p′-DDD)	0.00002	0.0077	NOEC (21d): 130	*Oncorhynchus mykiss*	n.i.	[5]
PC	DDE	0.0020	**1.00**	EC50 (48h): 1	*Bosmina longirostris*	n.i.	[5]
SC	DDE	0.0001	0.0313	LC50 (96h): 32	*Oncorhynchus mykiss*	n.i.	[5]
PC	DDD	0.0002	0.1111	EC50 (48h): >9	*Daphnia magna*	n.i.	[5]
SC	DDD	0.00003	0.0143	LC50 (96h): >70	*Oncorhynchus mykiss*	n.i.	[5]
PC	DDT	0.0004	0.2000	EC50 (48h): >5	*Daphnia magna*	n.i.	[5]
SC	DDT	0.000001	0.0004	LC50 (96h): >2500	*Oncorhynchus mykiss*	n.i.	[5]
P	p.p'-DDT	0.00001	0.0072	EC50 (72h): 138.26	Algae	n.i.	[7]
PC	p.p'-DDT	0.0001	0.0485	LC50 (48h): 20.62	*Daphnia*	n.i.	[7]
SC	p.p'-DDT	0.0008	0.4167	LC50 (96h): 2.4	*Cyprinus carpio*	n.i.	[13]
SC	p.p'-DDT	0.00004	0.0204	LC50 (96h): 49	*Puntius ticto*	n.i.	[13]
SC	p.p'-DDT	0.0001	0.0556	LC50 (96h): 17.98	*Pimephales promelas*	n.i.	[7]
P	Endosulfan (α + β + sulphate)	0.0257	0.1009	EC50 (72h): 2.18	Algae	n.i.	[7]
P	Endosulfan	0.0001	0.0005	EC50 (<10d): 428	Nonvascular Plants	n.i.	[6]
P	Endosulfan	0.00003	0.0001	EC50 (72h)-growth: 2150	*Anabaena doliolum*	n.i.	[5]
PC	Endosulfan	0.0933	0.3667	EC50 or LC50 (48 or 96h): 0.6	Invertebrates	n.i.	[6]
PC	Endosulfan	**5.60**	**22.00**	NOAEC: 0.01	Invertebrates	n.i.	[6]
PC	Endosulfan	0.0667	0.2619	LC50 (48h): 0.84	*Daphnia*	n.i.	[7]
PC	Endosulfan	0.0002	0.0009	LC50 (96h): 240	*Americamysis bahia*	n.i.	[5]
PC	Endosulfan	0.0001	0.0005	EC50 (48h): 440	*Daphnia magna*	n.i.	[5]
SC	Endosulfan	**0.56**	**2.20**	LC50 (96h): 0.1	Fish	n.i.	[6]
SC	Endosulfan	**2.43**	**9.57**	NOAEC: 0.023	Fish	n.i.	[6]
PC	Endosulfan	**155.56**	**611**	LC50 (96h): 0.00036	*Chironomus ramosus*	Larvae	[32]
SC	Endosulfan	0.0824	0.3235	LC50 (96h): 0.68	*Pimephales promelas*	n.i.	[7]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	Endosulfan	0.0280	0.1100	LC50 (96h): 2	*Oncorhynchus mykiss*	n.i.	[5]
SC	Endosulfan	**112.00**	**440**	NOEC (28d): 0.0005	*Cyprinodon variegatus*	n.i.	[5]
P	α-Endosulfan	0.00003	0.0001	EC50 (72h): 2203.64	Algae	n.i.	[7]
P	α-Endosulfan	0.00003	0.0001	EC50 (72h)-growth: 2150	*Anabaena doliolum*	n.i.	[5]
PC	α-Endosulfan	0.0001	0.0003	LC50 (48h): 697.53	*Daphnia*	n.i.	[7]
PC	α-Endosulfan	0.0001	0.0005	EC50 (48h): 440	*Daphnia magna*	n.i.	[5]
PC	α-Endosulfan	0.0002	0.0009	LC50 (96h): 240	*Americamysis bahia*	n.i.	[5]
SC	α-Endosulfan	0.0001	0.0002	LC50 (96h): 981.35	*Pimephales promelas*	n.i.	[7]
SC	α-Endosulfan	0.0280	0.1100	LC50 (96h): 2	*Oncorhynchus mykiss*	n.i.	[5]
P	Endosulfan sulfate	0.0255	0.1000	EC50 (72h): 2.2	Algae	n.i.	[7]
PC	Endosulfan sulfate	0.0001	0.0003	EC50 (48h): 760	*Daphnia magna*	n.i.	[5]
PC	Endosulfan sulfate	0.0361	0.1419	LC50 (48h): 1.55	*Daphnia*	n.i.	[7]
SC	Endosulfan sulfate	0.0246	0.0968	LC50 (96h): 2.273	*Gambusia affinis*	n.i.	[33]
SC	Endosulfan sulfate	0.0272	0.1069	LC50 (96h): 2.058	*Heterandria formosa*	n.i.	[33]
SC	Endosulfan sulfate	0.0160	0.0627	LC50 (96h): 3.506	*Poecilia latipinna*	n.i.	[33]
SC	Endosulfan sulfate	0.0184	0.0722	LC50 (96h): 3.047	*Pimephales promelas*	n.i.	[33]
SC	Endosulfan sulfate	0.0560	0.2200	LC50 (96h): 1	*Pimephales promelas*	n.i.	[7]
SC	Endosulfan sulfate	0.0056	0.0220	LC50 (48h): 10	Cyprinidae	n.i.	[5]
P	Endrin	0.0062	0.3077	EC50 (72h): 0.65	Algae	n.i.	[7]
PC	Endrin	0.0211	**1.05**	LC50 (48h): 0.19	*Daphnia*	n.i.	[7]
PC	Endrin	0.0010	0.0476	EC50 (48h): 4.2	*Daphnia magna*	n.i.	[5]
SC	Endrin	0.0003	0.0154	EC50 (24h): 13	*Rana sphenocephala*	Larvae	[34]
SC	Endrin	0.0004	0.0222	LC50 (96h): 9	*Rana sphenocephala*	Larvae	[34]
SC	Endrin	0.0001	0.0050	EC50 (24h): >40	*Rana catesbeiana*	Larvae	[34]
SC	Endrin	0.0020	0.1000	LC50 (96h): 2	*Rana catesbeiana*	Larvae	[34]
SC	Endrin	0.0003	0.0125	EC50 (24h): <16	*Rana sylvatica*	Larvae	[34]
SC	Endrin	0.0001	0.0059	LC50 (96h): 34	*Rana sylvatica*	Larvae	[34]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	Endrin	0.0005	0.0250	EC50 (24h): 8	*Bufo americanus*	Larvae	[34]
SC	Endrin	0.0004	0.0200	LC50 (96h): 10	*Bufo americanus*	Larvae	[34]
SC	Endrin	0.0002	0.0087	EC50 (24h): 23	*Acris crepitans*	Larvae	[34]
SC	Endrin	0.0004	0.0200	LC50 (96h): 10	*Acris crepitans*	Larvae	[34]
SC	Endrin	0.0002	0.0111	EC50 (24h): 18	*Ambystoma opacum*	Larvae	[34]
SC	Endrin	0.0002	0.0111	LC50 (96h): 18	*Ambystoma opacum*	Larvae	[34]
SC	Endrin	0.0001	0.0042	EC50 (24h): 48	*Ambystoma maculatum*	Larvae	[34]
SC	Endrin	0.0001	0.0036	LC50 (96h): 56	*Ambystoma maculatum*	Larvae	[34]
SC	Endrin	**2.00**	**100**	LC50 (96h): 0.002	*Pimephales promelas*	n.i.	[7]
SC	Endrin	0.0055	0.2740	LC50 (96h): 0.73	*Oncorhynchus mykiss*	n.i.	[5]
SC	Endrin	0.0333	**1.67**	NOEC (21d): 0.12	*Cyprinodon variegatus*	n.i.	[5]
P	Glyphosate	0.0027	0.0118	LC50 (7d): 23660	*Azolla caroliniana*	n.i.	[26]
P	Glyphosate	0.0054	0.0231	EC50 (<10d): 12100	Nonvascular Plants	n.i.	[6]
P	Glyphosate	0.0055	0.0235	EC50 (<10d): 11900	Vascular plants	n.i.	[6]
P	Glyphosate	0.0034	0.0147	EC50 (72h): 19000	Algae	n.i.	[7]
P	Glyphosate	0.0054	0.0233	EC50 (72h)-growth: 12000	*Raphidocelis subcapitata*	n.i.	[5]
P	Glyphosate	**5.42**	**23.33**	EC50 (7d): 12	*Lemna gibba*	n.i.	[5]
PC	Glyphosate	0.0012	0.0053	EC50 or LC50 (48 or 96h): 53200	Invertebrates	n.i.	[6]
PC	Glyphosate	0.0013	0.0056	NOAEC: 49900	Invertebrates	n.i.	[6]
PC	Glyphosate	0.0013	0.0056	LC50 (48h): 50339.42	*Daphnia*	n.i.	[7]
PC	Glyphosate	0.0007	0.0028	EC50 (48h): >100000	*Daphnia magna*	n.i.	[5]
PC	Glyphosate	0.0052	0.0224	NOEC (21d): 12500	*Daphnia magna*	n.i.	[5]
PC	Glyphosate	0.0016	0.0070	LC50 (96h): 40000	*Americamysis bahia*	n.i.	[5]
SC	Glyphosate	0.0015	0.0065	LC50 (96h): 43000	Fish	n.i.	[6]
SC	Glyphosate	0.0025	0.0109	NOAEC: 25700	Fish	n.i.	[6]
SC	Glyphosate	0.0003	0.0012	LC50 (96h): 227829.43	*Pimephales promelas*	n.i.	[7]
SC	Glyphosate	0.0007	0.0028	LC50 (96h): >100000	*Oncorhynchus mykiss*	n.i.	[5]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	Glyphosate	0.0650	0.2800	NOEC (21d): 1000	*Danio rerio*	n.i.	[5]
SC	Glyphosate	0.0089	0.0384	LC50 (96h): 7300	*Rhamdia quelen*	Fingerling	[22]
P	Gution	0.000001	0.000001	EC50 (72h)-growth: 7150	*Raphidocelis subcapitata*	n.i.	[5]
PC	Gution	0.0045	0.0045	EC50 (48h): 1.1	*Daphnia magna*	n.i.	[5]
PC	Gution	0.0125	0.0125	LOEC (21d): 0.4	*Daphnia magna*	n.i.	[5]
PC	Gution	0.0227	0.0227	LC50 (96h): 0.22	*Americamysis bahia*	n.i.	[5]
SC	Gution	0.00001	0.00001	LC50 (96h): >890	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.00001	0.00001	EC50 (96h)-malformed survivors: >890	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.00001	0.00001	NOAEL (96h)-lenght: 480	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.00000	0.00000	LOAEL (96h)-lenght: 1300	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.00001	0.00001	NOAEL (96h)-deformity: 510	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.00001	0.00001	LOAEL (96h)-deformity: <990	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.000004	0.000004	NOAEL (96h)-mortality: 1300	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.000001	0.000001	LOAEL (96h)-mortality: 3800	*Xenopus laevis*	Embryo	[35]
SC	Gution	0.000003	0.000003	LC50 (96h): 1470	*Pseudacris regilla*	Tadpole	[36]
SC	Gution	0.00003	0.00003	LOAEL (10d): 170	*Pseudacris regilla*	Tadpole	[36]
SC	Gution	0.0001	0.0001	NOAEL (10d): 70	*Pseudacris regilla*	Tadpole	[36]
SC	Gution	0.000003	0.000003	LC50 (96h): 1670	*Ambystoma gracile*	Larvae	[36]
SC	Gution	0.00002	0.00002	LOAEL (10d): 220	*Ambystoma gracile*	Larvae	[36]
SC	Gution	0.0001	0.0001	NOAEL (10d): 100	*Ambystoma gracile*	Larvae	[36]
SC	Gution	0.000003	0.000003	LC50 (96h): 1900	*Ambystoma maculatum*	Larvae	[36]
SC	Gution	0.00005	0.00005	LOAEL (10d): 110	*Ambystoma maculatum*	Larvae	[36]
SC	Gution	0.0002	0.0002	NOAEL (10d): 30	*Ambystoma maculatum*	Larvae	[36]
SC	Gution	0.0003	0.0003	LC50 (96h): 20	*Oncorhynchus mykiss*	n.i.	[5]
SC	Gution	0.0294	0.0294	NOEC (21d): 0.17	*Pimephales promelas*	n.i.	[5]
P	Heptachlor + epoxide	0.0000001/ 0.00004	0.0001	EC50 (72h): 264.29	Algae	n.i.	[7]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Heptachlor	0.000001/ 0.0004	0.0011	EC50 (72h)-growth: 27	*Raphidocelis subcapitata*	n.i.	[5]
PC	Heptachlor	0.000001/ 0.0001	0.0004	LC50 (48h): 69.67	*Daphnia*	n.i.	[7]
PC	Heptachlor	0.000001/ 0.0002	0.0007	EC50 (48h): 42	*Daphnia magna*	n.i.	[5]
SC	Heptachlor	0.000001/ 0.0002	0.0005	LC50 (96h): 62.49	*Pimephales promelas*	n.i.	[7]
SC	Heptachlor	0.00001/ 0.0014	0.0043	LC50 (96h): 7	*Oncorhynchus mykiss*	n.i.	[5]
SC	Heptachlor	0.00004/ 0.01	0.0300	NOEC-growth: 1	*Danio rerio*	Juvenile	[12]
SC	Heptachlor	0.000004/ 0.001	0.0030	OEC-growth: 10	*Danio rerio*	Juvenile	[12]
P	Heptachlor epoxide	0.0000001/ 0.00002	0.0001	EC50 (72h): 478.39	Algae	n.i.	[7]
P	Heptachlor epoxide	0.0000000002/ 0.0000001	0.0000002	EC50 (72h)-growth: 200000	*Raphidocelis subcapitata*	n.i.	[5]
PC	Heptachlor epoxide	0.0000001/ 0.00003	0.0001	LC50 (48h): 299.43	*Daphnia*	n.i.	[7]
PC	Heptachlor epoxide	0.0000002/ 0.00004	0.0001	EC50 (48h): 240	*Daphnia magna*	n.i.	[5]
SC	Heptachlor epoxide	0.000004/ 0.001	0.0030	LC50 (96h): 10.09	*Pimephales promelas*	n.i.	[7]
SC	Heptachlor epoxide	0.000002/ 0.0005	0.0015	LC50 (96h): 20	*Oncorhynchus mykiss*	n.i.	[5]
P	Hexachlorobenzene	0.000001/ 0.00002	-	EC50 (72h): 263.79	Algae	n.i.	[7]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Hexachlorobenzene	0.00003/ 0.0006	-	EC50 (72h)-growth: 10	*Scenedesmus abundans*	n.i.	[5]
PC	Hexachlorobenzene	0.00004/ 0.0008	-	LC50 (48h): 7.79	*Daphnia*	n.i.	[7]
PC	Hexachlorobenzene	0.0000006/ 0.00001	-	EC50 (24h): 500	*Daphnia magna*	n.i.	[5]
PC	Hexachlorobenzene	0.00009/ 0.002	-	NOEC (21d): >3	*Daphnia magna*	n.i.	[5]
SC	Hexachlorobenzene	0.000003/ 0.00007	-	LC50 (96h): 92.72	*Pimephales promelas*	n.i.	[7]
SC	Hexachlorobenzene	0.000009/ 0.002	-	LC50 (96h): 30	*Oncorhynchus mykiss*	n.i.	[5]
SC	Hexachlorobenzene	0.00006/ 0.001	-	NOEC (32d): >4.8	*Pimephales promelas*	n.i.	[5]
P	Lindane	0.0007	0.0741	EC50 (7d)-biomass: 27	*Lemna gibba*	n.i.	[5]
P	Lindane	0.000004	0.0004	EC50 (72h): 4982.09	Algae	n.i.	[7]
P	Lindane	0.00001	0.0008	EC50 (72h)-growth: 2500	*Scenedesmus abundans*	n.i.	[5]
PC	Lindane	0.0200	**2.00**	EC50 or LC50 (48 or 96h): 1	Invertebrates	n.i.	[6]
PC	Lindane	0.0004	0.0370	NOAEC: 54	Invertebrates	n.i.	[6]
PC	Lindane	0.0021	0.2137	LC50 (96h): 9.36	*Neocaridina denticulata*	Juvenile	[23]
PC	Lindane	0.00002	0.0016	LC50 (48h): 1257.95	*Daphnia*	n.i.	[7]
PC	Lindane	0.00001	0.0013	EC50 (48h): 1600	*Daphnia magna*	n.i.	[5]
PC	Lindane	0.0000004	0.00004	NOEC (21d): 54000	*Daphnia magna*	n.i.	[5]
PC	Lindane	0.0032	0.3175	LC50 (96h): 6.3	*Americamysis bahia*	n.i.	[5]
SC	Lindane	0.0118	**1.18**	LC50 (96h): 1.7	Fish	n.i.	[6]
SC	Lindane	0.0069	0.6897	NOAEC: 2.9	Fish	n.i.	[6]
SC	Lindane	0.0002	0.0236	LC50 (96h): 84.83	*Pimephales promelas*	n.i.	[7]
SC	Lindane	0.0069	**0.69**	LC50 (96h): 2.9	*Oncorhynchus mykiss*	n.i.	[5]
SC	Lindane	0.00001	0.0007	NOEC (21d): 2900	*Oncorhynchus mykiss*	n.i.	[5]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Malathion	0.00001	0.0077	EC50 (72h)-growth: 13000	*Raphidocelis subcapitata*	n.i.	[5]
P	Malathion	0.00005	0.0490	EC50 (<10d): 2040	Nonvascular Plants	n.i.	[6]
P	Malathion	0.000004	0.0042	EC50 (<10d): 24000	Vascular plants	n.i.	[6]
P	Malathion	0.00002	0.0157	EC50 (72h): 6371.78	Algae	n.i.	[7]
PC	Malathion	**1.02**	**1020.4**	EC50 or LC50 (48 or 96h): 0.098	Invertebrates	n.i.	[6]
PC	Malathion	**1.67**	**1666.7**	NOAEC: 0.06	Invertebrates	n.i.	[6]
PC	Malathion	0.1111	**111.11**	LC50 (48h): 0.9	*Daphnia magna*	Neonate	[37]
PC	Malathion	0.0049	**4.92**	LC50 (48h): 20.32	*Daphnia*	n.i.	[7]
PC	Malathion	0.1429	**142.86**	EC50 (48h): 0.7	*Daphnia magna*	n.i.	[5]
PC	Malathion	**1.67**	**1666.67**	NOEC (21d): 0.06	*Daphnia magna*	n.i.	[5]
PC	Malathion	0.0667	**66.67**	LC50 (96h): 1.5	*Americamysis bahia*	n.i.	[5]
SC	Malathion	0.0244	**24.39**	LC50 (96h): 4.1	Fish	n.i.	[6]
SC	Malathion	0.0116	**11.63**	NOAEC: 8.6	Fish	n.i.	[6]
PC	Malathion	**3125**	**3125000**	LC50 (96h): 0.000032	*Chironomus ramosus*	Larvae	[32]
SC	Malathion	0.0223	**22.32**	LC50 (96h): 4.48	*Pimephales promelas*	n.i.	[7]
SC	Malathion	0.0056	**5.56**	LC50 (96h): 18	*Oncorhynchus mykiss*	n.i.	[5]
SC	Malathion	0.0011	**1.10**	NOEC (21d): 91	*Oncorhynchus mykiss*	n.i.	[5]
P	Metolachlor	0.2257	-	EC50 (72h): 44.3	*Raphidocelis subcapitata*	n.i.	[3]
P	Metolachlor	**1.25**	-	EC50 (<10d): 8	Nonvascular Plants	n.i.	[6]
P	Metolachlor	0.4762	-	EC50 (<10d): 21	Vascular plants	n.i.	[6]
P	Metolachlor	0.1190	-	EC50 (96h): 84	*Raphidocelis subcapitata*	n.i.	[4]
P	Metolachlor	0.0493	-	EC50 (96h): 203	*Chlorella vulgaris*	n.i.	[4]
P	Metolachlor	0.0088	-	EC50 (96h): 1138	*Chlamydomonas reinhardi*	n.i.	[4]
P	Metolachlor	0.0033	-	EC50 (96h): >3000	*Scenedesmus quadricauda*	n.i.	[4]
P	Metolachlor	0.0033	-	EC50 (96h): >3000	*Microcystis sp.*	n.i.	[4]
P	Metolachlor	0.0033	-	EC50 (96h): >3000	*Anabaena flosque*	n.i.	[4]
P	Metolachlor	0.0278	-	EC50 (14d): 360	*Lemna minor*	n.i.	[4]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
P	Metolachlor	0.1429	-	EC50 (14d): 70	*Ceratophyllum demersum*	n.i.	[4]
P	Metolachlor	0.0042	-	EC50 (14d): 2355	*Elodea canadensis*	n.i.	[4]
P	Metolachlor	0.0033	-	EC50 (14d): >3000	*Myriophyllum heterophyllum*	n.i.	[4]
P	Metolachlor	0.0413	-	EC50 (14d): 242	*Najas sp.*	n.i.	[4]
P	Metolachlor	0.0057	-	EC50 (24h)-growth rate: 1747	*Lemna minor*	n.i.	[27]
P	Metolachlor	0.2222	-	NOEC-growth rate: 45	*Lemna minor*	n.i.	[27]
P	Metolachlor	0.0056	-	EC50 (72h): 1798.98	Algae	n.i.	[7]
P	Metolachlor	0.0002	-	EC50 (72h)-growth: >57100	*Raphidocelis subcapitata*	n.i.	[5]
P	Metolachlor	0.2326	-	EC50 (7d)-biomass: >43	*Lemna gibba*	n.i.	[5]
P	Metolachlor	0.0033	-	NOEC (96h)-growth: 3000	*Anabaena sp.*	n.i.	[5]
PC	Metolachlor	0.0091	-	EC50 or LC50 (48 or 96h): 1100	Invertebrates	n.i.	[6]
PC	Metolachlor	**10**	-	NOAEC: 1	Invertebrates	n.i.	[6]
PC	Metolachlor	0.0004	-	EC50 (48h): 22300	*Daphnia magna*	Neonate	[3]
PC	Metolachlor	0.0034	-	EC50 (48h): <2900	*Hyalella azteca*	Juvenile	[8]
PC	Metolachlor	0.0004	-	EC50 (48h): 23000	*Ceriodaphnia dubia*	Juvenile	[8]
PC	Metolachlor	0.0002	-	EC50 (48h): 59000	*Daphnia magna*	Juvenile	[8]
PC	Metolachlor	0.0011	-	EC50 (96h): 9000	*Physa gyrina*	Juvenile	[8]
PC	Metolachlor	0.0010	-	EC50 (96h): 10000	*Lymnaea stagnalis*	Juvenile	[8]
PC	Metolachlor	0.0005	-	EC50 (24h): 21700	*Thamnocephalus platyurus*	Nauplii or early-instar juvenile	[8]
PC	Metolachlor	0.0007	-	LC50 (48h): 14740.14	*Daphnia*	n.i.	[7]
PC	Metolachlor	0.0004	-	EC50 (48h): >23500	*Daphnia magna*	n.i.	[5]
PC	Metolachlor	0.0141	-	LOEC (21d): >707	*Daphnia magna*	n.i.	[5]
PC	Metolachlor	0.0024	-	LC50 (96h): 4200	*Americamysis bahia*	n.i.	[5]
SC	Metolachlor	0.0026	-	LC50 (96h): 3800	Fish	n.i.	[6]
SC	Metolachlor	0.3333	-	NOAEC: 30	Fish	n.i.	[6]
SC	Metolachlor	0.0014	-	LC50 (96h): 7327.98	*Pimephales promelas*	n.i.	[7]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	Metolachlor	0.0026	-	LC50 (96h): >3900	*Oncorhynchus mykiss*	n.i.	[5]
SC	Metolachlor	0.0100	-	NOEC (21d): 1000	*Cyprinodon variegatus*	n.i.	[5]
P	Metoxichlor	0.0001	0.0333	EC50 (72h)-growth: 600	*Scenedesmus quadricauda*	n.i.	[5]
P	Metoxichlor	0.0001	0.0336	EC50 (72h): 594.82	Algae	n.i.	[7]
PC	Metoxichlor	0.0010	**0.67**	LC50 (48h): 30	*Daphnia*	n.i.	[7]
PC	Metoxichlor	0.0214	**14.29**	EC50 or LC50 (48 or 96h): 1.4	Invertebrates	n.i.	[6]
PC	Metoxichlor	0.0385	**25.64**	EC50 (48h): 0.78	*Daphnia magna*	n.i.	[5]
PC	Metoxichlor	0.0300	**20**	NOEC (21d): 1	*Daphnia magna*	n.i.	[5]
SC	Metoxichlor	0.0002	0.1246	LC50 (96h): 160.55	*Pimephales promelas*	n.i.	[7]
SC	Metoxichlor	0.0020	**1.33**	LC50 (96h): 15	Fish	n.i.	[6]
SC	Metoxichlor	0.0006	0.3846	LC50 (96h): 52	*Oncorhynchus mykiss*	n.i.	[5]
P	Parathion	0.000004	0.0035	EC50 (72h)-growth: 10000	*Scenedesmus subspicatus*	n.i.	[5]
P	Parathion	0.00004	0.0354	EC50 (72h): 987.58	Algae	n.i.	[7]
PC	Parathion	0.1053	**92.11**	LC50 (48h): 0.38	*Daphnia magna*	Neonate	[37]
PC	Parathion	0.0533	**46.67**	LC50 (48h): 0.75	*Daphnia*	n.i.	[7]
PC	Parathion	0.0160	**14.00**	EC50 (48h): 2.5	*Daphnia magna*	n.i.	[5]
PC	Parathion	0.4000	**350.00**	NOEC (21d): 0.1	*Daphnia magna*	n.i.	[5]
PC	Parathion	0.3636	**318.18**	LC50 (96h): 0.11	*Americamysis bahia*	n.i.	[5]
SC	Parathion	0.00001	0.0054	LC50 (96h): 6500	*Carassius auratus*	Juvenile	[38]
SC	Parathion	0.00002	0.0140	NOEC: 2500	*Carassius auratus*	Juvenile	[38]
SC	Parathion	0.00005	0.0414	LC50 (96h): 845.4	*Pimephales promelas*	n.i.	[7]
SC	Parathion	0.00003	0.0233	LC50 (96h): 1500	*Oncorhynchus mykiss*	n.i.	[5]
SC	Parathion	0.0004	0.3571	NOEC (21d): >98	*Danio rerio*	n.i.	[4]
P	Pentachlorophenol	0.0375/ 0.1125	0.1125	EC50 (72h)-growth: 80	*Scenedesmus quadricauda*	n.i.	[4]
P	Pentachlorophenol	0.025/ 0.075	0.0750	EC50 (7d)-biomass: 120	*Lemna gibba*	n.i.	[4]
P	Pentachlorophenol	0.0075/	0.0225	NOEC (96h)-growth: >400	*Chlorella pyrenoidosa*	n.i.	[4]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
		0.0225					
P	Pentachlorophenol	0.005/ 0.016	0.0161	EC50 (72h): 559.24	Algae	n.i.	[6]
PC	Pentachlorophenol	0.06/ 0.18	0.1800	EC50 or LC50 (48 or 96h): 50	Invertebrates	n.i.	[5]
PC	Pentachlorophenol	0.006/ 0.02	0.0200	EC50 (48h): >450	*Daphnia magna*	n.i.	[4]
PC	Pentachlorophenol	0.0167/ 0.05	0.0500	NOEC (21d): >180	*Daphnia magna*	n.i.	[4]
PC	Pentachlorophenol	0.0059/ 0.017	0.0176	LC50 (48h): 510.12	*Daphnia*	n.i.	[6]
SC	Pentachlorophenol	0.0316/ 0.0947	0.0947	LC50 (96h): 95	Fish	n.i.	[5]
SC	Pentachlorophenol	0.005/ 0.0155	0.0155	LC50 (96h): 580	*Heteropneustes fossilis*	n.i.	[28]
SC	Pentachlorophenol	0.0047/ 0.0141	0.0141	LC50 (96h): 640	*Clarias batrachus*	n.i.	[28]
SC	Pentachlorophenol	0.0039/ 0.0117	0.0117	LC50 (96h): 770	*Channa punctatus*	n.i.	[28]
SC	Pentachlorophenol	0.00003/ 0.0001	0.0001	LC50 (48h): 98000	*Culex pipiens fatigans*	Larvae	[28]
SC	Pentachlorophenol	0.0167/ 0.05	0.0500	LC50 (96h): 180.09	*Pimephales promelas*	n.i.	[6]
SC	Pentachlorophenol	0.0176/ 0.0529	0.0529	LC50 (96h): >170	*Oncorhynchus mykiss*	n.i.	[4]
SC	Pentachlorophenol	0.06/ 0.18	0.1800	NOEC (21d): 50	*Carassius auratus*	n.i.	[4]
P	Simazine	0.0067	-	EC50 (72h)-biomass: 300	*Lemna gibba*	n.i.	[4]
P	Simazine	0.3333	-	EC50 (<10d): 6	Nonvascular Plants	n.i.	[5]
P	Simazine	0.0299	-	EC50 (<10d): 67	Vascular plants	n.i.	[5]
P	Simazine	0.0050	-	EC50 (72h)-growth: 400	*Scenedesmus subspicatus*	n.i.	[4]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
P	Simazine	0.0226	-	EC50 (72h): 88.6	Algae	n.i.	[6]
PC	Simazine	0.0020	-	EC50 or LC50 (48 or 96h): 1000	Invertebrates	n.i.	[5]
PC	Simazine	0.0500	-	NOAEC: 40	Invertebrates	n.i.	[5]
PC	Simazine	0.0001	-	LC50 (96h): 30600	*Pacifastacus leniusculus*	Juvenile	[19]
PC	Simazine	0.0000	-	LC50 (48h): 92100	*Daphnia pulex*	Adult	[38]
PC	Simazine	0.0001	-	LC50 (48h): 34803.17	*Daphnia*	n.i.	[6]
PC	Simazine	0.0018	-	EC50 (48h): 1100	*Daphnia magna*	n.i.	[4]
PC	Simazine	0.0008	-	LOEC (21d): 2500	*Daphnia magna*	n.i.	[4]
SC	Simazine	0.0003	-	LC50 (96h): 6400	Fish	n.i.	[5]
SC	Simazine	0.0333	-	NOAEC: 60	Fish	n.i.	[5]
SC	Simazine	0.0003	-	LC50 (96h): 7550	*Silurana tropicalis*	Tadpole	[20]
SC	Simazine	0.0000	-	LC50 (96h): 90000	*Lepomis macrochirus*	n.i.	[4]
SC	Simazine	0.0001	-	LC50 (96h): 24740.29	*Pimephales promelas*	n.i.	[6]
P	2.4.5–T	0.0010	0.0010	EC50 (7d)-growth: 2000	Green algae	n.i.	[4]
P	2.4.5–T	0.0003	0.0003	EC50 (72h): 6279.53	Algae	n.i.	[6]
PC	2.4.5–T	0.0004	0.0004	EC50 (48h): 5000	*Daphnia magna*	n.i.	[4]
PC	2.4.5–T	0.0002	0.0002	LC50 (48h): 10184.21	*Daphnia*	n.i.	[6]
SC	2.4.5–T	0.0015	0.0015	LC50 (96h): 1300	*Oncorhynchus mykiss*	n.i.	[4]
SC	2.4.5–T	0.0002	0.0002	LC50 (96h): 9189.71	*Pimephales promelas*	n.i.	[6]
P	Toxaphene	0.000001/ 0.00004	0.0008	EC50 (72h): 273.08	Algae	n.i.	[6]
PC	Toxaphene	0.000004/ 0.0002	0.0033	LC50 (48h): 63.51	*Daphnia*	n.i.	[6]
SC	Toxaphene	0.000001/ 0.0001	0.0011	EC50 (24h): 193	*Rana sphenocephala*	Larvae	[33]
SC	Toxaphene	0.000002/ 0.0001	0.0016	LC50 (96h): 130	*Rana sphenocephala*	Larvae	[33]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (µg/L)	Tested organism	Life stage	Reference
SC	Toxaphene	0.0000009/ 0.00003	0.0007	EC50 (24h): 312	*Rana catesbeiana*	Larvae	[33]
SC	Toxaphene	0.000003/ 0.0001	0.0021	LC50 (96h): 99	*Rana catesbeiana*	Larvae	[33]
SC	Toxaphene	0.00001/ 0.0003	0.0058	EC50 (24h): 36	*Rana sylvatica*	Larvae	[33]
SC	Toxaphene	0.000001/ 0.0001	0.0011	LC50 (96h): 195	*Rana sylvatica*	Larvae	[33]
SC	Toxaphene	0.00001/ 0.0003	0.0055	EC50 (24h): 38	*Bufo americanus*	Larvae	[33]
SC	Toxaphene	0.00001/ 0.0003	0.0062	LC50 (96h): 34	*Bufo americanus*	Larvae	[33]
SC	Toxaphene	0.0000003/ 0.00001	0.0002	EC50 (24h): >1000	*Acris crepitans*	Larvae	[33]
SC	Toxaphene	0.000004/ 0.0001	0.0028	LC50 (96h): 76	*Acris crepitans*	Larvae	[33]
SC	Toxaphene	0.000002/ 0.0001	0.0012	EC50 (24h): 170	*Ambystoma opacum*	Larvae	[33]
SC	Toxaphene	0.000001/ 0.00003	0.0006	LC50 (96h): 342	*Ambystoma opacum*	Larvae	[33]
SC	Toxaphene	0.000001/ 0.00004	0.0009	EC50 (24h): 227	*Ambystoma maculatum*	Larvae	[33]
SC	Toxaphene	0.00001/ 0.0003	0.0062	LC50 (96h): 34	*Ambystoma maculatum*	Larvae	[33]
SC	Toxaphene	0.000001/ 0.00002	0.0005	LC50 (96h): 455.99	*Pimephales promelas*	n.i.	[6]
PC	2.4.5-TP	0.0001	0.0001	EC50 (48h): >140000	*Daphnia magna*	n.i.	[4]
PC	2.4.5-TP	0.0004	0.0004	LC50 (96h): >27900	*Americamysis bahia*	n.i.	[4]
SC	2.4.5-TP	0.0007	0.0007	LC50 (96h): >14800	*Oncorhynchus mykiss*	n.i.	[4]

Trophic level	Pesticide	RQ Class 1/2	RQ Class 3	Endpoint: concentration (μg/L)	Tested organism	Life stage	Reference
P	Trifluraline	0.0016	-	EC50 (72h): 124.77	Algae	n.i.	[6]
P	Trifluraline	0.0091	-	EC50 (<10d): 21.9	Nonvascular Plants	n.i.	[5]
P	Trifluraline	0.0040	-	EC50 (<10d): 49.7	Vascular plants	n.i.	[5]
PC	Trifluraline	0.0008	-	EC50 or LC50 (48 or 96h): 251	Invertebrates	n.i.	[5]
PC	Trifluraline	0.0833	-	NOAEC: 2.4	Invertebrates	n.i.	[5]
PC	Trifluraline	0.0008	-	EC50 (48h): 245	*Daphnia magna*	n.i.	[4]
PC	Trifluraline	0.0039	-	NOEC (21d): 51	*Daphnia magna*	n.i.	[4]
PC	Trifluraline	0.0027	-	LC50 (96h): 74	*Americamysis bahia*	n.i.	[4]
PC	Trifluraline	0.0004	-	LC50 (48h): 468.78	*Daphnia*	n.i.	[6]
SC	Trifluraline	0.0108	-	LC50 (96h): 18.5	Fish	n.i.	[5]
SC	Trifluraline	0.1053	-	NOAEC: 1.9	Fish	n.i.	[5]
SC	Trifluraline	0.0000	-	LC50 (120h): 9400	*Bombina bombina*	Embryo	[39]
SC	Trifluraline	0.0000	-	EC50 (120h): 5580	*Bombina bombina*	Embryo	[39]
SC	Trifluraline	0.0000	-	LC50 (120h): 11800	*Bombina bombina*	Larvae	[39]
SC	Trifluraline	0.0044	-	LC50 (96h): 45	*Cyprinus carpio*	6-month-old carp fry	[40]
SC	Trifluraline	0.0000	-	LC50 (96h): 9760	*Lithobates clamitans*	Tadpole	[41]
SC	Trifluraline	0.0013	-	LC50 (96h): 159.77	*Pimephales promelas*	n.i.	[6]
SC	Trifluraline	0.0023	-	LC50 (96h): 88	*Oncorhynchus mykiss*	n.i.	[4]
SC	Trifluraline	0.0000	-	NOEC (35d): 10000	*Pimephales promelas*	n.i.	[4]

d: day; h: hour; LC: lethal concentration; EC: effective concentration; LOEC: lowest observed effect concentration; LOAEL: lowest observable adverse effect level; NOAEC: no observed adverse effect concentration; NOEC: no observed effect concentration; NOAEL: observed adverse effect level; PNOEC: predicted no effect concentration; MATC: maximum acceptable toxicant concentrations; OEC: observed effect concentration. [a]Producer organism; [b]Primary consumer; [c]Secondary consumer.; [d]Demeton; [d1]Isomer S; [d2]Isomer O; [e] Degradation product of DDE; [f]Standards for bodies of water where there is fishing or cultivation of organisms for purposes of intensive consumption. All ecotoxicological studies were conducted in a laboratory setting, except for ref. [4-6] where this information was not available.

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