

Supplementary Data

Simultaneous determination of multiresidues of pesticides and veterinary drugs in soil using QuEChERS and UHPLC-MS/MS

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Table S1. Retention time (t_R), precursor and products ions monitored, and collision energies (CE) used for the UHPLC-MS/MS analysis

Compounds	t_R (min)	Precursor ion (m/z)	1 st transition Quantification		2 nd transition Identification	
			Product ion (m/z)	CE (eV)	Product ion (m/z)	CE (eV)
1 2,4-D	5.41	219.0	125.0	13	161.0	13
2 Atrazine	5.37	216.1	174.1	23	96.1	18
3 Azoxystrobin	5.86	404.0	329.0	30	372.0	15
4 Bentazone	4.96	241.1	107.2	26	199.1	12
5 Bispyribac sodium	6.04	431.3	275.2	20	196.1	14
6 Bitertanol	6.87	338.1	99.1	8	70.1	16
7 Boscalid	5.90	342.9	307.0	20	139.9	20
8 Bromuconazole	6.50	376.0	158.9	25	70.1	35
9 Buprofezin	7.01	306.1	201.0	20	57.4	12
10 Carbaryl	5.02	202.0	145.0	28	117.0	22
11 Carbendazim	2.06	192.0	160.1	28	132.1	18
12 Carbofuran	4.81	222.1	165.1	16	123.0	16
13 Carbofuran-3OH	3.56	238.0	163.0	16	181.0	10
14 <u>Chloramphenicol</u>	3.80	321.0	152.1	18	257.1	12
15 Chlorpropham	6.48	214.1	154.0	18	172.0	8
16 Chlorpyrifos-ethyl	7.40	349.9	97.0	32	198.0	20
17 Chlorpyrifos-methyl	6.99	321.8	289.0	20	125.0	16
18 Clomazone	5.65	240.0	89.0	46	125.0	18
19 Clorimuron-ethyl	5.97	415.1	213.0	17	186.0	15
20 Cyanazine	4.30	241.0	214.0	25	96.0	17
21 Diazinon	6.70	305.1	96.9	35	169.0	22
22 Difenoconazole	7.04	406.0	251.1	60	111.1	25
23 Dimethoate	3.22	230.1	199.0	20	125.0	10
24 Epoxiconazole	6.30	330.0	101.0	50	121.0	22
25 Fenarimol	6.30	331.0	268.0	34	81.0	22
26 Fenpropathrin	7.60	350.1	97.0	34	125.0	14
27 Fenpropimorph	5.60	304.2	147.1	30	57.2	28
28 Fenthion	6.67	279.1	169.1	16	247.1	13
29 Fipronil	6.50	435.3	330.2	26	250.1	16
30 Fluquiconazol	6.17	376	348.8	18	306.9	30
31 Fluroxypyr	4.50	254.9	208.8	22	180.8	16
32 Flutolanil	6.00	324.1	65.0	40	262.1	18
33 Imazalil	5.21	297.0	69.0	22	159	22
34 Imidacloprid	3.10	256.1	175.1	20	209.1	15
35 Iprovalicarb	6.20	321.1	119.1	16	203.1	10
36 Linuron	6.20	249.1	160.1	18	181.1	16
37 Linuron d6	5.84	255.3	160.0	20	185.5	17
38 Malathion	6.00	331.0	99.0	24	127.0	12
39 Mecarbam	6.30	330.0	97.0	35	227.1	8
40 Mepronil	6.00	270.1	91.0	44	119.0	28
41 Metalaxyl	5.40	280.1	192.1	17	220.1	13
42 Metconazole	6.80	320.1	125.0	22	70.0	36

Compounds	t _R (min)	Precursor ion (m/z)	1 st transition Quantification		2 nd transition Identification	
			Product ion (m/z)	CE (eV)	Product ion (m/z)	CE (eV)
43 Methiocarb sulfone	3.50	258.1.0	107.1	15	122.1	38
44 Methiocarb sulfoxid	3.70	242.0	185.0	28	122.0	14
45 Metsulfuron-methyl	4.70	382.0	167.0	16	198.9	22
46 Mevinphos	3.57	225.1	127.1	15	193.1	8
47 Miclobutanil	6.10	289.1	70.2	18	125.1	32
48 <u>Monensin</u>	8.30	693.5	461.4	50	479.5	52
49 Monocrotophos	2.47	224.1	127.1	12	98.1	16
50 Monolinuron	4.96	215.0	99.0	34	126.0	22
51 Paraoxon-ethyl	4.30	248.0	90.0	25	202.0	19
52 Pirimicarb	3.56	239.1	72.0	18	182.1	15
53 Pirimiphos-methyl	6.60	306.1	108.1	32	162.1	22
54 Profenofos	7.20	372.9	127.9	40	302.6	20
55 Propargito	7.59	368.0	175.0	15	231.0	15
56 Propiconazole	6.70	342.0	69.0	22	159.0	34
57 Propoxur	4.76	210.0	111.0	16	168.0	10
58 Propyzamide	6.47	256.2	156.1	15	190.1	15
59 Pyraclostrobin	6.70	388.1	163.0	25	193.9	12
60 Pyrazophos	6.80	374.0	194.0	32	222.1	22
61 Pyridaben	7.80	365.1	147.1	24	309.1	12
62 Pyridaphenthion	6.10	341.0	92.0	34	189.0	22
63 Pyridate	8.00	379.0	207.0	18	351.1	10
64 Pyrimethanil	5.11	200.0	82.0	24	107.0	24
65 Quinoxifen	7.40	308.0	161.9	44	197.0	32
66 <u>Robenidin</u>	6.30	372.2	159.0	32	172.1	48
67 <u>Salinomycin</u>	8.50	773.6	403.4	61	431.4	50
68 Simazine	4.73	202.0	96.0	22	124.0	16
69 <u>Sulfadimethoxin</u>	3.80	311.1	92.0	32	156.0	20
70 <u>Sulfamethazin</u>	2.70	279.1	92.0	28	186.0	16
71 <u>Sulfathiazol</u>	2.00	256.0	92.0	25	156.0	15
72 Tebuconazole	6.60	308.0	70.1	22	125.0	40
73 Terbutylazine	6.00	230.0	96.0	28	174.0	16
74 Tetraconazole	6.30	372.0	70.1	20	159.0	30
75 Thiacloprid	3.80	253.0	90.1	40	126.0	20
76 Thiamethoxam	2.70	292.0	132.0	22	211.2	12
77 Tolcofos-methyl	6.80	301.1	125.0	17	174.9	29
78 Triadimefon	6.10	294.1	69.3	20	197.2	15
79 Triazophos	6.20	314.1	118.9	35	161.9	18
80 Trichlorfon	3.20	256.9	127.0	17	257.0	5
81 Trifloxystrobin	7.30	409.0	145.0	40	186.0	16
82 Triflumizole	6.70	346.0	60.0	10	277.9	10
83 Vamidothion	3.40	288.0	118.0	28	146.0	10
84 Triphenylphosphate	6.96	327.2	215.2	28	152.1	37