

Supplementary information for:

Analysis of pesticides, veterinary drugs, and environmental contaminants in goat and lamb by the QuEChERSER mega-method

Ederina Ninga,^{a,#} Steven J. Lehotay,^{b,*} Yelena Sapozhnikova,^b
Alan R. Lightfield,^b Gary D. Strahan,^b and Sergio H. Monteiro^c

^a Department of Toxicology and Residues Monitoring, Food Safety and Veterinary Institute, Tirana, Albania

^b USDA Agricultural Research Service, Eastern Regional Research Center; 600 East Mermaid Lane; Wyndmoor, PA 19038; USA

^c Pesticide Residue Laboratory, Environmental Protection Research Center, Biological Institute, Sao Paulo, Brazil

Current affiliation: National Food Institute, Technical University of Denmark, 2800 Kgs, Lyngby, Denmark

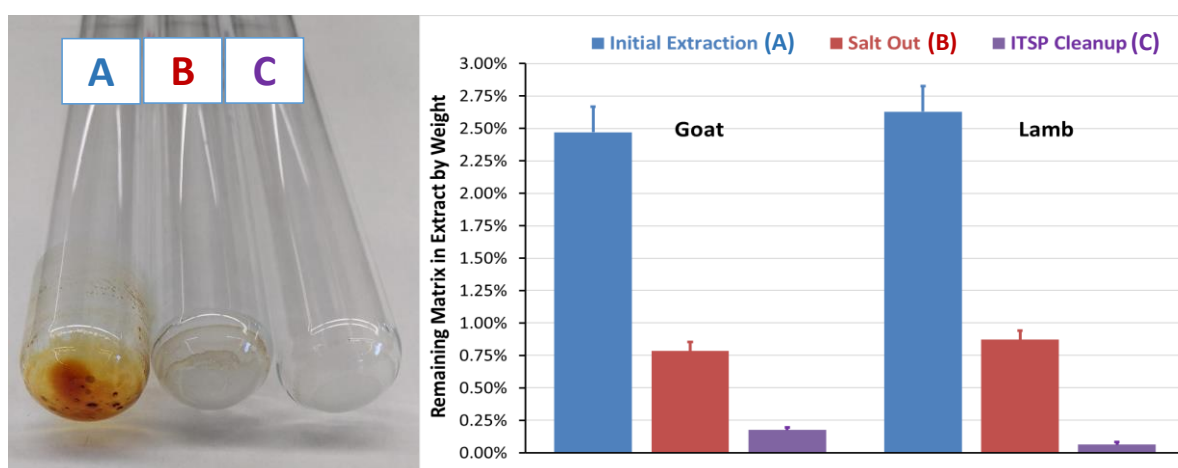


Fig. S1 Left) image of the dried extracts in QuEChERSER after (A) the initial extraction step, (B) salting out with 1 g 4/1 (w/w) anhydrous $MgSO_4/NaCl$, and (C) SPE cleanup with 20/12/12/1 (w/w) anhydrous $MgSO_4/PSA/C18/CarbonX$ sorbent. Right) co-extracted amounts for each step per 1 g equivalent sample for goat and lamb ($n = 10$ each).

Table S1. List of targeted analytes in the study, their class, function, chemical formula, molecular weight (MW), octanol/water partitioning coefficient (K_{ow}), and acid dissociation constant (pK_a); spiking levels (X) at 0.5X, 1X, 1.5X, and 2X, n = 10 each in each matrix.

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K_{ow}	pK_a
1	20	Acephate	Organophosphorus	Insecticide	C ₄ H ₁₀ NO ₃ PS	183.2	-0.85	8.35
2	50	Acetamiprid	Neonicotinoid	Insecticide	C ₁₀ H ₁₁ ClN ₄	222.7	0.8	0.7
3	10	Alachlor	Acetamide	Herbicide	C ₁₄ H ₂₀ ClNO ₂	269.8	3.09	-
4	100	Albendazole	Benzimidazole	Anthelmintic	C ₁₂ H ₁₅ N ₃ O ₂ S	265.3	1.27	-
5	100	Albendazole sulfone	Benzimidazole	Metabolite	C ₁₂ H ₁₅ N ₃ O ₄ S	297.3	-	-
6	100	Albendazole sulfoxide	Benzimidazole	Metabolite	C ₁₂ H ₁₅ N ₃ O ₃ S	281.3	1.27	-
7	100	Albendazole, 2-aminosulfone	Benzimidazole	Metabolite	C ₁₀ H ₁₃ N ₃ O ₂ S	239.3	-	-
8	10	Aldicarb sulfone	Carbamate	Metabolite	C ₇ H ₁₄ N ₂ O ₄ S	222.3	-0.57	-
9	10	Aldicarb sulfoxide	Carbamate	Metabolite	C ₇ H ₁₄ N ₂ O ₃ S	206.3	-1.12	-
10	200	Aldrin	Organochlorine	Insecticide	C ₁₂ H ₈ Cl ₆	364.9	5.31	-
11	10	Atrazine	Triazine	Herbicide	C ₈ H ₁₄ ClN ₅	215.7	2.5	1.6
12	10	Atrazine-desethyl	Triazine	Metabolite	C ₆ H ₁₀ ClN ₅	187	1.5	1.3
13	10	Azinphos-ethyl	Organophosphorus	Insecticide	C ₁₂ H ₁₆ N ₃ O ₃ PS ₂	345.4	3.18	-
14	10	Azinphos-methyl	Organophosphorus	Insecticide	C ₁₀ H ₁₂ N ₃ O ₃ PS ₂	317.3	2.96	-
15	10	Azoxystrobin	Strobilurin	Fungicide	C ₂₂ H ₁₇ N ₃ O ₅	403.4	2.5	-
16	100	Bacitracin	Cyclic peptide	Antibiotic	C ₆₆ H ₁₀₃ N ₁₇ O ₁₆ S	1422.7	-0.8	-
17	50	Benoxacor	Benzoxazine	Herbicide safener	C ₁₁ H ₁₁ Cl ₂ NO ₂	260.1	2.6	-
18	20	Bentazon	Benzothiazinone	Herbicide	C ₁₀ H ₁₂ N ₂ O ₃ S	240.3	2.34	3.3
19	20	Bifenazate	Hydrazine carboxylate	Insecticide	C ₁₇ H ₂₀ N ₂ O ₃	300.4	3.4	12.94
20	100	Bifenthrin	Pyrethroid	Insecticide	C ₂₃ H ₂₂ ClF ₃ O ₂	422.9	6.6	
21	10	Bispyribac	Pyrimidinyl carboxy	Herbicide	C ₁₉ H ₁₈ N ₄ O ₈	430.4	-1.03	3.05
22	10	Bitertanol	Triazole	Fungicide	C ₂₀ H ₂₃ N ₃ O ₂	337.4	-	-
23	10	Bithionol	Diphenyl	Anthelmintic	C ₁₂ H ₆ Cl ₄ O ₂ S	356	5.91	4.82
24	10	Boscalid	Carboxamide	Fungicide	C ₁₈ H ₁₂ Cl ₂ N ₂ O	343.2	2.96	-
25	10	Brombuterol	β -Agonist	Growth promoter	C ₁₂ H ₁₈ Br ₂ N ₂ O	366.1	-	-
26	10	Bromchlorbuterol	β -Agonist	Growth promoter	C ₁₂ H ₁₈ BrClN ₂ O	321.6	-	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
27	10	Bromopropylate	Benzilate	Acaricide	C ₁₇ H ₁₆ Br ₂ O ₃	428.1	5.4	-
28	50	Buprofezin	Thiadiazine	Insecticide	C ₁₆ H ₂₃ N ₃ OS	305.4	4.93	6.7
29	10	Cambendazole	Benzimidazole	Anthelmintic	C ₁₄ H ₁₄ N ₄ O ₂ S	302.4	-	-
30	10	Carazolol	Beta-Blocker	Tranquilizer	C ₁₈ H ₂₂ N ₂ O ₂	298.4	-	-
31	10	Carbadox	Carboxylate	Antibiotic	C ₁₁ H ₁₀ N ₄ O ₄	262.2	0.13	-
32	10	Carbadox metabolite (2-QCA)	Carboxylate	Metabolite	C ₉ H ₆ N ₂ O ₂	174.2	-	-
33	50	Carbaryl	Carbamate	Insecticide	C ₁₂ H ₁₁ NO ₂	201.2	2.36	-
34	10	Carbofuran	Carbamate	Insecticide	C ₁₂ H ₁₅ NO ₃	221.3	1.8	-
35	20	Carbophenothion	Organophosphorus	Insecticide	C ₁₁ H ₁₆ ClO ₂ PS ₃	342.9	5.33	-
36	50	Carboxin	Anilide	Fungicide	C ₁₂ H ₁₃ NO ₂ S	235.3	2.3	-
37	10	Carfentrazone	Triazolone	Herbicide	C ₁₃ H ₁₀ Cl ₂ F ₃ N ₃ O ₃	384.1	-	-
38	100	Cefazolin	β-Lactam	Antibiotic	C ₁₄ H ₁₄ N ₈ O ₄ S ₃	454.5	0.58	3.6
39	200	Chlorantraniliprole	Carboxamide	Insecticide	C ₁₈ H ₁₄ BrCl ₂ N ₅ O ₂	483.1	2.76	10.88
40	50	<i>cis</i> -Chlordane	Organochlorine	Insecticide	C ₁₀ H ₆ Cl ₈	409.8	5.56	-
41	50	<i>trans</i> -Chlordane	Organochlorine	Insecticide	C ₁₀ H ₆ Cl ₈	409.8	-	-
42	10	Chlorfenvinphos	Organophosphorus	Insecticide	C ₁₂ H ₁₄ Cl ₃ O ₄ P	359.6	3.81	-
43	20	Chlorimuron	Sulfonylurea	Herbicide	C ₁₃ H ₁₁ ClN ₄ O ₆ S	386.8	-	-
44	50	Chlorpropham	Carbamate	Herbicide	C ₁₀ H ₁₂ ClNO ₂	213.7	3.76	-
45	10	Chlorpyrifos	Organophosphorus	Insecticide	C ₉ H ₁₁ Cl ₃ NO ₃ PS	350.6	4.7	-
46	10	Chlorpyrifos-methyl	Organophosphorus	Insecticide	C ₇ H ₇ Cl ₃ NO ₃ PS	322.6	4.31	-
47	100	Chlortetracycline	Tetracycline	Antibiotic	C ₂₂ H ₂₃ ClN ₂ O ₈	478.9	-	7.435
48	10	Cimaterol	β-Agonist	Growth promoter	C ₁₂ H ₁₇ N ₃ O	219.3	-	-
49	100	Ciprofloxacin	Fluoroquinolone	Antibiotic	C ₁₇ H ₁₈ FN ₃ O ₃	331.3	0.28	6.09
50	100	Ciprofloxacin, desethylene	Fluoroquinolone	Metabolite	C ₂₀ H ₂₄ FN ₃ O ₅	405.4	-	-
51	10	Clenbuterol	β-Agonist	Growth promoter	C ₁₂ H ₁₈ Cl ₂ N ₂ O	277.2	-	-
52	10	Clencyclohexerol	β-Agonist	Growth promoter	C ₁₄ H ₂₀ Cl ₂ N ₂ O ₂	319.2	-	-
53	10	Clenpenterol	β-Agonist	Growth promoter	C ₁₃ H ₂₀ Cl ₂ N ₂ O	291.2	-	-
54	200	Clethodim	Cyclohexanedione	Herbicide	C ₁₇ H ₂₆ ClNO ₃ S	359.9	4.14	-
55	50	Clofentezine	Tetrazine	Acaricide	C ₁₄ H ₈ Cl ₂ N ₄	303.1	3.1	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
56	35	Clorsulon	Sulfonamide	Flukicide	C ₈ H ₈ Cl ₃ N ₃ O ₄ S ₂	380.7	-	-
57	10	Coumaphos	Organophosphorus	Insecticide	C ₁₄ H ₁₆ ClO ₅ PS	362.8	4.13	-
58	10	Cyazofamid	Imidazole	Fungicide	C ₁₃ H ₁₃ ClN ₄ O ₂ S	324.8	3.2	-
59	50	Cyfluthrin	Pyrethroid	Insecticide	C ₂₂ H ₁₈ Cl ₂ FNO ₃	434.3	6	-
60	500	λ-Cyhalothrin	Pyrethroid	Insecticide	C ₂₃ H ₁₉ ClF ₃ NO ₃	449.9	7	-
61	10	Cymoxanil	Urea	Fungicide	C ₇ H ₁₀ N ₄ O ₃	198.2	0.67	9.7
62	100	Cypermethrin	Pyrethroid	Insecticide	C ₂₂ H ₁₉ Cl ₂ NO ₃	416.3	6.6	-
63	100	Cyphenothrin	Pyrethroid	Insecticide	C ₂₄ H ₂₅ NO ₃	375.5	6.29	-
64	50	Cyproconazole	Triazole	Fungicide	C ₁₅ H ₁₈ ClN ₃ O	291.8	2.9	-
65	200	Danofloxacin	Fluoroquinolone	Antibiotic	C ₁₉ H ₂₀ FN ₃ O ₃	357.4	-	-
66	100	Dapsone	NSAID	Anti-inflammatory	C ₁₂ H ₁₂ N ₂ O ₂ S	248.3	0.97	2.41
67,68	50	<i>o,p'</i> -DDD, <i>p,p'</i> -DDD	Organochlorine	Metabolite	C ₁₄ H ₁₀ Cl ₄	320.0	5.38	-
69,70	50	<i>o,p'</i> -DDE, <i>p,p'</i> -DDE	Organochlorine	Metabolite	C ₁₄ H ₈ Cl ₄	318.0	6.36	-
71,72	50	<i>o,p'</i> -DDT, <i>p,p'</i> -DDT	Organochlorine	Insecticide	C ₁₄ H ₉ Cl ₅	354.5	5.92	-
73	30	Deltamethrin	Pyrethroid	Insecticide	C ₂₂ H ₁₉ Br ₂ NO ₃	505.2	6.2	-
74	50	Desmedipham	Carbamate	Herbicide	C ₁₆ H ₁₆ N ₂ O ₄	300.3	3.39	-
75	20	Diazinon	Organophosphorus	Insecticide	C ₁₂ H ₂₁ N ₂ O ₃ PS	304.3	3.69	2.6
76	10	Dichlormid	Acetamide	Herbicide safener	C ₈ H ₁₁ Cl ₂ NO	207.0	1.84	-
77	10	Dichlorvos	Organophosphorus	Insecticide	C ₄ H ₇ Cl ₂ O ₄ P	221.0	1.9	-
78	50	Diclofenac	NSAID	Anti-inflammatory	C ₁₄ H ₁₁ Cl ₂ NO ₂	296.1	4.51	4.15
79	100	Dicloxacillin	β-Lactam	Antibiotic	C ₁₉ H ₁₇ Cl ₂ N ₃ O ₅ S	470.3	2.91	-
80	50	Dicofol	Organochlorine	Acaricide	C ₁₄ H ₉ Cl ₅ O	370.5	4.3	-
81	50	Dicrotophos	Organophosphorus	Insecticide	C ₈ H ₁₆ NO ₅ P	237.2	-0.35	-
82	200	Dieldrin	Organochlorine	Insecticide	C ₁₂ H ₈ Cl ₆ O	380.9	4.87	-
83	50	Difenoconazole	Triazole	Fungicide	C ₁₉ H ₁₇ Cl ₂ N ₃ O ₃	406.3	4.36	-
84	300	Difloxacin	Fluoroquinolone	Antibiotic	C ₂₁ H ₁₉ F ₂ N ₃ O ₃	399.4	0.89	-
85	100	Diflubenzuron	Benzoylurea	Insecticide	C ₁₄ H ₉ ClF ₂ N ₂ O ₂	310.7	3.89	-
86	50	Diflufenzopyr	Semi-carbazone	Herbicide	C ₁₅ H ₁₂ F ₂ N ₄ O ₃	334.3	0.03	-
87	50	Dimethoate	Organophosphorus	Insecticide	C ₅ H ₁₂ NO ₃ PS ₂	229.3	0.7	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
88	10	Dimethomorph	Morpholine	Fungicide	C ₂₁ H ₂₂ ClNO ₄	387.9	2.63	-
89	10	Dimetridazole	Nitroimidazole	Antibiotic	C ₅ H ₇ N ₃ O ₂	141.1	-	-
90	10	Dimetridazole, hydroxy	Nitroimidazole	Metabolite	C ₅ H ₇ N ₃ O ₃	157.1	-	-
91	30	Dimoxystrobin	Strobilurin	Fungicide	C ₁₉ H ₂₂ N ₂ O ₃	326.4	3.59	-
92	100	Dinotefuran	Neonicotinoid	Insecticide	C ₇ H ₁₄ N ₄ O ₃	202.2	-0.54	12.6
93	10	Disulfoton	Organophosphorus	Insecticide	C ₈ H ₁₉ O ₂ PS ₃	274.4	4.02	-
94	50	Diuron	Phenylurea	Herbicide	C ₉ H ₁₀ Cl ₂ N ₂ O	233.1	2.68	-
95	10	DMPF (amitraz met.)*	Amidine	Metabolite	C ₁₀ H ₁₄ N ₂	162.2	2.34	-
96	100	Doxycycline	Tetracycline	Antibiotic	C ₂₂ H ₂₄ N ₂ O ₈	444.4	0.63	3.09
97	100	Emamectin	Macrocyclic lactone	Anthelmintic	C ₄₉ H ₇₅ NO ₁₃	886.1	5	4.2
98	50	Endosulfan I	Organochlorine	Insecticide	C ₉ H ₆ Cl ₆ O ₃ S	406.9	4.74	-
99	50	Endosulfan II	Organochlorine	Insecticide	C ₉ H ₆ Cl ₆ O ₃ S	406.9	4.79	-
100	50	Endosulfan sulfate	Organochlorine	Insecticide	C ₉ H ₆ Cl ₆ O ₄ S	423	-	-
101	50	Endrin	Organochlorine	Insecticide	C ₁₂ H ₈ Cl ₆ O	380.9	4.87	-
102	50	Endrin ketone	Organochlorine	Metabolite	C ₁₂ H ₈ Cl ₆ O	380.9	2.67	-
103	100	Enrofloxacin	Fluoroquinolone	Antibiotic	C ₁₉ H ₂₂ FN ₃ O ₃	359.4	-	-
104	10	Epoxiconazole	Triazole	Fungicide	C ₁₇ H ₁₃ ClFN ₃ O	329.8	3.3	-
105	200	Erythromycin A	Macrolide	Antibiotic	C ₃₇ H ₆₇ NO ₁₃	733.9	2.6	8.88
106,107	40	Es+Fenvalerate	Pyrethroid	Insecticide	C ₂₅ H ₂₂ ClNO ₃	419.9	-	-
108	10	Ethalfuralin	Dinitroaniline	Herbicide	C ₁₃ H ₁₄ F ₃ N ₃ O ₄	333.3	5.11	-
109	10	Ethion	Organophosphorus	Insecticide	C ₉ H ₂₂ O ₄ P ₂ S ₄	384.5	4.28	-
110	30	Ethofumesate	Benzofuran	Herbicide	C ₁₃ H ₁₈ O ₅ S	286.3	2.7	-
111	10	Ethoprop	Organophosphorus	Insecticide	C ₈ H ₁₉ O ₂ PS ₂	242.3	3.1	-
112	500	Etofenprox	Pyrethroid	Insecticide	C ₂₅ H ₂₈ O ₃	376.5	6.9	-
113	10	Etrimfos	Organophosphorus	Insecticide	C ₁₀ H ₁₇ N ₂ O ₄ PS	292.3	3.3	-
114	50	Famphur	Organophosphorus	Insecticide	C ₁₀ H ₁₆ NO ₅ PS ₂	325.3	2.13	-
115	10	Fenamidone	Imidazole	Fungicide	C ₁₇ H ₁₇ N ₃ OS	311.4	2.8	-
116	20	Fenamiphos	Organophosphorus	Insecticide	C ₁₃ H ₂₂ NO ₃ PS	303.4	3.3	-
117	20	Fenarimol	Pyrimidine	Fungicide	C ₁₇ H ₁₂ Cl ₂ N ₂ O	331.2	3.69	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
118	50	Fenbendazole	Benzimidazole	Anthelmintic	C ₁₅ H ₁₃ N ₃ O ₂ S	299.3	-	-
119	50	Fenbendazole sulfone	Benzimidazole	Metabolite	C ₁₅ H ₁₃ N ₃ O ₄ S	331.3	-	-
120	10	Fenitrothion	Organophosphorus	Insecticide	C ₉ H ₁₂ NO ₅ PS	277.2	3.3	-
121	10	Fenoterol	β-Agonist	Growth promoter	C ₁₇ H ₂₁ NO ₄	303.3	-	-
122	50	Fenoxycarb	Carbamate	Insect growth reg.	C ₁₇ H ₁₉ NO ₄	301.4	4.07	-
123	50	Fenpropathrin	Pyrethroid	Insecticide	C ₂₂ H ₂₃ NO ₃	349.4	6	-
124	10	Fenpyroximate	Pyrazole	Insecticide	C ₂₄ H ₂₇ N ₃ O ₄	421.5	5.01	1.5
125	50	Fenthion	Organophosphorus	Insecticide	C ₁₀ H ₁₅ O ₃ PS ₂	278.3	4.84	-
126	50	Fenthion sulfone	Organophosphorus	Metabolite	C ₁₀ H ₁₅ O ₅ PS ₂	310.3	1.82	-
127	5	Fipronil	Pyrazole	Insecticide	C ₁₂ H ₄ Cl ₂ F ₆ N ₄ OS	437.2	4	-
128	5	Fipronil desufinyl	Pyrazole	Metabolite	C ₁₂ H ₄ Cl ₂ F ₆ N ₄	389.1	-	-
129	5	Fipronil sulfide	Pyrazole	Metabolite	C ₁₂ H ₄ Cl ₂ F ₆ N ₄ S	421.1	-	-
130	100	Florfenicol	Phenicol	Antibiotic	C ₁₂ H ₁₄ Cl ₂ FNO ₄ S	358.2	-	-
131	50	Flubendazole	Benzimidazole	Anthelmintic	C ₁₆ H ₁₂ FN ₃ O ₃	313.3	-	-
132	50	Flubendazole, 2-amino	Benzimidazole	Metabolite	C ₁₃ H ₁₁ N ₃ S	241.3	-	-
133	40	Fludioxonil	Pyrrole	Fungicide	C ₁₂ H ₆ F ₂ N ₂ O ₂	248.2	4.12	-
134	50	Flufenacet	Acetamide	Herbicide	C ₁₄ H ₁₃ F ₄ N ₃ O ₂ S	363.3	3.2	-
135	50	Flufenoxuron	Phenylurea	Insecticide	C ₂₁ H ₁₁ ClF ₆ N ₂ O ₃	488.8	4	-
136	200	Flumequine	Fluoroquinolone	Antibiotic	C ₁₄ H ₁₂ FNO ₃	261.3	1.6	6.5
137	800	Fluopyram	Benzamide	Fungicide	C ₁₆ H ₁₁ ClF ₆ N ₂ O	396.7	-	-
138	20	Fluoxastrobin	Strobilurin	Fungicide	C ₂₁ H ₁₆ ClFN ₄ O ₅	458.8	2.86	-
139	10	Fluroxypyr-meptyl	Pyridine	Herbicide	C ₁₅ H ₂₁ Cl ₂ FN ₂ O ₃	367.2	4.57	-
140	20	Flusilazole	Triazole	Fungicide	C ₁₆ H ₁₅ F ₂ N ₃ Si	315.4	3.87	2.5
141	50	Flutolanil	Oxathiin	Fungicide	C ₁₇ H ₁₆ F ₃ NO ₂	323.3	3.17	-
142	10	Flutriafol	Triazole	Fungicide	C ₁₆ H ₁₃ F ₂ N ₃ O	301.3	2.3	2.3
143	20	Fluxapyroxad	Pyrazolium	Fungicide	C ₁₈ H ₁₂ F ₅ N ₃ O	381.3	2.96	-
144	20	Foramsulfuron	Sulfonylurea	Herbicide	C ₁₇ H ₂₀ N ₆ O ₇ S	452.5	-0.78	4.6
145-148	10	HCHs (α, β, γ, δ)	Organochlorine	Insecticide	C ₆ H ₆ Cl ₆	290.8	3.99	-
149	200	Heptachlor	Organochlorine	Insecticide	C ₁₀ H ₅ Cl ₇	373.3	4.4	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
150	200	Heptachlor epoxide	Organochlorine	Metabolite	C ₁₀ H ₅ Cl ₇ O	389.3	4.24	-
151	5	Hexachlorobenzene	Organochlorine	Fungicide	C ₆ Cl ₆	284.8	5.66	-
152	10	Hexaconazole	Triazole	Fungicide	C ₁₄ H ₁₇ Cl ₂ N ₃ O	314.2	3.9	-
153	50	Hexythiazox	Carboxamide	Acaricide	C ₁₇ H ₂₁ ClN ₂ O ₂ S	352.9	2.67	-
154	50	Imazalil	Imidazole	Fungicide	C ₁₄ H ₁₄ Cl ₂ N ₂ O	297.2	2.63	6.49
155	50	Imazapyr	Imidazolinone	Herbicide	C ₁₃ H ₁₅ N ₃ O ₃	261.3	0.11	3.6
156	100	Imidacloprid	Neonicotinoid	Insecticide	C ₉ H ₁₀ ClN ₅ O ₂	255.7	0.57	-
157	50	Indoxacarb	Oxadiazine	Insecticide	C ₂₂ H ₁₇ ClF ₃ N ₃ O ₇	527.8	4.65	-
158	100	Iprodione	Dicarboximide	Fungicide	C ₁₃ H ₁₃ Cl ₂ N ₃ O ₃	330.2	3	-
159	50	Iprovalicarb	Carbamate	Fungicide	C ₁₈ H ₂₈ N ₂ O ₃	320.4	3.18	-
160	50	Isocarbofos	Organophosphorus	Insecticide	C ₁₁ H ₁₆ NO ₄ PS	289.3	1.65	-
161	50	Kresoxim-methyl	Strobilurin	Fungicide	C ₁₈ H ₁₉ NO ₄	313.3	3.4	-
162	50	Lasalosid A	Coccidiostat	Antibiotic	C ₃₄ H ₅₄ O ₈	590.8	-	-
163	10	Levamisole	Thiazole	Anthelmintic	C ₁₁ H ₁₂ N ₂ S	204.3	1.84	-
164	100	Lincomycin	Macrolide	Antibiotic	C ₁₈ H ₃₄ N ₂ O ₆ S	406.5	0.56	-
165	10	Linuron	Phenylurea	Herbicide	C ₉ H ₁₀ Cl ₂ N ₂ O ₂	249.1	3	-
166	30	Lufenuron	Benzoylurea	Insecticide	C ₁₇ H ₈ Cl ₂ F ₈ N ₂ O ₃	511.2	5.12	10.18
167	10	Mabuterol	β-Agonist	Growth promoter	C ₁₃ H ₁₈ ClF ₃ N ₂ O	310.7	-	-
168	20	Malathion	Organophosphorus	Insecticide	C ₁₀ H ₁₉ O ₆ PS ₂	330.4	2.75	-
169	20	Malathion oxon	Organophosphorus	Metabolite	C ₁₀ H ₁₉ O ₇ PS	314.3	2.07	-
170	60	Mebendazole	Benzimidazole	Anthelmintic	C ₁₆ H ₁₃ N ₃ O ₃	295.3	2.83	-
171	60	Mebendazole, 2-amino	Benzimidazole	Metabolite	C ₁₄ H ₁₁ N ₃ O	237.3	-	-
172	20	Meloxicam	NSAID	Anti-inflammatory	C ₁₄ H ₁₃ N ₃ O ₄ S ₂	351.4	0.1	4.08
173	50	Mephosfolan	Organophosphorus	Insecticide	C ₈ H ₁₆ NO ₃ PS ₂	269.3	1.04	-
174	10	Metalaxyl	Benzenoid	Fungicide	C ₁₅ H ₂₁ NO ₄	279.3	1.65	-
175	50	Metazachlor	Acetamide	Herbicide	C ₁₄ H ₁₆ ClN ₃ O	277.8	2.49	-
176	20	Metconazole	Triazole	Fungicide	C ₁₇ H ₂₂ ClN ₃ O	319.8	3.85	-
177	10	Methamidophos	Organophosphorus	Insecticide	C ₂ H ₈ NO ₂ PS	141.1	-0.8	-
178	20	Methidathion	Organophosphorus	Insecticide	C ₆ H ₁₁ N ₂ O ₄ PS ₃	302.3	2.2	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
179	50	Methiocarb	Carbamate	Insecticide	C ₁₁ H ₁₅ NO ₂ S	225.3	3.18	-
180	50	Methiocarb sulfone	Carbamate	Metabolite	C ₁₁ H ₁₅ NO ₄ S	257.3	1.26	-
181	50	Methiocarb sulfoxide	Carbamate	Metabolite	C ₁₁ H ₁₅ NO ₃ S	241.3	0.61	-
182	10	Methomyl	Carbamate	Insecticide	C ₅ H ₁₀ N ₂ O ₂ S	162.2	0.09	-
183	100	Metribuzin	Triazinone	Herbicide	C ₈ H ₁₄ N ₄ OS	214.3	1.7	1.0
184	10	Metsulfuron-methyl	Sulfonylurea	Herbicide	C ₁₄ H ₁₅ N ₅ O ₆ S	381.4	0.01	3.8
185	10	Mirex	Organochlorine	Insecticide	C ₁₀ Cl ₂	545.5	7.41	-
186	20	Monensin	Cocciostat	Antibiotic	C ₃₆ H ₆₂ O ₁₁	670.9	5.43	6.6
187	50	Monocrotophos	Organophosphorus	Insecticide	C ₇ H ₁₄ NO ₅ P	223.2	-0.22	-
188	10	Monuron	Phenylurea	Herbicide	C ₉ H ₁₁ ClN ₂ O	198.7	1.46	-
189	100	Morantel	Pyrimidine	Anthelmintic	C ₁₂ H ₁₆ N ₂ S	220.3	-	-
190	10	Myclobutanil	Triazole	Fungicide	C ₁₅ H ₁₇ ClN ₄	288.8	3.17	-
191	300	Nafcillin	β-Lactam	Antibiotic	C ₂₁ H ₂₂ N ₂ O ₅ S	414.5	-	-
192	50	Nalidixic acid	Quinolone	Antibiotic	C ₁₂ H ₁₂ N ₂ O ₃	232.2	1.41	8.6
193	10	Naproxen	NSAID	Anti-inflammatory	C ₁₄ H ₁₄ O ₃	230.3	3.18	4.15
194	100	Nitenpyram	Neonicotinoid	Insecticide	C ₁₁ H ₁₅ ClN ₄ O ₂	270.7	-0.64	-
195	400	Nitroxinil	Nitrobenzotrile	Anthelmintic	C ₇ H ₃ IN ₂ O ₃	290.0	-	-
196	10	Norflurazon	Pyridazinone	Herbicide	C ₁₂ H ₉ ClF ₃ N ₃ O	303.7	2.45	-
197	200	Novaluron	Benzoylurea	Insecticide	C ₁₇ H ₉ ClF ₈ N ₂ O ₄	492.7	4.3	-
198	50	Omethoate	Organophosphorus	Insecticide	C ₅ H ₁₂ NO ₄ PS	213.2	-0.74	-
199	100	Ormetoprim	Pyrimidine	Antibiotic	C ₁₄ H ₁₈ N ₄ O ₂	274.3	1.23	-
200	300	Oxacillin	β-Lactam	Antibiotic	C ₁₉ H ₁₉ N ₃ O ₅ S	401.4	2.38	2.72
201	50	Oxadiazon	Oxadiazole	Herbicide	C ₁₅ H ₁₈ Cl ₂ N ₂ O ₃	345.2	5.33	-
202	50	Oxfendazole	Benzimidazole	Anthelmintic	C ₁₅ H ₁₃ N ₃ O ₃ S	315.3	-	-
203	100	Oxibendazole	Benzimidazole	Anthelmintic	C ₁₂ H ₁₅ N ₃ O ₃	249.3	-	-
204	200	Oxolinic acid	Quinolone	Antibiotic	C ₁₃ H ₁₁ NO ₅	261.2	0.94	-
205	50	Oxychlorane	Organochlorine	Metabolite	C ₁₀ H ₄ Cl ₈ O	423.8	4.23	-
206	50	Oxyfluorfen	Diphenyl ether	Herbicide	C ₁₅ H ₁₁ ClF ₃ NO ₄	361.7	4.86	-
207	100	Oxytetracycline	Tetracycline	Antibiotic	C ₂₂ H ₂₄ N ₂ O ₉	460.4	-0.9	3.27

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
208	500	Paclobutrazol	Triazole	Fungicide	C ₁₅ H ₂₀ ClN ₃ O	293.8	3.11	-
209	50	Parathion	Organophosphorus	Insecticide	C ₁₀ H ₁₄ NO ₅ PS	291.3	3.83	-
210	50	Parathion-methyl	Organophosphorus	Metabolite	C ₈ H ₁₀ NO ₅ PS	263.2	-	-
211	5	PCB 28	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₇ Cl ₃	257.5	-	-
212	5	PCB 52	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₆ Cl ₄	292	-	-
213	5	PCB 77	Non-ortho PCB	Env. Contam.	C ₁₂ H ₆ Cl ₄	292	-	-
214	5	PCB 81	Non-ortho PCB	Env. Contam.	C ₁₂ H ₆ Cl ₄	292	-	-
215	5	PCB 101	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₅ Cl ₅	326.4	-	-
216	5	PCB 105	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₅ Cl ₅	326.4	-	-
217	5	PCB 118	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₅ Cl ₅	326.4	-	-
218	5	PCB 123	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₅ Cl ₅	326.4	-	-
219	5	PCB 126	Non-ortho PCB	Env. Contam.	C ₁₂ H ₅ Cl ₅	326.4	-	-
220	5	PCB 138	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₄ Cl ₆	360.9	-	-
221	5	PCB 153	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₄ Cl ₆	360.9	-	-
222	5	PCB 156	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₄ Cl ₆	360.9	-	-
223	5	PCB 157	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₄ Cl ₆	360.9	-	-
224	5	PCB 169	Non-ortho PCB	Env. Contam.	C ₁₂ H ₄ Cl ₆	360.9	-	-
225	5	PCB 180	Non-dioxin-like PCB	Env. Contam.	C ₁₂ H ₃ Cl ₇	395.3	-	-
226	5	PCB 189	Mono-ortho PCB	Env. Contam.	C ₁₂ H ₃ Cl ₇	395.3	-	-
227	50	Penconazole	Triazole	Fungicide	C ₁₃ H ₁₅ Cl ₂ N ₃	284.2	3.72	1.51
228	10	Pendimethalin	Dinitroaniline	Herbicide	C ₁₃ H ₁₉ N ₃ O ₄	281.3	5.2	2.8
229	50	Penicillin G	β-Lactam	Antibiotic	C ₁₆ H ₁₈ N ₂ O ₄ S	334.4	1.83	2.74
230	20	Penoxsulam	Triazopyrimidine	Herbicide	C ₁₆ H ₁₄ F ₅ N ₅ O ₅ S	483.4	1.13	5.1
231	20	Pentachloroaniline	Organochlorine	Metabolite	C ₆ H ₂ Cl ₅ N	265.4	4.86	-
232	50	Permethrins (<i>cis+trans</i>)	Pyrethroid	Insecticide	C ₂₁ H ₂₀ Cl ₂ O ₃	391.3	6.1	-
233	50	Phenothrin	Pyrethroid	Insecticide	C ₂₃ H ₂₆ O ₃	350.4	6.01	-
234	20	Phorate	Organophosphorus	Insecticide	C ₇ H ₁₇ O ₂ PS ₃	260.4	3.92	-
235	20	Phorate sulfone	Organophosphorus	Metabolite	C ₇ H ₁₇ O ₄ PS ₃	292.4	1.78	-
236	20	Phorate sulfoxide	Organophosphorus	Metabolite	C ₇ H ₁₇ O ₃ PS ₃	276.4	1.51	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
237	10	Phosalone	Organophosphorus	Insecticide	C ₁₂ H ₁₅ ClNO ₄ PS ₂	367.8	4.01	-
238	100	Phosmet	Organophosphorus	Insecticide	C ₁₁ H ₁₂ NO ₄ PS ₂	317.3	2.96	-
239	10	Picoxystrobin	Strobilurin	Fungicide	C ₁₈ H ₁₆ F ₃ NO ₄	367.3	3.6	-
240	100	Piperonyl butoxide	Butoxide	Synergist	C ₁₉ H ₃₀ O ₅	338.4	4.75	-
241	50	Pirimicarb	Carbamate	Insecticide	C ₁₁ H ₁₈ N ₄ O ₂	238.3	1.7	4.44
242	10	Pirimiphos	Organophosphorus	Insecticide	C ₁₃ H ₂₄ N ₃ O ₃ PS	333.4	5	-
243	100	Pirlimycin	Lincosamide	Antibiotic	C ₁₇ H ₃₁ ClN ₂ O ₅ S	411	-	-
244	100	Piroxicam	NSAID	Anti-inflammatory	C ₁₅ H ₁₃ N ₃ O ₄ S	331.3	3.06	6.3
245	10	Primisulfuron-methyl	Sulfonylurea	Herbicide	C ₁₅ H ₁₂ F ₄ N ₄ O ₇ S	468.3	0.2	3.47
246	100	Prochloraz	Imidazole	Fungicide	C ₁₅ H ₁₆ Cl ₃ N ₃ O ₂	376.7	3.53	3.8
247	50	Profenofos	Organophosphorus	Insecticide	C ₁₁ H ₁₅ BrClO ₃ PS	373.6	4.44	-
248	50	Prometryn	Triazine	Herbicide	C ₁₀ H ₁₉ N ₅ S	241.4	3.1	4.1
249	20	Propachlor	Chloroacetamide	Herbicide	C ₁₁ H ₁₄ ClNO	211.7	1.4	-
250	10	Propamocarb	Carbamate	Fungicide	C ₉ H ₂₀ N ₂ O ₂	188.3	-1.2	9.6
251	10	Propanil	Anilide	Herbicide	C ₉ H ₉ Cl ₂ NO	218.1	2.29	-
252	50	Propetamphos	Organophosphorus	Insecticide	C ₁₀ H ₂₀ NO ₄ PS	281.3	3.82	13.67
253	50	Propiconazole	Triazole	Fungicide	C ₁₅ H ₁₇ Cl ₂ N ₃ O ₂	342.2	3.72	1.09
254	50	Propoxur	Carbamate	Insecticide	C ₁₁ H ₁₅ NO ₃	209.2	1.56	-
255	50	Propoxycarbazone	Triazolone	Herbicide	C ₁₅ H ₁₈ N ₄ O ₇ S	398.4	-	-
256	20	Prosulfuron	Sulfonylurea	Herbicide	C ₁₅ H ₁₆ F ₃ N ₅ O ₄ S	419.4	1.5	3.76
257	50	Pyraclofos	Organophosphorus	Insecticide	C ₁₄ H ₁₈ ClN ₂ O ₃ PS	360.8	3.77	-
258	50	Pyraclostrobin	Strobilurin	Fungicide	C ₁₉ H ₁₈ ClN ₃ O ₄	387.8	3.99	-
259	10	Pyrazophos	Phosphorothiolate	Fungicide	C ₁₄ H ₂₀ N ₃ O ₅ PS	373.4	3.8	-
260	20	Pyridaben	Pyridazinone	Insecticide	C ₁₉ H ₂₅ ClN ₂ OS	364.9	6.37	-
261	20	Pyrifenox	Pyridine	Fungicide	C ₁₄ H ₁₂ Cl ₂ N ₂ O	295.2	3.7	4.61
262	100	Pyrimethanil	Anilinopyrimidine	Fungicide	C ₁₂ H ₁₃ N ₃	199.3	3	3.52
263	50	Pyriproxyfen	Pyridine	Insecticide	C ₂₀ H ₁₉ NO ₃	321.4	5.37	6.87
264	10	Quinclorac	Quinolinecarboxylic acid	Herbicide	C ₁₀ H ₅ Cl ₂ NO ₂	242.1	-1.15	4.34

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
265	10	Quintozene	Organochlorine	Fungicide	C ₆ Cl ₅ NO ₂	295.3	5.1	-
266	50	Quizalofop	Aryloxyphenoxy acid	Herbicide	C ₁₉ H ₁₇ ClN ₂ O ₄	372.8	4.28	
267	10	Ractopamine	β-Agonist	Growth promoter	C ₁₈ H ₂₃ NO ₃	301.4	2.4	9.4
268	10	Ritodrine	β-Agonist	Tocolytic	C ₁₇ H ₂₁ NO ₃	287.4	2.4	-
269	10	Ronidazole	Nitroimidazole	Antibiotic	C ₆ H ₈ N ₄ O ₄	200.2	-0.38	-
270	10	Saflufenacil	Uracil	Herbicide	C ₁₇ H ₁₇ ClF ₄ N ₄ O ₅ S	500.9	2.6	4.41
271	200	Sethoxydim	Cyclohexadione	Herbicide	C ₁₇ H ₂₉ NO ₃ S	327.5	4.51	4.4
272	10	Simazine	Triazine	Herbicide	C ₇ H ₁₂ ClN ₅	201.7	2.1	1.62
273	10	Spinetoram	Spinosyn	Insecticide	C ₄₂ H ₆₉ NO ₁₀ + C ₄₃ H ₆₉ NO ₁₀	-	-	-
274/275	200	Spinosyns A&D	Spinosyn	Insecticide	C ₄₁ H ₆₅ NO ₁₀ / C ₄₂ H ₆₇ NO ₁₀	732 / 746.0	2.78 / 3.23	8.1/ 7.87
276	10	Spirodiclofen	Tetronic acid	Insecticide	C ₂₁ H ₂₄ Cl ₂ O ₄	411.3	5.83	-
277	10	Spiromesifen	Tetronic acid	Insecticide	C ₂₃ H ₃₀ O ₄	370.5	4.55	-
278	100	Sulfabromomethazine	Sulfonamide	Antibiotic	C ₁₂ H ₁₃ BrN ₄ O ₂ S	357.2	0.14	7.59
279	100	Sulfachloropyridazine	Sulfonamide	Antibiotic	C ₁₀ H ₉ ClN ₄ O ₂ S	284.7	-	-
280	100	Sulfaclozine	Sulfonamide	Antibiotic	C ₁₀ H ₉ ClN ₄ O ₂ S	284.7	-	-
281	100	Sulfadiazine	Sulfonamide	Antibiotic	C ₁₀ H ₁₀ N ₄ O ₂ S	250.3	-0.09	6.36
282	100	Sulfadimethoxine	Sulfonamide	Antibiotic	C ₁₂ H ₁₄ N ₄ O ₄ S	310.3	1.63	-
283	100	Sulfadoxine	Sulfonamide	Antibiotic	C ₁₂ H ₁₄ N ₄ O ₄ S	310.3	0.7	-
284	100	Sulfaethoxypyridazine	Sulfonamide	Antibiotic	C ₁₂ H ₁₄ N ₄ O ₃ S	294.3	-	-
285	100	Sulfamerazine	Sulfonamide	Antibiotic	C ₁₁ H ₁₂ N ₄ O ₂ S	264.3	0.14	-
286	100	Sulfamethazine	Sulfonamide	Antibiotic	C ₁₂ H ₁₄ N ₄ O ₂ S	278.3	0.89	7.59
287	100	Sulfamethizole	Sulfonamide	Antibiotic	C ₉ H ₁₀ N ₄ O ₂ S ₂	270.3	0.54	2.1
288	100	Sulfamethoxazole	Sulfonamide	Antibiotic	C ₁₀ H ₁₁ N ₃ O ₃ S	253.3	0.89	-
289	100	Sulfamethoxypyridazine	Sulfonamide	Antibiotic	C ₁₁ H ₁₂ N ₄ O ₃ S	280.3		
290	100	Sulfamonomethoxine	Sulfonamide	Antibiotic	C ₁₁ H ₁₂ N ₄ O ₃ S	280.3	-	-
291	100	Sulfanilamide	Sulfonamide	Antibiotic	C ₆ H ₈ N ₂ O ₂ S	172.2	-0.62	10.6
292	100	Sulfaquinoxaline	Sulfonamide	Antibiotic	C ₁₄ H ₁₂ N ₄ O ₂ S	300.3	1.68	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
293	100	Sulfathiazole	Sulfonamide	Antibiotic	C ₉ H ₉ N ₃ O ₂ S ₂	255.3	0.05	7.2
294	100	Sulfisoxazole	Sulfonamide	Antibiotic	C ₁₁ H ₁₃ N ₃ O ₃ S	267.3	1.01	5
295	300	Sulfoxaflor	Sulfoximine	Insecticide	C ₁₀ H ₁₀ F ₃ N ₃ OS	277.3	0.8	-
296	50	Sulprofos	Organophosphorus	Insecticide	C ₁₂ H ₁₉ O ₂ PS ₃	322.4	5.48	-
297	100	Tebuconazole	Triazole	Fungicide	C ₁₆ H ₂₂ ClN ₃ O	307.8	3.7	-
298	10	Tebuthiuron	Urea	Herbicide	C ₉ H ₁₆ N ₄ OS	228.3	1.79	-
299	50	Tefluthrin	Pyrethroid	Insecticide	C ₁₇ H ₁₄ ClF ₇ O ₂	418.7	6.4	-
300	10	Terbufos	Organophosphorus	Insecticide	C ₉ H ₂₁ O ₂ PS ₃	288.4	2.77	-
301	50	Tetrachlorvinphos	Organophosphorus	Insecticide	C ₁₀ H ₉ Cl ₄ O ₄ P	366	3.86	-
302	500	Tetraconazole	Triazole	Fungicide	C ₁₃ H ₁₁ Cl ₂ F ₄ N ₃ O	372.1	3.56	0.8
303	100	Tetracycline	Tetracycline	Antibiotic	C ₂₂ H ₂₄ N ₂ O ₈	444.4	-1.3	3.3
304	90	Captan	Phthalimide	Fungicide	C ₉ H ₈ Cl ₃ NO ₂ S	300.6	2.8	-
305	50	Tetramethrin	Pyrethroid	Insecticide	C ₁₉ H ₂₅ NO ₄	331.4	4.6	-
306	50	Thiabendazole	Benzimidazole	Fungicide/ Anthelmintic	C ₁₀ H ₇ N ₃ S	201.3	2.47	4.64
307	100	Thiacloprid	Neonicotinoid	Insecticide	C ₁₀ H ₉ ClN ₄ S	252.7	1.26	-
308	20	Thiamethoxam	Neonicotinoid	Insecticide	C ₈ H ₁₀ ClN ₅ O ₃ S	291.7	-0.13	-
309	50	Thiamphenicol	Phenicol	Antibiotic	C ₁₂ H ₁₅ Cl ₂ NO ₅ S	356.2	-0.27	-
310	10	Thidiazuron	Phenylurea	Herbicide	C ₉ H ₈ N ₄ OS	220.2	1.77	-
311	10	Thiencarbazone-methyl	Triazolone	Herbicide	C ₁₂ H ₁₄ N ₄ O ₇ S ₂	390.4	-1.98	3
312	10	Thiobencarb	Thiocarbamate	Herbicide	C ₁₂ H ₁₆ ClNOS	257.8	3.42	-
313	50	Thiophanate-methyl	Benzimidazole	Fungicide	C ₁₂ H ₁₄ N ₄ O ₄ S ₂	342.4	1.45	-
314	100	Tiamulin	Diterpene	Antibiotic	C ₃₂ H ₅₁ NO ₈ S	609.8	-	-
315	50	Tilmicosin	Macrolide	Antibiotic	C ₄₆ H ₈₀ N ₂ O ₁₃	869.1	3.8	8.18
316	10	Tolyfluanid	Sulphamide	Fungicide	C ₁₀ H ₁₃ Cl ₂ FN ₂ O ₂ S ₂	347.3	3.9	-
317	10	Triadimefon	Triazole	Fungicide	C ₁₄ H ₁₆ ClN ₃ O ₂	293.8	3.11	-
318	10	Triadimenol	Triazole	Fungicide	C ₁₄ H ₁₈ ClN ₃ O ₂	295.8	-	-
319	10	Triazophos	Organophosphorus	Insecticide	C ₁₂ H ₁₆ N ₃ O ₃ PS	313.3	3.34	-
320	10	Tribufos	Organophosphorus	Defoliant	C ₁₂ H ₂₇ OPS ₃	314.5	-	-

No.	1X (ng/g)	Analyte	Class	Function	Chemical formula	MW (g/mol)	Log K _{ow}	pK _a
321	225	Triclabendazole	Benzimidazole	Flukicide	C ₁₄ H ₉ Cl ₃ N ₂ OS	359.7	3.48	-
322	225	Triclabendazole sulfoxide	Benzimidazole	Metabolite	C ₁₄ H ₉ Cl ₃ N ₂ O ₂ S	375.7	-	-
323	50	Tridiphane	Oxirane	Herbicide	C ₁₀ H ₇ Cl ₅ O	320.4	4.34	-
324	40	Trifloxystrobin	Strobilurin	Fungicide	C ₂₀ H ₁₉ F ₃ N ₂ O ₄	408.4	4.5	-
325	50	Triflumizole	Imidazole	Fungicide	C ₁₅ H ₁₅ ClF ₃ N ₃ O	345.7	4.77	3.7
326	10	Triflumuron	Benzoylurea	Insecticide	C ₁₅ H ₁₀ ClF ₃ N ₂ O ₃	358.7	4.9	-
327	10	Trifluralin	Dinitroaniline	Herbicide	C ₁₃ H ₁₆ F ₃ N ₃ O ₄	335.3	5.27	-
328	50	Trimethoprim	Pyrimidine	Antibiotic	C ₁₄ H ₁₈ N ₄ O ₃	290.3	0.91	7.12
329	100	Tylosin	Macrolide	Antibiotic	C ₄₆ H ₇₇ NO ₁₇	916.1	1.63	7.73
330	10	Vinclozolin	Dicarboximide	Fungicide	C ₁₂ H ₉ Cl ₂ NO ₃	286.1	3	-

Table S2. LPGC-MS/MS conditions; t_R = retention time, MRM = multiple reaction monitoring transition, CE = collision energy, ISTD = internal standard, QC = quality control.

No.	Analyte	t_R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
1	Acephate	3.1	136 → 94	10	136 → 42	10		
2	Alachlor	4.3	188 → 160	10	188 → 130	40	188 → 118	25
3	Aldrin	4.5	263 → 228	20	263 → 193	40	263 → 191	40
4	Atrazine	3.9	215 → 58	10	200 → 94	25	200 → 68	25
5	Atrazine-desethyl	3.7	187 → 172	5	187 → 145	20	187 → 58	5
6	Azinphos-ethyl	5.5	160 → 132	5	160 → 77	20	160 → 51	40
7	Azinphos-methyl	5.4	160 → 132	5	160 → 77	20	160 → 51	40
8	Benoxacor	4.2	259 → 176	5	259 → 134	30	259 → 120	20
9	Bifenazate	3.8	258 → 196	5	258 → 182	20	258 → 170	20
10	Bifenthrin	4.0	181 → 166	15	181 → 165	30	181 → 141	25
11	Bitertanol	4.1	170 → 141	35	170 → 115	40	170 → 55	10

No.	Analyte	t_R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
12	Boscalid	4.0	140 → 112	10	140 → 85	35	140 → 76	30
13	Bromopropylate	5.3	341 → 185	25	341 → 183	25	341 → 157	40
14	Buprofezin	5.3	172 → 115	5	172 → 83	10	172 → 57	5
15	Carbaryl	5.7	144 → 116	15	144 → 115	25	144 → 89	40
16	Carbofuran	6.1	164 → 149	5	164 → 103	25	164 → 77	40
17	Carbophenothion	5.4	199 → 143	10	342 → 199	5	342 → 157	5
18	<i>cis</i> -Chlordane	4.9	373 → 301	10	373 → 266	30	373 → 264	30
19	<i>trans</i> -Chlordane	3.2	373 → 301	10	373 → 266	30	373 → 264	30
20	Chlorfenvinphos	4.3	267 → 159	20	267 → 123	40	267 → 81	20
21	Chlorpropham	3.9	213 → 171	5	213 → 154	5	213 → 127	15
22	Chlorpyrifos	5.1	199 → 171	20	199 → 109	40	197 → 169	15
23	Chlorpyrifos-methyl	4.8	286 → 271	15	286 → 241	25	286 → 93	25
24	Coumaphos	4.8	362 → 109	15	362 → 81	40	226 → 91	40
25	Cyfluthrin	4.6	163 → 91	15	163 → 127	5		
26	λ -Cyhalothrin	3.7	197 → 141	10	197 → 91	30	181 → 152	30
27	Cyphenothrin	4.4	123 → 81	10	123 → 79	25	123 → 95	15
28	Cypermethrin	4.3	181 → 152	20	163 → 127	5	163 → 91	15
29	Cyproconazole	5.8	222 → 125	20	222 → 82	5	222 → 55	20
30	<i>o,p'</i> -DDD	5.9	235 → 165	35	237 → 165	25	235 → 199	15
31,32	<i>p,p'</i> -DDD + <i>o,p'</i> -DDT	5.5	235 → 165	35	237 → 165	25	235 → 199	15
33	<i>o,p'</i> -DDE	6.0	318 → 248	25	318 → 246	15	246 → 176	25
34	<i>p,p'</i> -DDE	5.4	246 → 176	35	318 → 246	25	318 → 248	25
35	<i>p,p'</i> -DDT	5.0	237 → 165	25	235 → 199	15	235 → 165	35
36	Deltamethrin	4.9	181 → 152	25	181 → 127	25	181 → 77	40
37	Desmedipham	5.1	181 → 122	15	181 → 109	10	181 → 81	25
38	Diazinon	4.7	304 → 179	15	199 → 93	15	179 → 137	20
39	Dichlormid	4.9	172 → 144	5	172 → 108	5	172 → 96	10
40	Dichlorvos	5.2	220 → 185	5	220 → 109	20	185 → 93	10
41	Dicofol (as 4,4-dichlorobenzophenone)	6.6	139 → 111	15	139 → 76	30		

No.	Analyte	t_R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
42	Dicrotophos	3.8	127 → 109	10	127 → 95	15	127 → 79	18
43	Dieldrin	4.0	263 → 193	40	263 → 191	40	263 → 228	20
44	Difenoconazole	2.9	323 → 265	10	323 → 202	40	265 → 202	20
45	Dimethoate	2.5	125 → 93	15	125 → 79	5	93 → 63	5
46	Dimethomorph	4.5	387 → 301	15	387 → 165	30	387 → 139	35
47	Dimoxystrobin	3.7	205 → 116	10	205 → 89	40	205 → 58	20
48	Disulfoton	4.9	153 → 97	10	142 → 81	10	88 → 60	5
49	DMPF (amitraz met.)	6.5	149 → 121	5	149 → 106	25	149 → 77	40
50	Endosulfan I	3.9	241 → 206	15	241 → 172	30	241 → 170	25
51	Endosulfan II	6.9	241 → 206	15	241 → 172	30	241 → 170	25
52	Endosulfan sulfate	5.3	387 → 253	15	272 → 237	15	272 → 235	15
53	Endrin	4.1	263 → 193	40	263 → 191	40	263 → 228	20
54	Endrin ketone	3.2	317 → 245	15	317 → 101	15	317 → 65	40
55,56	Es+Fenvalerate	4.8	167 → 125	5	167 → 89	35	167 → 77	30
57	Ethalfuralin	5.0	316 → 202	25	276 → 202	15	276 → 105	25
58	Ethion	5.2	231 → 175	20	231 → 129	20	231 → 65	40
59	Ethofumesate	5.0	286 → 207	10	286 → 179	15	286 → 161	20
60	Ethoprop	5.4	242 → 158	5	242 → 97	35	242 → 65	40
61	Etofenprox	6.4	163 → 135	15	163 → 107	20	163 → 95	20
62	Etrimfos	3.7	292 → 181	5	292 → 153	20	292 → 125	20
63	Famphur	5.0	282 → 218	5	218 → 186	10	282 → 109	40
64	Fenamiphos	4.4	303 → 195	5	303 → 154	20	303 → 80	35
65	Fenarimol	3.6	139 → 111	15	139 → 75	30		
66	Fenitrothion	6.1	277 → 125	15	277 → 109	20	277 → 79	35
67	Fenoxycarb	3.7	255 → 186	15	255 → 158	20	301 → 161	10
68	Fenpropathrin	5.1	181 → 152	20	181 → 127	30	181 → 77	40
69	Fenthion	4.8	278 → 169	15	278 → 109	15	278 → 79	35
70	Fenthion sulfone	5.7	310 → 137	25	310 → 121	25	310 → 105	25
71	Fipronil	4.4	367 → 255	20	367 → 213	35	367 → 178	40

No.	Analyte	t_R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
72	Fipronyl desulfinyl	5.5	388 → 333	20	333 → 281	20	333 → 231	20
73	Fipronil sulfide	5.3	351 → 255	20	351 → 228	40	351 → 192	35
74	Fludioxonil	4.4	248 → 182	20	248 → 154	15	248 → 127	20
75	Flufenacet	5.0	363 → 151	15	363 → 211	10		
76	Flufenoxuron	4.6	331 → 276	25	331 → 268	25	331 → 227	25
77	Fluopyram	4.6	223 → 196	20	223 → 187	20	223 → 160	35
78	Fluoxastrobin	4.2	363 → 305	15	363 → 230	20	363 → 150	35
79	Fluroxypyr-meptyl	4.8	254 → 181	15	210 → 181	15	181 → 161	15
80	Flusilazole	4.4	233 → 165	25	233 → 152	25	233 → 91	25
81	Flutriafol	4.0	219 → 123	20	219 → 95	40		
82	Heptachlor	4.6	272 → 237	20	272 → 235	20	272 → 117	35
83	Heptachlor epoxide	6.0	353 → 282	20	353 → 263	15	353 → 253	25
84	Hexachlorobenzene	5.5	284 → 249	20	284 → 214	35	284 → 179	40
85	Hexaconazole	4.9	214 → 187	15	214 → 159	25	214 → 145	35
86	α -HCH	4.8	219 → 183	15	183 → 147	30	181 → 109	30
87	β -HCH	4.3	219 → 183	15	183 → 147	30	181 → 109	30
88	γ -HCH (Lindane)	4.7	219 → 183	15	183 → 147	30	181 → 109	30
89	δ -HCH	3.9	219 → 183	15	183 → 147	30	181 → 109	30
90	Imazalil	4.8	173 → 109	30	215 → 145	10	215 → 173	10
91	Iprodione	4.8	245 → 188	10	187 → 159	15	187 → 124	25
92	Isocarbofos	5.2	289 → 136	15	289 → 113	5	289 → 108	40
93	Kresoxim-methyl	4.5	206 → 131	20	206 → 116	5	116 → 89	20
94	Malathion	4.9	173 → 117	10	173 → 99	15	125 → 79	10
95	Malathion oxon	4.2	268 → 127	10	268 → 109	35	268 → 99	15
96	Mephosfolan	4.4	227 → 168	5	227 → 135	15	227 → 60	40
97	Metalaxyl	4.6	206 → 132	20	206 → 117	35	206 → 105	20
98	Metazochlor	4.3	209 → 132	20	209 → 117	40	209 → 105	40
99	Metconazole	4.6	250 → 125	15	319 → 70	25		
100	Methamidophos	5.5	141 → 95	5	141 → 79	20	95 → 79	10

No.	Analyte	t _R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
101	Methidathion	2.5	145 → 85	15	145 → 58	15		
102	Methiocarb sulfone	4.7	200 → 137	5	200 → 121	20	200 → 91	35
103	Methiocarb sulfoxide	4.3	184 → 169	5	184 → 107	15	184 → 79	30
104	Metribuzin	4.3	198 → 89	30	198 → 82	20	198 → 55	15
105	Mirex	4.2	272 → 237	15	272 → 143	40	272 → 117	40
106	Monocrotophos	5.7	192 → 127	10	192 → 109	30	192 → 66	35
107	Myclobutanil	3.7	179 → 125	15	179 → 115	30	179 → 90	35
108	Nitenpyram	4.9	236 → 207	10	236 → 169	5	236 → 67	35
109	Omethoate	4.1	156 → 110	5	110 → 79	15	156 → 79	25
110	Oxadiazon	3.5	344 → 258	10	344 → 175	25	344 → 112	40
111	Oxychlorane	4.8	387 → 263	15	387 → 253	15		
112	Oxyfluorfen	4.7	252 → 170	40	252 → 146	40		
113	Paclobutrazol	4.8	236 → 167	10	236 → 132	20	236 → 125	10
114	Parathion	4.7	291 → 109	20	291 → 91	20	291 → 81	40
115	Parathion-methyl	4.5	263 → 125	15	263 → 109	10	263 → 79	15
116	PCB 28	4.3	256 → 221	15	256 → 186	30	256 → 151	40
117	PCB 52	4.7	290 → 255	15	290 → 220	20	290 → 185	40
118,119	PCB 77+81	5.1	292 → 222	35	292 → 220	35	292 → 185	40
120	PCB 101	5.0	326 → 290	25	326 → 256	30	326 → 254	30
121	PCB 105	5.2	326 → 290	25	326 → 256	30	326 → 254	30
122,123	PCB 123+118	5.2	326 → 290	25	326 → 256	30	326 → 254	30
124	PCB 126	5.1	326 → 290	25	326 → 256	30	326 → 254	30
125	PCB 138	5.4	360 → 290	25	360 → 288	40	360 → 218	40
126	PCB 153	5.6	360 → 290	25	360 → 288	40	360 → 218	40
127,128	PCB 156+157	5.6	360 → 290	25	360 → 288	40	360 → 218	40
129	PCB 169	5.7	360 → 290	25	360 → 288	40	360 → 218	40
130	PCB 180	4.2	394 → 359	15	394 → 324	40	394 → 322	40
131	PCB 189	4.5	394 → 359	20	394 → 324	40	394 → 322	20
132	Penconazole	4.9	248 → 206	15	248 → 192	15	248 → 157	30

No.	Analyte	t _R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
133	Pendimethalin	4.6	281 → 252	5	252 → 191	10	252 → 162	10
134	Pentachloroaniline	4.6	265 → 203	30	265 → 194	30	265 → 192	30
135	Permethrins	4.2	183 → 153	15	183 → 77	35		
136	Phenothrin	5.8	183 → 168	10	183 → 155	10	183 → 77	30
137	Phorate	5.4	260 → 75	10	231 → 175	10	231 → 129	25
138	Phorate sulfone	4.0	215 → 115	15	199 → 143	10	199 → 97	20
139	Phosalone	4.4	182 → 111	20	182 → 102	20	182 → 75	40
140	Phosmet	5.5	160 → 133	15	160 → 77	25	160 → 51	40
141	Piperonyl butoxide	5.4	176 → 131	10	176 → 103	20	176 → 91	40
142	Pirimicarb	5.2	166 → 71	40	166 → 55	20	166 → 42	40
143	Pirimiphos	4.1	318 → 166	15	318 → 168	25	318 → 182	10
144	Prochloraz	4.5	180 → 138	10	196 → 97	30	308 → 70	15
145	Profenofos	5.8	337 → 267	15	337 → 249	30	337 → 188	30
146	Prometryn	4.8	241 → 184	10	241 → 58	15	226 → 184	10
147	Propachlor	4.3	176 → 120	5	176 → 92	15	176 → 77	30
148	Propanil	3.6	219 → 163	10	217 → 161	10	161 → 99	30
149	Propetamphos	4.2	236 → 194	5	236 → 166	15	236 → 88	25
150	Propiconazole	3.9	259 → 191	5	259 → 173	15	259 → 69	5
151	Propoxur	5.2	152 → 110	10	110 → 92	10	110 → 64	10
152	Pyraclufos	3.6	360 → 194	10	360 → 139	15	360 → 97	40
153	Pyraclostrobin	5.7	132 → 77	20	132 → 51	40		
154	Pyrazophos	6.4	373 → 265	5	373 → 232	10	373 → 221	15
155	Pyridaben	5.6	147 → 132	15	147 → 117	25	147 → 91	40
156	Pyrifenoxy	5.8	262 → 227	10	262 → 192	20	262 → 91	20
157	Pyrimethanil	4.9	198 → 158	20	198 → 118	15	198 → 90	35
158	Pyriproxyfen	4.0	136 → 96	10	136 → 78	30	136 → 51	40
159	Quintozene	5.5	295 → 237	20	237 → 143	30	237 → 119	30
160	Simazine	4.0	201 → 186	5	201 → 173	5	186 → 96	10
161	Spirodiclofen	3.9	312 → 259	5	312 → 195	25	312 → 109	5

No.	Analyte	t_R (min)	MRM I (m/z)	CE (V)	MRM II (m/z)	CE (V)	MRM III (m/z)	CE (V)
162	Spiromesifen	5.8	272 → 231	15	272 → 226	15	272 → 209	15
163	Sulprofos	5.3	322 → 198	15	322 → 156	15	322 → 139	15
164	Tebuconazole	5.1	250 → 153	10	250 → 125	20	250 → 70	15
165	Tebuthiuron	5.2	171 → 156	5	156 → 74	20	156 → 62	30
166	Tefluthrin	3.3	177 → 127	20	177 → 87	40		
167	Terbufos	4.0	288 → 231	5	288 → 129	30	288 → 57	30
168	Tetrachlorvinphos	4.0	331 → 222	40	331 → 109	25	331 → 79	25
169	Tetraconazole	4.7	336 → 218	15	336 → 204	30	336 → 156	30
170	Tetrahydrophthalimide	4.5	151 → 122	10	151 → 105	20	151 → 79	25
171	Tetramethrin	5.3	164 → 107	5	164 → 91	20	164 → 79	20
172	Thiamethoxam	4.5	182 → 149	30	182 → 81	5	182 → 96	25
173	Thiobencarb	4.4	257 → 100	10	125 → 89	20	125 → 63	40
174	Tolyfluanid	4.6	346 → 137	20	238 → 137	10	346 → 181	5
175	Triadimenol	4.6	168 → 70	10	168 → 112	10	168 → 57	20
176	Triazophos	4.6	257 → 134	30	161 → 91	20		
177	Triadimefon	4.6	208 → 127	15	208 → 111	25	208 → 75	40
178	Tribufos	4.8	169 → 113	5	169 → 95	25	169 → 57	5
179	Tridiphane	4.3	285 → 219	25	285 → 189	5	285 → 159	20
180	Trifloxystrobin	5.1	172 → 145	25	116 → 89	30	116 → 63	30
181	Triflumizole	4.6	206 → 186	10	206 → 179	20	206 → 144	30
182	Trifluralin	3.7	306 → 264	5	306 → 206	15	264 → 160	10
183	Vinclozolin	4.2	285 → 178	10	212 → 145	30	212 → 109	40
ISTD	$^{13}C_{12}$ - <i>p,p'</i> -DDE	3.1	330 → 258	40	258 → 188	40		
ISTD	$^{13}C_{12}$ -PCB 153	4.3	372 → 302	25	372 → 300	40		
ISTD	Atrazine- d_5	4.5	205 → 105	15	205 → 127	10		
QC	<i>p</i> -Terphenyl- d_{14}	3.9	244 → 212	40	244 → 160	40		

Table S3. UHPLC-MS/MS conditions for the analysis of the targeted analytes (t_R = retention time; DP = declustering potential; CE = collision energy, CXP = collision exit potential; MRM = multiple reaction monitoring ion transition; ISTD = internal standard; QC = quality control).

No.	Analyte	t_R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
1	Acetamiprid	4.4	71	223 → 126	27 (6)	223 → 90	51 (6)	223 → 56	19 (10)
2	Albendazole	5.4	89	266 → 234	27 (12)	266 → 191	45 (10)	266 → 192	39 (10)
3	Albendazole sulfone	4.5	85	298 → 159	47 (8)	298 → 224	37 (12)	298 → 131	67 (6)
4	Albendazole sulfoxide	4.0	66	282 → 240	19 (12)	282 → 208	33 (10)	282 → 159	53 (5)
5	Albendazole, 2-aminosulfone	3.3	85	240 → 133	39 (6)	240 → 198	27 (10)	240 → 150	69 (12)
6	Aldicarb sulfone	3.1	41	223 → 148	13 (8)	223 → 86	19 (4)	223 → 76	11(4)
7	Aldicarb sulfoxide	2.8	26	207 → 132	9 (6)	207 → 89	19 (6)	207 → 105	15 (6)
8	Atrazine	5.8	66	216 → 174	25 (10)	216 → 104	37 (6)	216 → 96	33 (6)
9	Atrazine-desethyl	4.3	70	188 → 146	23 (6)	188 → 104	33 (6)	188 → 79	33 (4)
10	Azoxystrobin	6.6	91	404 → 372	21 (16)	404 → 344	35 (16)	404 → 329	43 (14)
11	Bacitracin	4.7	80	475 → 670	19 (10)	475 → 86	21 (10)	475 → 227	29 (12)
12	Bentazon	5.5	61	241 → 199	15 (10)	241 → 107	35 (8)	241 → 135	29 (6)
13	Bispyribac-Na	6.5	64	431 → 275	25 (8)	431 → 243	47 (6)	431 → 119	57 (18)
14	Bithionol	7.9	-60	355 → 161	-30 (-9)	355 → 163	-30 (-9)	355 → 194	-34 (-1)
15	Boscalid	6.7	90	343 → 307	27 (6)	343 → 272	43 (12)	343 → 140	25 (6)
16	Brombuterol	4.2	51	367 → 293	25 (16)	367 → 214	41 (12)	367 → 212	41 (12)
17	Bromchlorbuterol	4.0	46	323 → 249	25 (6)	323 → 305	17 (6)	323 → 168	39 (10)
18	Buprofezin	7.6	56	306 → 201	17 (10)	306 → 57	37 (10)	306 → 106	33 (6)
19	Cambendazole	4.5	70	303 → 261	25 (14)	303 → 217	37 (12)	303 → 190	53 (10)
20	Carazolol	4.3	77	299 → 116	27 (6)	299 → 222	27 (12)	299 → 194	39 (10)
21	Carbadox	3.6	36	263 → 231	19 (12)	263 → 130	27 (6)	263 → 229	25 (12)
22	Carbadox metabolite (2-QCA)	3.7	55	175 → 131	21 (6)	175 → 102	41 (14)	175 → 129	23 (6)
23	Carbaryl	5.6	91	202 → 145	15 (6)	202 → 127	37 (6)	202 → 117	33 (6)
24	Carbofuran	5.4	41	222 → 123	29 (8)	222 → 165	17 (10)	222 → 77	57 (12)
25	Carboxin	5.6	71	236 → 143	21 (4)	236 → 87	31 (6)	236 → 93	49 (6)
26	Carfentrazone	7.2	115	412 → 366	25 (16)	412 → 346	31 (16)	412 → 384	19 (18)

No.	Analyte	t _R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
27	Cefazolin	3.8	35	455 → 323	15 (16)	455 → 156	23 (8)	455 → 295	23 (14)
28	Chlorantraniliprole	6.3	66	484 → 453	23 (22)	484 → 286	19 (8)	484 → 177	61 (8)
29	Chlorfenvinphos	7.3	56	359 → 155	17 (8)	358 → 99	43 (6)	359 → 170	53 (8)
30	Chlorimuron	6.7	86	415 → 186	25 (10)	415 → 213	19 (6)	415 → 121	55 (16)
31	Chlortetracycline	4.2	56	479 → 444	29(20)	479 → 444	37 (8)	479 → 444	37 (8)
32	Cimaterol	2.5	34	220 → 143	31 (6)	220 → 116	45 (18)	220 → 89	61 (10)
33	Ciprofloxacin	3.5	97	332 → 314	27 (14)	332 → 231	49 (12)	332 → 245	33 (12)
34	Ciprofloxacin, desethylene	3.3	19	306 → 268	35 (14)	306 → 217	51 (12)	306 → 288	25 (14)
35	Clenbuterol	3.8	41	277 → 203	23 (10)	277 → 132	37 (6)	277 → 259	15 (14)
36	Clencyclohexerol	3.4	61	319 → 301	19 (16)	319 → 203	29 (12)		
37	Clenpenterol	4.3	71	291 → 203	23 (12)	291 → 132	39 (8)	291 → 168	41 (10)
38	Clethodim	7.8	45	360 → 164	27 (14)	360 → 136	30 (14)	360 → 240	10 (14)
39	Clofentezine	7.4	56	303 → 138	19 (8)	303 → 102	51 (4)	303 → 75	79 (10)
40	Clorsulon	4.5	-90	380 → 344	6 (7)	380 → 242	-32 (3)	380 → 342	6 (17)
41	Cyazofamid	7.1	40	325 → 108	17 (8)	324 → 261	13 (14)	325 → 217	27 (12)
42	Cymoxanil	4.6	31	199 → 128	11 (6)	199 → 111	25 (6)	199 → 83	33 (12)
43	Cyproconazole	6.7	89	292 → 70	23 (18)	292 → 125	39 (18)	292 → 89	83 (14)
44	Danofloxacin	3.6	84	358 → 340	31 (16)	358 → 314	25 (16)	358 → 283	33 (14)
45	Dapsone	3.7	111	249 → 156	21 (8)	249 → 108	29 (18)	249 → 92	31 (12)
46	Diazinon	7.4	80	305 → 169	29 (8)	305 → 153	27 (8)	305 → 97	47 (6)
47	Diclofenac	7.0	30	296 → 214	45 (12)	296 → 215	27 (12)	296 → 250	19 (12)
48	Dicloxacillin	6.1	40	470 → 160	19 (10)	470 → 311	19 (16)	470 → 114	65 (18)
49	Difenoconazole	7.5	72	406 → 251	33 (14)	406 → 337	23 (16)	406 → 188	61 (10)
50	Difloxacin	3.9	91	400 → 382	31 (12)	400 → 299	37 (14)	400 → 356	27 (18)
51	Diflubenzuron	6.9	71	311 → 158	21 (8)	311 → 141	45 (8)	311 → 113	47 (20)
52	Diflufenzopyr	5.7	81	335 → 206	15 (8)	335 → 162	23 (6)	335 → 78	55 (10)
53	Dimethoate	4.3	56	230 → 199	13 (8)	230 → 125	29 (6)	230 → 171	21 (8)
54	Dimethomorph	6.5	91	388 → 301	29 (16)	388 → 165	41 (8)	388 → 139	43 (6)
55	Dimetridazole	2.9	38	142 → 96	23 (16)	142 → 95	31 (14)	142 → 81	35 (12)

No.	Analyte	t _R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
56	Dimetridazole, hydroxy	2.6	36	158 → 140	17 (6)	158 → 112	25 (18)		
57	Dimoxystrobin	7.1	46	327 → 205	15 (10)	327 → 116	29 (8)	327 → 238	15 (12)
58	Dinotefuran	2.9	66	203 → 129	15 (6)	203 → 157	11 (4)	203 → 113	15 (6)
59	Diuron	5.9	80	233 → 72	21 (12)	233 → 46	37 (8)	233 → 160	33 (8)
60	Doxycycline	4.5	61	445 → 428	25 (20)	445 → 321	43 (16)	445 → 267	49 (14)
61	Emamectin	7.3	32	887 → 158	41 (8)	887 → 82	119 (12)	887 → 302	39 (16)
62	Enrofloxacin	3.6	84	360 → 342	29 (16)	360 → 245	37 (12)	360 → 316	27 (16)
63	Epoxiconazole	6.9	59	330 → 121	51 (8)	330 → 101	81 (4)	330 → 95	91 (18)
64	Erythromycin A	5.3	67	734 → 576	27 (26)	734 → 83	89 (12)	734 → 158	37 (8)
65	Fenamidone	6.6	66	312 → 236	21 (10)	312 → 92	41(4)	312 → 103	27 (6)
66	Fenamiphos	6.9	130	304 → 217	43 (12)	304 → 202	49 (6)	304 → 234	19 (10)
67	Fenarimol	6.7	80	331 → 268	31 (12)	331 → 189	63 (10)	331 → 139	45 (6)
68	Fenbendazole	6.1	91	300 → 268	29 (14)	300 → 159	47 (8)	300 → 131	59 (6)
69	Fenbendazole sulfone	5.1	114	332 → 300	31 (16)	332 → 159	49 (8)	332 → 131	61 (6)
70	Fenoterol	2.9	86	304 → 135	25 (6)	304 → 107	41 (18)	304 → 152	27 (8)
71	Fenoxycarb	7.0	71	302 → 116	15 (8)	302 → 88	29 (10)	302 → 256	17 (12)
72	Fenpyroximate	8.3	76	422 → 366	23 (16)	422 → 138	39 (6)	422 → 215	35 (8)
73	Fenthion	7.3	111	279 → 247	19 (12)	279 → 169	23 (10)	279 → 105	29 (8)
74	Fenthion sulfone	5.9	114	311 → 125	27 (6)	311 → 279	25 (12)	311 → 109	37 (6)
75	Florfenicol	4.2	21	358 → 241	23 (12)	358 → 206	35 (12)	358 → 170	41 (8)
76	Flubendazole	5.6	80	314 → 282	31 (14)	314 → 123	47 (6)	314 → 95	55 (14)
77	Flubendazole, 2-amino	4.3	116	256 → 123	37 (6)	256 → 95	47 (14)	256 → 75	85 (10)
78	Flufenacet	7.0	51	364 → 152	25 (8)	364 → 194	15 (8)	364 → 124	25 (22)
79	Flumequine	5.5	63	262 → 244	27 (12)	262 → 202	45 (10)	262 → 200	47 (12)
80	Fluopyram	6.8	110	397 → 173	37 (8)	397 → 145	73 (8)	397 → 208	29 (10)
81	Fluoxastrobin	7.0	54	459 → 427	25 (24)	459 → 188	45 (8)	459 → 367	31 (16)
82	Flutolanil	6.8	90	324 → 242	35 (10)	324 → 262	25 (6)	324 → 282	19 (12)
83	Flutriafol	5.8	81	302 → 70	19 (4)	302 → 123	31 (6)	302 → 95	71 (16)
84	Fluxapyroxad	6.7	86	382 → 362	23 (16)	382 → 342	31 (16)	382 → 314	39 (6)

No.	Analyte	t _R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
85	Foramsulfuron	5.4	-30	451 → 268	-32 (-5)	451 → 296	- 8 (-5)	451 → 252	-32 (-3)
86	Hexythiazox	8.1	81	353 → 228	21 (10)	353 → 168	33 (8)	353 → 271	19 (12)
87	Imazalil	5.3	55	297 → 159	37 (8)	297 → 201	21 (8)	297 → 255	21 (12)
88	Imazapyr	3.8	71	262 → 217	29 (4)	262 → 149	35 (10)	262 → 78	75 (12)
89	Imidacloprid	4.1	60	256 → 175	23 (12)	256 → 209	27 (10)	256 → 84	21 (10)
90	Indoxacarb	7.6	55	528 → 249	23 (13)	528 → 293	19 (6)	528 → 150	31 (6)
91	Iprodione	7.0	71	330 → 245	21 (12)	330 → 288	17 (14)	330 → 162	37 (10)
92	Iprovalicarb	6.8	51	321 → 119	25 (8)	321 → 203	13 (6)	321 → 116	29 (8)
93	Lasalosisid A	10.2	-85	589 → 235	-40 (-3)	589 → 173	-54 ()	589 → 191	-46 (-3)
94	Levamisole	3.0	82	205 → 178	29 (10)	205 → 123	39 (8)	205 → 117	39 (6)
95	Lincomycin	3.1	66	407 → 126	33 (6)	407 → 359	25 (18)	407 → 82	107 (12)
96	Linuron	6.4	63	249 → 160	25 (6)	249 → 182	23 (8)	249 → 88	14 (6)
97	Lufenuron	8.0	76	511 → 158	25 (8)	511 → 141	63 (8)	511 → 113	109 (12)
98	Mabuterol	4.3	41	311 → 237	25 (12)	311 → 217	35 (12)	311 → 202	43 (10)
99	Mebendazole	5.4	80	296 → 264	29 (14)	296 → 105	43 (14)	296 → 186	45 (10)
100	Mebendazole, 2-amino	4.1	121	238 → 105	35 (12)	238 → 133	47 (6)	238 → 106	59 (12)
101	Meloxicam	6.3	66	352 → 115	23 (8)	352 → 141	25 (6)	352 → 73	71 (12)
102	Mephosfolan	5.2	76	270 → 140	33 (6)	270 → 196	19 (10)	270 → 168	23 (10)
103	Metalaxyl	6.1	66	280 → 220	19 (4)	280 → 192	25 (8)	280 → 248	15 (10)
104	Metazachlor	6.1	51	278 → 134	29 (6)	278 → 210	15 (10)	278 → 105	55 (12)
105	Metconazole	7.3	79	320 → 70	61 (8)	320 → 125	57 (6)	320 → 89	97 (10)
106	Methiocarb	6.4	85	226 → 169	13(8)	226 → 121	25 (6)	226 → 77	33 (6)
107	Methiocarb sulfoxide	4.0	41	242 → 185	19 (10)	242 → 122	39 (6)	242 → 170	31 (10)
108	Methomyl	3.3	76	163 → 88	13 (8)	163 → 106	13 (8)	163 → 122	7 (4)
109	Metsulfuron-methyl	5.4	86	382 → 167	21 (10)	382 → 141	21 (6)	382 → 199	29 (10)
110	Monensin (Na adduct)	9.3	71	693 → 461	71 (22)	693 → 479	71 (22)	693 → 501	69 (22)
111	Monocrotophos	3.4	61	224 → 193	11 (10)	224 → 127	21 (6)	224 → 98	15 (16)
112	Monuron	5.2	56	199 → 72	19 (8)	199 → 126	33 (6)	199 → 99	51 (16)
113	Morantel	3.9	74	221 → 123	47 (6)	221 → 111	33 (18)	221 → 150	39 (10)

No.	Analyte	t_R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
114	Nafcillin	6.2	41	415 → 199	19 (10)	415 → 171	47 (8)	415 → 115	97 (16)
115	Nalidixic acid	5.4	46	233 → 215	21 (12)	233 → 187	35 (10)	233 → 159	43 (8)
116	Naproxen	6.2	96	231 → 185	21 (10)	231 → 170	35 (10)	231 → 141	61 (6)
117	Nitroxinil	5.4	-56	289 → 162	-28 (-9)	289 → 127	-32 (3)	289 → 215	-34 (1)
118	Norflurazon	6.0	76	304 → 284	33 (44)	304 → 160	41 (28)	304 → 145	63 (6)
119	Novaluron	7.7	91	493 → 158	23 (4)	493 → 141	67 (4)	493 → 113	80 (10)
120	Omethoate	2.6	51	214 → 183	15 (10)	214 → 125	29 (8)	214 → 155	21 (8)
121	Ormetoprim	3.5	100	275 → 123	31 (6)	275 → 231	35 (10)	275 → 121	53 (6)
122	Oxacillin	5.8	34	402 → 243	19 (12)	402 → 160	19 (8)	402 → 114	49 (18)
123	Oxfendazole	4.6	105	316 → 159	41 (8)	316 → 191	29 (10)	316 → 284	25 (14)
124	Oxibendazole	4.6	103	250 → 218	27 (12)	250 → 176	39 (10)	250 → 148	49 (8)
125	Oxolinic acid	4.7	56	262 → 244	25 (14)	262 → 216	39 (12)	262 → 160	49 (8)
126	Oxytetracycline	3.5	56	461 → 426	27 (20)	461 → 443	19 (20)	461 → 444	19 (20)
127	Penicillin G	5.3	40	335 → 176	19 (10)	335 → 160	15 (8)	335 → 87	59 (14)
128	Penoxsulam	5.9	31	484 → 195	37 (8)	484 → 164	45 (10)	484 → 444	35 (20)
129	Phorate sulfone	6.1	45	293 → 171	15 (8)	293 → 247	9 (10)	293 → 97	45 (6)
130	Phorate sulfoxide	5.8	31	277 → 199	13 (8)	277 → 143	27 (6)	277 → 171	19 (8)
131	Phosalone	7.5	45	368 → 182	19 (6)	368 → 111	51 (4)	368 → 75	60 (4)
132	Picoxystrobin	7.2	71	368 → 145	25 (12)	368 → 205	17 (12)	368 → 102	101 (26)
133	Pirimiphos	8.0	121	334 → 198	29 (10)	334 → 182	29 (10)	334 → 170	43 (10)
134	Pirlimycin	4.4	60	411 → 112	31 (6)	411 → 363	25 (18)	411 → 56	81 (8)
135	Piroxicam	5.6	67	332 → 95	25 (14)	332 → 121	29 (6)	332 → 164	25 (10)
136	Primisulfuron-methyl	6.7	-25	467 → 226	8 (1)	467 → 176	-42 (-9)	467 → 126	-70 (3)
137	Prochloraz	6.9	46	376 → 308	15 (6)	376 → 70	31 (4)	376 → 266	21 (16)
138	Profenofos	7.8	86	373 → 303	25 (42)	373 → 345	17 (12)	373 → 144	47 (8)
139	Propamocarb	3.6	91	189 → 102	23 (16)	189 → 144	17 (6)	189 → 74	33 (8)
140	Propanil	6.3	92	218 → 162	21 (8)	218 → 127	35 (6)	218 → 92	48 (6)
141	Propiconazole	7.3	70	342 → 159	33 (6)	342 → 123	79 (6)	342 → 69	23 (4)
142	Propoxycarbazone	5.9	51	399 → 199	21 (10)	399 → 367	13 (10)	399 → 116	41 (6)

No.	Analyte	t_R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
143	Prosulfuron	6.5	96	420 → 141	23 (6)	420 → 167	25 (10)	420 → 109	69 (18)
144	Pyraclostrobin	7.5	65	388 → 194	17 (4)	388 → 163	33 (4)	388 → 149	30 (8)
145	Pyridaben	8.5	51	365 → 309	17 (14)	365 → 117	83 (8)	365 → 147	33 (8)
146	Pyrimethanil	5.6	71	200 → 107	33 (4)	200 → 82	33 (6)	200 → 80	37 (12)
147	Quinclorac	5.2	51	242 → 224	25 (4)	241 → 161	51 (10)	242 → 196	39 (12)
148	Quizalofop	7.8	86	373 → 299	27 (8)	373 → 255	45 (10)	373 → 163	49 (8)
149	Ractopamine	3.6	48	302 → 164	23 (8)	302 → 121	29 (6)	302 → 107	47 (14)
150	Ritodrine	3.1	61	288 → 121	29 (8)	288 → 150	27 (8)	288 → 103	55 (16)
151	Ronidazole	2.8	29	201 → 140	15 (6)	201 → 55	29 (8)	201 → 54	65 (8)
152	Saflufenacil	6.5	90	501 → 349	37 (8)	501 → 459	21 (20)	501 → 198	59 (4)
153	Sethoxydim	8.0	41	328 → 178	37 (10)	328 → 110	37 (8)	328 → 282	29 (12)
154	Simazine	5.2	96	202 → 124	25 (6)	202 → 132	25 (4)	202 → 104	33 (6)
155	Spinetoram	7.0	102	748 → 142	33 (6)	748 → 98	105 (16)	748 → 97	89 (12)
156	Spinosyn A	6.8	85	732 → 142	37 (6)	732 → 98	93 (4)	732 → 97	93 (16)
157	Spinosyn D	7.0	74	746 → 142	37 (6)	746 → 98	101 (6)	746 → 75	52 (6)
158	Sulfabromomethazine	5.4	75	357 → 264	25 (14)	357 → 156	27 (8)	357 → 202	35 (10)
159	Sulfachloropyridazine	4.1	24	285 → 156	21 (8)	285 → 92	37 (14)	285 → 108	31 (18)
160	Sulfaclozine	4.6	56	285 → 156	23 (8)	285 → 108	33 (18)	285 → 130	29 (4)
161	Sulfadiazine	2.9	25	251 → 156	21 (8)	251 → 92	33 (14)	251 → 108	31 (18)
162	Sulfadimethoxine	4.7	69	311 → 156	27 (8)	311 → 108	35 (18)	311 → 92	43 (14)
163	Sulfadoxine	4.1	69	311 → 156	25 (8)	311 → 108	33 (16)	311 → 92	39 (14)
164	Sulfaethoxypyridazine	4.0	47	295 → 156	25 (8)	295 → 140	25 (8)	295 → 108	35 (16)
165	Sulfamerazine	3.3	26	265 → 156	23 (8)	265 → 172	23 (10)	265 → 108	33 (16)
166	Sulfamethazine	3.6	41	279 → 186	23 (10)	279 → 124	29 (6)	279 → 156	25 (8)
167	Sulfamethizole	3.6	29	271 → 156	19 (8)	271 → 92	37 (14)	271 → 108	31 (18)
168	Sulfamethoxazole	4.1	19	254 → 156	21 (8)	254 → 92	35 (14)	254 → 108	31 (8)
169	Sulfamethoxypyridazine	3.9	52	281 → 156	23 (8)	281 → 108	33 (14)	281 → 92	39 (14)
170	Sulfamonomethoxine	3.8	71	281 → 156	23 (8)	281 → 108	33 (18)	281 → 92	37 (10)
171	Sulfanilamide	1.5	16	173 → 76	53 (12)	173 → 156	11 (8)	173 → 75	49 (10)

No.	Analyte	t_R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
172	Sulfaquinoxaline	4.8	66	301 → 156	23 (8)	301 → 92	41 (10)	301 → 108	33 (16)
173	Sulfathiazole	3.0	22	256 → 156	22 (8)	256 → 92	37 (14)	256 → 80	63 (12)
174	Sulfisoxazole	4.3	56	268 → 156	19 (10)	268 → 92	35 (16)	268 → 113	21 (8)
175	Sulfoxaflor	4.7	-73	276 → 213	-22 (-1)	276 → 261	-6 (-7)	276 → 171	-40 (-9)
176	Tebuthiuron	5.1	61	229 → 172	25 (6)	229 → 116	39 (8)	229 → 157	37(8)
177	Tetrachlorvinphos	7.1	61	367 → 127	19 (4)	367 → 206	51 (10)	367 → 241	27 (10)
178	Tetraconazole	6.8	72	372 → 159	37 (8)	372 → 70	63 (6)	372 → 123	83 (8)
179	Tetracycline	3.6	52	445 → 410	27 (10)	445 → 154	35 (8)	445 → 226	73 (12)
180	Thiabendazole	3.8	106	202 → 175	35 (6)	202 → 131	45 (6)	202 → 92	47 (8)
181	Thiacloprid	4.7	111	253 → 126	31 (4)	253 → 90	51 (6)	253 → 99	63 (6)
182	Thiamphenicol	3.5	36	356 → 308	21 (6)	356 → 338	11 (8)	356 → 229	31 (16)
183	Thidiazuron	5.2	56	221 → 102	21 (16)	221 → 128	23 (6)	221 → 94	19 (10)
184	Thiencarbazone-methyl	5.4	21	391 → 359	13 (18)	391 → 230	23 (12)	391 → 130	19 (6)
185	Thiophanate-methyl	5.3	101	343 → 151	25 (8)	343 → 311	15 (16)	343 → 160	39 (8)
186	Tiamulin	5.4	91	494 → 192	29 (10)	494 → 119	55 (6)	494 → 163	39 (10)
187	Tilmicosin (++)	4.6	66	435 → 174	33 (10)	435 → 99	25 (16)	435 → 696	23 (30)
188	Triadimenol	6.5	36	296 → 70	29 (12)	296 → 99	21(6)	296 → 75	97 (12)
189	Triclabendazole	7.4	67	359 → 274	49 (14)	359 → 344	37 (18)	359 → 171	67 (10)
190	Triclabendazole sulfoxide	7.0	74	375 → 360	31 (18)	375 → 242	63 (12)	375 → 313	35 (16)
191	Trifloxystrobin	7.7	35	409 → 186	25 (8)	409 → 145	61 (6)	409 → 206	19 (4)
192	Triflumuron	7.3	56	359 → 156	21 (8)	359 → 139	45 (6)	359 → 75	107 (8)
193	Trimethoprim	3.3	121	291 → 230	33 (12)	291 → 261	34 (13)	291 → 123	31 (6)
194	Tylosin	5.4	69	917 → 174	47 (10)	917 → 772	41 (32)	917 → 83	125 (14)
ISTD	Atrazine- d_5	5.8	96	221 → 179	25 (8)				
ISTD	Fenthion- d_6	7.3	100	285 → 253	21 (8)				
ISTD	Clenbuterol- d_9	3.9	46	286 → 204	23 (12)				
ISTD	Flunixin- d_3	6.5	90	300 → 282	33 (14)				
ISTD	Penicillin G- d_7	5.3	35	342 → 160	17 (16)				
QC	^{13}C -Phenacetin	4.6	91	181 → 110	29 (6)				

No.	Analyte	t_R (min)	DP (V)	MRM I (m/z)	CE (CXP) (V)	MRM II (m/z)	CE (CXP) (V)	MRM III (m/z)	CE (CXP) (V)
ISTD	Pyridaben- d_{13}	8.4	51	378 → 160	33 (4)				
ISTD	Ractopamine- d_3	3.6	56	305 → 167	21 (10)				
ISTD	Phenylbutazone- d_{10}	6.9	56	319 → 221	23 (12)				
ISTD	$^{13}C_6$ -Sulfamethazine	3.6	56	285 → 186	23 (10)				

Table S4. Overall validation results for the QuEChERSER mega-method in muscle of goat and lamb; ISTD = internal standard, t_R = retention time, ME = matrix effect, Rec = average recovery, RSD = relative standard deviation (n = 40); bold text indicates |ME| or RSD > 20% and 70% > recovery > 120%. LVL is the lowest validated level that achieved 70-120% recovery with RSD < 20%.

No.	Analyte	ISTD	Tool	t_R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
1	Acephate	Atrazine- d_5	GC	3.1	-14	88	15	10	14	75	19	10
2	Acetamiprid	Atrazine- d_5	LC	4.3	-3	101	13	25	1	101	15	25
3	Alachlor	Atrazine- d_5	GC	4.3	-1	99	6	5	4	108	18	5
4	Albendazole	Fenthion- d_6	LC	5.4	-3	105	13	50	-7	74	25	-
5	Albendazole sulfone	Flunixin- d_3	LC	4.5	-5	104	13	50	-9	101	9	50
6	Albendazole sulfoxide	Flunixin- d_3	LC	4.1	0	105	12	50	1	154	19	50
7	Albendazole, 2-aminosulfone	Flunixin- d_3	LC	3.3	-3	101	10	50	0	134	12	50
8	Aldicarb sulfone	Atrazine- d_5	LC	3.2	9	85	27	-	14	87	16	5
9	Aldicarb sulfoxide	Atrazine- d_5	LC	2.9	-39	102	44	-	0	85	22	-
10	Aldrin	$^{13}C_{12}$ - p,p' -DDE	GC	4.5	-1	104	5	100	-5	94	13	100
11	Atrazine	Atrazine- d_5	LC	5.8	-7	105	9	5	-5	95	11	5
	Atrazine	Atrazine- d_5	GC	3.9	-3	109	6	5	-2	100	11	5
12	Atrazine-desethyl	Atrazine- d_5	GC	3.7	-5	99	11	5	-3	95	14	5
	Atrazine-desethyl	Atrazine- d_5	LC	4.3	-4	98	15	5	-3	102	18	10
13	Azinphos-ethyl	Atrazine- d_5	GC	5.5	4	87	17	5	42	95	26	-
14	Azinphos-methyl	Atrazine- d_5	GC	5.4	-9	110	13	5	51	101	17	5

No.	Analyte	ISTD	Tool	t_R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
15	Azoxystrobin	Atrazine- d_5	LC	6.5	-3	105	14	5	11	101	15	5
16	Bacitracin	Flunixin- d_3	LC	4.7	50	95	11	50	2	111	31	-
17	Benoxacor	Atrazine- d_5	GC	4.2	1	109	5	25	1	89	11	25
18	Bentazon	Atrazine- d_5	LC	5.5	12	93	18	10	8	89	27	-
19	Bifenazate	Atrazine- d_5	GC	5.3	-1	30	39	-	8	70	32	-
20	Bifenthrin	Pyridaben- d_{13}	GC	5.3	4	86	8	50	-2	85	16	50
21	Bispyribac	Atrazine- d_5	LC	6.5	5	103	17	5	29	98	16	5
22	Bitertanol	Atrazine- d_5	GC	5.7	5	86	14	5	1	80	20	5
23	Bithionol	Clenbuterol- d_9	LC	7.9	37	95	28	-	75	59	48	-
24	Boscalid	Atrazine- d_5	GC	6.1	4	92	15	5	1	107	21	-
	Boscalid	Atrazine- d_5	LC	6.6	-2	94	13	5	0	96	16	5
25	Brombuterol	Clenbuterol- d_9	LC	4.2	2	105	12	5	14	95	12	5
26	Bromchlorbuterol	Clenbuterol- d_9	LC	4.1	3	111	9	5	10	101	12	5
27	Brompropylate	Atrazine- d_5	GC	5.4	-22	100	9	5	61	97	17	5
28	Buprofezin	Atrazine- d_5	GC	4.9	17	102	8	25	-27	104	14	25
	Buprofezin	Atrazine- d_5	LC	7.6	-33	118	16	25	-45	127	31	-
29	Cambendazole	Clenbuterol- d_9	LC	4.5	-3	102	19	5	0	100	11	5
30	Carazolol	Clenbuterol- d_9	LC	4.3	4	111	11	5	2	75	33	-
31	Carbadox	Clenbuterol- d_9	LC	3.8	26	108	14	5	25	105	17	5
32	Carbadox met. (2-QCA)	Clenbuterol- d_9	LC	3.9	11	91	15	5	0	117	13	5
33	Carbaryl	Atrazine- d_5	GC	4.3	-22	104	8	25	85	98	11	25
	Carbaryl	Atrazine- d_5	LC	5.5	-4	104	16	25	-4	100	14	25
34	Carbofuran	Atrazine- d_5	GC	3.9	-5	93	9	5	47	104	19	5
	Carbofuran	Atrazine- d_5	LC	5.4	1	110	14	5	1	98	18	5
35	Carbophenothion	Atrazine- d_5	GC	5.1	-6	99	11	10	40	98	16	10
36	Carboxin	Atrazine- d_5	LC	5.6	3	103	11	25	10	86	18	25
37	Carfentrazone	Atrazine- d_5	LC	7.2	-7	70	24	-	7	93	21	-
38	Cefazolin	Flunixin- d_3	LC	3.9	2	92	22	-	14	102	10	50
39	Chlorantraniliprole	Atrazine- d_5	LC	6.3	-1	102	11	100	7	97	16	100

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
40	<i>cis</i> -Chlordane	Atrazine- <i>d</i> ₅	GC	4.8	-7	77	12	25	33	90	13	25
41	<i>trans</i> -Chlordane	Atrazine- <i>d</i> ₅	GC	4.8	-94	74	14	25	17	88	14	25
42	Chlorfenvinphos	Atrazine- <i>d</i> ₅	GC	4.6	-2	96	9	5	15	105	12	5
	Chlorfenvinphos	Atrazine- <i>d</i> ₅	LC	7.3	9	106	13	5	0	95	15	5
43	Chlorimuron	Atrazine- <i>d</i> ₅	LC	6.6	-7	101	13	10	9	101	14	10
44	Chlorpropham	Atrazine- <i>d</i> ₅	GC	3.7	63	104	7	25	-5	107	10	25
45	Chlorpyrifos	Atrazine- <i>d</i> ₅	GC	4.4	-6	99	8	5	11	98	12	5
46	Chlorpyrifos-methyl	Atrazine- <i>d</i> ₅	GC	4.3	-3	102	6	5	8	106	9	5
47	Chlortetracycline	Flunixin- <i>d</i> ₃	LC	4.3	5	69	16	50	-24	79	20	100
48	Cimaterol	Flunixin- <i>d</i> ₃	LC	2.8	-23	98	14	5	-5	95	12	5
49	Ciprofloxacin	¹³ C ₆ -Sulfamethazine	LC	3.6	5	84	14	50	6	74	11	50
50	Ciprofloxacin, desethylene	¹³ C ₆ -Sulfamethazine	LC	3.5	-3	84	13	50	-28	90	21	-
51	Clenbuterol	Clenbuterol- <i>d</i> ₉	LC	3.9	0	108	10	5	12	100	9	5
52	Clencyclohexerol	Clenbuterol- <i>d</i> ₉	LC	3.4	-23	76	32	-	9	116	17	5
53	Clenpenterol	Clenbuterol- <i>d</i> ₉	LC	4.3	-22	117	13	5	-22	115	17	5
54	Clethodim	Atrazine- <i>d</i> ₅	LC	7.8	13	97	13	100	51	91	22	-
55	Clofentezine	Atrazine- <i>d</i> ₅	LC	7.4	2	111	17	25	25	173	27	-
56	Clorsulon	Flunixin- <i>d</i> ₃	LC	4.5	1	94	25	-	6	89	17	18
57	Coumaphos	Atrazine- <i>d</i> ₅	GC	5.8	3	96	12	5	2	108	21	5
58	Cyazofamid	Atrazine- <i>d</i> ₅	LC	7.1	4	98	21	-	-1	95	20	10
59	Cyfluthrin	Pyridaben- <i>d</i> ₁₃	GC	5.9	2	107	9	25	6	112	19	25
60	λ-Cyhalothrin	Pyridaben- <i>d</i> ₁₃	GC	5.5	-5	112	6	250	5	112	13	250
61	Cymoxanil	Atrazine- <i>d</i> ₅	LC	4.6	-22	111	14	5	-42	112	27	-
62	Cypermethrin	Pyridaben- <i>d</i> ₁₃	GC	6.0	4	104	6	50	10	103	12	50
63	Cyphenothrin	Pyridaben- <i>d</i> ₁₃	GC	5.4	5	96	9	50	-7	92	16	50
64	Cyproconazole	Atrazine- <i>d</i> ₅	GC	5.0	-3	93	12	25	4	111	14	25
	Cyproconazole	Atrazine- <i>d</i> ₅	LC	6.6	-5	103	10	25	0	99	12	25
65	Danofloxacin	Flunixin- <i>d</i> ₃	LC	3.7	20	86	16	100	5	79	18	200
66	Dapsone	Flunixin- <i>d</i> ₃	LC	3.9	7	98	12	50	6	95	10	50

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
67	<i>o,p'</i> -DDD	Atrazine- <i>d</i> ₅	GC	4.9	1	80	11	25	11	100	12	25
68	<i>o,p'</i> -DDE	Atrazine- <i>d</i> ₅	GC	4.7	3	93	12	25	4	80	14	25
69,70	<i>p,p'</i> -DDD + <i>o,p'</i> -DDT	Atrazine- <i>d</i> ₅	GC	5.1	22	88	13	25	8	70	16	25
71	<i>p,p'</i> -DDE	¹³ C ₁₂ - <i>p,p'</i> -DDE	GC	4.9	2	105	6	25	6	101	12	25
72	<i>p,p'</i> -DDT	Atrazine- <i>d</i> ₅	GC	5.2	2	88	11	25	-12	77	21	-
73	Deltamethrin	Pyridaben- <i>d</i> ₁₃	GC	6.6	1	97	8	15	4	103	18	15
74	Desmedipham	Atrazine- <i>d</i> ₅	GC	3.8	-2	101	14	25	52	129	25	-
75	Diazinon	Atrazine- <i>d</i> ₅	GC	4.0	15	103	6	10	-15	96	17	10
	Diazinon	Atrazine- <i>d</i> ₅	LC	7.4	-9	102	10	10	0	111	15	10
76	Dichlormid	Atrazine- <i>d</i> ₅	GC	2.9	25	108	6	5	-30	95	12	5
77	Dichlorvos	Atrazine- <i>d</i> ₅	GC	2.5	19	59	38	-	-23	66	31	-
78	Diclofenac	Flunixin- <i>d</i> ₃	LC	7.0	11	94	12	25	-6	98	9	25
79	Dicloxacillin	Flunixin- <i>d</i> ₃	LC	6.1	13	105	10	50	11	104	10	50
80	Dicofol (as 4,4-dichlorobenzophenone)	Atrazine- <i>d</i> ₅	GC	4.5	11	94	9	25	-21	102	11	25
81	Dicrotophos	Atrazine- <i>d</i> ₅	GC	3.7	-5	90	9	25	26	86	13	25
82	Dieldrin	Atrazine- <i>d</i> ₅	GC	4.9	5	102	10	100	8	107	13	100
83	Difenoconazole	Atrazine- <i>d</i> ₅	GC	6.5	-2	90	16	25	13	77	29	-
	Difenoconazole	Atrazine- <i>d</i> ₅	LC	7.4	2	112	12	25	4	90	19	25
84	Difloxacin	Flunixin- <i>d</i> ₃	LC	4.0	9	89	18	150	-6	95	14	150
85	Diflubenzuron	Atrazine- <i>d</i> ₅	LC	6.9	-8	106	13	50	-4	97	15	50
86	Diflufenzopyr	Atrazine- <i>d</i> ₅	LC	5.7	10	99	9	25	9	96	14	25
87	Dimethoate	Atrazine- <i>d</i> ₅	GC	3.9	2	105	8	25	5	115	13	25
	Dimethoate	Atrazine- <i>d</i> ₅	LC	4.3	2	110	14	25	3	101	15	25
88	Dimethomorph	Atrazine- <i>d</i> ₅	GC	6.9	-1	98	16	10	-4	108	47	-
	Dimethomorph	Atrazine- <i>d</i> ₅	LC	6.4	-5	98	11	5	-2	101	16	5
89	Dimetridazole	Flunixin- <i>d</i> ₃	LC	3.1	0	106	13	5	-3	102	9	5
90	Dimetridazole, hydroxy	Clenbuterol- <i>d</i> ₉	LC	2.9	24	103	26	-	9	119	18	5
91	Dimoxystrobin	Atrazine- <i>d</i> ₅	GC	5.3	-12	90	11	15	9	89	14	15

No.	Analyte	ISTD	Tool	t_R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
	Dimoxystrobin	Atrazine- d_5	LC	7.1	0	92	20	15	6	96	14	15
92	Dinotefuran	Atrazine- d_5	LC	2.9	-30	109	26	-	4	97	19	50
93	Disulfoton	Atrazine- d_5	GC	4.1	9	100	6	5	-9	104	18	5
94	Diuron	Atrazine- d_5	LC	5.9	11	107	10	25	10	99	13	25
95	DMPF (amitraz met.)	Atrazine- d_5	GC	3.2	-2	110	11	5	50	102	15	5
96	Doxycycline	Flunixin- d_3	LC	4.5	12	71	20	50	5	74	11	50
97	Emamectin	Flunixin- d_3	LC	7.2	88	101	16	50	43	74	34	-
98	Endosulfan I	Atrazine- d_5	GC	4.8	0	85	11	25	2	100	11	25
99	Endosulfan II	Atrazine- d_5	GC	5.0	2	100	7	25	-9	100	12	25
100	Endosulfan sulfate	Atrazine- d_5	GC	5.2	2	99	9	25	-5	100	15	25
101	Endrin	Atrazine- d_5	GC	5.0	-2	97	12	25	14	74	18	25
102	Endrin ketone	Atrazine- d_5	GC	5.4	-6	102	7	25	12	88	11	25
103	Enrofloxacin	Flunixin- d_3	LC	3.8	23	89	16	50	3	93	21	-
104	Epoxiconazole	Atrazine- d_5	LC	6.8	-3	106	16	5	9	95	15	5
105	Erythromycin A	Flunixin- d_3	LC	5.3	21	105	11	100	88	85	20	100
106,107	Es+Fenvalerate	Pyridaben- d_{13}	GC	6.4	1	107	6	20	5	108	10	20
108	Ethalfuralin	Atrazine- d_5	GC	3.7	-9	103	8	5	22	92	11	5
109	Ethion	Atrazine- d_5	GC	5.0	-10	106	9	5	7	106	15	5
110	Ethofumesate	Atrazine- d_5	GC	4.4	-27	97	7	15	55	115	8	15
111	Ethoprop	Atrazine- d_5	GC	3.6	-6	107	6	5	44	109	14	5
112	Etofenprox	Pyridaben- d_{13}	GC	6.1	1	91	7	250	3	90	14	250
113	Etrimfos	Atrazine- d_5	GC	3.7	5	99	13	5	-7	90	13	5
114	Famphur	Atrazine- d_5	GC	5.1	2	109	9	25	-1	109	13	25
115	Fenamidone	Atrazine- d_5	LC	6.5	-6	102	15	5	9	93	13	5
116	Fenamiphos	Atrazine- d_5	GC	4.8	2	94	16	10	7	110	15	10
	Fenamiphos	Atrazine- d_5	LC	6.9	2	101	17	10	4	97	14	10
117	Fenarimol	Atrazine- d_5	LC	6.7	8	107	15	10	3	92	15	10
	Fenarimol	Pyridaben- d_{13}	GC	5.7	14	101	13	10	7	114	19	10
118	Fenbendazole	Flunixin- d_3	LC	6.1	3	120	11	25	0	80	27	-

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
119	Fenbendazole sulfone	Flunixin-d ₃	LC	5.1	14	99	10	25	1	99	10	25
120	Fenitrothion	Atrazine-d ₅	GC	4.4	-8	107	9	5	8	110	10	5
121	Fenoterol	Flunixin-d ₃	LC	3.1	1	81	14	5	-8	76	22	-
122	Fenoxycarb	Atrazine-d ₅	GC	5.3	5	104	8	25	10	122	28	-
	Fenoxycarb	Atrazine-d ₅	LC	7.0	1	105	16	25	3	106	16	25
123	Fenpropathrin	Pyridaben-d ₁₃	GC	5.5	10	112	6	25	-10	112	13	25
124	Fenpyroximate	Atrazine-d ₅	LC	8.2	51	118	17	5	237	101	37	-
125	Fenthion	Atrazine-d ₅	GC	4.4	4	99	6	25	5	94	17	25
	Fenthion	Atrazine-d ₅	LC	7.2	3	107	15	25	21	133	25	-
126	Fenthion sulfone	Atrazine-d ₅	GC	5.0	-9	101	10	25	42	112	13	25
	Fenthion sulfone	Atrazine-d ₅	LC	5.8	0	96	13	25	0	121	18	25
127	Fipronil	Atrazine-d ₅	GC	4.6	2	112	9	2.5	8	114	14	2.5
128	Fipronyl desulfinyl	Atrazine-d ₅	GC	4.2	23	99	9	2.5	-24	106	21	-
129	Fipronil sulfide	Atrazine-d ₅	GC	4.6	-5	102	7	2.5	15	103	21	-
130	Florfenicol	Flunixin-d ₃	LC	4.3	3	101	20	50	-6	96	13	50
131	Flubendazole	Flunixin-d ₃	LC	5.6	-3	107	13	25	0	97	14	25
132	Flubendazole, 2-amino	Flunixin-d ₃	LC	4.3	0	103	12	25	3	82	17	25
133	Fludioxonil	Atrazine-d ₅	GC	4.8	-4	112	10	20	5	117	16	20
134	Flufenacet	Atrazine-d ₅	GC	4.4	-7	100	8	25	28	110	13	25
	Flufenacet	Atrazine-d ₅	LC	7.0	11	96	16	25	1	100	13	25
135	Flufenoxuron	Atrazine-d ₅	GC	4.0	-8	92	17	50	48	68	24	-
136	Flumequine	Flunixin-d ₃	LC	5.5	9	103	13	100	7	101	10	100
137	Fluopyram	Atrazine-d ₅	GC	4.6	5	108	8	400	-16	110	17	400
	Fluopyram	Atrazine-d ₅	LC	6.8	-3	104	11	400	2	102	13	400
138	Fluoxastrobin	Atrazine-d ₅	GC	6.0	-6	108	10	10	15	107	20	10
	Fluoxastrobin	Atrazine-d ₅	LC	6.9	22	100	13	10	21	108	13	10
139	Fluroxypyr-meptyl	Atrazine-d ₅	GC	5.5	20	101	11	5	-11	98	15	5
140	Flusilazole	Atrazine-d ₅	GC	4.9	25	107	9	10	-30	106	17	10
141	Flutolanil	Atrazine-d ₅	LC	6.7	6	103	10	25	4	101	13	25

No.	Analyte	ISTD	Tool	t_R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
142	Flutriafol	Atrazine- d_5	GC	4.8	1	100	10	5	10	117	16	5
	Flutriafol	Atrazine- d_5	LC	5.7	1	104	8	5	-1	98	14	5
143	Fluxapyroxad	Atrazine- d_5	LC	6.6	-7	101	13	10	-2	99	15	10
144	Foramsulfuron	Atrazine- d_5	LC	5.4	-20	93	15	10	0	91	19	10
145	α -HCH	Atrazine- d_5	GC	3.8	-2	98	7	5	4	100	16	5
146	β -HCH	Atrazine- d_5	GC	4.0	-5	104	6	5	36	102	16	5
147	γ -HCH (Lindane)	Atrazine- d_5	GC	4.1	-6	101	7	5	16	90	18	5
148	δ -HCH	Atrazine- d_5	GC	4.0	4	102	6	5	5	93	16	5
149	Heptachlor	Atrazine- d_5	GC	4.3	-5	84	13	100	31	64	16	100
150	Heptachlor epoxide	Atrazine- d_5	GC	4.7	4	96	8	100	14	86	17	100
151	Hexachlorobenzene	Atrazine- d_5	GC	3.9	7	71	19	2.5	13	71	21	-
152	Hexaconazole	Atrazine- d_5	GC	4.8	9	101	11	5	-5	100	17	5
153	Hexythiazox	Atrazine- d_5	LC	8.1	0	95	24	-	59	132	42	-
154	Imazalil	Atrazine- d_5	GC	4.8	-2	79	15	25	36	73	15	25
	Imazalil	Atrazine- d_5	LC	5.3	-23	120	14	25	3	77	24	-
155	Imazapyr	Atrazine- d_5	LC	3.9	11	85	19	25	-1	92	16	25
156	Imidacloprid	Atrazine- d_5	LC	4.1	8	98	12	50	10	99	15	50
157	Indoxacarb	Atrazine- d_5	LC	7.6	25	110	15	25	11	91	18	25
158	Iprodione	Atrazine- d_5	GC	5.2	-6	127	13	50	12	103	17	50
	Iprodione	Atrazine- d_5	LC	7.0	5	104	13	50	-24	115	24	-
159	Iprovalicarb	Atrazine- d_5	LC	6.7	0	103	19	25	12	98	13	25
160	Isocarbofos	Atrazine- d_5	GC	4.5	26	108	8	25	-20	105	15	25
161	Kresoxim-methyl	Atrazine- d_5	GC	4.9	0	111	6	25	15	112	14	25
162	Lasalosid A	Flunixin- d_3	LC	10.5	155	128	17	25	70	80	19	25
163	Levamisole	Flunixin- d_3	LC	3.2	6	96	18	5	-27	86	19	5
164	Lincomycin	Flunixin- d_3	LC	3.3	-7	94	12	50	-3	87	14	50
165	Linuron	Atrazine- d_5	LC	6.4	10	107	14	5	20	99	18	5
166	Lufenuron	Atrazine- d_5	LC	7.9	78	111	17	15	91	82	22	-
167	Mabuterol	Flunixin- d_3	LC	4.3	10	120	12	5	0	83	27	-

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
168	Malathion	Atrazine-d ₅	GC	4.4	10	53	42	-	38	81	30	-
169	Malathion oxon	Atrazine-d ₅	GC	4.2	1	82	19	10	26	92	25	-
170	Mebendazole	Flunixin-d ₃	LC	5.4	2	104	11	30	-5	99	13	30
171	Mebendazole, 2-amino	Flunixin-d ₃	LC	4.1	1	101	12	30	2	83	20	30
172	Meloxicam	Flunixin-d ₃	LC	6.3	10	102	10	10	5	97	11	10
173	Mephosfolan	Atrazine-d ₅	GC	4.6	0	86	17	25	10	83	20	25
	Mephosfolan	Atrazine-d ₅	LC	5.2	1	106	10	25	-7	94	13	25
174	Metalaxyl	Atrazine-d ₅	GC	4.3	-2	108	8	5	14	104	17	5
	Metalaxyl	Atrazine-d ₅	LC	6.0	3	111	11	5	1	94	13	5
175	Metazachlor	Atrazine-d ₅	LC	6.0	1	109	11	25	6	94	12	25
	Metazochlor	Atrazine-d ₅	GC	4.6	2	113	5	25	-2	113	12	25
176	Metconazole	Atrazine-d ₅	GC	5.5	3	104	17	10	1	83	45	-
	Metconazole	Atrazine-d ₅	LC	7.2	3	102	13	10	4	95	14	10
177	Methamidophos	Atrazine-d ₅	GC	2.5	1	89	8	5	-1	102	22	-
178	Methidathion	Atrazine-d ₅	GC	4.7	3	111	6	10	13	116	11	10
179	Methiocarb	Atrazine-d ₅	LC	6.4	-3	102	10	25	0	101	15	25
180	Methiocarb sulfone	Atrazine-d ₅	GC	4.3	-12	114	10	25	8	148	21	-
181	Methiocarb sulfoxide	Atrazine-d ₅	GC	4.3	-7	91	16	25	33	91	21	-
	Methiocarb sulfoxide	Atrazine-d ₅	LC	4.0	-6	105	13	25	-44	160	31	-
182	Methomyl	Atrazine-d ₅	LC	3.4	84	129	18	5	97	89	21	-
183	Metribuzin	Atrazine-d ₅	GC	4.2	0	108	6	50	6	107	12	50
184	Metsulfuron-methyl	Atrazine-d ₅	LC	5.4	2	102	13	5	0	94	22	-
185	Mirex	¹³ C ₁₂ -p,p'-DDE	GC	5.7	2	77	11	5	16	57	24	-
186	Monensin	Flunixin-d ₃	LC	9.3	41	99	14	10	6	102	22	-
187	Monocrotophos	Atrazine-d ₅	GC	3.7	1	96	11	25	7	80	13	25
	Monocrotophos	Atrazine-d ₅	LC	3.4	-9	98	17	25	1	93	16	25
188	Monuron	Atrazine-d ₅	LC	5.1	-8	99	12	5	-7	96	13	5
189	Morantel	Flunixin-d ₃	LC	4.0	4	98	13	50	2	83	23	-
190	Myclobutanil	Atrazine-d ₅	GC	4.9	4	107	8	5	12	109	18	5

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
191	Nafcillin	Flunixin-d ₃	LC	6.2	7	103	11	150	12	103	9	150
192	Nalidixic acid	Flunixin-d ₃	LC	5.4	13	104	15	25	3	102	11	25
193	Naproxen	Flunixin-d ₃	LC	6.2	0	101	25	5	-5	105	19	10
194	Nitenpyram	Atrazine-d ₅	GC	4.1	-2	118	7	50	23	105	11	50
195	Nitroxinil	Flunixin-d ₃	LC	5.4	0	129	33	-	0	71	537	-
196	Norflurazon	Atrazine-d ₅	LC	6.0	6	101	19	5	1	101	22	-
197	Novaluron	Atrazine-d ₅	LC	7.6	34	119	14	100	40	87	20	50
198	Omethoate	Atrazine-d ₅	GC	3.5	-8	85	11	25	-10	70	13	25
	Omethoate	Atrazine-d ₅	LC	2.7	-26	107	24	-	7	90	19	25
199	Ormetoprim	Flunixin-d ₃	LC	3.6	1	103	13	50	1	89	16	50
200	Oxacillin	Flunixin-d ₃	LC	5.8	3	109	10	150	1	102	9	150
201	Oxadiazon	Atrazine-d ₅	GC	4.8	-20	91	6	25	-5	89	19	25
202	Oxfendazole	Flunixin-d ₃	LC	4.6	28	106	10	25	-3	105	12	25
203	Oxibendazole	Flunixin-d ₃	LC	4.6	5	101	12	50	7	92	16	50
204	Oxolinic Acid	Flunixin-d ₃	LC	4.7	14	105	16	100	3	103	9	100
205	Oxychlorthane	Atrazine-d ₅	GC	4.7	-4	88	12	25	28	76	15	25
206	Oxyfluorfen	Atrazine-d ₅	GC	4.8	7	107	11	25	30	95	13	25
207	Oxytetracycline	Flunixin-d ₃	LC	3.6	16	63	19	50	10	72	15	50
208	Paclobutrazol	Atrazine-d ₅	GC	4.7	-3	100	10	250	7	118	15	250
209	Parathion	Atrazine-d ₅	GC	4.5	0	111	7	25	7	106	12	25
210	Parathion-methyl	Atrazine-d ₅	GC	4.3	-10	110	7	25	12	111	14	25
211	PCB 28	¹³ C ₁₂ -p,p'-DDE	GC	4.2	3	111	7	2.5	1	98	15	2.5
212	PCB 52	¹³ C ₁₂ -p,p'-DDE	GC	4.5	-1	109	9	2.5	-2	97	13	2.5
213,214	PCB 77+81	¹³ C ₁₂ -p,p'-DDE	GC	4.9	7	79	9	2.5	0	76	13	2.5
215	PCB 101	¹³ C ₁₂ -p,p'-DDE	GC	4.7	-8	94	9	2.5	11	82	13	2.5
216	PCB 105	¹³ C ₁₂ -p,p'-DDE	GC	5.1	2	84	12	2.5	13	70	15	2.5
217,218	PCB 123+118	¹³ C ₁₂ -p,p'-DDE	GC	5.0	6	73	13	2.5	-2	60	18	2.5
219	PCB 126	¹³ C ₁₂ -PCB 153	GC	5.2	5	88	12	2.5	27	94	16	2.5
220	PCB 138	¹³ C ₁₂ -p,p'-DDE	GC	5.2	-4	77	12	2.5	26	62	15	2.5

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
221	PCB 153	¹³ C ₁₂ -PCB 153	GC	5.1	7	107	7	2.5	10	105	13	2.5
222,223	PCB 156+157	¹³ C ₁₂ -PCB 153	GC	5.4	5	102	9	2.5	9	97	15	2.5
224	PCB 169	¹³ C ₁₂ -PCB 153	GC	5.6	1	56	13	2.5	-6	58	21	-
225	PCB 180	¹³ C ₁₂ -PCB 153	GC	5.6	-1	93	10	2.5	-2	89	17	2.5
226	PCB 189	¹³ C ₁₂ -PCB 153	GC	5.7	-3	66	12	2.5	-9	59	22	-
227	Penconazole	Atrazine-d ₅	GC	4.6	9	105	7	25	-5	99	17	25
228	Pendimethalin	Atrazine-d ₅	GC	4.6	11	104	10	5	-2	87	12	5
229	Penicillin G	Penicillin G-d ₇	LC	5.3	0	104	19	25	3	110	14	25
230	Penoxsulam	Atrazine-d ₅	LC	5.9	10	102	12	10	22	101	17	10
231	Pentachloroaniline	Atrazine-d ₅	GC	4.2	8	87	13	10	-5	90	17	10
232	Permethrins (<i>cis+trans</i>)	Pyridaben-d ₁₃	GC	5.8	8	96	7	25	0	86	13	25
233	Phenothrin	Pyridaben-d ₁₃	GC	5.4	-1	100	9	25	-4	95	15	25
234	Phorate	Atrazine-d ₅	GC	4.0	-4	101	7	10	-3	96	15	10
235	Phorate Sulfone	Atrazine-d ₅	GC	4.4	-3	115	7	10	-2	116	14	10
	Phorate sulfone	Atrazine-d ₅	LC	6.1	6	119	21	-	6	101	28	-
236	Phorate sulfoxide	Atrazine-d ₅	LC	5.8	6	109	11	10	6	102	17	10
237	Phosalone	Atrazine-d ₅	GC	5.5	0	106	11	5	1	101	15	5
	Phosalone	Atrazine-d ₅	LC	7.5	-33	120	30	-	13	95	16	5
238	Phosmet	Atrazine-d ₅	GC	5.4	4	98	13	50	17	101	17	50
239	Picoxystrobin	Atrazine-d ₅	LC	7.1	16	87	28	-	0	94	20	5
240	Piperonyl butoxide	Atrazine-d ₅	GC	5.2	-2	100	12	50	2	103	15	50
241	Pirimicarb	Atrazine-d ₅	GC	4.1	-3	108	5	25	0	109	13	25
242	Pirimiphos	Atrazine-d ₅	GC	4.5	8	102	7	5	-20	105	9	5
	Pirimiphos	Atrazine-d ₅	LC	7.9	-3	106	19	5	23	171	36	-
243	Pirlimycin	Flunixin-d ₃	LC	6.9	-3	94	10	50	-7	76	19	50
244	Piroxicam	Flunixin-d ₃	LC	4.4	10	100	17	50	4	99	11	50
245	Primisulfuron-methyl	Atrazine-d ₅	LC	6.7	1	101	13	5	4	96	15	5
246	Prochloraz	Atrazine-d ₅	GC	5.8	1	80	13	50	4	44	23	-
	Prochloraz	Atrazine-d ₅	LC	6.9	2	105	16	50	-6	87	16	50

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
247	Profenofos	Atrazine-d ₅	GC	4.8	4	97	10	25	12	99	13	25
	Profenofos	Atrazine-d ₅	LC	7.8	4	112	15	25	-4	103	20	25
248	Prometryn	Atrazine-d ₅	GC	4.3	1	104	6	25	23	111	10	25
249	Propachlor	Atrazine-d ₅	GC	3.6	-5	58	51	-	45	79	40	-
250	Propamocarb	Atrazine-d ₅	LC	2.7	7	100	15	5	-10	85	17	5
251	Propanil	Atrazine-d ₅	GC	4.2	-3	97	10	5	36	118	19	5
	Propanil	Atrazine-d ₅	LC	6.3	1	103	10	5	5	96	13	5
252	Propetamphos	Atrazine-d ₅	GC	3.9	-2	107	6	25	-36	110	16	25
253	Propiconazole	Atrazine-d ₅	GC	5.2	1	102	11	25	8	98	18	25
	Propiconazole	Atrazine-d ₅	LC	7.2	-7	104	10	25	3	91	13	25
254	Propoxur	Atrazine-d ₅	GC	3.6	-7	108	7	25	74	111	12	25
255	Propoxycarbazone	Atrazine-d ₅	LC	5.9	2	106	11	25	-1	97	16	25
256	Prosulfuron	Atrazine-d ₅	LC	6.5	0	102	13	10	12	101	15	10
257	Pyraclofos	Pyridaben-d ₁₃	GC	5.7	1	94	13	25	17	80	17	25
258	Pyraclostrobin	Atrazine-d ₅	LC	7.4	9	104	17	25	-7	97	20	25
	Pyraclostrobin	Pyridaben-d ₁₃	GC	6.4	-1	79	18	25	6	80	39	-
259	Pyrazophos	Pyridaben-d ₁₃	GC	5.6	-3	97	12	5	1	114	14	5
260	Pyridaben	Pyridaben-d ₁₃	GC	5.8	-5	98	6	10	15	104	12	10
	Pyridaben	Pyridaben-d ₁₃	LC	8.4	-3	98	20	10	34	99	13	10
261	Pyrifenox	Atrazine-d ₅	GC	4.9	2	88	14	10	3	104	15	10
262	Pyrimethanil	Atrazine-d ₅	GC	4.0	-10	96	6	50	18	95	11	50
	Pyrimethanil	Atrazine-d ₅	LC	5.6	9	111	11	50	-29	102	17	50
263	Pyriproxyfen	Atrazine-d ₅	GC	5.5	-3	103	9	25	3	103	18	25
264	Quinclorac	Atrazine-d ₅	LC	5.1	6	109	21	-	-2	96	15	5
265	Quintozene	Atrazine-d ₅	GC	4.0	-6	87	12	5	10	78	17	5
266	Quizalofop	Atrazine-d ₅	LC	7.8	-25	98	15	25	9	112	13	25
267	Ractopamine	Ractopamine-d ₃	LC	5.6	3	106	12	5	0	103	10	5
268	Ritodrine	Flunixin-d ₃	LC	9.0	3	94	17	5	-25	90	17	5
269	Ronidazole	Flunixin-d ₃	LC	3.2	8	102	15	5	2	83	17	5

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
270	Saflufenacil	Atrazine-d ₅	LC	6.5	-7	97	17	5	5	95	17	5
271	Sethoxydim	Atrazine-d ₅	LC	8.0	14	88	17	100	69	89	20	100
272	Simazine	Atrazine-d ₅	GC	3.9	4	103	6	5	-4	102	12	5
	Simazine	Atrazine-d ₅	LC	5.2	-7	103	12	5	-6	97	12	5
273	Spinetoram	Atrazine-d ₅	LC	7.0	20	102	22	-	12	80	24	-
274	Spinosyn A	Atrazine-d ₅	LC	6.8	-6	121	13	100	9	82	24	-
275	Spinosyn D	Atrazine-d ₅	LC	6.9	26	102	18	100	19	82	24	-
276	Spirodiclofen	Pyridaben-d ₁₃	GC	5.8	4	98	10	5	-14	95	16	5
277	Spiromesifen	Atrazine-d ₅	GC	5.3	2	92	12	5	1	90	14	5
278	Sulfabromomethazine	¹³ C ₆ -Sulfamethazine	LC	3.1	0	104	13	50	7	95	10	50
279	Sulfachloropyridazine	¹³ C ₆ -Sulfamethazine	LC	5.4	-7	99	11	50	-3	96	8	50
280	Sulfaclozine	¹³ C ₆ -Sulfamethazine	LC	4.1	12	108	10	50	-3	98	10	50
281	Sulfadiazine	¹³ C ₆ -Sulfamethazine	LC	4.6	3	107	13	50	15	98	9	50
282	Sulfadimethoxine	¹³ C ₆ -Sulfamethazine	LC	3.1	4	110	11	50	2	97	9	50
283	Sulfadoxine	¹³ C ₆ -Sulfamethazine	LC	4.7	0	104	9	50	3	101	9	50
284	Sulfaethoxypyridazine	¹³ C ₆ -Sulfamethazine	LC	4.2	-9	105	10	50	0	98	9	50
285	Sulfamerazine	¹³ C ₆ -Sulfamethazine	LC	4.4	2	101	12	50	19	96	9	50
286	Sulfamethazine	¹³ C ₆ -Sulfamethazine	LC	3.8	0	104	12	50	5	102	9	50
287	Sulfamethizole	¹³ C ₆ -Sulfamethazine	LC	3.5	-4	100	11	50	4	95	9	50
288	Sulfamethoxazole	¹³ C ₆ -Sulfamethazine	LC	3.7	-6	104	11	50	8	97	9	50
289	Sulfamethoxy-pyridazine	¹³ C ₆ -Sulfamethazine	LC	4.2	-1	99	11	50	6	99	8	50
290	Sulfamonomethoxine	¹³ C ₆ -Sulfamethazine	LC	4.0	6	103	11	50	6	100	8	50
291	Sulfanilamide	¹³ C ₆ -Sulfamethazine	LC	3.8	-55	154	31	-	-83	253	31	-
292	Sulfaquinoxaline	¹³ C ₆ -Sulfamethazine	LC	1.5	-4	106	11	50	4	95	9	50
293	Sulfathiazole	¹³ C ₆ -Sulfamethazine	LC	4.8	5	105	12	50	15	94	9	50
294	Sulfisoxazole	¹³ C ₆ -Sulfamethazine	LC	3.3	-6	99	13	50	6	95	9	50
295	Sulfoxaflor	Atrazine-d ₅	LC	4.7	34	107	12	150	-22	92	14	150
296	Sulprofos	Atrazine-d ₅	GC	5.1	-2	99	9	25	-4	98	12	25
297	Tebuconazole	Atrazine-d ₅	GC	5.2	-5	89	13	50	3	95	17	50

No.	Analyte	ISTD	Tool	t _R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
298	Tebuthiuron	Atrazine-d ₅	GC	3.3	-3	118	6	5	37	106	13	5
	Tebuthiuron	Atrazine-d ₅	LC	5.1	4	99	10	5	4	100	13	5
299	Tefluthrin	Atrazine-d ₅	GC	4.0	12	83	8	25	3	95	10	25
300	Terbufos	Atrazine-d ₅	GC	4.0	-4	94	9	5	-2	106	11	5
301	Tetrachlorvinphos	Atrazine-d ₅	GC	4.7	2	94	8	25	-18	94	10	25
	Tetrachlorvinphos	Atrazine-d ₅	LC	7.1	5	96	14	25	3	95	14	25
302	Tetraconazole	Atrazine-d ₅	GC	4.5	-9	163	23	-	35	117	14	250
	Tetraconazole	Atrazine-d ₅	LC	6.8	-3	106	11	250	1	94	14	250
303	Tetracycline	¹³ C ₆ -Sulfamethazine	LC	4.3	3	75	15	50	13	77	12	50
304	Tetrahydrophthalimide	None	GC	3.2	-5	213	20	45	30	130	14	45
305	Tetramethrin	Atrazine-d ₅	GC	5.3	-4	100	14	25	33	95	19	25
306	Thiabendazole	Atrazine-d ₅	LC	3.3	-9	94	15	25	5	92	15	25
307	Thiacloprid	Atrazine-d ₅	LC	4.7	0	105	12	50	4	98	13	50
308	Thiamethoxam	Atrazine-d ₅	GC	4.5	-9	80	20	10	6	90	20	20
309	Thiamphenicol	Flunixin-d ₃	LC	3.7	6	98	16	25	0	97	13	25
310	Thidiazuron	Atrazine-d ₅	LC	5.1	0	102	14	5	4	95	16	5
311	Thiencarbazone-methyl	Atrazine-d ₅	LC	5.3	-6	92	19	5	10	93	26	-
312	Thiobencarb	Atrazine-d ₅	GC	4.4	4	95	6	5	1	107	9	5
313	Thiophanate-methyl	Atrazine-d ₅	LC	5.3	3	100	12	25	-1	86	21	-
314	Tiamulin	Flunixin-d ₃	LC	3.7	1	130	10	50	-6	73	30	-
315	Tilmicosin	Flunixin-d ₃	LC	3.1	44	103	11	25	33	75	16	25
316	Tolyfluanid	Atrazine-d ₅	GC	4.6	4	5	174	-	2	44	52	-
317	Triadimefon	Atrazine-d ₅	GC	4.6	-105	110	7	5	7	112	16	5
318	Triadimenol	Atrazine-d ₅	GC	4.6	-8	96	11	5	59	114	18	5
	Triadimenol	Atrazine-d ₅	LC	6.4	-9	106	11	5	0	99	13	5
319	Triazophos	Atrazine-d ₅	GC	5.1	-4	104	12	5	-4	116	23	-
320	Tribufos	Atrazine-d ₅	GC	4.8	-5	88	11	5	13	98	16	5
321	Triclabendazole	Flunixin-d ₃	LC	4.6	6	113	11	112	21	82	28	-
322	Triclabendazole sulfoxide	Flunixin-d ₃	LC	7.4	2	105	12	112	2	97	21	-

No.	Analyte	ISTD	Tool	t_R (min)	Goat			LVL (ng/g)	Lamb			LVL (ng/g)
					%ME	%Rec	%RSD		%ME	%Rec	%RSD	
323	Tridiphane	Atrazine- d_5	GC	4.3	-2	98	9	25	4	77	13	25
324	Trifloxystrobin	Atrazine- d_5	GC	5.1	-3	109	10	20	16	117	16	20
	Trifloxystrobin	Atrazine- d_5	LC	7.6	6	108	13	20	4	102	17	20
325	Triflumizole	Atrazine- d_5	GC	4.6	1	101	9	25	14	115	12	25
326	Triflumuron	Atrazine- d_5	LC	7.3	9	114	14	5	3	93	21	-
327	Trifluralin	Atrazine- d_5	GC	3.7	4	104	7	5	5	89	14	5
328	Trimethoprim	$^{13}C_6$ -Sulfamethazine	LC	7.0	-3	103	14	25	4	93	13	25
329	Tylosin	Flunixin- d_3	LC	3.4	4	99	17	50	-35	104	25	-
330	Vinclozolin	Atrazine- d_5	GC	4.2	2	94	6	5	23	102	19	5