

INFORMATION SUPPLEMENTARY

Table S1. Analytical validation results. Instrumental technique: UHPLC-ESI-MS/MS.

PESTICIDE	WATER		SEDIMENTS	
	RECOVERY % (RSD) n=5	LOQ (µg/L)	RECOVERY % (RSD)	LOQ (µg/kg)
2,4 D	62 (12)	0.5	63 (13)	10
2,4 DB	87 (17)	1	78 (16)	50
2-Methyl-4,6-dinitrophenol	69 (4)	1	100 (20)	50
acephate	-	-	117 (23)	50
acetamiprid	116 (23)	0.1	101 (20)	1
acetochlor	65 (13)	0.1	130 (26)	50
alachlor	63 (13)	0.1	130 (26)	1
aldicarb	64 (11)	1	68 (14)	10
amitraz	-	-	51 (4)	5
AMPA	86 (17)	0.6	73 (15)	2
anilazine	64 (13)	1	117 (23)	10
atrazine	75 (15)	0.1	94 (19)	1
azinphos methyl	96 (19)	0.1	113 (23)	10
azoxystrobin	89 (18)	0.1	81 (16)	1
bendiocarb	79 (16)	0.1	106 (21)	1
benomyl	Qualitative evaluation			
bentazone	68 (12)	0.1	70 (14)	10
carbaryl	80 (16)	0.1	73 (15)	10
carbendazim	74 (5)	0.2	65 (9)	10
carbofuran	91 (18)	0.1	96 (19)	1
carboxin	62 (12)	0.1	79 (16)	1
chinomethionate	63 (13)	0.5	109 (22)	50
chlorantraniliprole	90 (18)	0.1	75 (15)	10
chlorimuron-ethyl	Qualitative evaluation			
clofentezine	81 (16)	0.5	109 (22)	10
clothianidin	46 (9)	0.2	106 (21)	5
cyhalofop	109 (22)	0.2	100 (29)	5
ciproconazole	95 (19)	0.1	100 (20)	0.5
cyromazine	20 (0.4)	1	29 (6)	5
diazinon	66 (13)	0.1	72 (14)	1
dicamba	100 (20)	1	90 (18)	50
dichlorvos	75 (15)	0.1	100 (20)	5
diclosulam	94 (19)	0.1	108 (22)	1
dicofol	68 (14)	1	120 (24)	50
diflubenzuron	100 (20)	0.5	60 (12)	10

dimethoate	62 (12)	0.1	101 (20)	1
dinotefuran	66 (3)	1	130 (26)	50
epoxiconazole	105 (21)	0.1	101 (20)	1
fenhexamid	106 (21)	0.1	120 (24)	5
fenoxyaprop-p-ethyl	74 (11)	0.1	101 (20)	1
fipronil	80 (16)	0.1	91 (18)	5
flonicamid	75 (3)	1	88 (18)	5
flubendiamide	77 (15)	0.1	89 (18)	50
fludioxonil	70 (14)	0.1	95 (19)	5
flusilazole	95 (19)	0.1	78 (16)	1
flutolanil	107 (21)	0.1	106 (21)	1
glufosinate	86 (17)	0.6	60 (8)	2
glyphosate	102 (20)	0.6	68 (10)	2
haloxyfop	89 (18)	0.2	111 (22)	5
imazalil	76 (15)	0.1	89 (18)	1
imazapic	99 (20)	0.2	68 (10)	5
imazapyr	77 (15)	0.1	69 (10)	5
imazethapyr	103 (21)	0.1	67 (13)	1
imidacloprid	95 (19)	0.1	114 (23)	5
linuron	82 (16)	0.1	130 (26)	10
mecarbam	89 (18)	0.1	77 (15)	1
metalaxyll	102 (20)	0.1	109 (22)	1
methamidophos	-	1	130 (26)	10
methidathion	101 (20)	0.1	62 (12)	1
methomyl	Qualitative evaluation			
methoprene	79 (16)	0.5	78 (16)	50
methoxyfenozide	108 (22)	0.1	118 (24)	1
metolachlor	86 (17)	0.1	110 (22)	10
metribuzin	75 (15)	0.1	122 (24)	1
metsulfuron-methyl	110 (22)	0.1	88 (18)	10
nitenpyram	63 (7)	1	116 (23)	50
phosmet	82 (16)	0.1	109 (22)	5
picloram	87 (17)	1	79 (16)	10
pirimicarb	71 (14)	0.1	75 (11)	1
pirimiphos-methyl	91 (18)	0.1	85 (17)	1
prochloraz	76 (15)	0.1	99 (20)	1
profenofos	107 (21)	0.2	125 (25)	50
propargite	54 (11)	0.1	112 (22)	50
propiconazole	99 (20)	0.1	108 (22)	1
pyraclostrobin	100 (20)	0.1	130 (26)	5
pyrimethanil	89 (18)	0.1	91 (18)	1
quinclorac	75 (15)	0.1	94 (19)	1
s-metolachlor	65 (13)	0.1	91 (18)	10
spinosad	67 (13)	0.1	130 (26)	1
tebuconazole	88 (18)	0.1	113 (23)	1
terbufos	-	1	90 (18)	50

thiabendazole	66 (13)	0.2	79 (4)	5
thiacloprid	70 (14)	0.1	122 (24)	1
thiamethoxam	68 (10)	0.5	92 (18)	10
triadimefon	92 (18)	0.1	83 (17)	1
triadimenol	101 (20)	0.1	101 (20)	1
triazophos	94 (19)	0.1	130 (26)	5
trifloxystrobin	86 (17)	0.1	120 (24)	1

Table S2 Analytical validation results. Instrumental technique: GC-ECD.

PESTICIDE	WATER		SEDIMENTS	
	RECOVERY % (RSD) n=5	LOQ (µg/L)	RECOVERY % (RSD) n=5	LOQ (µg/kg)
aldrin	67 (3)	0.2	60 (12)	5
bifenthrin	64 (11)	0.1	72 (14)	5
chlordan-cis (alpha)	93 (19)	0.1	76 (15)	2
chlordan-oxy	68 (10)	0.1	76 (15)	2
chlordan-trans (gamma)	75 (11)	0.1	80 (16)	1
chlorpyrifos	84 (17)	0.1	91 (18)	5
chlorpyrifos-methyl	79 (16)	0.1	68 (12)	2
cyhalothrin (lambda)	69 (12)	0.1	71 (14)	10
cypermethrin	66 (13)	0.1	118 (24)	10
DDD-o,p'	74 (15)	0.1	91 (18)	1
DDD-p,p'	71 (14)	0.1	94 (19)	1
DDE-o,p'	63 (11)	0.1	83 (17)	1
DDE-p,p'	70 (10)	0.1	81 (16)	1
DDT-o,p'	71 (14)	0.2	94 (19)	1
deltamethrin	65 (11)	0.1	101 (20)	10
diazinon	75 (15)	0.1	72 (14)	1
dieldrin	84 (17)	0.1	67 (13)	2
endosulfan (alpha)	65 (13)	0.1	76 (15)	1
endosulfan (beta)	80 (16)	0.1	105 (21)	1
endosulfan sulfate	102 (20)	0.1	92 (18)	1
endrin	92 (18)	0.1	88 (18)	10
ethion	Qualitative evaluation			
fenitrothion	98 (20)	1	67 (7)	10
fenvvalerate	66 (13)	0.2	101 (20)	10
heptachlor	61 (4)	0.1	67 (13)	1
heptachlor epoxide	60 (12)	0.1	62 (12)	1
hexachlorobenzene	66 (3)	0.1	64 (7)	1
lindane	69 (10)	0.1	69 (12)	1
malathion	86 (17)	0.1	79 (16)	2
methoxychlor	89 (18)	0.1	95 (19)	2
mirex	64 (9)	0.1	86 (17)	1

parathion-methyl	78 (16)	0.5	81 (16)	20
permethrin	Qualitative evaluation			
pirimiphos-methyl	96 (19)	0.1	85 (17)	1
procymidone	93 (19)	0.1	77 (15)	10
tetramethrin	87 (17)	0.1	85 (17)	5
vinclozolin	85 (17)	0.1	79 (16)	2

RECOVERY %: surrogate samples of water and sediment were prepared at LOQ level for each pesticide.

RSD: Relative Standard Deviation at LOQ level (n=5)

LOD ($\mu\text{g/L}$): estimated as three times the average SD of the blank replicates.

LOQ ($\mu\text{g/L}$): estimated as 6 times the average SD of blank for replicates.