

Electronic Supplementary Information

Multi-pesticides residues screening, identification, and quantification analysis in diversified fruits and vegetables by UHPLC-Q Exactive HRMS

Fengyi Wang^{a,b}, Ying Jiao^{a,b}, Shiting Qiu^{a,b}, Mei Han^{a,b}, Xue Hou^{a,b*}, Guangyun He, and
Shudi Qin^{a,b}*

*a Institute of Quality Standard and Testing Technology For Agro-products of Sichuan
Academy of Agricultural Sciences, Chengdu 610066, China.*

*b Laboratory of Quality and Safety Risk Assessment for Agro-products (Chengdu),
Ministry of Agriculture, Chengdu, 610066, China*

** Corresponding authors: SCNKYHM@163.com (M. Han); caitian@swu.edu.cn (X. Hou).*

Table S1 Pesticides high-resolution MS database.

ID	Compound Name ^a	CAS NO.	Chemical Formula	Exact Mass	Adduct	RT/min	Fragment 1	Fragment 2	Fragment 3	Fragment 4	Fragment 5
1	1-naphthylacetic acid	86-87-3	C12H10O2	209.0573	M+Na	7.31	182.97159	152.06145	131.08498	79.05479	67.05499
2	2,4-D	94-75-7	C8H6Cl2O3	218.96212	M-H	7.39	160.95613	124.9795	89.00313	70.98317	77.00299
3	Acephate	30560-19-1	C4H10NO3P S	184.01918	M+H	2.92	142.99211	112.99934	112.0154	128.97644	64.97861
4	Acetamidiprid	135410-20-7	C10H11ClN4	223.0745	M+H	4.31	126.01003	144.02068	223.07399	187.09663	181.05202
5	Acetochlor	34256-82-1	C14H20ClNO2	270.12553	M+H	9.86	148.11189	133.08847	50.04939	130.06505	224.08331
6	Acifluorfen	50594-66-6	C14H7ClF3NO5	359.98921	M-H	9.77	194.98271	174.97697	222.02975	137.0117	69.03459
7	Alachlor	15972-60-8	C14H20ClNO2	270.12553	M+H	9.86	162.12750	132.0807	147.10414	90.01049	238.09918
8	Albendazole	54965-21-8	C12H15N3O2S	266.09577	M+H	8.43	234.06923	191.0146	159.0426	192.0224	266.09546
9	Aldicarb sulfoxide	1646-87-3	C7H14N2O3S	207.07979	M+H	3.12	89.04156	69.05711	65.00548	68.04932	76.03901
10	Aldicarb	116-06-3	C7H14N2O2S	191.08487	M+H	5.09	89.04195	116.05285	70.06513		
11	Aldicarb sulfone	1646-88-4	C7H14N2O4S	223.0747	M+H	3.27	86.05969	62.98986	59.04917	81.00017	76.03901
12	Ametoctradin	865318-97-4	C15H25N5	276.21827	M+H	11.94	276.21799	176.09311	149.08212	177.10097	123.06646
13	Ametryn	834-12-8	C9H17N5S	228.12774	M+H	7.7	68.02416	186.08006	228.12671	96.05521	74.00558
14	Amidosulfuron	120923-37-7	C9H15N5O7S2	370.04857	M+H	7.2	236.033	139.03752	69.00844	261.02847	279.03891
15	Aminocyclopyrachlor	858956-08-8	C8H8ClN3O2	214.03778	M+H	3.01	68.04949	168.03203	100.99017	66.02144	214.0378
16	Aminopyralid	150114-71-9	C6H4Cl2N2O2	206.97226	M+H	3.1	178.97733	133.95586	206.97217	160.96672	125.99793
17	Amisulbrom	348635-87-0	C13H13BrFN5O4S2	487.94686	M+Na	12.61	245.98347	226.93575	172.67561	51.82406	188.98752
18	Amitraz	33089-61-1	C19H23N3	294.19647	M+H	14.01	163.12297	122.09643	132.08078	107.07295	
19	Amitrole	61-82-5	C2H4N4	107.03282	M+Na	1.82	70.1074	79.05507	91.05473	62.99071	80.05016
20	Anilazine	101-05-3	C9H5Cl3N4	272.9507	M-H	9.36	153.02158	274.96515	61.97952	178.01686	118.05264
21	Anilofos	64249-01-0	C13H19ClNO3PS2	368.03053	M+H	10.98	142.9921	170.96909	198.96385	78.99402	93.00961
22	Atrazine	1912-24-9	C8H14ClN5	216.10105	M+H	7.41	174.05336	68.02414	104.0005	79.00541	96.05519
23	Avermectins	71751-41-2	C48H72O14	895.48143	M+Na	15.1	521.28888	497.25253	455.2412	449.25021	327.19235
24	Azadirachtin	11141-17-6	C30H36O9	541.24321	M+H	10.4	83.04914	161.05971	567.18609	585.19665	525.17552
25	Azinphosmethyl	86-50-0	C10H12N3O3PS2	318.01305	M+H	8.44	136.03933	168.06549	142.99266	132.04439	182.08124
26	Azocyclotri	41083-	C20H25N3S2	437.18	M+	16.1	201.20081	154.12155	90.0762	81.06056	171.1484

n	11-8	475	7								
<i>Table S1 contd.</i>											
27	Azoxystrobin	13186 0-33-8	C22H17N3O 5	404.12 41	M+H	8.87	156.04372	134.05943	129.044 2	133.0517 6	145.0515
28	Benalaxyl	71626- 11-4	C20H23NO3	326.17 507	M+H	10.91	91.05387	148.11145	121.088 13	208.1323 2	106.0647
29	Benazolin	25059- 80-7	C9H6ClNO3 S	243.98 297	M+H	5.81	122.11137	180.63597	136.053 99	174.0574 2	
30	Benfurcarb	82560- 54-1	C20H30N2O 5S	411.19 482	M+H	12.32	195.04723	162.06749	252.068 5	158.1176 1	190.0896
31	Bensulfuron-methyl	83055- 99-6	C16H18N4O 7S	411.09 69	M+H	8.67	149.05914	182.05635	119.048 65	91.05384	83.02364
32	Bentazone	25057- 89-0	C10H12N2O 3S	263.04 608	M+Na	5.66	91.05408	211.66307	135.322 86	243.3347 5	190.3686 8
33	Benziothiazolinone	2634- 33-5	C7H5NOS	152.01 646	M+H	4.29	152.01639	134.00578	132.997 91	124.0215 2	135.9973 8
34	Benzovindiflupyr	10729 57-71- 1	C18H15Cl2F 2N3O	398.06 33	M+H	11.02	159.03624	286.09668	146.976 03	287.1050 1	152.0621
35	Benzoximate	29104- 30-1	C18H18ClN O5	364.09 463	M+H	11.56	105.03307	199.01479	95.0487 2	140.9731 9	202.0018 2
36	Bifenazate	14987 7-41-8	C17H20N2O 3	301.15 467	M+H	9.68	170.0964	198.09134	153.069 9	184.0757	
37	Bifenox	53774- 07-5	C14H9Cl2N O5	341.99 305	M+H	11.79	309.96684	188.9595	132.960 69	265.9770 1	203.0128 2
38	Bifenthrin	82657- 04-3	C23H22ClF3 O2	445.11 526	M+NH 4	15.26	181.10037	166.07703	165.069 23	179.0849 3	153.0688 6
39	Bispyribac-sodium	12540 1-92-5	C19H17N4N aO8	453.10 168	M+H	9.19	179.04295	231.07736	275.066 1	116.368	87.65776
40	Bitertanol	55179- 31-2	C20H23N3O 2	338.18 63	M+H	11.5	70.03976	99.08044	57.0699 5	152.0614 5	153.0691 7
41	Boscalid	18842 5-85-6	C18H12Cl2N 2O	343.03 994	M+H	9.09	307.06183	271.08536	139.989 77	272.0931 1	96.04399
42	Bromoxynil	1689- 84-5	C7H3Br2NO	273.85 086	M-H	7.36	78.91867	273.85007	193.925 09	129.776	162.1506 5
43	Bupirimate	41483- 43-6	C13H24N4O 3S	317.16 419	M+H	10.01	166.09685	317.16266	108.010 89	210.1591 5	272.1051
44	Buprofezin	69327- 76-0	C16H23N3O S	306.16 346	M+H	12.54	57.06995	106.06471	59.9902 5	116.0523 8	86.05965
45	Butachlor	23184- 66-9	C17H26ClN O2	312.17 248	M+H	12.69	162.1279	238.09924	147.104 31	132.0809 6	146.0965 1
46	Butralin	33629- 47-9	C14H21N3O 4	296.16 048	M+H	13.67	240.0966	222.08621	57.0699 3	132.0801 7	208.0706 9
47	Cadusafos	10373 5-82-6	C10H23O2P S2	271.09 498	M+H	11.59	130.93854	158.96983	132.972 08	128.9768 8	148.9489 6
48	Captan	133- 06-2	C9H8Cl3NO 2S	299.94 141	M+H	8.13	79.05428	58.06546	106.065 22	66.94051	95.04901
49	Carbaryl	63-25- 2	C12H11NO2	202.08 626	M+H	6.6	145.06419	115.05375	117.069 35	91.05384	155.0596 3
50	Carbendazim	10605- 21-7	C9H9N3O2	192.07 675	M+H	3.75	160.0499	105.04431	132.055 08	65.03848	90.03349
51	Carbofuran	16655- 82-6	C12H15NO4	238.10 738	M+H	4.23	163.07465	135.07983	145.064 24	181.0851 3	123.0436 2
52	Carbofuran	1563- 66-2	C12H15NO3	222.11 247	M+H	5.98	123.0435	165.09033	55.0543 2	91.05383	95.04873
53	Carbosulfam	55285- 11-4	C20H32N2O S	381.22 473	M+H	14.85	118.06705	76.07122	128.142	160.1147	57.06004

	n	14-8	3S	064					82	8	
<i>Table S1 contd.</i>											
54	Carboxin	5234-68-4	C12H13NO2 S	236.07 398	M+H	6.65	143.01561	93.05697	124.021 13	66.04631	132.0439
55	Carfentrazone-ethyl	105-37-3	C15H14Cl2F 3N3O3	412.04 371	M+H	10.81	366.00184	345.99561	384.012 41	302.0302 5	338.0069 3
56	Cartap	15263-53-3	C7H15N3O2 S2	238.06 784	M+H	6.65	145.01117	93.05698	144.019 12	126.0169	145.0205 4
57	Chlorantraniliprole	50000-8-45-7	C18H14BrCl 2N5O2	481.97 807	M+H	8.25	130.00496	138.00998	111.994 16	160.0498	141.0208 9
58	Chlorbenzuron	19679-1-54-5	C14H10Cl2N 2O2	309.01 921	M+H	11.13	138.99417	156.02037	139.005 23	129.0096	75.02339
59	Chlordimeform	6164-98-3	C10H13ClN2	197.08 4	M+H	3.61	117.0573	125.01525	152.026 15	89.03858	
60	Chlorfenapyr	12245-3-73-0	C15H11BrCl F3N2O	428.95 876	M+Na	12.25	248.26474	181.94283	166.758 12		
61	Chlorfluazuron	71422-67-8	C20H9Cl3F5 N3O3	539.97 024	M+H	14.31	158.04056	141.01402	186.957 81	197.9919 6	179.9812 6
62	Chlorimuron-ethyl	12245-3-73-0	C15H15ClN4 O6S	415.04 736	M+H	9.44	186.00599	184.99026	121.028 39	161.0111 2	213.0215
63	Chlorotoluron	15545-48-9	C10H13ClN2 O	213.07 892	M+H	7.32	140.02612	168.02127	213.079 85	171.0403 6	125.0153 4
64	Chlorpyrifos oxon	6515-38-4	C5H2Cl3NO	197.92 747	M+H	10.03	197.92747	106.94498	133.955 88	277.8938	161.9508
65	Chlorpyrifos-methyl	5598-13-0	C7H7Cl3NO 3PS	321.90 226	M+H	11.83	142.9921	78.99402	289.874 57	127.0148 9	62.01841
66	Chlorpyrifos	2921-88-2	C9H11Cl3N O3PS	349.93 356	M+H	13.29	114.96082	106.94449	133.955 24	64.97855	96.95035
67	Chlorsulfuron	64902-72-3	C12H12ClN5 O4S	358.03 713	M+H	6.78	141.07649	167.05571	56.0495 7	58.02878	57.0448
68	Cinosulfuron	94593-91-6	C15H19N5O 7S	414.10 78	M+H	5.69	183.05055	83.02364	157.071 4	183.0104 7	121.0279 1
69	Clethodim Sulfone 1	11103-1-17-5	C17H26ClN O5S	392.12 93	M+H	5.54	164.07031	98.05993	95.0160 8	300.1259 2	208.1329 5
	Clethodim Sulfone 2	11103-1-17-5	C17H26ClN O5S	392.12 93	M+H	7.99	164.07036	208.13304	206.117 71	136.0759 1	300.1263 4
70	Clethodim Sulfoxide 1	11103-1-14-2	C17H26ClN O4S	376.13 438	M+H	5.62	206.11726	136.03915	164.070 33	134.0598 3	178.0860 6
	Clethodim Sulfoxide 2	11103-1-14-2	C17H26ClN O4S	376.13 438	M+H	8.07	164.07079	206.11775	136.075 56	268.1359 6	298.1202 4
71	Clethodim 1	99129-21-2	C17H26ClN O3S	360.13 947	M+H	9.39	164.07036	166.08609	134.059 86	136.0755 8	108.0806 1
	Clethodim 2	99129-21-2	C17H26ClN O3S	360.13 947	M+H	12.13	164.07077	166.08653	136.075 91	121.0649 7	149.0597 5
72	Clodinafop-propargyl	10551-2-06-9	C17H13ClFN O4	350.05 899	M+H	10.75	266.03763	222.01147	238.042 72	159.0479	238.0061 5
73	Clofentezine	74115-24-5	C14H8Cl2N4	303.01 988	M+H	11.78	138.00996	130.03949	102.033 41	75.02265	120.0439 1
74	Clomazone	81777-89-1	C12H14ClN O2	240.07 858	M+H	8.16	125.01477	89.03818	98.9991 8	90.04604	63.02286
75	Clopyralid	1702-17-6	C6H3Cl2NO 2	191.96 136	M+H	3.36	109.9794	75.01049	163.966 49	146.0005 2	191.9614 4
76	Clothianidin	21088-0-92-5	C6H8ClN5O 2S	250.01 6	M+H	4.11	250.14079	131.9664	169.053 6	113.0163	110.0708 8
77	Clotrimazol	23593-	C20H15N3	328.36	M+Na	7.52	156.17461	100.21671	173.201	57.07017	71.08556

e 1	75-1		862						11		
<i>Table S1 contd.</i>											
	Clotrimazole 2	23593-75-1	C20H45N3	328.36 862	M+Na	8.36	156.17461	268.29965	199.216 74	87.09166	57.07018
78	Coumaphos	56-72-4	C14H16ClO5 PS	363.02 174	M+H	11.39	226.99176	211.0147	114.960 88	225.9838 6	115.0537 5
79	Coumoxystrobin	850881-70-8	C26H28O6	437.19 587	M+H	13.12	145.06454	117.06966	115.054 23	205.0858 3	130.0414
80	Cyanazine	21725-46-2	C9H13ClN6	241.09 63	M+H	5.66	214.0854	241.09601	132.032 38	174.0541 8	205.1196 3
81	Cyantraniliprole	736994-63-1	C19H14BrCl N6O2	473.01 229	M+H	6.89	283.92081	130.00496	177.008 15	195.0186 2	185.0338
82	Cyclosulfamuron	136849-15-5	C17H19N5O 6S	422.11 288	M+H	10.05	139.03763	69.0084	154.060 99	182.0559 5	199.0824 3
83	Cycloxydim	101205-02-1	C17H27NO3 S	326.17 844	M+H	12.2	180.10191	280.13658	155.052 44	163.0752 7	127.0576 3
84	Cyflumetofen	400882-07-7	C24H24F3N O4	448.17 302	M+H	12.35	173.0206	145.02563	217.047 04	158.9638 5	163.1121 1
85	Cyhalothrin	91465-08-6	C23H19ClF3 NO3	472.08 978	M+Na	13.83	279.15793	467.13278	322.270 26	149.0228	490.0586 2
86	Cyhexatin	13121-70-5	C18H34OSn	387.17 044	M+H	14.35	287.08162	81.06988			
87	Cymoxanil	57966-95-7	C7H10N4O3	199.08 257	M+H	4.69	156.07617	100.03886	57.0448	83.02364	68.01292
88	Cypermethrin	52315-07-8	C22H19Cl2N O3	416.08 148	M+H	14.07	191.0025	127.0309	91.0542 3	163.0075 8	181.0648
89	Cyproconazole	113096-99-4	C15H18ClN3 O	292.12 112	M+H	9.77	70.04	125.01515	89.0385 1	98.99947	292.1199
90	Cyprodinil	121552-61-2	C14H15N3	226.13 387	M+H	10.49	226.13277	93.05694	65.0384 8	91.0538	95.04873
91	Cyromazine	66215-27-8	C6H10N6	167.10 397	M+H	2.77	68.02415	85.05052	60.0556 4	83.05999	125.0817
92	Daminozide	1596-84-5	C6H12N2O3	161.09 207	M+H	2.37	143.08093	61.07602	59.0604	55.01796	72.04417
93	Dazomet	533-74-4	C5H10N2S2	163.03 582	M+H	3.49	135.04401	163.03778	150.547 5	123.4612 5	171.0546
94	Deltamethrin	52918-63-5	C22H19Br2N O3	503.98 045	M+H	14.05	89.06053	91.05502	92.0625 9	93.07061	121.0652
95	Demeton-S	8065-48-3	C8H19O3PS 2	259.05 86	M+H	8.23	89.04155	61.01062	55.0542 8	142.9920 7	92.22396
96	Desmedipham	13684-56-5	C16H16N2O 4	301.11 828	M+H	8.29	136.0393	154.04987	182.081 17	121.0396 5	164.0709
97	Diafenthiuron	80060-09-9	C23H32N2O S	385.23 081	M+H	13.75	278.15268	236.10583	228.137 34	93.05694	270.184
98	Diazinon	333-41-5	C12H21N2O 3PS	305.10 833	M+H	11.08	169.07872	114.96088	153.101 58	100.0211 3	84.0441
99	Dicamba	1918-00-9	C8H6Cl2O3	218.96 212	M-H	4.97	112.98578	248.96063	174.972 47	176.9695 3	354.9373
100	Dichlofluanid	1085-98-9	C9H11Cl2FN 2O2S2	332.96 958	M+H	9.8	223.94983	123.01379	188.980 53	153.0043	
101	Dichlorvos	62-73-7	C4H7Cl2O4P	220.95 318	M+H	5.86	127.01494	78.99401	112.999 34	96.96009	144.9810
102	Diclofopmethyl	51338-27-3	C16H14Cl2O 4	341.03 419	M+H	12.7	281.01306	120.0569	202.017 99	208.9919	
103	Diethofencarb	87130-20-9	C14H21NO4	268.15 433	M+H	8.7	124.03882	152.06995	180.101 07	97.02802	80.04911

104	Difenoconazole	119446-68-3	C19H17Cl2N3O3	406.07197	M+H	11.95	251.00124	188.03795	152.06139	223.00653	153.06926
<i>Table S1 contd.</i>											
105	Difenzoquat	49866-87-7	C17H17N2	249.13863	M+	4.13	249.13782	130.06485	95.04892	118.06481	131.07263
106	Diflubenzuron	35367-38-5	C14H9ClF2N2O2	311.03934	M+H	10.88	141.01416	158.04051	141.02515	63.02284	140.03009
107	Diflufenican	83164-33-4	C19H11F5N2O2	395.08135	M+H	12.11	266.04234	246.03589	238.04709	218.04103	183.04175
108	Dimepiperate	61432-55-1	C15H21NOS	264.14166	M+H	11.75	91.05386	146.06277	119.08507	69.06969	112.07526
109	Dimethenamid	87674-68-8	C12H18ClNO2S	276.08195	M+H	8.62	244.0546	168.0835	111.02583	126.03667	138.03668
110	Dimethoate	60-51-5	C5H12NO3PS2	230.0069	M+H	4.35	142.99208	78.99401	88.02119	170.96912	93.0096
111	Dimethomorph 1	110488-70-5	C21H22ClNO4	388.13101	M+H	8.81	301.06219	165.05452	138.99446	388.13019	70.02877
	Dimethomorph 2	110488-70-5	C21H22ClNO4	388.13101	M+H	9.27	165.05403	138.99402	70.02852	242.0481	125.01472
112	Diniconazole	83657-24-3	C15H17Cl2N3O	326.08214	M+H	11.76	70.03975	158.9756	172.95424	57.06996	69.06959
113	Dinocap	39300-45-3	C18H24N2O6	387.15266	M+Na	14.43	91.05695	114.96075	81.0697	136.61652	60.05578
114	Dinotefuran	165252-70-0	C7H14N4O3	203.11387	M+H	3.28	73.06319	57.04481	87.07879	114.10217	72.04417
115	Diphenylamine	122-39-4	C12H11N	170.09643	M+H	9.66	170.09647	152.06207	153.06981	128.06206	169.08804
116	Disulfoton sulfone	2497-06-5	C8H19O4PS3	307.02558	M+H	7.27	171.02393	142.99263	132.97191	232.95232	124.98209
117	Disulfoton-sulfoxide	479073-80-8	C8H19O3PS3	291.03067	M+H	7.03	114.96117	156.95396	128.92262	64.97887	184.98547
118	Disulfoton	298-04-4	C8H19O2PS3	275.03576	M+H	11.59	89.04207	61.01099	89.03671	153.02174	167.53394
119	Dithianon	3347-22-6	C14H4N2O2S2	296.9787	M+H	6.63	268.98416	170.00578	296.97742	197.01662	239.98058
120	Diuron	330-54-1	C9H10Cl2N2O	233.02429	M+H	8.01	132.96068	159.97153	125.00271	233.02396	187.96652
121	Dodine	2439-10-3	C13H29N3	228.24342	M+H	10.7	186.22163	85.10118	57.07061	71.0861	
122	Dufulin	882182-49-2	C19H22FN2O3PS	409.11455	M+H	11.83	271.06866	251.06262	244.05794	123.02576	148.02095
123	Edifenphos	17109-49-8	C14H15O2PS2	311.03238	M+H	10.94	109.01025	111.02585	95.04877	190.99187	140.98213
124	Emamectin B1A	155569-91-8	C49H75NO13	886.53112	M+H	12.38	158.11756	82.06513	126.09134	302.1962	
125	Endosulfan sulfate	1031-07-8	C9H6Cl6O4S	418.80452	M-H	11.34	418.80353	203.04895			
126	Enestroburin	238410-11-2	C22H22ClNO4	400.13101	M+H	12.74	137.0153	145.06482	178.04185	102.04642	115.05426
127	Epoxiconazole	106325-08-0	C17H13ClFN3O	330.08039	M+H	10.46	121.04427	123.02349	129.04413	70.03973	86.09603
128	Ethamsulfuron	111353-84-5	C14H16N6O6S	397.09248	M+H	6.23	182.06735	154.03603	128.05679	86.03484	156.08798
129	Ethion	563-12-2	C9H22O4P2S4	384.99489	M+H	13.01	385.14868	198.09865	114.96087	197.09526	
130	Ethionole	18158	C13H9Cl2F3	396.98	M+H	9.07	251.0686	227.05784	212.947	200.0471	240.9529

		7-01-9	N4OS	99					05	9	
<i>Table S1 contd.</i>											
131	Ethirimol	23947-60-6	C11H19N3O	210.16009	M+H	5.1	140.10699	98.06004	182.12879	193.13354	70.06513
132	Ethofenpro x	80844-07-1	C25H28O3	394.23767	M+NH 4	15.2	359.19995	183.08022	177.12712	135.08026	107.04938
133	Ethofumesa te	26225-79-6	C13H18O5S	287.09477	M+H	8.67	121.06479	259.06347	241.05291	162.06753	161.05971
134	Ethopropho s	13194-48-4	C8H19O2PS 2	243.06368	M+H	9.84	114.96085	130.93794	64.97858	172.98473	77.04162
135	Ethoxyquin	91-53-2	C14H19NO	218.15394	M+H	7.66	218.15387	160.07571	174.09138	148.07571	190.12268
136	Ethoxysulf uron	126801-58-9	C15H18N4O 7S	399.0969	M+H	9.7	173.02092	210.01039	145.02596	139.03772	109.02837
137	Etozazole	153233-91-1	C21H23F2N O2	360.17696	M+H	13.67	141.01416	57.06995	304.11304	141.02493	177.12657
138	Famoxadon e	131807-57-3	C22H18N2O 4	375.13393	M+H	11.3	238.11006	331.1441	93.0573	239.09408	195.08044
139	Fenamidon e	161326-34-7	C17H17N3O S	312.11651	M+H	8.73	92.04909	65.03849	236.11703	103.05378	134.07069
140	Fenaminstr obin	366815-39-6	C21H21Cl2N 3O3	434.10327	M+H	12.32	170.97623	136.00743	205.09706	212.00261	134.05997
141	Fenamipho s sulfone	31972-44-8	C13H22NO5 PS	336.10291	M+H	6.34	266.02335	108.05649	188.04628	308.06995	91.05383
142	Fenamipho s sulfoxide	31972-43-7	C13H22NO4 PS	320.10799	M+H	6.16	108.0565	251.01256	171.04666	154.04402	156.02328
143	Fenamipho s	22224-92-6	C13H22NO3 PS	304.11308	M+H	10.44	217.00731	201.98389	234.03372	107.04871	110.01791
144	Fenarimol	60168-88-9	C17H12Cl2N 2O	331.03994	M+H	9.89	81.04443	138.99419	268.05099	189.06908	54.03394
145	Fenzaquin	120928-09-8	C20H22N2O	307.18049	M+H	14.34	57.06994	161.13179	131.08502	147.05469	146.10843
146	Fenbucona zole	114369-43-6	C19H17ClN4	337.12145	M+H	10.5	55.05434	69.06967	67.05413	81.06956	95.08514
147	Fenbutatino xide fragment 1	13356-08-6	C60H78OSn2	1055.41694	M+H	17.53	299.06152	167.05537	91.05737	149.04478	344.9762
148	Fenhexami d	126833-17-8	C14H17Cl2N O2	302.07091	M+H	9.53	97.10079	55.05433	302.06946	143.01266	69.06968
149	Fenobucarb	3766-81-2	C12H17NO2	208.13321	M+H	8.41	95.04876	57.06995	53.03873	51.02311	105.04433
150	Fenothiocar b	62850-32-2	C13H19NO2 S	254.12093	M+H	10.73	72.04413	56.01317	95.0488	107.04852	106.03166
151	Fenoxanil	115852-48-7	C15H18Cl2N 2O2	329.08181	M+H	10.27	86.09605	188.98601	125.01476	69.0697	141.11424
152	Fenoxaprop -ethyl	66441-23-4	C18H16ClN O5	362.07898	M+H	12.54	288.0408	91.05386	121.06432	103.05376	119.04865
153	Fenpropath rin	39515-41-8	C22H23NO3	350.17507	M+H	13.68	125.09561	55.05434	57.06994	97.10081	69.06971
154	Fenpropidi n	67306-00-7	C19H31N	274.25293	M+H	7.48	274.25156	147.11618	117.06937	86.09606	132.09283
155	Fenpropim orph	67306-03-0	C20H33NO	304.26349	M+H	7.79	304.26193	147.11615	117.06934	132.09279	119.08507
156	Fenpyroxi mate	134098-61-6	C24H27N3O 4	422.20743	M+H	13.99	138.0656	214.09639	215.10439	231.09911	81.04439
157	Fenthion	3761-	C10H15O5P	311.01	M+H	6.88	142.0021	127.01404	78.9940	139.0206	127.0414

	sulfone	42-0	S2	713					3	8	
<i>Table S1 contd.</i>											
158	Fenthion sulfoxide	3761-41-9	C10H15O4P S2	295.02 221	M+H	6.44	127.01489	279.99744	78.9940 2	142.9918 7	278.0181
159	Fenthion	55-38-9	C10H15O3P S2	279.02 73	M+H	11.05	149.02278	65.03848	105.069 47	169.0132 9	121.0278 5
160	Fentinaceta te fragment 1	900-95-8	C20H18O2Sn	411.04 015	M+H	8.54	119.9017	196.94077	351.018 95	369.0296 3	214.9514 3
161	Fenvalerate	51630-58-1	C25H22CIN O3	437.16 265	M+NH 4	14.27	125.0155	181.06482	167.062 68	208.0754 5	129.7031 7
162	Fipronil- desulfinyl	20565 0-65-3	C12H4C12F6 N4	386.96 444	M-H	10.28	90.0084	135.01091	68.9955 2	133.0013 9	83.00479
163	Fipronil- sulfide	12006 7-83-6	C12H4C12F6 N4S	418.93 651	M-H	10.89	57.9753	170.00925	233.980 67	100.9675 9	217.9856 3
164	Fipronil- sulfone	12006 8-36-2	C12H4C12F6 N4O2S	469.96 745	M+NH 4	11.2	78.51429	119.18118	97.5506 9	60.05651	52.57012
165	Fipronil	12006 8-37-3	C12H4C12F6 N4OS	436.94 598	M+H	10.56	367.95077	289.97611			
166	Flonicamid	15806 2-67-0	C9H6F3N3O	230.05 357	M+H	3.58	203.04185	98.0397	148.036 25	174.0155 3	176.0311
167	Florasulam	14570 1-23-1	C12H8F3N5 O3S	360.03 727	M+H	5.04	129.03846	144.02557	360.036 93	191.9926	296.0746 2
168	Fluazifop- butyl	79241-46-6	C19H20F3N O4	384.14 172	M+H	12.47	282.07236	91.05388	328.077 55	238.0462 3	254.0776 2
169	Fluazinam	79622-59-6	C13H4C12F6 N4O4	464.95 866	M+H	12.91	107.96706	90.97658	243.939 44	203.6318 1	163.5732 1
170	Flubendiam ide	27245 1-65-7	C23H22F7IN 2O4S	683.03 059	M+H	10.74	273.9346	152.07333	255.924 09	135.0468	71.04893
171	Flucarbazone	14502 6-88-6	C12H11F3N4 O6S	397.04 242	M+H	4.84	130.0611	115.03763	73.0396 4		
172	Flucetosulf uron	41292 8-75-7	C18H22FN5 O8S	488.12 459	M+H	8.85	156.07681	182.05609	100.039 27	136.0557 9	83.02399
173	Flucythrinate	70124-77-5	C26H23F2N O4	469.19 334	M+NH 4	13.47	181.06458	157.04595	199.093 51	412.1552 1	208.0755
174	Fludioxonil	13134 1-86-1	C12H6F2N2 O2	249.04 701	M+H	9.27	180.03282	126.03477	169.040 6	151.0300 3	
175	Flufenacet	14245 9-58-3	C14H13F4N3 O2S	364.07 374	M+H	9.76	152.05066	124.0557	152.086 75	194.0976	123.0242 3
176	Flufenoxuron	10146 3-69-8	C21H11CIF6 N2O3	489.04 352	M+H	13.94	158.04056	141.01404	306.028 69	140.0299 7	111.0473 5
177	Flufiprole	70488 6-18-0	C16H10C12F 6N4OS	490.99 293	M+H	11.16	421.99701	404.99432	388.962 95	97.99322	239.9584 4
178	Flumetrain	62924-70-3	C16H12CIF4 N3O4	439.07 907	M+NH 4	13.61	143.00562	107.02966	84.9119 3	390.2979 4	422.3224 5
179	Flumetsulam	98967-40-9	C12H9F2N5 O2S	326.05 178	M+H	4.06	129.03846	326.05151	262.089 54	144.0256	134.0586 9
180	Flumiclorac-pentyl	87546-18-7	C21H23CIFN O5	424.13 216	M+H	12.7	308.04843	326.05899	135.044 11	252.0584 9	174.0118 9
181	Flumioxazin	10336 1-09-7	C19H15FN2 O4	355.10 886	M+H	8.39	355.10855	327.11334	299.082 4	148.0557 1	176.0507
182	Flumorph	21186 7-47-9	C21H22FNO 4	372.16 056	M+H	7.98	285.09174	165.05473	123.024 09	372.1604 3	226.0786 3
183	Fluopicolide	23911 0-15-7	C14H8C13F3 N2O	382.97 271	M+H	9.17	172.95465	172.96599	108.983 57	212.0076 3	84.98359
184	Fluoxym	65806	C16H11CIF6	397.05	M+H	9.7	172.02012	208.01257	145.025	397.0534	172.0368

		6-35-4	N2O	369					3	1	8
<i>Table S1 contd.</i>											
185	Fluoroglyc ofen-ethyl	77501- 90-7	C18H13CIF3 NO7	465.06 709	M+NH 4	12.23	343.99283	222.97659	300.003 02	178.9868 9	166.9868 6
186	Fluroxypyr	69377- 81-7	C7H5Cl2FN2 O3	254.97 34	M+H	5.9	180.97311	208.968	196.968 11	124.9356 7	151.9465 5
187	Flurtamone	96525- 23-4	C18H14F3N O2	334.10 494	M+H	8.87	247.07291	105.03349	178.077 74	227.0666 5	
188	Flusilazole	85509- 19-9	C16H15F2N3 Si	316.10 761	M+H	10.4	165.06924	187.05772	316.106 23	95.04875	109.0443 6
189	Fluthiacet- methyl	11733 7-19-6	C15H15CIFN 3O3S2	404.03 002	M+H	11.03	344.00889	214.98393	273.997 21	239.0283 5	331.0010 6
190	Flutolanil	66332- 96-5	C17H16F3N O2	324.12 059	M+H	9.24	65.03848	262.06619	242.059 91	111.0435 7	145.0253 3
191	FlutriaFol	76674- 21-0	C16H13F2N3 O	302.10 995	M+H	7.36	123.02409	123.03506	233.076 98	137.0397 2	302.1107 5
192	Fluxapyrox ad	90720 4-31-3	C18H12F5N3 O	382.09 733	M+H	9.42	234.05197	314.08923	206.033 36	159.0361 8	271.0598 1
193	Fomesafen	72178- 02-0	C15H10CIF3 N2O6S	456.02 384	M+NH 4	9.45	222.9763	178.98666	74.0963 9	132.0180 1	166.9871 7
194	Fonophos	944- 22-9	C10H15OPS 2	247.03 747	M+H	11	126.99722	62.94525	80.9555 6	108.9867 7	137.0180 2
195	Forchlorfen uron	68157- 60-8	C12H10ClN3 O	248.05 852	M+H	8.28	129.02089	111.05486	155.000 11	93.0444	56.04959
196	Fosthiazate	98886- 44-3	C9H18NO3P S2	284.05 385	M+H	6.83	104.01602	61.01065	199.959 12	76.02129	137.9590 6
197	Halosulfuro n-methyl	10078 4-20-1	C13H15ClN6 O7S	435.04 842	M+H	10.22	182.0565	157.06126	139.050 25	156.0767 2	221.9736 2
198	Haloxypop- methyl	72161 9-32-0	C16H13CIF3 NO4	376.05 58	M+H	10.81	316.03467	272.00845	91.0542 3	288.0893 6	119.0491 4
199	Hexaconaz ole	79983- 71-4	C14H17Cl2N 3O	314.08 214	M+H	11.23	70.03977	158.97571	125.014 83	314.0802 6	57.06993
200	Hexaflumu ron	86479- 06-3	C16H8Cl2F6 N2O3	460.98 889	M+H	12.53	158.0412	141.01465	140.031 25	277.9768 7	62.98211
201	Hexanoic acid	10369- 83-2	C12H25NO2	216.19 581	M+H	4.06	143.10666	216.19569	135.043 91	227.2343 3	164.3093 9
202	Hexazinone	51235- 04-2	C12H20N4O 2	253.16 59	M+H	6.12	71.06016	171.08694	85.0757	83.02364	58.06518
203	Hexythiazo x	78587- 05-0	C17H21ClN2 O2S	353.10 85	M+H	13.17	228.02444	168.05745	194.036 72	271.0302 5	151.0309
204	Hymexazol	10004- 44-1	C4H5NO2	100.03 93	M+H	8.16	58.029	85.03952	71.0240 1	56.96498	103.0505 2
205	Imazalil	35554- 44-0	C14H14Cl2N 2O	297.05 56	M+H	6.7	158.97568	69.04455	297.054 14	200.9859 6	109.0756 4
206	Imazamox	11431 1-32-9	C15H19N3O 4	306.14 483	M+H	4.49	306.14334	69.06969	261.122 07	86.09608	163.0494 5
207	Imazapic	10409 8-48-8	C14H17N3O 3	276.13 427	M+H	4.67	231.11259	276.13397	163.050 22	145.0397	234.0871 9
208	Imazapyr	81510- 83-0	C13H15N3O 3	262.11 862	M+H	6.28	217.09715	149.03455	220.071 67	86.09643	202.0611
209	Imazaquin	81335- 37-7	C17H17N3O 3	312.13 427	M+H	6.39	312.13364	86.09633	267.112 34	199.0499 7	181.0391 4
210	Imazethapy r	81385- 77-5	C15H19N3O 3	290.14 992	M+H	5.51	177.06585	245.12845	230.092 4	159.0552 9	
211	Imidaclopri d	10582 7-78-9	C9H10ClN5 O2	256.05 958	M+H	3.93	209.05803	175.0972	84.0553 4	173.0816 8	128.0255 9

212	Imidaclothi z	10584 3-36-5	C7H8CIN5O 2S	262.01 6	M+H	4.18	181.05345	122.07079	123.078 59	95.04742	131.9664 2
<i>Table S1 contd.</i>											
213	Indoxacarb	14417 1-61-9	C22H17CIF3 N3O7	528.07 799	M+H	12.04	203.0179	168.02037	56.0131 7	218.0413 5	249.0413 1
214	Iodosulfuro n-methyl- Sodium	14455 0-36-7	C14H14IN5O 6S	507.97 822	M+H	8.51	167.05568	56.04956	141.076 45	83.02362	58.02877
215	Ipconazole	12522 5-28-7	C18H24CIN3 O	334.16 807	M+H	12.26	70.03995	125.01505	67.0541 3	89.03841	109.1011 7
216	Iprobenfos	26087- 47-8	C13H21O3P S	289.10 218	M+H	10.58	91.05386	65.03848	205.007 31	63.02285	53.0025
217	Iprodione	36734- 19-7	C13H13Cl2N 3O3	330.04 067	M+H	10.35	244.9877	173.98729	161.987 26	187.9664 6	216.9927 2
218	Isazophos	42509- 80-8	C9H17CIN3 O3PS	314.04 895	M+H	9.53	119.99541	114.96087	162.042 16	102.9689 3	135.9725 5
219	Isocarboph os	245- 01-5	C11H16NO4 PS	312.04 299	M+Na	7.82	269.99539	236.00719	189.376 74	203.0666	121.7565 2
220	Isofenphos- methyl	99675- 03-3	C14H22NO4 PS	332.10 799	M+H	10.73	121.02792	230.98653	65.0384 8	137.0049 3	216.9711
221	Isoprocarb	2631- 40-5	C11H15NO2	194.11 756	M+H	7.24	95.04876	53.03872	51.0231	105.0443 4	65.03848
222	Chloroprop ham	101- 21-3	C10H12CIN O2	214.06 293	M+H	9.47	154.00557	126.01067	93.0574 4	98.9997	172.0161 3
223	Isoprothiol ane	50512- 35-1	C12H18O4S2	291.07 193	M+H	9.3	188.96746	144.97763	231.014 41	172.9725 5	120.9773 3
224	Isoproturon	34123- 59-6	C12H18N2O	207.14 919	M+H	7.57	72.04415	91.05384	56.0131 6	134.0957 9	165.1016 4
225	Isopyrazam	88168 5-58-1	C20H23F2N3 O	360.18 82	M+H	11.8	244.08745	258.10306	250.096 95	278.1286 6	159.0363 9
226	Isoxaflutole	14111 2-29-0	C15H12F3N O4S	360.05 119	M+H	7.6	250.99843	219.9801	220.987 86	161.0208 8	
227	Kresoxim- methyl	14339 0-89-0	C18H19NO4	314.13 868	M+H	10.67	222.09018	116.04897	223.098 08	194.0955 7	178.0771 6
228	Lactofen	77501- 63-4	C19H15CIF3 NO7	462.05 619	M+H	12.73	343.99205	222.97638	300.002 88	178.9865 5	
229	Lufenuron	10305 5-07-8	C17H8Cl2F8 N2O3	510.98 57	M+H	13.47	158.0412	141.01465	327.972 51	510.9873	140.0304 3
230	Malathion	121- 75-5	C10H19O6P S2	331.04 334	M+H	9.44	99.00727	142.99211	127.038 46	71.01254	78.99403
231	Maleic Hydrazide	123- 33-1	C4H4N2O2	135.01 65	M+Na	2.56	56.96492	84.9594	51.0230 8	80.04912	53.03874
232	Mandiprop amid	37472 6-62-2	C23H22CIN O4	412.13 101	M+H	9.19	125.01482	204.10146	91.0539 2	164.0698 9	311.082
233	Matrine	519- 02-8	C15H24N2O	249.19 614	M+H	2.87	249.19505	148.11145	150.127 08	110.0960 2	55.01798
234	MeFenacet	73250- 68-7	C16H14N2O 2S	299.08 487	M+H	9.69	120.08028	148.07503	91.0538 6	79.05392	95.04875
235	Mepronil	55814- 41-0	C17H19NO2	270.14 886	M+H	9.62	119.04869	91.05387	228.100 77	65.03848	162.1270 3
236	Mesosulfur on-methyl	20846 5-21-8	C17H21N5O 9S2	504.08 535	M+H	7.66	182.05608	157.06075	162.054 87	306.0094 6	156.0768 3
237	Mesotrione	10420 6-82-8	C14H13NO7 S	340.04 855	M+H	4.76	227.99612	104.01308			
238	Metaflumiz one	13996 8-49-3	C24H16F6N4 O2	507.12 502	M+H	13.03	178.04665	116.04895	287.077 55	267.0715	221.0521 2

239	Metalaxyl-M	57837-19-1	C15H21NO4	280.15 433	M+H	7.47	192.13744	160.11143	220.132 2	148.1114 2	132.0803 2
<i>Table S1 contd.</i>											
240	Metaldehyde	108-62-3	C8H16O4	199.09 408	M+Na	3.89	79.05389	74.09615	55.0543 6	69.06971	95.04874
241	Metamifop	25641-2-89-2	C23H18ClFN2O4	441.10 119	M+H	12.78	288.04074	123.05991	103.053 79	180.0811 2	91.05386
242	Metazachlor	1131-01-7	C14H16ClN3O	278.10 547	M+H	7.29	134.09643	210.06802	123.080 38	132.0809 6	133.0763 7
243	Metazosulfuron	86868-0-84-6	C15H18ClN7O7S	476.07 497	M+H	9.28	182.05597	156.07672	295.025 85	83.02393	247.9524 8
244	Methamidophos	10265-92-6	C2H8NO2PS	142.00 861	M+H	2.67	112.01534	142.99211	63.9946 1	78.99403	127.9923 1
245	Methidathion	950-37-8	C6H11N2O4PS3	302.96 913	M+H	8.16	71.02377	85.0393	58.0287 9	145.0060 7	103.0497 7
246	Methiocarb sulfone	2179-25-1	C11H15NO4S	258.07 946	M+H	4.45	122.07212	107.04871	79.0539 2	121.0643	95.04877
247	Methiocarb sulfoxide	2635-10-1	C11H15NO3S	242.08 454	M+H	4.01	185.06229	122.07207	107.048 67	170.0388 5	153.0361 8
248	Methiocarb	2032-65-7	C11H15NO2S	226.08 963	M+H	8.87	121.06429	107.04868	91.0538 6	122.0720 7	95.04875
249	Methomyl 1	16752-77-5	C5H10N2O2S	163.05 357	M+H	3.55	72.9978	58.02879	88.0211 9	71.99001	106.0316 8
	Methomyl 2	16752-77-5	C5H10N2O2S	163.05 357	M+H	7.37	72.99806	58.02901	88.0214 9	71.99026	106.0320 4
250	Methoxyfenozide	16105-0-58-4	C22H28N2O3	369.21 727	M+H	9.4	149.05971	91.05383	133.064 27	105.0694 3	109.0643 4
251	Metolachlor	51218-45-2	C15H22ClNO2	284.14 118	M+H	9.97	252.1138	176.14272	91.0538 7	134.0958 9	133.0881
252	Metrafenone	22089-9-03-6	C19H21BrO5	409.06 451	M+H	11.64	209.08083	226.97003	168.964 74	183.9518 9	165.0546 7
253	Metribuzin	21087-64-9	C8H14N4OS	215.09 611	M+H	6.08	187.10119	215.09612	131.038 67	171.0580 7	186.0826 9
254	Metsulfuron-methyl	74223-64-6	C14H15N5O6S	382.08 158	M+H	6.41	167.05571	56.04957	135.043 5	199.0051 3	58.02879
255	Molinate	2212-67-1	C9H17NOS	188.11 036	M+H	9.19	55.05434	126.09083	83.0851 7	98.09606	70.06492
256	Monocrotophos	6923-22-4	C7H14NO5P	224.06 824	M+H	3.61	127.01494	58.02878	67.0177	98.05963	112.9993 6
257	Moroxydine hydrochloride	3731-59-7	C6H13N5O	172.11 929	M+H	2	130.09724	172.11896	155.092 71	169.7577 4	
258	Myclobutanil	88671-89-0	C15H17ClN4	289.12 145	M+H	9.48	70.03997	125.01525	89.0381 8	151.0302 9	116.0614 8
259	Napropamide	15299-99-7	C17H21NO2	272.16 451	M+H	9.93	129.11483	171.08044	199.075 36	114.0913 4	74.09643
260	Nicosulfuron	11199-1-09-4	C15H18N6O6S	411.10 813	M+H	6.26	182.0558	106.02859	83.0238 8	213.0323 8	78.03375
261	Nicotine	54-11-5	C10H14N2	163.12 298	M+H	2.59	132.08078	130.06513	117.057 3	106.0651 3	
262	Novaluron	11671-4-46-6	C17H9ClF8N2O4	493.01 959	M+H	12.72	158.0412	141.01456	310.006 4		
263	Dimethoate oxon	1113-02-6	C5H12NO4PS	214.02 974	M+H	3.1	142.99263	182.98754	127.015 47	154.9926 3	196.0191 8
264	Orthosulfamuron	21346-4-77-8	?C16H20N6O6S	425.12 378	M+H	7.81	120.04436	199.08249	227.048 22	156.0767 5	182.0560 5

265	oxadiargyl	39807-15-3	C15H14Cl2N2O3	341.04542	M+H	11.46	151.01773	223.00204	221.99423	57.06993	122.99905
<i>Table S1 contd.</i>											
266	Oxadiazon	19666-30-9	C15H18Cl2N2O3	345.07672	M+H	12.84	219.95525	176.94972	184.98665	303.02832	148.95494
267	Oxadixyl	77732-09-3	C14H18N2O4	279.13393	M+H	5.39	132.08029	133.08809	117.05683	219.11186	102.05457
268	Oxamyl	23135-22-0	C7H13N3O3S	220.07504	M+H	3.33	72.04439	90.05495	56.01337		
269	Oxaziclofene	153197-14-9	C20H19Cl2NO2	376.08656	M+H	12.41	190.08545	161.05905	55.01796	133.06425	158.97574
270	OxiMinoOxaMyl	30558-43-1	C5H10N2O2S	163.05357	M+H	3.16	130.01974	163.03856	131.02791	133.02826	138.62141
271	Oxycarboxin	5259-88-1	C12H13NO4S	268.06381	M+H	7.04	175.00596	164.98543	193.01674	104.96409	83.01276
272	Oxydemeton-methyl	14325-35-0	C6H15O4PS2	247.02221	M+H	3.36	127.01547	169.00836	142.99272	128.97722	136.98218
273	Paclbutrazol	76738-62-0	C15H20ClN3O	294.13677	M+H	9.07	70.03975	125.01474	57.06992	69.06966	87.0801
274	Parathion-methyl	298-00-0	C8H10NO5PS	264.00901	M+H	8.83	142.99289	249.99309	127.0156	154.97162	185.99042
275	Parathion	56-38-2	C10H14NO5PS	292.04031	M+H	10.71	235.97787	94.04147	114.96149	123.0317	110.01844
276	Penconazole	66246-88-6	C13H15Cl2N3	284.07158	M+H	10.76	70.03976	158.97565	122.99902	172.99129	89.03815
277	Pendimethalin	40487-42-1	C13H19N3O4	282.14483	M+H	13.43	212.06549	194.0549	135.11613	121.10085	114.09064
278	Penoxsulam	219714-96-2	C16H14F5N5O5S	484.07086	M+H	6.97	195.07433	194.06648	164.05597	139.04965	136.06128
279	Penthiopyrad	183675-82-3	C16H20F3N3OS	360.13519	M+H	10.8	256.03507	177.02702	276.04105	236.02861	157.02069
280	Phenamidol	39491-78-6	C12H12N2O2	217.09715	M+H	6.01	104.04939	171.05516	95.04909	146.05994	103.05418
281	Phenazino-1-carboxylic acid	2538-68-3	C13H8N2O2	225.06585	M+H	7.21	179.06032	225.0656	207.05515	152.04947	170.05997
282	Phenmedipham	13684-63-4	C16H16N2O4	301.11828	M+H	8.52	136.03879	168.06476	121.03983	154.05052	124.64648
283	Phenthoate	13376-78-8	C12H17O4PS2	321.03786	M+H	10.69	79.05389	142.99207	91.05385	107.04867	135.04346
284	Phorate oxon sulfone	2588-06-9	C7H17O5PS2	277.03278	M+H	7.1	154.99263	183.02393	249.00148	109.00491	128.97698
285	Phorate oxon sulfoxide	2588-05-8	C7H17O4PS2	261.03786	M+H	4.11	114.96133	128.97698	75.0263	171.02393	109.00491
286	Phorate oxon	2600-69-3	C7H17O3PS2	213.07088	M+H	7.4	75.0263	114.96133	157.00828	185.03958	142.99263
287	Phorate sulfone	2588-04-7	C7H17O4PS3	293.00993	M+H	7.31	114.96085	142.99207	64.9786	142.9379	171.02321
288	Phorate sulfoxide	2588-03-6	C7H17O3PS3	277.01502	M+H	7.04	114.96085	142.93791	64.97858	170.96902	171.02316
289	Phorate	298-02-2	C7H17O2PS3	261.0201	M+H	11.36	75.02644	114.96142	142.93887	64.97899	59.96682
290	Phosalone	2310-	C12H15ClN	367.99	M+H	11.50	181.00057	114.0600	129.009	138.0100	139.0052

		17-0	O4PS2	414					67	1	3
291	Phosfolan-methyl	5120-23-0	C5H10NO3PS2	227.99 125	M+H	3.67	61.01094	167.98795	127.015 5	78.99438	153.9722 6
<i>Table S1 contd.</i>											
292	PhosFolan	947-02-4	C7H14NO3PS2	256.02 255	M+H	4.97	139.95627	167.98757	199.959 92	227.9912 5	196.0192 9
293	Phosmet	732-11-6	C11H12NO4PS2	318.00 181	M+H	8.57	160.03868	133.02786	105.033 1	95.04877	53.03874
294	Phosphamidon	13171-21-6	C10H19CINO5P	300.07 621	M+H	5.32	127.01492	72.04414	100.075 26	174.0673 7	75.99455
295	Phoxim	14816-18-3	C12H15N2O3PS	299.06 138	M+H	11.43	114.96086	95.04876	53.0387 2	129.0441 6	105.0443 2
296	Phthalide	87-41-2	C8H6O2	135.04 406	M+H	4.09	135.04367	133.02844	77.0383 8	105.0444 3	
297	Picoxystrobin	11742-8-22-5	C18H16F3NO4	368.11 042	M+H	10.6	145.06479	130.04132	205.085 8	146.0726	131.0491 6
298	Pinoxaden	24397-3-20-8	C23H32N2O4	401.24 348	M+H	11.3	317.18463	57.06997	289.153 63	131.0850 8	101.0705 6
299	Piperonyl butoxide	51-03-6	C19H30O5	339.21 66	M+H	12.81	177.09101	119.08553	149.059 71	147.0804 4	
300	Pirimicarb	23103-98-2	C11H18N4O2	239.15 025	M+H	5.75	72.04413	182.1281	85.0756 8	109.0756 1	56.01316
301	Pirimiphos-methyl	29232-93-7	C11H20N3O3PS	306.10 358	M+H	11.3	67.02895	108.0552	306.102 14	164.1176 8	95.06
302	Pretilachlor	51218-49-6	C17H26CINO2	312.17 248	M+H	11.95	252.1147	132.08067	176.143 22	147.1041 1	105.0698 3
303	Probenazole	27605-76-1	C10H9NO3S	224.03 759	M+H	5.76	196.00629	184.00629	130.040 15	168.9955 4	120.0446 2
304	Prochloraz	67747-09-5	C15H16Cl3N3O2	376.03 809	M+H	11.26	70.02853	70.06493	265.952 48	56.04956	85.08826
305	ProFenophos	41198-08-7	C11H15BrClO3PS	372.94 242	M+H	12.36	128.00177	114.96085	143.978 91	158.9433 6	141.9632 4
306	Prohexadione	88805-35-0	C10H12O5	213.07 575	M+H	5.26	157.04954	129.05482	139.038 97	149.0238 8	121.0648 7
307	Prometryn	7287-19-6	C10H19N5S	242.14 339	M+H	8.97	158.04949	200.09644	242.143 1	152.1181 2	152.0930 2
308	Propachlor	1918-16-7	C11H14CINO	212.08 367	M+H	7.37	170.03672	152.02615	134.059 83	134.0965 7	212.0833
309	Propamocarb	25606-41-1	C9H20N2O2	189.15 975	M+H	3.1	102.05457	74.02335	58.0651 8	144.1016 5	86.09608
310	Propanil	709-98-8	C9H9Cl2NO	218.01 34	M+H	9.02	127.01834	161.98715	218.013 28	126.0106 9	129.5449 2
311	Propargite	2312-35-8	C19H26O4S	351.16 246	M+H	13.51	57.06994	81.06956	107.048 68	175.1109 6	79.0539
312	Propiconazole	60207-90-1	C15H17Cl2N3O2	342.07 706	M+H	11.02	158.97568	69.06969	122.999 09	70.03976	172.9546 1
313	Propisochlor	86763-47-5	C15H22CINO2	284.14 118	M+H	10.68	148.11212	212.08374	133.088 68	184.0526 4	224.0836 9
314	Propyrisulfuron	57041-5-88-2	C16H18CINO7O5S	560.02 076	M+H	9.82	196.06346	236.03331	139.037 6	261.0286 6	279.0391 8
315	Propyzamide	23950-58-5	C12H11Cl2NO	256.02 905	M+H	9.32	171.05519	146.05997	128.049 39	189.0658 4	129.0334 3
316	Prothioconazole	12098-3-64-4	C14H15Cl2N3OS	344.03 856	M+H	11.48	125.01525	225.02323	326.028	189.0465 5	102.0120 4
317	Pymetrozin	12331	C10H11N5O	218.10	M+H	2.18	105.04122	78.02252	51.0231	111.0310	70.04122

	e	2-89-0		364					1	5	
318	Pyraclostrobin	17501 3-18-0	C19H18ClN3 O4	388.10 586	M+H	11.53	163.0621	164.06993	133.051 68	149.0465 9	105.0568 9
<i>Table S1 contd.</i>											
319	Pyraflufen-ethyl	12963 0-17-7	C15H13Cl2F 3N2O4	430.05 427	M+NH 4	11.19	338.99094	288.99414	304.022 09	260.9992 2	384.9964 2
320	Pyrametostrobin	91541 0-70-7	C21H23N3O 4	382.17 613	M+H	10.7	163.06247	133.05193	149.046 95	164.0705 4	105.0571 4
321	Pyraoxystrobin	86258 8-11-2	C22H21ClN2 O4	413.12 626	M+H	11.62	145.06483	115.05425	117.069 88	205.0859 1	130.0413 5
322	Pyrazosulfuron-ethyl	93697- 74-6	C14H18N6O 7S	415.10 304	M+H	10.23	182.0564	83.02412	157.061 08	139.0504 8	119.0857 1
323	Pyrethrin 1	121- 21-1	C21H28O3	329.21 112	M+H	13.65	69.03361	105.06989	128.061 98	133.1011	143.0855 3
324	Pyrethrin 2	121- 29-9	C22H28O5	373.20 095	M+H	12.01	105.06986	69.03359	133.101 12	143.0855 1	161.0960 4
325	Pyribenzoxim	16808 8-61-7	C32H27N5O 8	610.19 324	M+H	12.86	180.07999	95.04875	289.080 35	119.0122 5	53.03871
326	Pyridaben	96489- 71-3	C19H25ClN2 OS	365.14 489	M+H	14.31	147.11624	132.09283	119.085 08	117.0694 2	105.0695
327	Pyridalyl	17910 1-81-6	C18H14Cl4F 3NO3	489.97 527	M+H	15.88	164.03163	183.02065	204.062 91	326.9500 7	148.0367 7
328	Pyridaphenthion	119- 12-0	C14H17N2O 4PS	341.07 194	M+H	9.6	189.06503	92.04909	205.042 11	65.03848	114.9608 6
329	Pyrifthalid	13518 6-78-6	C15H14N2O 4S	319.07 47	M+H	8.62	319.07318	139.04961	83.0236 4	157.0602 9	93.00797
330	Pyrimethanil	53112- 28-0	C12H13N3	200.11 822	M+H	8.4	200.11743	82.06481	53.0387 4	107.0600 1	80.04916
331	Pyrimorph	86839 0-90-3	C22H25ClN2 O2	385.16 773	M+H	11.12	385.16757	57.07021	242.036 56	256.0886 8	272.1199 6
332	Pyriproxyfen	95737- 68-1	C20H19NO3	322.14 377	M+H	13.07	185.05971	129.06993	134.072 68	128.0620 7	227.1067
333	Pyrisoxazole	84774 9-37-5	C16H17ClN2 O	289.11 022	M+H	7.68	120.04435	92.04943	122.059 78	80.04942	56.04977
334	Quinalphos	13593- 03-8	C12H15N2O 3PS	299.06 138	M+H	10.83	114.96086	147.05467	163.031 71	119.0599 1	242.9976 2
335	Quinclorac	84087- 01-4	C10H5Cl2N O2	241.97 701	M+H	5.29	161.00285	213.98219	124.018 37	195.9717 6	126.0339
336	Quinoxifen	12449 5-18-7	C15H8Cl2FN O	308.00 397	M+H	13.32	308.00238	162.00977	228.968 08	213.981	75.02264
337	Quizalofop	76578- 12-6	C17H13ClN2 O4	345.06 366	M+H	10.76	299.0571	345.06241	244.039 6	255.0317 7	163.0057 1
338	Quizalofop-ethyl	76578- 14-8	C19H17ClN2 O4	373.09 496	M+H	12.54	299.0567	91.05383	255.030 75	192.0672 9	163.0050 2
339	Rimsulfuron-	12293 1-48-0	C14H17N5O 7S2	432.06 422	M+H	7.2	182.05528	83.02361	325.094 85	157.0601 5	106.0647
340	Rotenone	83-79- 4	C23H22O6	395.14 891	M+H	10.55	213.08998	192.07724	191.069 46	203.0693 7	195.0797 6
341	Saflufenacil	37213 7-35-4	C17H17ClF4 N4O5S	501.06 171	M+H	8.55	197.97526	348.99924	366.026	459.0144	384.0366 5
342	Sedaxane	87496 7-67-6	C18H19F2N3 O	332.15 69	M+H	9.6	159.03619	139.03003	292.143 65	81.06995	263.1041 3
343	Sethoxydim 1	74051- 80-2	C17H29NO3 S	328.19 409	M+H	8.97	178.086	134.05983	180.101 61	107.049	79.05416
	Sethoxydim 2	74051- 80-2	C17H29NO3 S	328.19 409	M+H	12.65	178.08604	180.10172	107.049	110.0599 2	112.0755 4

344	Silthiofam	17521 7-20-6	C13H21NOS Si	268.11 859	M+H	10.4	139.02121	252.08729	268.118 16	197.0451 7	212.0559 5
345	Simazine	122- 34-9	C7H12ClN5	202.08 54	M+H	6.19	132.0323	124.08705	202.085 46	174.0543 1	166.1086 7
<i>Table S1 contd.</i>											
346	Simetryn	1014- 70-6	C8H15N5S	214.11 209	M+H	6.55	68.02416	124.08644	214.111 08	96.05522	71.06013
347	Spinetoram	18716 6-40-1	C42H69NO1 0	748.49 942	M+H	11.57	142.12247	98.09625	97.0646 7	99.08028	75.04397
348	Spinosad	16831 6-95-8	C41H65NO1 0	732.46 812	M+H	10.99	142.12263	732.46729	98.0964	97.0648	99.08039
349	Spirodiclofen	14847 7-71-8	C21H24Cl2O 4	411.11 244	M+H	13.84	71.08529	313.03763	212.949 6	184.9547 1	156.9599
350	Spirotetramat	20331 3-25-1	C21H27NO5	374.19 62	M+H	9.92	216.10097	302.17361	330.204 77	270.1476 7	117.0694
351	Sulcotrione	99105- 77-8	C14H13ClO5 S	329.02 45	M+H	5.45	157.04954	293.04782	139.039 05	329.0242	246.0521 2
352	Sulfentrazone	12283 6-35-5	C11H10Cl2F 2N4O3S	386.98 915	M+H	6.47	386.98883	163.96646	306.995 45	273.0345 8	308.0035 4
353	Sulfluramid	4151- 50-2	C10H6F17N O2S	525.97 75	M-H	13.73	525.97797	168.98949	64.9702 1	118.9925 5	218.9861 5
354	Sulfotepp	17233 1-68-9	C8H20O5P2 S2	323.03 001	M+H	10.7	114.96088	142.99211	171.023 22	98.98376	64.97858
355	Sulfoxaflor	94657 8-00-3	C10H10F3N3 OS	278.05 694	M+H	4.46	174.05208	172.05637	122.060 08	127.0354	134.0401 2
356	Tau-fluvalinate	10285 1-06-9	C26H22ClF3 N2O3	503.13 438	M+H	14.64	181.06396	208.07474	180.08	153.0692	152.0613 3
357	Tebuconazole	10753 4-96-3	C16H22ClN3 O	308.15 242	M+H	10.92	70.03978	125.01477	308.151	59.04919	116.0616 6
358	Tebufenozide	11241 0-23-8	C22H28N2O 2	353.22 235	M+H	10.34	133.06427	105.06944	79.0538 9	72.08051	123.0798 8
359	Tebuthiuron	34014- 18-1	C9H16N4OS	229.11 176	M+H	6.37	172.09029	157.06682	142.043 47	229.1114 8	156.0589 6
360	Teflubenzuron	83121- 18-0	C14H6Cl2F4 N2O2	380.98 152	M+H	13.42	158.0412	141.01465			
361	Terbufosulfone	56070- 16-7	C9H21O4PS 3	321.04 123	M+H	8.49	114.96133	171.02393	142.992 63	128.9769 8	
362	Terbufosulfoxide	10548- 10-4	C9H21O3PS 3	305.04 632	M+H	8.46	114.96089	130.938	187.000 37	158.9691 6	57.06995
363	Terbufos	13071- 79-9	C9H21O2PS 3	289.05 141	M+H	12.66	57.06995	114.96094	90.9762 8	103.0571 4	130.9380 3
364	Terbuthylazine	5915- 41-3	C9H16ClN5	230.11 67	M+H	8.87	174.0541	132.0323	146.022 8	138.0773 9	230.1168 4
365	Tetraconazole	11228 1-77-3	C13H11Cl2F 4N3O	372.02 881	M+H	10.16	158.97563	70.03976	372.027 04	122.9990 2	150.0223 7
366	Thiabendazole	148- 79-8	C10H7N3S	202.04 334	M+H	4.24	202.04251	131.05991	65.0385 1	175.0318	92.04911
367	Thiacloprid	11198 8-49-9	C10H9ClN4S	253.03 092	M+H	4.78	126.01002	98.9992	90.0335	72.98369	63.02286
368	Thiamethoxam	15371 9-23-4	C8H10ClN5 O3S	292.02 656	M+H	3.48	131.9664	211.06384	181.053 44	108.0551 7	69.04453
369	Thidiazuron	51707- 55-2	C9H8N4OS	221.04 916	M+H	6.58	102.0116	127.99073	59.9902 4	94.06474	95.04871
370	Thiencarbazone-methyl	31781 5-83-1	C12H14N4O 7S2	391.03 767	M+H	5.48	130.0611	218.97803	229.957 63	359.0114 5	316.0056 4

371	Thifensulfuron-methyl	79277-27-3	C12H13N5O6S2	388.038	M+H	6.04	167.05635	141.07709	222.97294		
372	Thifluzamide	130000-40-7	C13H6Br2F6N2O2S	526.84937	M+H	10.34	166.01318	526.84918	168.00879	148.00253	506.84311
<i>Table S1 contd.</i>											
373	Thiobencarb	28249-77-6	C12H16ClNOS	258.07139	M+H	11.42	125.01474	89.03818	98.99916	90.04603	63.02285
374	Thiocyclam	31895-21-3	C5H11NS3	182.01264	M+H	3	136.95491	182.0127	163.6776	142.14673	152.73273
375	Thiodicarb	59669-26-0	C10H18N4O4S3	355.05629	M+H	7.36	88.02116	107.9931	62.00584	78.9667	72.99776
376	Thiophanate-methyl	23564-05-8	C12H14N4O4S2	343.05292	M+H	6.2	151.03245	93.05695	85.96915	74.0056	118.05202
377	Thiophanate	23564-06-9	C14H18N4O4S2	371.08422	M+H	8.04	151.03245	282.03654	134.07127		
378	Tolclofosmethyl	57018-04-9	C9H11Cl2O3PS	300.96163	M+H	11.54	142.99286	174.97144	78.99445	112.00756	129.0103
379	Tolfenpyrid	129558-76-5	C21H22ClN3O2	384.14733	M+H	13.01	197.09532	154.07704	117.02092	91.05386	145.05211
380	Tolylfluandid	731-27-1	C10H13Cl2FN2O2S2	346.98523	M+H	10.76	137.02933	237.96527	91.0542	136.0215	110.01846
381	topramezone	210631-68-8	C16H17N3O5S	364.09617	M+H	3.73	334.0856	346.0856	125.03455	236.03759	210.05833
382	Tralkoxydim	87820-88-0	C20H27NO3	330.20637	M+H	13.14	138.05495	284.16451	122.06003	133.1013	140.07066
383	Triadimefon	43121-43-3	C14H16ClN3O2	294.10038	M+H	9.37	69.06969	57.06995	197.07198	98.99921	141.00964
384	Triadimenol	43121-43-3	C14H18ClN3O2	296.11603	M+H	9.62	70.03975	99.08044	57.06994	296.29309	69.06972
385	Triallate	2303-17-5	C10H16Cl3NOS	304.00909	M+H	13	142.92166	140.93274	128.10695	261.9617	304.0083
386	Triasulfuron	82097-50-5	C14H16ClN5O5S	402.06334	M+H	5.91	167.05684	141.07709	137.00605	121.02845	141.00052
387	Triazophos	24017-47-8	C12H16N3O3PS	314.07228	M+H	9.9	162.06552	114.96087	119.05992	92.04909	65.03846
388	Tribenuron-methyl	101200-48-0	C6H10N4O	396.09273	M+H	7.67	155.09276	83.024	56.04983	57.04505	135.0441
389	Trichlorfon	52-68-6	C4H8Cl3O4P	256.92985	M+H	4.32	127.01493	78.99403	82.94461	93.00958	62.99934
390	Triclopyricarb	902760-40-1	C15H13Cl3N2O4	391.00137	M+H	12.75	163.06281	133.05225	149.04723	164.0706	162.05495
391	Triclopyr	55335-06-3	C7H4Cl3NO3	253.9184	M-H	8.5	195.91315	198.7085	244.47971	183.47266	
392	Tricyclazole	41814-78-2	C9H7N3S	190.04334	M+H	5.18	190.04254	163.03177	136.02106	109.01024	65.0385
393	Trifloxystrobin	141517-21-7	C20H19F3N2O4	409.13697	M+H	11.99	186.05177	145.02596	116.04948	131.0724	206.08031
394	Triflumizole	68694-11-1	C15H15ClF3N3O	346.09285	M+H	12.03	55.05434	73.06451	69.04456	278.05432	53.00235
395	Triflumuron	64628-44-0	C15H10ClF3N2O3	359.04048	M+H	11.67	138.99414	156.02039	139.00505	129.00963	113.01478
396	Triflusulfuron-methyl	126535-15-7	C17H19F3N6O6S	493.11116	M+H	9.52	264.06973	96.05537	71.06052	238.09099	90.97675
397	Triforine	26644-46-2	C10H14Cl6N4O2	432.93207	M+H	8.29	98.08344	97.07563	212.97357	82.94463	191.01288
398	Trinexapac	95266-	C12H16O5	253.10	M+H	7.85	60.03278	68.00680	183.027	139.0383	111.0435

	-ethyl	40-3		705					95	5	2
399	Uniconazole	83657-22-1	C15H18ClN3O	292.12112	M+H	10.31	70.03976	292.11972	125.01481	138.99394	57.06997
<i>Table S1 contd.</i>											
400	Vamidothion	2275-23-2	C8H18NO4PS2	288.04876	M+H	4.12	58.02907	146.06319	118.03214	58.06546	86.06007
401	Zoxamide	56052-68-5	C14H16Cl3NO2	336.03194	M+H	11.22	186.97011	158.97569	122.99907	98.99917	203.99715
402	Metamitron	41394-05-2	C10H10N4O	203.09274	M+H	4.4	104.04942	175.09781	203.09253	174.0787	95.04913
403	Monosulfuron	155860-63-2	C13H12N4O5S	338.05537	M+H	5.32	136.05046	110.07123	111.0552	93.0447	66.03395

^a Pesticides with multiple entries mainly due to the two cases: (1) the occurrence of two extracted ions peaks with different retention time and (2) in-source fragmentation, which main product ion was input for further fragmentation.

Table S2 Summary of 68 screened samples.

Sample name	Number	Sample origin	Sample name	Number	Sample origin	Sample name	Number	Sample origin
Cucumber	2	Guangzhou	Asparagus bean	1	Guangzhou	Leaf lettuce	1	Foshan
Luffa	1	Guangzhou	Chinese cabbage	1	Guangzhou	Peach	1	Foshan
Grape	4	Guangzhou	Eggplant	1	Guangzhou	Carrot	1	Foshan
Peach	3	Guangzhou	Ginger	1	Guangzhou	Shiitake mushroom	1	Foshan
Leaf lettuce	1	Guangzhou	Lotus root	1	Guangzhou	Cucumber	3	Foshan
Spinach	2	Guangzhou	Common chinese cabbage	2	Foshan	Pea bean	2	Foshan
Leek	3	Guangzhou	Eggplant	1	Foshan	Celery	1	Foshan
Watermelon	1	Guangzhou	Leek	1	Foshan	Broccoli	1	Foshan
Cabbage	1	Guangzhou	Straw mushroom	1	Foshan	Potato	1	Foshan
Scallion	1	Guangzhou	Watermelon	2	Foshan	Pear	2	Sichuan
Celery	1	Guangzhou	Grape	4	Foshan	Jujube	1	Sichuan
Pepper	1	Guangzhou	Tomato	3	Foshan	Citrus	2	Sichuan
Bitter gourd	1	Guangzhou	Asparagus bean	1	Foshan	Apple	2	Sichuan
Pea bean	1	Guangzhou	Chinese cabbage	1	Foshan	Watermelon	1	Sichuan
Cauliflower	1	Guangzhou	Pepper	3	Foshan			

Table S3 Isomers, their exact m/z and UHPLC retention time.

Pesticide	Molecular Formula	Exact m/z	Rt (min)	Rt Difference (min)
Methomyl	C5H10N2O2S	163.05357	3.55	0.39
OxiMinoOxaMyl	C5H10N2O2S	163.05357	3.16	
2,4-Dichlorophenoxyacetic acid	C8H6Cl2O3	218.96212	7.39	2.42
Dicamba	C8H6Cl2O3	218.96212	4.97	
Acetochlor	C14H20ClNO2	270.12553	9.86	0
Alachlor	C14H20ClNO2	270.12553	9.86	
Butachlor	C17H26ClNO2	312.17248	12.69	0.74
Pretilachlor	C17H26ClNO2	312.17248	11.95	
Cyproconazole	C15H18ClN3O	292.12112	9.77	0.54
Uniconazole	C15H18ClN3O	292.12112	10.31	
Desmedipham	C16H16N2O4	301.11828	8.29	0.23
Phenmedipham	C16H16N2O4	301.11828	8.52	
Phoxim	C12H15N2O3PS	298.05355	11.43	0.6
Quinalphos	C12H15N2O3PS	298.05355	10.83	
Metolachlor	C15H22ClNO2	284.14118	9.97	0.71
Propisochlor	C15H22ClNO2	284.14118	10.68	

Table S4 Isobars, their exact m/z and UHPLC retention time.

Pesticide	Molecular formula	Exact m/z	m/z difference in ppm	Rt (min)	Rt Difference (min)
Maleic Hydrazide	C4H4N2O2	135.0165	204.1	2.74	1.35
Phthalide	C8H6O2	135.04406			
Dazomet	C5H10N2S2	163.03582	108.9	3.49	0.6
Methomyl	C5H10N2O2S	163.05357			
Cymoxanil	C7H10N4O3	199.08257	57.8	4.69	0.8
Metaldehyde	C8H16O4	199.09408			
Carbaryl	C12H11NO2	202.08626	4.3	6.6	0.41
Simazine	C7H12ClN5	202.0854			
Chlorotoluron	C10H13ClN2O	213.07892	37.7	7.32	1.61
Phorate oxon	C7H17O3PS	213.07088			
Aminocyclopyrachlor	C8H8ClN3O2	214.03778	37.6	3.01	0.09
Dimethoate oxon	C5H12NO4PS	214.02974			
Ethoxyquin	C14H19NO	218.15394	230.6	7.66	4.48
Pymetrozine	C10H11N5O	218.10364			
Acetamiprid	C10H11ClN4	223.0745	0.896	4.31	1.04
Aldicarb sulfone	C7H14N2O4S	223.0747			
Monocrotophos	C7H14NO5P	224.06824	136.8	3.61	2.15
Probenazole	C10H9NO3S	224.03759			
Fonophos	C10H15OPS2	247.03747	61.8	11.0	7.64
Oxydemeton-methyl	C6H15O4PS2	247.02221			
Difenzoquat	C17H17N2	249.13863	230.8	4.13	1.26
Matrine	C15H24N2O	249.19614			
Hexazinone	C12H20N4O2	253.1659	232.6	6.12	1.73
Trinexapac-ethyl	C13H16O5	253.10705			
Phosfolan	C7H14NO3PS2	256.02255	25.4	4.97	4.35
Propyzamide	C12H11Cl2NO	256.02905			
Methiocarb sulfone	C11H15NO4S	258.07946	31.3	4.45	6.97
Thiobencarb	C12H16ClNOS	258.07139			
Phorate oxon sulfoxide	C7H17O4PS2	261.03786	68.0	4.11	7.25
Phorate	C7H17O2PS3	261.0201			
Bentazone	C10H12N2O3S	263.04608	110.0	5.66	1.49
Demeton S sulfone	C6H15O5PS2	263.01713			
Diethofencarb	C14H21NO4	268.15433	133.3	8.7	1.7
Silthiofam	C13H21NOSSi	268.11859			
Alachlor	C14H20ClNO2	270.12553	86.4	9.86	0.24
Mepronil	C17H19NO2	270.14886			
Phorate oxon sulfone	C7H17O5PS2	277.03278	64.1	7.1	0.06

Pesticide	Molecular formula	Exact m/z	m/z difference in ppm	Rt (min)	Rt Difference (min)
Phorate sulfoxide	C7H17O3PS3	277.01502		7.04	
Fosthiazate	C9H18NO3PS2	284.05385	62.4	6.83	3.9
Penconazole	C13H15Cl2N3	284.07158		10.76	
Myclobutanil	C15H17ClN4	289.12145	38.8	9.48	1.8
Pyrisoxazole	C16H17ClN2O	289.11022		7.68	
Disulfoton-sulfoxide	C8H19O3PS3	291.03067	141.8	7.03	2.37
Isoprothiolane	C12H18O4S2	291.07193		9.40	
Parathion	C10H14NO5PS	292.04031	47.1	10.71	10.23
Thiamethoxam	C8H10ClN5O3S	292.02656		3.48	
Amitraz	C19H23N3	294.19647	202.9	14.01	4.94
Paclobutrazol	C15H20ClN3O	294.13677		9.07	
Butralin	C14H21N3O4	296.16048	150.1	13.57	3.95
Triadimenol	C14H18ClN3O2	296.11603		9.62	
Bifenazate	C17H20N2O3	301.15467	120.8	9.68	0.99
Desmedipham	C16H16N2O4	301.11828		8.69	
Buprofezin	C16H23N3OS	306.16346	60.8	12.54	8.05
Imazamox	C15H19N3O4	306.14483		4.49	
Diflubenzuron	C14H9ClF2N2O2	311.03934	22.4	10.88	0.06
Edifenphos	C14H15O2PS2	311.03238		10.94	
Fenamidone	C17H17N3OS	312.11651	56.9	8.73	2.34
Imazaquin	C17H17N3O3	312.13427		6.39	
Hexaconazole	C14H17Cl2N3O	314.08214	31.4	11.23	1.33
Triazophos	C12H16N3O3PS	314.07228		9.9	
Azinphos-methyl	C10H12N3O3PS2	318.01305	35.3	8.44	0.13
Phosmet	C11H12NO4PS2	318.00181		8.57	
Phenthoate	C12H17O4PS2	321.03786	10.5	10.69	2.2
Terbufos sulfone	C9H21O4PS3	321.04123		8.49	
Diniconazole	C15H17Cl2N3O	326.08214	93.1	11.76	7.7
Flumetsulam	C12H9F2N5O2S	326.05178		4.06	
Benalaxyl	C20H23NO3	326.17507	10.3	10.91	1.29
Cycloxydim	C17H27NO3S	326.17844		12.2	
Fenoxanil	C15H18Cl2N2O2	329.08181	174.2	10.27	4.82
Sulcotrione	C14H13ClO5S	329.0245		5.45	
Epoxiconazole	C17H13ClFN3O	330.08039	120.3	10.46	0.11
Iprodione	C13H13Cl2N3O3	330.04067		10.35	
Fenarimol	C17H12Cl2N2O	331.03994	10.3	9.89	0.45
Malathion	C10H19O6PS2	331.04334		9.44	
Isofenphos-methyl	C14H22NO4PS	332.10799	147.2	10.73	1.13
Sedaxane	C18H19F2N3O	332.1569		9.6	

Pesticide	Molecular formula	Exact m/z	m/z difference in ppm	Rt (min)	Rt Difference (min)
Flurtamone	C18H14F3NO2	334.10494	188.9	8.87	3.39
Ipconazole	C18H24ClN3O	334.16807			
Diclofop-methyl	C16H14Cl2O4	341.03419	32.9	12.7	1.24
oxadiargyl	C15H14Cl2N2O3	341.04542			
Boscalid	C18H12Cl2N2O	343.03994	37.8	9.09	2.89
Thiophanate-methyl	C12H14N4O4S2	343.05292			
Oxadiazon	C15H18Cl2N2O3	345.07672	37.8	12.84	2.08
Quizalofop Acid	C17H13ClN2O4	345.06366			
Florasulam	C12H8f3N5O3S	360.03727	38.7	5.04	2.56
Isoxaflutole	C15H12F3NO4S	360.05119			
Clethodim	C17H26ClNO3S	360.13947	104.1	12.13	1.54
Etoxazole	C21H23F2NO2	360.17696			
Isopyrazam	C20H23F2N3O	360.1882	147.2	11.8	1.0
Penthiopyrad	C16H20F3N3OS	360.13519			
Benzoximate	C18H18ClNO5	364.09463	57.4	11.56	1.8
Flufenacet	C14H13F4N3O2S	364.07374			
Haloxypop-methyl	C16H13ClF3NO4	376.0558	47.1	10.81	0.45
Prochloraz	C15H16Cl3N3O2	376.03809			
Fluxapyroxad	C18H12F5N3O	382.09733	41.2	9.42	3.0
Metsulfuron-methyl	C14H15N5O6S	382.08158			
Tolfenpyrad	C21H22ClN3O2	384.14733	14.6	12.47	0.54
Fluazifop-butyl	C19H20F3NO4	384.14172			
Fipronil-desulfinyl	C12H4Cl2F6N4	386.96444	63.9	10.28	3.81
Sulfentrazone	C11H10Cl2F2N4O3S	386.98915			
Dimethomorph	C21H22ClNO4	388.13101	64.8	9.28	2.25
Pyraclostrobin	C19H18ClN3O4	388.10586			
Thiencarbazone-methyl	C12H14N4O7S2	391.03767	92.8	5.48	7.27
Triclopyricarb	C15H13Cl3N2O4	391.00137			
Flucarbazone	C12H11F3N4O6S	397.04242	28.4	4.84	4.86
Fluopyram	C16H11ClF6N2O	397.05369			
Dufulin	C19H22FN2O3PS	409.11455	54.8	11.83	0.16
Trifloxystrobin	C20H19F3N2O4	409.13697			
Bensulfuron-methyl	C16H18N4O7S	411.0969	138.0	8.67	0.13
Fentinacetate	C20H18O2Sn	411.04015			
Nicosulfuron	C15H18N6O6S	411.10813	10.5	6.26	7.58
Spirodiclofen	C21H24Cl2O4	411.11244			
Coumoxystrobin	C26H28O6	437.19587	76.0	13.12	1.15
Fenvalerate	C25H22ClNO3	437.16265			

Table S5 The screening detection limit and recoveries for 403 pesticides at 5, 20, 50 µg/kg in asparagus bean, cucumber, chinese cabbage, and ginger.

Pesticides	Asparagus bean							Cucumber							Chinese cabbage							Ginger						
	SD L (µg/ kg)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µg /kg)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µ g/k g)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µg /kg)	5 µg/kg		20 µg/kg		50 µg/kg	
		AV E	RS D, %(n =3)	AVE	RS D, % (n= 3)	AV E	RS D,% (n=3)		AVE	RS D, % (n=3)	AVE	RSD ,% (n=3)	AV E	RSD ,% (n=3)		AVE	RS D, % (n=3)	AVE	RS D, % (n=3)	AV E	RS D, % (n=3)		AVE	RSD ,% (n=3)	AV E	RS D, % (n=3)	AVE	RSD ,% (n=3)
1-naphthylacetic acid	50	F	F	F	F	68.0	3.7	20	F	F	45.8	17.7	71.7	35.4	20	F	F	71.6	31.5	109.1	26.1	50	F	F	F	F	40.0	6.3
2,4-Dichlorophenoxyacetic acid	50	F	F	F	F	16.5	11.6	50	F	F	F	F	16.8	3.5	10	F	F	13.4	33.6	21.2	12.4	20	F	F	6.3	27.5	15.9	26.9
Acephate	20	F	F	90.6	1.5	78.7	3.3	5	105.7	1.0	100.9	5.8	92.3	2.1	20	F	F	102.3	1.1	86.0	4.4	5	102.1	4.3	97.9	4.9	91.8	1.4
Acetamiprid	1	108.7	9.4	109.7	1.5	99.0	3.3	1	123.9	0.8	116.1	10.9	105.4	6.8	5	108.7	2.0	105.8	0.8	96.5	0.3	5	119.7	3.8	103.7	4.6	102.1	2.6
Acetochlor	20	F	F	92.0	5.1	83.9	0.9	20	F	F	100.6	2.7	95.0	4.2	20	F	F	91.7	2.7	90.3	8.8	20	F	F	90.4	3.5	100.8	1.3
Acifluorfen	20	F	F	13.4	14.4	27.8	14.7	5	6.2	F	12.8	35.3	20.7	31.4	5	12.3	60.4	16.2	19.8	32.7	22.2	20	F	F	11.9	41.4	32.1	27.5
Alachlor	20	F	F	92.0	5.1	83.9	0.9	20	F	F	100.6	2.7	95.0	4.2	20	F	F	91.7	2.7	90.3	8.8	20	F	F	90.4	3.5	100.8	1.3
Albendazole	5	53.3	4.1	62.0	6.0	60.0	3.3	5	28.5	6.6	31.7	9.5	51.1	3.9	20	F	F	57.1	5.3	54.3	4.2	1	110.1	1.6	109.1	4.3	103.3	3.4

Aldicarb sulfoxide	20	F	F	91.6	0.9	79.1	1.2	20	F	F	101.4	5.4	96.9	2.8	50	F	F	F	F	98.0	2.9	10	F	F	114.9	7.3	102.7	2.1
Aldicarb	5	96.6	21.3	100.3	1.4	85.9	5.0	20	F	F	110.0	11.4	87.2	7.4	5	80.0	7.9	90.0	1.9	76.1	9.3	20	F	F	119.5	6.6	102.9	7.3
Aldoxycarb	5	124.4	8.2	110.9	2.3	92.0	1.8	5	131.1	2.5	111.7	3.7	100.8	6.8	20	F	F	61.2	4.7	116.0	3.1	5	137.9	3.3	125.6	5.5	109.1	2.0
Ametoctradin	1	87.0	1.4	81.6	5.6	77.9	3.3	5	114.4	1.5	95.2	0.3	92.2	6.6	5	117.9	2.4	92.1	0.4	87.9	1.9	5	96.8	1.2	90.3	2.1	87.5	2.1
Ametryn	1	100.3	2.3	93.5	5.3	87.1	1.7	1	104.4	3.3	95.0	3.2	89.4	4.1	1	127.7	0.3	92.1	2.6	85.5	1.4	1	107.1	2.1	98.0	3.0	93.2	4.3
Amidosulfuron	10	F	F	81.4	3.9	95.2	5.8	1	80.0	11.6	79.2	9.1	90.0	7.0	20	F	F	88.2	3.9	91.4	6.4	50	F	F	F	F	87.7	4.9
Aminocyclopyra chlor	100	F	F	F	F	F	F	50	F	F	F	F	0.7	75.4	100	F	F	F	F	F	F	100	F	F	F	F	1.0	F
Aminopyralid	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Amisulbrom	50	F	F	F	F	23.1	9.3	20	F	F	28.2	13.4	47.3	50.9	50	F	F	F	F	80.1	18.5	NA	F	F	F	F	F	F
Amitraz	5	126.7	12.6	58.6	23.0	67.0	2.6	10	F	F	9.1	10.8	2.7	5.4	20	F	F	128.6	45.9	127.3	9.9	5	133.1	17.1	88.2	3.0	54.3	10.3
Amitrole	5	8.1	100.9	9.1	80.6	3.2	19.2	5	10.7	31.1	3.8	7.6	3.7	38.6	20	F	F	6.3	29.8	7.4	24.1	5	36.4	19.3	10.7	17.9	10.2	33.5
Anilazine	1	67.8	12.6	91.9	1.1	84.5	1.5	5	119.7	3.2	167.6	11.4	158.6	14.1	5	111.9	6.2	121.9	6.9	112.3	8.5	5	32.9	14.8	35.6	5.0	51.6	10.4
Anilofos	1	103.7	6.4	98.1	3.3	89.2	2.5	1	116.6	1.1	106.2	4.0	99.1	6.4	1	103.8	2.1	106.3	4.0	94.8	3.1	5	117.4	1.1	117.6	5.4	114.7	1.9

Atrazine	5	11 1.7	0.8	101. 2	5. 7	92. 8	1.6	5	115. 1	2.3	101. 1	3.3	93. 2	1.6	5	155. 0	40. 0	103. 4	2.4	94. 7	0.4	5	116. 8	2.6	103. 3	3.5	95.7	4.3
Avermectins	1	82. 0	10. 2	79.9	8. 2	71. 9	1.9	1	72.2	14. 5	82.4	1.6	84. 3	5.2	1	114. 4	46. 1	82.9	1.2	77. 8	5.9	1	91.8	5.1	95.0	11.3	108. 4	7.8
Azadirachtin	20	F	F	2.0	15 .0	6.2	43. 5	N A	F	F	F	F	0.3	76.0	5	7.6	10 1.1	13.7	35. 3	9.7	26. 4	50	F	F	F	F	95.4	3.3
Azinphos- methyl	5	84. 8	7.9	74.3	8. 4	64. 1	5.0	10	F	F	103. 6	4.6	95. 9	0.8	10 0	F	F	F	F	F	F	20	F	F	115. 2	3.3	107. 3	0.8
Azocyclotin	50	F	F	F	F	205 .1	5.5	50	F	F	F	F	29. 9	36.7	50	F	F	F	F	120 .0	2.8	50	F	F	F	F	46.1	26. 1
Azoxystrobin	1	10 3.8	5.7	94.1	2. 7	84. 7	1.7	1	102. 6	1.3	98.1	3.5	89. 6	1.2	1	97.7	1.9	94.4	1.7	87. 3	4.5	5	109. 6	9.3	115. 5	2.3	109. 6	5.1
Benalaxyl	1	10 6.6	7.6	112. 4	1. 5	99. 7	3.5	1	116. 8	0.2	114. 6	6.4	111 .2	3.2	1	103. 8	3.9	109. 3	3.2	100 .9	2.1	1	116. 3	4.5	115. 6	8.6	107. 6	1.3
Benazolin	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F
Benfuracarb	10 0	F	F	F	F	F	F	20	F	F	F	F	F	F	N A	F	F	F	F	F	F	10 0	F	F	F	F	F	F
Bensulfuron- methyl	5	11 0.9	2.5	118. 1	1. 5	111 .8	3.8	5	111. 9	2.5	106. 9	8.8	107 .4	3.5	5	95.4	2.8	96.2	3.1	92. 2	1.1	5	91.8	6.2	98.4	7.0	97.2	0.6
Bentazone	1	12 0.1	7.0	114. 7	2. 3	98. 9	3.5	1	118. 3	9.8	114. 0	9.7	103 .7	3.2	1	126. 5	6.7	132. 9	4.3	112 .0	3.9	1	104. 8	6.8	109. 5	10.4	110. 9	1.3
Benziothiazolino ne	20	F	F	77.6	3. 3	55. 5	7.0	1	96.3	4.6	76.6	10. 7	72. 8	11.4	50	F	F	F	F	77. 1	1.0	10	F	F	90.9	5.8	83.4	2.3
Benzovindiflupy r	1	11 0.4	8.0	116. 3	1. 2	104 .8	3.5	1	116. 4	1.4	115. 3	8.5	106 .1	4.2	1	101. 9	5.3	108. 4	4.0	101 .2	1.8	1	82.4	4.7	99.3	7.2	98.9	1.7

Benzoximate	20	F	F	104.3	8.1	88.8	0.1	20	F	F	17.5	10.4	107.5	4.8	20	F	F	113.1	3.6	103.7	3.0	50	F	F	F	F	105.4	3.5
Bifenazate	100	F	F	F	F	F	F	100	F	F	F	F	F	F	50	F	F	F	F	23.1	18.5	5	F	F	6.3	20.2	24.9	32.9
Bifenox	5	F	F	F	F	F	F	5	118.2	16.6	113.8	0.9	100.2	5.9	20	F	F	F	F	73.9	6.5	5	113.8	5.6	44.5	63.8	109.0	13.1
Bifenthrin	20	F	F	77.7	15.3	78.2	7.0	50	F	F	F	F	89.7	6.3	20	F	F	84.8	13.2	97.6	5.8	50	F	F	F	F	83.6	7.9
Bispyribac-sodium	50	F	F	F	F	20.8	6.9	50	F	F	F	F	31.0	13.0	100	F	F	F	F	F	F	50	F	F	F	F	23.3	34.0
Bitertanol	5	72.3	5.5	87.5	6.1	77.6	0.6	20	F	F	92.5	0.4	88.9	3.4	20	F	F	98.1	3.2	89.1	1.4	10	F	F	114.7	6.3	100.5	1.2
Boscalid	20	F	F	89.9	8.9	81.1	9.5	20	F	F	113.3	3.6	105.7	1.7	20	F	F	111.8	3.6	101.9	1.9	5	101.6	4.4	102.5	5.9	100.9	2.1
Bromoxyni	1	44.8	18.0	43.4	5.6	57.2	6.2	1	40.5	11.5	42.1	15.1	49.9	13.9	1	41.6	13.7	49.9	5.4	62.8	6.5	1	27.9	13.5	41.1	22.9	63.2	15.4
Bupirimate	1	101.8	2.5	94.4	5.3	90.5	3.4	1	108.8	0.3	96.7	3.3	91.5	4.6	1	109.4	0.7	101.4	0.9	91.6	1.1	5	118.6	3.8	101.7	1.3	95.8	2.3
Buprofezin	1	83.4	4.5	83.2	5.6	77.9	0.4	1	107.1	0.6	98.6	0.7	96.0	4.3	1	87.2	3.5	83.3	3.9	80.4	3.1	5	101.8	2.4	94.8	4.4	90.4	1.5
Butachlor	5	56.1	18.2	67.0	10.8	74.3	2.5	5	69.7	12.6	71.7	10.1	75.0	5.7	5	66.2	11.8	80.2	1.2	82.3	2.3	5	103.2	7.6	98.4	1.9	99.1	4.5
Butralin	1	83.7	6.7	81.3	1.5	80.7	3.1	5	88.6	2.3	83.1	2.2	85.3	3.9	5	92.4	0.5	88.3	3.1	87.4	8.5	1	98.3	5.8	88.7	6.8	91.1	3.1
Cadusafos	1	105.5	5.6	111.9	2.7	102.7	1.8	1	110.1	0.6	112.3	7.3	102.7	2.9	5	110.4	2.7	113.2	3.8	101.1	0.6	1	100.9	3.3	98.2	8.2	99.6	1.5

Captan	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	
Carbaryl	1	10 7.8	4.0	100. 4	0. 5	88. 8	0.7	5	118. 8	3.6	102. 6	6.0	95. 4	2.3	5	108. 1	3.1	97.2	2.2	86. 7	4.1	1	129. 5	4.6	124. 4	5.0	115. 6	5.4
Carbendazim	5	10 4.9	3.3	96.0	2. 9	88. 3	1.6	1	111. 6	4.0	106. 3	5.2	114 .5	3.8	1	96.5	1.7	89.7	3.1	79. 1	1.0	1	109. 9	2.2	99.3	2.2	93.4	2.3
Carbofuran	5	11 9.7	8.2	106. 5	11 .1	82. 6	15. 3	5	121. 4	0.9	98.4	18. 9	107 .9	8.8	20	F	F	106. 2	0.8	76. 3	17. 9	5	119. 8	1.5	141. 5	7.7	102. 8	1.8
Carbofuran	1	12 6.8	8.3	119. 2	4. 1	106 .0	1.9	1	167. 3	4.7	140. 4	5.2	127 .9	4.3	1	111. 4	2.0	106. 8	4.0	94. 0	5.4	1	145. 4	4.3	136. 8	2.9	128. 4	0.7
Carbosulfan	10	F	F	16.1	30 .1	9.2	7.2	5	26.8	1.2	15.2	88. 8	12. 9	1.5	NA	F	F	F	F	F	F	5	21.0	19. 3	40.8	26.5	18.8	92. 1
Carboxin	5	48. 7	3.8	41.8	7. 5	48. 1	11. 1	5	23.1	0.2	20.5	6.3	30. 7	7.1	5	78.9	51. 0	61.6	5.4	50. 1	5.1	1	115. 1	0.6	104. 4	0.7	96.9	1.1
Carfentrazone-ethyl	1	12 4.7	5.1	127. 2	1. 9	111 .0	2.4	1	125. 9	1.1	122. 6	7.3	109 .9	3.2	1	119. 8	4.3	121. 8	6.5	107 .9	2.8	10	F	F	110. 5	11.0	108. 7	4.6
Cartap	10 0	F	F	F	F	F	F	50	F	F	F	F	29. 0	7.4	50	F	F	F	F	51. 4	5.9	50	F	F	F	F	94.4	3.1
Chlorantraniliprole	5	10 9.2	2.5	105. 2	2. 8	90. 9	2.2	10	F	F	99.9	2.2	91. 0	2.9	50	F	F	F	F	88. 3	2.1	5	135. 8	1.1	127. 6	3.3	113. 1	3.9
Chlorbenzuron	20	F	F	86.3	24 .8	84. 9	1.6	50	F	F	F	F	69. 8	0.2	20	F	F	65.5	34. 1	76. 8	7.1	10	F	F	105. 4	12.1	103. 3	5.6
Chlordimeform	1	71. 5	3.2	77.6	1. 3	79. 5	0.8	1	87.0	2.7	83.5	1.9	86. 2	4.4	1	83.7	1.2	70.6	6.1	72. 7	1.8	1	67.9	2.0	78.2	4.8	81.9	3.2
Chlorfenapyr	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F

Chlorfluazuron	5	10 2.9	11. 0	109. 5	12 .9	91. 1	12. 6	20	F	F	91.7	3.4	84. 0	2.1	20	F	F	97.6	4.9	86. 5	4.8	5	99.8	7.6	103. 9	8.5	94.4	4.4	
Chlorimuron-ethyl	5	67. 3	11. 3	83.6	7. 2	82. 9	2.3	20	F	F	87.1	12. 1	90. 8	9.8	50	F	F	F	F	100 .6	4.3	20	F	F	71.3	13.2	93.7	6.0	
Chlorotoluron	5	11 4.0	2.6	107. 7	3. 2	93. 4	0.8	1	117. 8	0.6	106. 0	2.6	96. 0	1.5	5	111. 8	1.0	107. 8	0.4	92. 3	3.1	5	132. 2	0.8	119. 6	2.1	113. 6	1.9	
Chlorpyrifos oxon	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	F	N A	F	F	F	F	F	F
Chlorpyrifos-methyl	50	F	F	F	F	78. 1	3.4	50	F	F	F	F	74. 4	4.7	20	F	F	71.1	10. 1	79. 6	11. 6	20	F	F	33.4	52.7	75.5	3.1	
Chlorpyrifos	5	82. 0	5.0	104. 5	6. 8	93. 8	6.1	5	73.8	1.5	93.6	8.7	92. 1	12.4	5	82.6	3.5	94.0	9.0	90. 2	3.3	5	93.1	13. 0	90.5	2.7	86.7	5.0	
Chlorsulfuron	5	48. 8	20. 8	58.9	3. 6	69. 5	6.5	20	F	F	58.4	1.5	65. 8	8.4	20	F	F	74.6	8.5	76. 4	4.4	50	F	F	F	F	71.3	12. 1	
Cinosulfuron	5	82. 8	2.6	87.3	4. 3	85. 9	2.0	20	F	F	90.9	5.3	92. 7	9.0	20	F	F	99.0	3.2	93. 2	6.8	20	F	F	80.7	4.9	91.9	8.1	
ClethodiM Sulfone	5	12 2.7	5.7	114. 3	4. 0	109 .0	2.3	5	136. 1	4.1	116. 7	7.9	108 .6	8.8	5	115. 7	3.6	118. 3	10. 3	107 .7	4.6	5	114. 5	2.4	111. 0	2.9	107. 6	2.8	
ClethodiMSulfoxide	1	15 1.9	4.4	140. 9	3. 7	115 .7	1.3	1	192. 8	4.5	170. 6	5.7	142 .5	7.0	1	189. 6	36. 2	134. 7	11. 2	109 .1	5.1	5	90.6	2.4	87.4	1.9	86.7	3.5	
Clethodim	5	27. 8	5.2	30.2	7. 9	54. 6	2.4	5	3.7	21. 4	5.9	12. 8	31. 1	4.8	5	47.3	54. 9	50.2	8.8	65. 7	5.2	5	96.4	2.4	93.6	1.7	91.1	1.7	
Clodinafop-propargyl	1	14 0.2	2.6	125. 3	4. 5	105 .2	2.9	1	138. 2	1.5	124. 8	2.5	104 .0	2.0	1	139. 4	1.0	128. 8	4.5	105 .8	0.8	20	F	F	123. 1	7.3	111. 5	2.2	
Clofentezine	20	F	F	93.4	10 .0	79. 0	4.3	50	F	F	F	F	82. 2	8.6	20	F	F	75.9	9.1	74. 3	2.9	50	F	F	F	F	85.6	4.7	

Clomazone	1	10 5.0	0.4	99.6	4. 1	94. 5	2.8	1	109. 5	0.6	99.5	0.8	93. 9	2.8	1	118. 8	4.8	85.4	2.8	79. 6	2.1	1	109. 7	1.4	101. 7	2.3	95.1	2.6
Clopyralid	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F
Clothianidin	5	98. 4	3.7	96.3	0. 7	91. 0	3.8	5	116. 8	2.5	103. 4	6.0	98. 9	6.6	10	F	F	89.2	2.7	79. 9	3.9	5	116. 2	2.1	102. 8	1.7	92.2	3.0
Clotrimazole	50	F	F	F	F	91. 9	4.8	10	F	F	66.0	65. 2	70. 6	38.9	20	F	F	67.6	26. 9	73. 4	10. 3	20	F	F	87.3	15.8	92.9	9.9
Coumaphos	5	85. 1	8.7	86.0	5. 0	76. 2	2.7	5	99.4	0.9	98.1	2.0	93. 3	6.3	5	94.2	6.0	103. 9	3.0	92. 5	2.2	5	114. 4	4.1	108. 7	5.1	104. 6	3.4
Coumoxystrobin	5	10 7.2	3.6	121. 0	3. 3	107 .4	1.6	5	105. 2	1.4	106. 1	3.9	96. 9	8.0	5	99.3	5.3	100. 8	5.8	97. 3	2.5	1	113. 5	3.2	104. 6	1.3	99.6	2.0
Cyanazine	5	95. 8	7.4	93.4	2. 5	83. 4	2.0	5	113. 5	2.1	103. 6	3.1	92. 4	5.1	5	100. 6	4.6	96.7	2.6	89. 3	1.6	5	116. 3	3.4	108. 6	4.3	102. 6	1.2
Cyantraniliprole	50	F	F	F	F	86. 6	5.7	50	F	F	F	F	83. 5	1.9	50	F	F	F	F	89. 6	5.8	5	104. 4	1.7	109. 2	8.3	102. 4	3.7
Cyclosulfamuron	5	10 4.3	0.5	101. 4	6. 4	99. 2	4.3	5	101. 5	4.7	97.1	7.7	94. 4	9.6	5	102. 1	2.2	106. 4	3.2	97. 1	5.3	5	94.0	6.1	94.3	6.4	98.9	4.2
Cycloxydim	5	18. 5	4.2	21.2	8. 2	43. 4	4.5	5	3.5	14. 1	3.8	9.0	20. 1	14.9	5	35.1	57. 0	38.4	11. 5	59. 1	3.7	5	89.9	5.4	88.6	1.7	89.2	0.3
Cyflumetofen	1	10 4.2	9.9	112. 8	7. 4	102 .0	3.4	1	110. 7	2.7	113. 9	5.7	106 .0	4.1	1	90.9	7.2	92.8	0.5	91. 4	3.7	1	112. 1	5.9	110. 0	7.3	105. 6	1.6
Cyhalothrin	50	F	F	F	F	87. 1	4.7	5	79.7	8.9	98.6	10. 4	104 .5	5.4	20	F	F	98.1	6.7	95. 6	4.7	10 0	F	F	F	F	F	F
Cyhexatin	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F

Cymoxanil	5	96.9	3.2	95.0	1.5	85.5	1.6	5	109.8	0.8	96.6	5.1	90.1	6.4	5	77.4	6.4	83.6	2.1	75.3	3.7	5	120.0	2.5	106.9	6.4	102.7	3.4
Cypermethrin	50	F	F	F	F	50.7	13.7	50	F	F	F	F	90.4	5.2	50	F	F	F	F	101.5	5.6	50	F	F	F	F	56.5	65.5
Cyproconazole	5	106.3	2.3	92.3	7.4	86.3	4.3	5	96.7	6.2	89.3	3.8	89.6	2.4	5	98.7	22.5	89.1	6.8	89.2	8.9	5	99.0	8.5	95.5	6.9	92.0	4.5
Cyprodinil	1	96.8	5.2	94.4	3.8	85.6	1.3	1	100.7	0.7	98.3	3.0	91.4	3.5	1	100.1	4.0	97.5	3.6	89.6	2.2	1	112.7	0.5	107.7	3.8	102.6	1.1
Cyromazine	50	F	F	F	F	32.0	8.1	5	33.8	11.5	34.5	8.9	38.1	3.6	50	F	F	F	F	27.0	23.6	20	F	F	50.2	5.3	54.5	3.8
Daminozide	NA	F	F	F	F	F	F	20	F	F	27.0	14.3	12.5	10.6	20	F	F	23.4	74.1	11.7	38.0	5	F	F	F	F	F	F
Dazomet	50	F	F	F	F	30.3	4.1	5	4.8	6.9	12.0	13.4	18.4	9.6	50	F	F	F	F	35.2	38.7	5	97.1	2.7	99.5	2.9	98.4	1.5
Deltamethrin	50	F	F	F	F	69.1	13.7	50	F	F	F	F	78.2	6.7	100	F	F	F	F	F	F	50	F	F	F	F	92.4	18.4
Demeton-S	5	99.3	2.5	102.5	5.4	83.2	0.2	1	121.2	8.2	79.4	17.5	63.0	1.3	5	84.2	7.2	107.5	19.5	79.3	8.4	5	182.2	6.7	112.9	5.8	107.6	5.6
Desmedipham	1	93.5	0.4	92.8	6.1	84.9	2.5	1	107.0	1.6	94.4	1.3	91.4	1.4	1	100.9	2.8	95.5	4.6	88.8	2.0	5	117.3	1.7	107.3	3.2	100.4	1.7
DiaFenthiuron	100	F	F	F	F	F	F	50	F	F	F	F	0.5	62.6	10	F	F	110.4	5.0	80.0	3.9	50	F	F	F	F	57.0	3.2
Diazinon	1	98.6	8.5	106.3	1.1	98.6	1.1	1	115.4	3.0	111.6	6.6	107.6	2.4	1	99.9	4.8	104.2	2.5	97.8	2.8	1	99.2	6.9	104.8	8.4	102.4	2.5
Dicamba	50	F	F	F	F	20.2	70.3	20	F	F	13.3	47.8	14.6	23.5	20	F	F	26.2	69.7	22.5	15.9	50	F	F	F	F	30.8	27.3

Dichlofluanid	5	74.7	11.2	74.6	7.2	69.1	4.8	5	94.1	5.2	96.5	5.2	91.0	2.8	5	113.0	33.1	88.2	4.8	91.0	3.5	5	67.8	13.3	85.7	10.0	89.7	6.0
Dichlorvos	5	78.0	3.3	92.3	1.3	91.6	2.2	5	90.0	1.4	95.7	4.5	92.4	3.7	5	89.1	2.4	100.2	2.2	97.6	2.6	20	F	F	91.4	3.8	95.6	2.0
Diclofop-methyl	20	F	F	106.9	8.6	94.8	2.6	20	F	F	106.5	1.7	104.5	3.8	5	83.1	9.0	90.9	3.8	88.0	3.9	N A	F	F	F	F	F	F
DiethoFencarb	5	107.3	3.3	87.7	4.0	80.3	2.2	5	110.3	2.6	103.9	2.7	92.8	4.3	1	118.6	4.6	93.3	1.7	81.4	2.0	5	110.9	4.2	102.3	1.6	95.3	1.5
Difenoconazole	5	85.4	10.8	90.2	2.5	84.7	1.8	5	105.5	1.7	101.6	8.1	99.5	3.8	5	89.4	6.6	90.5	4.8	86.6	2.5	5	94.6	7.5	96.4	5.3	97.5	3.4
Difenzoquat	1	102.9	7.0	98.7	4.1	94.3	0.8	1	110.0	0.8	102.4	4.7	97.5	4.5	1	95.5	1.2	102.3	5.7	91.3	2.0	1	113.9	3.1	108.6	2.0	107.0	1.8
Diflubenzuron	20	F	F	155.1	1.5	115.9	2.7	5	170.0	2.6	159.9	5.9	119.9	2.1	5	177.3	3.9	159.9	2.6	126.7	7.1	20	F	F	106.2	9.9	108.3	5.9
Diflufenican	20	F	F	102.9	15.5	93.4	13.2	20	F	F	94.1	4.2	89.7	8.5	5	97.8	9.6	100.0	6.9	97.5	9.8	20	F	F	94.2	11.1	91.8	12.7
Dimepiperate	5	86.2	8.8	87.9	6.5	78.7	1.8	20	F	F	102.3	3.0	92.7	5.1	5	93.5	2.8	90.7	3.2	83.5	1.1	10	F	F	100.6	10.7	98.7	5.5
Dimethenamid	1	91.7	5.2	97.4	3.6	90.2	0.2	1	111.2	3.3	110.2	7.7	102.9	4.1	5	91.7	1.7	91.2	4.2	84.1	3.3	5	113.5	2.6	106.6	5.9	102.6	1.6
Dimethoate	1	105.8	7.2	108.8	2.9	98.2	2.5	1	121.1	0.4	112.1	7.8	104.8	3.4	5	101.1	0.4	100.9	0.9	92.8	3.4	1	113.3	1.6	106.4	5.6	100.9	2.8
Dimethomorph	5	88.1	8.2	79.8	8.5	74.3	1.4	5	103.5	1.9	92.3	1.1	89.8	4.0	5	99.2	4.0	85.8	1.9	82.6	3.1	20	F	F	99.5	4.0	96.7	3.9
Diniconazole	5	94.9	4.6	101.8	3.2	100.5	1.5	5	97.1	1.5	98.2	6.9	97.4	2.5	5	95.5	5.0	103.1	2.7	97.4	1.0	5	90.6	4.4	97.4	9.2	94.7	1.6

Dinocap	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	
Dinotefuran	5	97.5	6.1	103.0	1.0	88.4	0.7	5	113.8	0.3	108.5	5.9	99.4	4.9	5	79.1	9.5	89.3	1.7	86.3	1.1	5	114.0	0.5	107.4	6.6	98.2	3.1
Diphenylamine	50	F	F	F	F	84.6	3.7	5	84.1	3.6	78.7	4.0	83.0	4.0	50	F	F	F	F	87.4	2.8	50	F	F	F	F	79.1	3.7
Disulfoton sulfone	1	113.6	2.6	106.7	6.0	94.6	1.0	1	126.1	0.9	105.3	3.1	96.3	2.9	1	119.3	4.8	104.9	3.2	93.7	3.1	1	113.2	3.5	108.9	3.5	99.5	4.3
Disulfoton-sulfoxide	1	158.5	1.4	147.1	3.7	113.7	5.7	1	197.6	1.5	171.7	4.2	132.1	1.9	1	155.6	6.0	123.5	3.8	106.3	1.3	1	117.0	2.7	109.1	2.0	97.8	2.2
Disulfoton	100	F	F	F	F	F	F	50	F	F	F	F	19.2	50.0	20	F	F	33.0	3.9	61.7	10.2	50	F	F	F	F	108.4	22.3
Dithianon	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Diuron	1	112.1	5.2	112.6	2.1	99.9	2.3	1	121.0	3.5	116.0	6.8	105.5	2.3	1	114.8	4.1	115.2	1.0	101.6	2.2	5	113.2	1.8	110.5	6.1	105.1	1.3
Dodine	1	116.5	1.9	105.8	5.3	89.2	0.6	1	129.0	2.0	106.7	3.5	90.9	7.8	1	108.4	4.0	108.2	1.3	93.1	4.3	1	167.6	2.7	139.4	2.3	114.6	2.0
Dufulin	1	99.6	6.4	94.9	6.2	85.3	0.7	5	106.4	2.5	100.2	0.7	93.3	4.2	1	102.5	4.5	99.8	3.4	92.1	3.2	5	116.7	5.6	110.0	5.0	102.9	2.5
Edifenphos	1	119.7	8.4	121.7	2.1	104.8	2.0	1	132.0	0.8	120.3	6.7	114.2	2.5	1	117.5	4.0	117.7	2.2	105.0	3.1	1	119.5	4.7	116.1	6.1	111.2	0.6
Emamectin B1A	5	79.2	14.3	82.3	7.3	72.8	3.4	5	93.2	3.7	94.8	1.9	91.7	6.0	20	F	F	85.2	2.5	81.7	6.4	1	98.2	9.9	104.3	3.2	94.3	6.7
Endosulfansulfate	1	77.8	1.8	84.6	7.0	81.4	7.2	5	114.8	6.4	99.0	4.4	96.9	5.9	5	112.2	1.2	104.3	4.6	96.4	6.2	5	98.0	6.6	90.9	3.0	81.6	5.1

Enestroburin	1	10 3.1	9.0	108. 0	2. 0	97. 2	1.6	1	107. 8	0.9	101. 4	6.5	98. 9	7.6	1	100. 5	6.1	108. 3	2.9	97. 9	0.1	1	112. 6	2.0	105. 8	5.0	106. 6	5.5
Epoxiconazole	5	10 3.7	3.2	108. 7	2. 7	101. 0	1.2	5	111. 9	0.7	111. 1	5.9	108. 5	5.2	5	105. 6	5.0	110. 8	2.9	104. 0	2.8	20	F	F	101. 6	2.7	100. 0	5.8
Ethametsulfuron	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F
Ethion	5	79. 0	3.9	76.5	5. 4	73. 7	5.4	1	90.6	0.5	89.6	0.8	88. 4	2.2	1	88.2	6.5	85.4	4.5	84. 3	0.5	1	102. 2	5.4	97.3	2.8	94.7	4.7
Ethiprole	20	F	F	103. 2	6. 2	92. 6	2.6	20	F	F	103. 0	1.8	95. 9	1.2	20	F	F	99.4	6.2	93. 2	1.2	20	F	F	90.2	7.1	97.2	2.4
Ethirimol	5	60. 9	6.6	65.2	3. 6	65. 1	4.8	1	79.4	1.2	73.8	4.7	71. 6	3.9	5	63.9	3.1	68.5	2.3	66. 4	1.7	1	85.7	0.5	85.5	5.1	82.5	1.7
Ethofenprox	1	87. 3	11. 1	97.6	5. 1	86. 1	1.5	1	95.4	1.2	95.5	4.2	96. 7	2.0	1	86.7	5.0	94.4	1.4	91. 4	2.2	1	96.6	0.6	96.6	11.5	95.9	1.9
Ethofumesate	1	93. 1	3.0	91.3	6. 6	85. 7	0.3	5	109. 5	1.2	99.4	3.5	94. 8	4.9	5	104. 5	1.2	92.7	2.8	87. 1	0.7	5	108. 9	2.7	100. 3	1.0	96.5	2.1
Ethoprophos	1	10 2.0	7.2	95.7	6. 0	84. 7	1.8	1	109. 9	0.7	105. 2	2.3	96. 5	4.2	5	107. 6	8.8	101. 9	2.7	92. 1	3.4	5	111. 0	1.7	108. 2	5.1	103. 6	3.9
Ethoxyquin	10 0	F	F	F	F	F	F	1	F	F	F	F	F	F	10 0	F	F	F	F	F	F	5	5.5	16. 8	8.8	15.2	6.1	45. 0
Ethoxysulfuron	10	F	F	56.3	4. 6	69. 3	7.4	10	F	F	54.5	8.0	65. 1	1.5	5	71.7	41. 3	62.7	14. 6	80. 4	21. 1	20	F	F	46.1	16.1	66.0	8.3
Etiozazole	1	88. 7	2.2	87.3	4. 5	82. 3	2.7	1	100. 0	2.1	88.2	1.5	88. 0	5.8	1	105. 0	0.6	92.0	3.3	91. 4	3.7	1	105. 4	1.0	100. 2	3.7	90.5	3.9
Famoxadone	5	69. 1	21. 4	75.6	7. 3	65. 7	6.4	10	F	F	105. 7	6.7	98. 4	0.3	20	F	F	97.7	1.5	91. 9	1.7	5	85.8	4.4	86.9	3.8	86.4	3.3

Fenamidone	1	98.4	4.4	96.1	2.3	86.5	0.9	5	106.3	0.8	97.5	5.4	91.4	3.7	5	100.0	2.2	98.5	2.8	89.2	2.6	5	109.9	7.3	103.2	3.9	102.7	5.0
Fenaminstrobin	1	109.3	5.6	104.4	4.7	93.0	2.4	1	114.9	1.7	105.7	4.8	96.3	3.4	1	94.4	4.7	92.7	2.5	86.5	2.1	1	122.4	4.2	118.1	3.7	110.0	1.4
Fenamiphos sulfone	1	112.6	1.1	116.1	2.4	106.4	2.2	1	120.6	1.0	115.0	6.4	113.0	3.2	5	108.9	5.3	122.2	3.2	111.7	1.0	1	102.1	5.7	103.0	3.7	100.5	0.9
Fenamiphos sulfoxide	1	126.8	4.9	118.0	2.2	103.6	4.3	1	157.6	1.7	135.5	7.4	120.5	3.5	5	114.9	5.3	117.5	4.2	106.4	2.3	5	105.0	0.6	102.3	4.0	96.6	2.7
Fenamiphos	1	82.9	3.4	101.0	2.9	98.0	0.8	1	64.0	0.8	82.2	3.2	93.7	4.8	1	97.5	3.2	104.0	4.7	97.1	2.5	1	126.6	1.2	119.0	2.8	109.2	1.0
Fenarimol	20	F	F	100.8	5.3	97.7	4.6	50	F	F	F	F	92.1	3.6	20	F	F	100.7	1.2	90.9	0.9	50	F	F	F	F	100.9	3.7
Fenazaquin	1	96.6	2.9	96.0	7.0	85.0	2.1	1	104.2	1.9	98.6	1.0	91.6	2.8	1	94.4	3.9	97.4	2.5	87.6	0.6	1	116.4	0.7	109.6	3.3	101.7	2.8
Fenbuconazole	50	F	F	F	F	94.1	1.2	5	106.4	3.1	98.7	0.6	93.7	5.1	5	105.1	0.3	99.9	5.6	93.6	3.4	5	110.9	2.0	100.8	2.8	97.4	0.2
Fenbutatinoxide	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Fenhexamid	20	F	F	97.4	5.6	87.1	2.9	50	F	F	F	F	93.3	4.9	5	88.4	12.7	96.9	0.7	91.3	2.8	50	F	F	F	F	97.6	2.9
Fenobucarb	1	131.5	2.2	92.2	4.8	80.6	0.4	1	112.3	0.4	98.0	1.0	91.7	2.1	1	95.3	3.9	89.3	3.6	82.0	3.6	1	113.5	1.9	102.0	0.9	94.1	1.1
Fenothiocarb	1	104.3	7.6	108.3	3.7	96.8	4.2	1	113.6	0.2	112.6	5.2	102.8	2.0	1	109.6	3.3	111.0	1.0	101.6	2.3	1	80.3	76.6	110.3	5.6	106.2	1.3
Fenoxanil	5	85.9	F	65.9	71.3	81.6	F	5	105.7	5.9	112.2	2.0	99.7	8.2	1	99.3	16.1	102.2	10.3	75.9	62.4	20	F	F	F	F	F	F

Fenoxaprop-ethyl	5	87.4	5.0	89.5	4.4	78.9	2.3	1	100.6	1.8	96.3	4.2	93.1	5.0	1	89.6	2.2	95.1	3.5	86.7	1.6	1	110.0	3.8	105.3	3.2	101.2	1.6
Fenpropathrin	50	F	F	F	F	71.2	6.5	20	F	F	90.2	3.4	88.6	4.8	50	F	F	F	F	87.5	4.5	20	F	F	109.9	10.4	99.7	4.3
Fenpropidin	1	98.8	3.8	98.9	4.9	95.2	1.4	1	109.3	1.8	107.6	8.6	101.5	2.2	1	97.6	3.8	102.8	5.3	98.3	0.9	1	110.3	1.4	106.6	4.2	101.8	3.5
Fenpropimorph	1	93.5	3.1	90.3	5.5	85.2	1.7	1	100.4	3.4	91.3	4.0	88.1	4.7	1	91.3	0.4	85.8	4.4	83.4	1.2	1	100.4	1.9	92.5	3.0	89.5	4.9
Fenpyroximate	1	92.2	3.7	90.9	12.0	86.8	1.7	1	92.5	1.6	82.3	4.4	85.7	5.8	5	85.7	7.3	89.7	0.6	83.5	1.0	1	96.6	3.1	88.9	2.4	84.3	2.6
Fenthion sulfone	1	109.7	2.3	113.2	2.6	104.0	4.9	1	108.7	0.4	108.9	6.6	99.0	1.2	1	105.2	3.2	109.4	2.3	105.3	2.0	1	106.1	1.8	107.7	3.9	103.0	2.9
Fenthion sulfoxide	5	128.2	5.1	125.6	3.1	110.2	0.6	1	182.2	5.6	171.7	3.8	135.3	2.8	1	127.6	1.6	122.0	3.2	106.0	2.3	1	115.5	2.4	108.9	4.2	106.0	1.2
Fenthion	50	F	F	F	F	73.4	6.7	20	F	F	39.8	12.2	55.0	1.3	1	43.7	32.3	76.8	10.2	81.2	3.2	20	F	F	13.2	20.2	90.6	23.3
Fentinacetate	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Fenvalerate	5	70.8	36.2	99.2	11.3	80.5	6.8	5	26.1	23.0	91.4	13.0	97.7	3.6	20	F	F	71.5	12.2	94.7	4.9	5	70.8	36.2	99.2	11.3	80.5	6.8
Fipronil-desulfinyl	5	97.3	7.7	98.8	2.7	89.6	2.5	5	101.5	1.8	93.0	1.4	91.3	4.0	1	98.0	3.8	98.7	2.8	94.5	5.0	1	113.2	3.1	107.1	6.0	104.6	3.7
Fipronil-sulfide	1	99.1	9.9	108.1	3.6	101.6	2.9	1	103.4	2.8	106.9	9.4	101.8	6.4	1	103.2	4.3	115.5	5.8	108.9	1.8	1	101.6	4.1	98.8	5.7	96.2	3.1
Fipronil-sulfone	5	99.2	22.3	124.3	7.4	67.6	49.3	5	29.4	51.1	103.4	25.1	103.0	3.0	50	F	F	F	F	104.6	6.9	10	F	F	61.2	4.0	85.6	8.2

Fipronil	5	86.8	16.8	101.1	5.9	89.4	0.5	5	80.9	10.1	107.1	11.3	99.2	3.1	5	113.6	8.4	109.3	2.1	101.1	6.9	20	F	F	105.9	23.5	106.8	12.2
Flonicamid	5	60.6	21.4	83.8	15.4	92.1	4.3	10	F	F	87.1	10.4	95.4	7.7	5	95.0	29.6	84.3	23.8	75.7	4.6	5	90.1	5.0	92.9	4.1	97.6	2.0
Florasulam	20	F	F	64.7	7.7	76.2	1.8	20	F	F	65.4	20.0	71.1	14.8	10	F	F	68.4	14.0	75.9	6.3	20	41.3	1.6	55.9	21.1	76.0	10.0
Fluazifop-butyl	1	92.1	8.4	95.6	6.4	87.2	3.0	1	116.3	1.5	115.4	6.9	107.6	6.8	1	88.1	11.2	92.9	2.8	91.8	5.9	5	100.5	2.8	98.8	7.5	96.2	1.5
Fluazinam	50	F	F	F	F	78.9	3.1	20	F	F	91.4	3.4	90.0	3.4	20	F	F	95.2	5.0	92.0	2.5	20	94.2	0.7	96.1	1.1	101.7	3.3
Flubendiamide	5	160.8	10.3	164.0	8.1	129.1	1.5	5	170.2	1.0	150.6	4.9	127.6	2.6	5	181.6	7.0	168.8	8.7	131.1	3.5	5	154.4	6.9	156.5	8.0	126.7	3.7
Flucarbazone	5	15.3	45.2	34.1	5.0	50.4	9.5	5	7.5	2.6	25.4	49.8	35.7	33.9	50	F	F	F	F	27.5	32.7	20	F	F	40.7	32.0	71.5	9.7
Flucetosulfuron	50	F	F	F	F	70.1	1.6	10	F	F	69.5	6.8	77.4	7.1	10	F	F	87.3	7.9	94.6	1.4	100	F	F	F	F	F	F
Flucythrinate	20	F	F	95.8	7.3	87.2	2.2	20	F	F	104.1	8.3	105.6	3.5	20	F	F	91.6	6.9	90.1	5.4	20	88.8	3.5	90.8	6.6	94.1	2.4
Fludioxonil	1	77.3	5.3	90.1	2.9	88.3	4.8	1	54.7	10.8	63.8	6.5	92.7	5.2	1	98.7	4.5	99.9	1.6	98.0	1.8	1	112.0	3.5	108.5	8.4	105.5	1.6
Flufenacet	1	102.0	8.8	103.9	3.5	93.4	1.2	1	112.4	3.0	112.0	8.3	103.7	2.8	1	109.2	11.9	109.0	2.6	106.0	2.6	5	99.7	1.8	103.4	8.1	101.0	3.1
Flufenoxuron	20	F	F	78.9	8.2	75.4	1.7	1	76.8	6.1	84.0	4.2	84.5	7.4	20	F	F	77.0	9.2	67.2	4.9	20	F	F	95.2	13.4	90.5	6.8
Flufiprole	1	105.4	1.7	98.9	4.9	90.2	3.3	5	93.8	0.7	98.9	3.1	92.9	7.0	5	92.5	13.4	92.4	7.5	88.5	0.8	5	95.1	1.2	100.4	14.1	105.0	3.8

Flumetrain	NA	F	F	F	F	F	F	10	F	F	27.6	0.2	33.5	62.6	50	F	F	F	F	60.7	35.0	NA	F	F	F	F	F	F
Flumetsulam	20	F	F	75.2	3.1	82.5	2.1	20	F	F	76.8	16.8	82.2	12.2	20	F	F	86.6	14.5	86.0	6.5	20	52.0	5.6	59.8	15.1	77.0	5.2
Flumiclorac-pentyl	1	104.5	1.9	101.6	5.5	92.2	3.3	5	109.9	2.8	104.8	0.9	96.4	4.1	5	99.3	1.7	103.4	2.6	93.1	0.9	5	69.4	11.9	95.1	7.8	104.1	4.9
Flumioxazin	50	F	F	F	F	37.0	9.8	10	F	F	44.4	24.4	63.1	7.0	10	F	F	21.9	62.4	46.9	37.5	10	F	F	75.8	17.1	83.9	5.2
Flumorph	5	109.3	1.5	100.5	4.3	95.7	3.7	5	111.8	1.7	99.7	1.1	96.2	4.8	5	109.5	1.6	104.6	3.2	98.1	3.7	5	112.8	1.4	108.2	2.3	103.6	2.1
Fluopicolide	5	86.8	10.9	92.1	3.9	82.1	2.3	5	108.3	6.4	111.3	5.1	101.9	5.0	5	96.5	7.5	96.3	2.2	90.6	0.8	5	88.4	7.7	92.5	11.4	91.8	2.9
Fluopyram	1	112.7	6.6	106.4	3.5	94.3	2.8	5	98.1	3.3	99.5	5.4	100.1	0.8	5	107.4	36.3	98.7	2.9	104.5	22.2	5	98.6	3.8	96.2	4.9	93.3	6.5
Fluoroglycofen-ethyl	20	F	F	91.7	6.2	84.5	6.7	1	99.5	3.6	89.8	3.6	86.4	7.5	20	F	F	97.1	7.1	91.3	6.1	10	F	F	122.8	5.2	105.3	2.0
Fluroxypyr	NA	F	F	F	F	F	F	10	F	F	16.5	1.3	5.3	2.6	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Flurtamone	1	98.3	8.1	102.9	3.0	93.1	2.1	1	107.8	2.9	105.9	5.0	98.3	0.9	1	101.2	2.6	101.2	1.0	95.6	3.6	1	95.8	12.2	105.0	8.7	103.8	6.6
Flusilazole	1	105.6	1.4	101.5	4.2	92.7	0.8	5	113.7	1.9	106.2	1.4	99.9	6.0	5	105.1	2.3	104.2	2.5	92.7	3.2	5	120.7	3.4	116.7	2.9	106.1	1.1
Fluthiacet-methyl	5	100.6	8.7	115.8	2.8	108.2	3.4	5	106.2	0.6	106.3	9.8	103.4	2.9	5	98.9	4.0	108.6	5.7	98.1	6.1	20	F	F	97.2	11.7	97.3	5.2
Flutolanil	1	93.1	12.0	94.9	2.8	85.4	3.0	1	114.3	3.0	110.3	7.4	102.6	2.1	1	102.1	5.6	101.5	3.0	92.6	2.4	5	103.1	2.7	104.1	4.6	103.0	3.3

Flutriafol	5	10 0.3	6.4	93.9	2. 4	91. 2	2.0	5	99.0	1.9	90.2	1.4	88. 4	3.9	5	92.6	3.8	89.1	7.0	85. 9	1.6	5	100. 8	2.9	94.4	3.4	91.7	3.3
Fluxapyroxad	1	92. 7	6.5	87.1	2. 6	76. 9	2.9	1	111. 0	2.7	104. 7	3.7	92. 1	2.7	1	96.2	1.7	94.8	1.2	85. 8	0.9	1	125. 7	5.9	116. 2	6.2	108. 5	2.9
Fomesafen	1	85. 3	7.9	81.9	6. 8	88. 3	1.8	1	97.6	5.0	92.9	2.2	96. 1	4.0	1	103. 2	1.8	83.8	77. 5	94. 1	3.4	1	68.7	6.2	85.5	7.7	99.9	2.4
Fonophos	50	F	F	F	F	87. 3	5.1	10	F	F	87.0	10. 7	92. 3	3.0	5	77.4	7.1	96.4	5.0	101. .6	13. 4	50	F	F	F	F	93.3	11. 6
Forchlorfenuron	5	93. 4	1.3	94.8	3. 6	87. 4	0.6	20	F	F	91.4	2.1	89. 8	3.6	20	F	F	93.7	1.7	86. 4	1.9	20	F	F	110. 9	2.7	108. 1	0.3
Fosthiazate	1	10 2.3	3.6	106. 3	3. 8	99. 8	4.2	1	107. 6	0.7	108. 0	7.9	99. 3	0.8	1	100. 9	3.2	105. 1	2.3	100 .3	1.8	1	103. 5	1.1	105. 1	5.0	100. 6	4.0
Halosulfuron- methyl	50	F	F	F	F	71. 7	3.9	50	F	F	F	F	71. 1	4.8	20	F	F	77.0	9.6	83. 6	3.9	50	F	F	F	F	83.1	7.3
Haloxyfop- methyl	1	94. 5	9.6	98.5	4. 5	88. 3	1.6	1	114. 1	1.8	113. 4	4.3	105 .3	5.2	1	101. 9	4.6	107. 7	0.8	98. 9	1.3	5	97.8	5.5	98.4	6.0	96.5	1.7
Hexaconazole	5	88. 3	11. 6	88.6	2. 4	85. 0	3.9	5	104. 4	4.5	96.1	3.6	92. 7	0.7	5	96.9	4.9	94.3	3.2	92. 2	1.1	20	F	F	102. 8	0.5	102. 5	3.6
Hexaflumuron	NA	F	F	F	F	F	F	10	F	F	74.5	20. 2	83. 0	14.7	20	F	F	18.9	53. 9	34. 5	7.9	N A	F	F	F	F	F	F
Hexanoic acid	10	F	F	144. 9	7. 7	100 .6	18. 0	50	F	F	F	F	124 .1	21.4	50	F	F	F	F	78. 4	15. 7	50	F	F	F	F	106. 8	17. 7
Hexazinone	1	10 8.0	4.3	100. 4	3. 4	88. 6	4.8	1	110. 1	1.8	100. 0	3.1	91. 8	2.9	1	102. 6	1.4	98.8	2.8	86. 5	3.3	1	120. 5	4.5	112. 8	4.5	102. 0	2.1
Hexythiazox	5	71. 4	7.2	77.8	20 .4	73. 7	6.5	5	80.3	1.3	63.6	22. 3	73. 9	11.4	5	128. 1	31. 9	89.0	4.8	138 .6	6.8	5	77.0	28. 9	72.1	27.7	70.3	17. 0

Hymexazol	5	13 8.1	24. 3	95.9	5. 1	93. 6	5.4	20	F	F	101. 0	2.2	93. 1	4.0	5	103. 7	10. 8	96.5	7.5	88. 9	2.6	20	F	F	102. 6	6.8	93.5	2.4
Imazalil	1	81. 3	5.8	74.5	5. 0	74. 6	4.9	1	83.3	3.1	74.0	2.2	71. 8	2.9	1	80.4	4.1	81.9	2.6	72. 6	1.6	1	97.3	1.4	93.2	2.7	90.2	1.3
Imazamox	50	F	F	F	F	24. 7	10. 8	20	F	F	27.6	32. 0	33. 1	24.3	20	F	F	30.8	30. 6	35. 5	22. 0	50	F	F	F	F	19.5	13. 3
Imazapic	5	20. 9	8.6	22.6	1. 0	23. 7	8.6	20	F	F	30.1	31. 9	35. 6	27.5	5	25.6	7.8	32.0	25. 1	35. 8	19. 7	5	7.3	12. 6	11.7	12.9	19.8	10. 4
Imazapyr	5	10. 0	12. 6	12.9	1. 7	14. 2	12. 1	20	F	F	18.4	30. 2	25. 1	23.7	10	F	F	21.6	36. 9	25. 8	27. 0	5	4.1	8.5	6.4	15.2	12.3	15. 1
Imazaquin	5	25. 7	14. 5	26.5	3. 9	29. 5	8.7	50	F	F	F	F	43. 9	15.1	20	F	F	41.3	25. 6	44. 4	16. 3	5	66.1	2.4	28.7	4.2	25.0	24. 7
Imazethapyr	5	26. 9	8.2	28.0	3. 7	29. 2	10. 0	5	35.4	28. 5	35.8	26. 0	43. 2	18.1	1	33.6	7.6	42.2	20. 0	45. 1	17. 5	20	F	F	17.4	9.0	26.7	13. 7
Imidacloprid	5	10 1.1	7.8	108. 2	2. 8	96. 7	1.5	5	119. 4	2.7	110. 9	8.2	109 .0	6.6	5	99.3	4.1	105. 9	2.9	104 .1	3.0	1	106. 2	7.3	102. 2	4.5	98.3	1.7
Imidaclothiz	10	F	F	102. 9	4. 7	91. 3	1.6	10	F	F	115. 5	8.3	104 .8	11.2	20	F	F	114. 0	6.6	88. 4	4.5	20	F	F	115. 8	8.3	110. 9	1.9
Indoxacarb	5	82. 4	1.5	80.9	0. 6	72. 6	4.0	5	104. 0	1.4	93.3	3.7	92. 5	10.3	1	110. 2	4.2	98.3	2.5	88. 6	14. 0	20	F	F	99.6	6.8	95.3	2.9
Iodosulfuron- methyl-Sodium	1	52. 8	26. 8	62.2	11 .9	75. 0	2.5	1	F	F	F	F	F	F	1	F	F	F	F	F	F	20	F	F	60.0	19.0	84.0	11. 2
Ipconazole	5	86. 7	8.6	81.9	5. 3	87. 1	1.8	20	F	F	85.6	5.2	89. 8	4.2	5	99.4	5.3	96.6	3.4	91. 9	1.9	1	89.1	8.1	89.6	6.4	90.6	2.4
Iprobenfos	1	10 3.3	4.9	97.1	4. 2	91. 7	3.5	1	107. 2	0.6	101. 4	1.9	95. 4	5.4	5	106. 4	1.4	98.7	5.0	92. 4	3.0	5	109. 6	3.5	102. 0	2.0	96.4	1.3

Iprodione	10	F	F	33.8	66.8	56.6	32.9	10	F	F	46.4	22.9	77.3	38.5	10	F	F	96.4	36.2	90.8	28.4	NA	F	F	F	F	F	F
Isazophos	1	92.7	6.9	89.4	2.2	82.7	3.6	1	104.6	4.9	100.6	2.9	92.6	2.1	1	94.3	4.2	94.1	1.6	85.7	0.7	1	116.9	0.6	110.4	4.1	106.5	5.4
Isocarbophos	20	F	F	115.6	4.3	98.4	1.1	20	F	F	101.5	10.4	96.6	4.4	20	F	F	105.8	3.4	97.4	3.4	20	F	F	118.8	3.8	106.8	6.9
Isofenphos-methyl	50	F	F	F	F	104.4	3.4	10	F	F	139.5	3.4	117.2	5.9	5	144.3	11.9	123.9	3.2	109.4	4.3	5	112.8	13.1	129.2	8.7	122.6	10.3
Isoprocarb	1	114.3	3.8	99.5	4.3	93.1	2.5	1	119.0	2.5	96.0	1.9	91.1	2.0	1	101.9	6.5	102.8	1.9	91.0	2.0	1	117.2	2.3	100.1	1.1	93.4	3.7
Isopropyl-N-(3-chlorophenyl)carbamate	NA	F	F	F	F	F	F	50	F	F	F	F	52.4	13.9	50	F	F	F	F	52.4	13.9	20	F	F	113.9	2.9	53.3	18.8
Isoprothiolane	1	83.0	4.0	78.9	5.5	73.7	2.0	1	102.0	1.5	86.6	10.2	89.5	2.8	1	91.2	2.1	82.8	2.3	79.1	1.5	1	110.6	3.6	105.7	4.4	97.4	1.5
Isoproturon	1	105.4	0.7	97.6	1.5	91.7	1.1	1	117.1	0.9	101.1	2.2	93.3	1.0	1	106.7	2.9	100.1	2.9	92.9	1.4	1	115.2	1.0	106.8	1.7	99.1	4.6
Isopyrazam	5	98.4	8.7	108.0	3.4	99.4	1.0	1	108.6	0.9	109.9	5.7	103.2	5.6	5	108.9	3.4	110.9	3.5	103.0	1.4	1	106.1	1.1	102.2	6.1	100.1	2.3
Isoxaflutole	20	F	F	90.8	2.5	87.8	4.4	20	F	F	89.4	3.5	85.8	4.7	5	86.7	3.6	92.7	1.9	90.3	2.1	5	100.9	2.7	105.4	4.8	101.2	5.3
Kresoxim-methyl	20	F	F	118.5	6.1	102.3	1.4	20	F	F	120.8	3.1	106.0	5.1	20	123.8	2.6	123.6	1.7	102.2	2.4	50	100.1	28.4	129.5	13.3	109.7	2.5
Lactofen	5	107.5	8.9	98.3	4.6	86.0	2.4	5	104.2	1.8	95.1	2.0	89.1	8.7	1	95.5	6.5	99.7	5.9	91.1	2.4	50	F	F	F	F	74.8	17.3
Lufenuron	50	F	F	F	F	70.	8.7	20	F	F	102.	5.9	106	1.5	5	93.0	10.	89.5	7.6	82.	10.	5	84.2	9.0	98.9	19.9	96.3	4.2

		5		1	4	1			3		0		.5			1		7		2			4		1		3	
Metazosulfuron	50	F	F	F	F	67.5	2.5	20	F	F	52.7	13.8	59.9	10.5	50	F	F	F	F	72.8	2.1	50	F	F	F	F	64.9	10.7
Methamidophos	1	F	F	F	F	F	F	1	F	F	F	F	F	F	1	F	F	F	F	F	F	1	66.6	1.5	62.1	3.2	62.6	0.5
Methidathion	1	10 1.4	0.8	92.7	3.1	89.1	5.1	1	105.0	1.6	94.8	1.1	89.7	2.6	1	101.2	3.4	94.0	2.5	88.4	2.4	5	102.1	2.5	97.7	1.4	92.1	3.9
Methiocarb sulfone	20	F	F	105.3	2.0	92.2	2.8	5	124.9	5.8	112.8	5.2	99.1	2.8	1	99.6	1.2	100.3	4.4	89.6	0.7	5	126.2	3.3	117.5	2.4	107.0	2.5
Methiocarb sulfoxide	1	10 3.5	7.2	100.8	0.5	88.8	1.3	1	117.7	4.2	105.0	4.4	99.7	6.0	1	103.2	3.8	101.1	2.9	90.7	0.4	1	111.8	2.1	104.4	4.0	95.9	2.7
Methiocarb	5	94.2	6.9	90.9	3.2	80.8	3.5	5	103.8	2.3	103.5	3.7	92.9	1.9	1	105.8	0.5	98.3	1.1	89.0	2.0	50	F	F	F	F	91.8	9.6
Methomyl	20	F	F	104.7	2.3	92.5	2.8	20	F	F	115.0	7.4	100.6	5.1	20	F	F	90.3	7.5	81.2	5.2	10	F	F	120.2	3.1	106.4	5.0
Methoxyfenozid e	5	58.8	12.9	78.4	3.0	78.8	4.0	5	84.8	2.9	91.9	3.8	85.1	3.5	5	79.2	3.6	86.6	3.4	83.5	1.9	5	115.7	7.9	112.8	4.9	111.9	4.1
Metolachlor	1	10 4.9	4.9	99.4	4.1	88.3	1.5	1	112.2	1.4	105.6	1.2	94.9	4.4	1	111.0	6.1	103.1	2.6	95.1	4.9	1	119.2	2.6	114.5	4.5	107.6	3.1
Metrafenone	1	97.8	11.5	102.2	4.2	95.5	1.5	5	105.9	1.0	107.0	7.9	100.8	2.2	1	110.4	1.8	113.1	1.7	102.0	1.2	10	F	F	95.5	8.5	92.0	3.4
Metribuzin	1	10 2.1	4.9	89.8	4.2	86.7	4.6	1	111.4	0.9	93.7	1.5	90.9	2.6	1	102.6	0.5	93.7	2.5	86.8	2.2	1	96.4	4.3	93.7	2.3	90.0	3.5
Metsulfuron-methyl	5	57.1	9.6	56.6	1.7	69.7	3.2	20	F	F	70.2	10.1	79.6	5.7	5	67.8	2.8	78.4	9.6	80.7	4.2	50	F	F	F	F	69.9	9.8
Molinate	5	86.8	0.6	85.7	3.5	82.2	1.8	5	95.8	2.5	90.6	3.4	85.5	1.2	5	91.9	3.6	93.3	6.4	86.2	1.2	5	84.3	9.8	101.4	4.0	98.6	4.0

Monocrotophos	5	13 0.6	3.4	106. 0	1. 9	87. 4	0.3	1	110. 2	0.9	93.3	5.5	92. 8	6.4	5	86.7	3.3	78.6	11. 6	67. 9	10. 0	1	119. 1	0.5	108. 7	2.8	89.3	12. 7
Monosulfuron	20	F	F	47.4	7. 9	51. 3	6.0	1	54.9	25. 5	52.6	22. 8	58. 9	19.9	10 0	F	F	F	F	F	F	50	F	F	F	F	49.7	17. 9
Moroxydinehydr ochloride	20	F	F	15.8	3. 2	15. 1	2.9	1	9.8	31. 0	7.8	40. 0	7.7	66.5	5	14.5	37. 2	9.0	37. 6	10. 5	39. 5	1	44.3	5.5	26.0	13.1	19.3	40. 3
Myclobutanil	5	10 4.5	6.1	94.0	2. 3	87. 8	2.2	5	103. 3	1.9	99.5	2.5	93. 8	5.6	1	99.7	1.5	98.9	1.4	90. 6	1.9	5	133. 1	1.8	111. 3	2.5	102. 1	1.9
Napropamide	1	10 3.9	7.1	105. 2	3. 4	97. 1	1.9	1	106. 2	0.9	108. 0	4.3	103 .2	1.8	1	107. 8	12. 7	104. 4	2.6	100 .1	6.9	1	106. 0	1.6	104. 1	6.3	101. 0	3.7
Nicosulfuron	5	29. 4	30. 3	29.6	7. 8	41. 8	4.0	50	F	F	F	F	46. 4	4.4	50	F	F	F	F	50. 9	6.9	20	F	F	18.8	11.0	37.5	16. 4
Nicotine	1	95. 5	3.6	94.3	36 .4	37. 4	25. 3	1	117. 4	1.9	98.8	22. 4	43. 4	31.9	1	166. 3	4.7	95.0	32. 2	37. 3	41. 7	1	131. 5	7.1	124. 4	14.4	62.2	42. 7
Novaluron	1	12 6.3	10. 5	132. 5	0. 7	119 .5	0.3	1	134. 8	4.0	129. 4	6.6	116 .0	4.8	1	114. 3	5.6	114. 2	8.0	106 .3	4.6	1	112. 9	2.1	113. 2	4.6	103. 2	5.1
Dimethoate oxon	1	10 0.4	3.5	102. 3	0. 6	90. 7	1.7	1	113. 7	1.1	110. 8	5.0	104 .3	2.7	5	109. 8	2.7	95.8	7.3	92. 4	0.8	1	114. 4	2.9	105. 0	4.0	96.6	0.3
Orthosulfamuron	50	F	F	F	F	95. 3	4.4	20	F	F	92.2	9.2	90. 1	13.2	20	F	F	101. 0	13. 7	95. 0	3.5	5	60.3	11. 1	83.0	6.0	88.4	7.5
Oxadiargyl	5	79. 1	21. 0	81.2	3. 5	72. 4	3.2	20	F	F	103. 3	7.2	94. 9	10.3	20	F	F	100. 0	3.6	94. 2	1.7	5	98.0	5.0	94.8	3.5	94.4	6.1
Oxadiazon	20	F	F	97.9	5. 6	84. 4	1.9	20	F	F	106. 1	7.1	104 .4	2.3	5	97.6	1.0	106. 8	1.0	99. 1	3.0	10	F	F	93.2	8.0	92.3	5.4
Oxadixyl	5	10 3.9	12. 2	113. 6	1. 1	105 .4	4.0	1	118. 2	2.9	114. 3	12. 2	103 .7	7.0	5	101. 0	6.5	105. 5	3.4	97. 7	1.9	5	101. 8	5.8	107. 1	9.1	101. 2	1.3

Oxamyl	5	13 8.6	7.4	119. 8	3. 7	99. 1	0.3	5	148. 3	3.2	118. 9	4.1	104 .0	9.2	5	126. 0	8.4	106. 5	12. 9	98. 9	3.8	5	157. 0	4.4	128. 2	4.4	108. 4	2.0	
Oxaziclomefone	1	10 9.6	8.7	116. 8	3. 0	104 .3	2.2	1	113. 8	1.0	115. 4	5.4	105 .2	2.0	1	99.6	2.5	101. 7	1.6	96. 1	2.6	1	120. 9	6.0	118. 1	3.2	110. 4	0.1	
OxiMinoOxaMy l	5	10 2.4	1.0	106. 6	2. 0	94. 6	1.4	1	122. 6	5.0	115. 0	6.6	110 .4	3.5	1	108. 5	9.1	94.7	3.9	99. 2	2.3	1	125. 6	5.0	118. 1	5.5	107. 5	2.2	
Oxycarboxin	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	5	154. 3	15. 4	147. 8	28. 1	86. 4	45. 0	5	84.1	5.8	24.6	48.6	67.0	27. 2	
Oxydemeton- methyl	1	10 3.0	3.7	94.2	1. 6	85. 0	0.4	1	109. 0	1.7	95.4	1.1	89. 6	0.8	1	100. 8	1.7	87.5	2.8	82. 2	2.4	1	108. 2	0.7	95.9	2.0	87.3	2.0	
Paclobutrazol	1	10 0.4	1.7	105. 3	3. 0	100 .9	1.1	5	108. 2	3.0	111. 0	5.7	109 .4	3.8	5	118. 6	2.5	108. 4	6.5	101 .1	0.9	5	100. 7	3.9	102. 1	4.3	102. 2	2.6	
Parathion- methyl	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	F	N A	F	F	F	F	F	F
Parathion	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	F	N A	F	F	F	F	F	F
Penconazole	1	11 6.2	1.4	110. 1	4. 8	97. 3	2.7	1	119. 2	3.1	103. 3	1.8	96. 1	1.3	5	118. 1	1.2	110. 8	6.9	97. 8	1.7	10	F	F	110. 4	8.2	99.7	0.7	
Pendimethalin	1	91. 8	5.9	92.0	9. 4	87. 9	3.6	5	88.0	0.2	88.0	3.0	84. 2	7.8	5	85.2	3.1	96.2	9.8	87. 6	3.7	5	102. 2	6.8	99.3	7.5	100. 5	4.2	
Penoxsulam	5	90. 7	10. 3	89.3	1. 1	95. 9	3.6	5	93.4	5.3	83.6	3.0	90. 4	5.0	5	89.0	3.0	99.1	7.1	90. 8	2.2	5	68.9	9.5	73.9	7.7	85.9	3.1	
Penthiopyrad	1	11 2.0	7.5	112. 4	0. 4	100 .7	2.4	1	122. 5	0.7	116. 5	9.0	107 .7	3.8	1	118. 6	4.2	120. 3	4.7	106 .3	1.6	5	111. 2	6.9	109. 0	11.9	104. 5	2.7	
Phenamacril	1	96. 6	4.9	90.4	2. 9	85. 9	2.0	1	112. 0	1.9	95.9	4.2	90. 0	1.2	1	101. 1	4.0	91.0	2.0	84. 9	2.2	5	109. 0	3.1	94.7	4.4	90.7	3.8	

Phenazino-1-carboxylic acid	1	81.2	0.8	77.2	6.5	73.7	2.8	1	94.0	2.0	84.0	2.8	82.0	4.1	1	78.2	2.4	76.7	3.3	70.9	3.1	5	68.5	1.2	64.0	0.6	65.4	3.7
Phenmedipham	1	102.0	4.4	94.8	4.0	85.3	2.8	1	113.7	0.7	100.7	3.3	94.9	4.8	1	98.5	2.5	86.0	0.9	78.6	3.0	5	117.4	6.4	109.6	0.2	98.8	3.6
Phenthoate	5	126.8	12.5	128.0	5.0	114.2	2.0	5	134.8	2.4	122.7	3.8	114.8	3.9	5	131.5	3.6	126.7	2.9	113.2	0.9	5	128.4	2.3	123.3	5.3	116.3	4.3
Phorate oxon sulfone	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Phorate oxon sulfone	1	120.1	10.4	117.7	2.3	103.5	1.5	1	136.8	2.3	118.5	9.6	107.5	7.7	5	106.3	1.3	101.0	4.5	90.6	1.5	5	119.7	1.9	103.7	7.3	95.8	3.0
Phorate oxon	10	F	F	82.6	13.5	102.2	21.4	50	F	F	F	F	135.4	17.5	20	F	F	86.8	5.6	88.9	7.0	5	63.4	35.8	122.3	34.4	117.2	12.2
Phorate sulfone	1	117.0	3.3	112.5	3.4	97.4	0.9	5	117.2	0.6	110.2	4.0	100.2	1.1	5	109.3	3.7	105.1	1.5	92.2	2.6	5	129.2	2.1	118.8	0.5	114.3	1.7
Phorate sulfoxide	1	130.9	4.6	121.3	2.9	100.2	4.7	1	150.8	1.0	132.7	6.0	106.9	2.7	1	124.2	3.2	116.3	0.9	97.6	0.8	1	134.6	2.4	122.3	3.6	110.0	1.2
Phorate	10	F	F	38.8	4.5	68.5	9.4	50	F	F	F	F	62.7	7.2	50	F	F	F	F	92.6	1.2	50	F	F	F	F	83.0	7.5
Phosalone	5	73.8	5.9	87.8	4.6	79.5	2.4	1	110.6	1.8	105.8	6.0	102.5	2.8	5	105.4	4.0	109.3	1.7	99.8	2.6	5	103.6	7.1	102.4	10.4	97.8	1.4
Phosfolan-methyl	1	101.7	2.0	90.8	2.7	84.1	3.2	1	105.7	0.6	95.0	5.6	90.6	4.8	1	96.9	2.4	89.1	5.1	80.7	2.7	1	113.3	0.6	101.6	1.7	94.0	3.6
Phosfolan	1	103.0	5.6	98.2	3.4	91.2	2.7	1	113.7	1.2	99.3	2.5	95.5	3.1	1	98.4	2.0	100.1	2.9	89.6	1.7	1	111.2	1.8	110.0	2.2	101.3	2.4
Phosmet	5	98.3	10.0	103.3	2.6	91.9	1.6	5	119.1	2.2	115.9	7.7	104.6	3.2	5	91.3	4.8	87.4	2.8	81.8	4.6	5	106.1	4.3	104.8	10.9	101.3	1.9

Phosphamidon	1	10 3.6	6.6	101. 4	3. 8	91. 7	4.0	5	111. 0	1.8	105. 5	2.6	97. 6	3.6	5	104. 1	3.2	102. 0	2.5	91. 8	1.3	5	113. 2	2.2	110. 8	3.9	103. 1	2.5	
Phoxim	5	79. 2	3.2	77.1	5. 1	73. 3	2.9	5	95.5	5.6	91.4	2.7	88. 3	4.4	1	93.3	2.2	93.1	1.5	90. 6	2.9	5	95.0	6.6	89.2	2.0	94.0	0.6	
Phthalide	50	F	F	F	F	61. 4	1.7	1	133. 6	9.9	129. 6	8.3	100 .6	1.3	1	127. 1	11. 1	76.2	4.9	111 .0	4.7	1	154. 5	27. 2	113. 7	10.0	112. 7	7.6	
Picoxystrobin	1	94. 5	9.4	102. 0	4. 7	94. 5	1.5	1	111. 5	0.4	109. 3	7.6	101 .4	2.5	1	101. 8	2.9	107. 0	1.3	99. 2	4.6	1	117. 5	2.6	109. 2	5.7	109. 0	2.8	
Pinoxaden	1	85. 5	2.6	83.4	4. 9	80. 3	4.5	1	104. 2	1.4	98.3	4.3	94. 7	3.0	1	95.2	2.7	89.5	5.2	86. 4	1.9	1	87.0	3.5	81.3	7.1	89.2	1.5	
Piperonyl butoxide	1	10 6.8	4.3	102. 8	3. 2	89. 1	3.7	1	106. 3	1.5	97.9	2.6	96. 9	7.7	1	92.0	3.4	99.2	1.0	90. 2	3.2	5	124. 3	6.8	110. 5	3.6	101. 2	2.3	
Pirimicarb	1	95. 2	2.6	86.5	5. 3	83. 3	2.3	1	103. 8	3.4	92.9	1.8	86. 5	1.7	1	103. 9	1.7	88.5	2.9	82. 3	4.7	1	118. 9	1.6	103. 1	0.8	91.8	1.6	
Pirimiphos- methyl	1	87. 6	7.1	97.1	2. 7	87. 1	2.2	1	107. 9	1.9	109. 6	7.2	105 .0	1.5	1	98.8	4.4	101. 4	1.4	97. 0	1.3	1	103. 6	1.9	102. 3	4.1	105. 1	0.7	
Pretilachlor	5	91. 1	4.3	97.7	3. 4	91. 2	2.4	5	109. 0	2.6	109. 8	6.1	103 .9	5.4	5	96.4	3.3	100. 8	2.2	93. 9	1.7	5	103. 5	4.0	99.5	9.5	97.8	0.3	
Probenazole	20	F	F	85.1	6. 6	83. 2	1.8	5	96.2	2.2	90.1	3.3	87. 5	3.5	5	93.4	3.6	87.0	0.5	82. 9	1.9	5	87.2	1.8	81.6	3.0	78.6	2.4	
Prochloraz	1	81. 1	3.7	88.5	4. 0	81. 7	1.5	5	65.5	4.4	71.2	7.2	81. 9	0.3	5	89.1	2.0	94.0	2.9	90. 8	0.3	5	105. 6	2.9	103. 3	4.3	101. 2	1.6	
Profenophos	5	96. 0	8.2	112. 1	F	99. 7	F	5	113. 3	1.2	113. 0	6.1	107 .4	2.7	5	84.5	4.9	98.4	3.6	91. 9	2.8	5	117. 8	5.0	115. 6	8.0	107. 6	2.3	
Prohexadione	50	F	F	F	F	82. 3	66. 5	5	113. 3	1.2	113. 0	6.1	107 .4	2.7	N A	F	F	F	F	F	F	F	50	F	F	F	F	87.6	43. 8

Prometryn	1	97.9	8.0	95.6	5.4	84.2	0.7	1	107.2	1.4	97.4	5.2	90.0	1.4	1	98.4	0.7	97.8	1.6	90.2	1.2	5	119.0	2.6	111.0	6.3	108.4	2.7
Propachlor	1	112.2	4.0	116.1	3.9	104.2	1.4	1	114.0	1.6	112.2	7.0	104.2	2.5	1	108.6	1.5	108.5	2.0	98.8	0.3	1	114.5	1.5	111.1	2.3	104.2	3.0
Propamocarb	1	85.3	1.3	78.9	0.7	75.0	2.5	1	94.8	8.7	86.9	0.5	82.2	1.8	1	86.2	F	76.5	F	73.9	6.0	1	99.8	1.0	88.9	2.7	79.6	5.3
Propanil	20	F	F	96.0	6.8	83.5	1.7	20	F	F	97.2	3.5	98.9	6.1	5	92.9	12.1	94.0	6.5	96.2	2.0	20	F	F	90.4	25.3	99.5	11.0
Propargite	1	101.2	2.5	97.5	5.5	87.6	0.9	1	106.0	1.7	96.2	10.5	96.6	3.0	5	101.2	2.9	97.1	2.9	87.9	1.7	1	113.9	0.7	109.7	5.1	102.9	0.9
Propiconazole	5	106.5	0.5	100.2	1.1	94.3	2.2	1	111.0	1.3	97.0	3.7	95.4	3.2	5	133.8	41.4	97.9	5.6	92.8	1.6	5	96.6	18.0	101.5	3.3	94.6	2.6
Propisochlor	5	104.6	12.2	91.6	6.3	83.5	3.9	5	106.6	1.0	98.5	2.9	93.1	14.8	1	97.8	1.0	91.1	3.0	95.0	0.7	1	80.5	10.1	74.9	1.3	102.6	25.6
Propyrisulfuron	20	F	F	89.4	5.7	88.6	3.3	50	F	F	F	F	88.5	7.1	50	F	F	F	F	97.0	5.7	50	F	F	F	F	89.3	3.8
Propyzamide	5	78.6	11.5	82.0	5.5	74.8	4.2	1	111.4	3.5	106.1	2.4	95.2	8.1	5	91.4	1.6	89.7	1.4	82.9	6.3	5	104.8	4.6	108.7	11.5	113.4	0.4
Prothioconazole	20	F	F	27.4	10.8	42.4	7.3	5	27.6	4.3	32.7	6.5	45.7	9.4	20	F	F	73.8	4.5	81.2	1.5	5	30.7	14.3	48.5	11.6	68.1	7.4
Pymetrozine	20	F	F	65.1	5.4	58.4	1.0	50	F	F	F	F	39.7	65.3	50	F	F	F	F	48.6	45.5	5	88.6	6.0	69.4	9.0	54.9	41.9
Pyraclostrobin	1	93.9	2.6	93.2	8.2	80.4	1.5	1	107.3	2.0	101.4	4.5	96.1	2.2	1	101.6	3.3	100.5	0.9	91.8	1.5	1	117.4	3.0	116.4	5.8	105.8	0.6
Pyraflufen-ethyl	1	104.6	7.8	106.8	4.8	97.2	4.7	20	F	F	109.5	5.4	105.6	0.9	5	113.3	4.1	111.1	3.5	105.8	0.6	5	103.3	7.3	100.2	9.8	98.6	3.0

Pyrametostrobin	1	13 8.2	0.4	121. 8	7. 7	105 .3	0.6	1	149. 7	0.2	117. 5	6.0	106 .0	3.8	1	146. 1	2.7	124. 9	6.1	104 .9	0.8	1	141. 3	1.7	124. 3	1.6	113. 5	4.1
Pyraoxystrobin	1	96. 4	1.7	93.4	5. 2	90. 4	1.5	1	97.3	1.9	92.6	3.9	87. 5	4.0	1	102. 3	6.8	96.3	2.6	88. 3	1.1	5	94.4	2.7	90.0	6.9	85.8	1.6
Pyrazosulfuron-ethyl	10	F	F	77.6	29 .2	105 .5	5.4	5	86.0	13. 8	80.9	9.3	88. 0	7.9	5	85.2	2.1	95.9	4.9	94. 6	4.5	1	56.4	16. 1	68.6	7.9	85.3	4.4
Pyrethrin 1	20	F	F	94.5	32 .2	93. 7	57. 4	50	F	F	F	F	175 .9	14.5	10	F	F	110. 5	24. 4	107 .2	39. 2	5	59.7	27. 2	16.1	7.9	26.7	113 .2
Pyrethrin 2	10	F	F	74.6	29 .8	68. 1	12. 8	5	52.2	85. 2	75.3	53. 4	80. 6	17.9	50	F	F	F	F	142 .1	10. 1	50	F	F	F	F	123. 9	12. 8
Pyribenzoxim	5	10 4.9	4.5	104. 6	3. 2	95. 4	0.7	5	104. 5	1.0	94.7	4.4	89. 6	9.7	5	97.3	6.9	108. 2	2.8	95. 4	2.7	5	115. 5	18. 9	118. 8	4.3	117. 5	3.2
Pyridaben	1	93. 5	6.3	102. 7	6. 1	93. 1	1.2	1	105. 1	0.4	105. 4	6.7	101 .1	2.6	1	93.8	6.4	102. 1	4.1	95. 2	1.1	1	101. 8	0.1	101. 2	5.0	97.7	2.8
Pyridalyl	1	84. 5	5.2	88.7	4. 7	78. 4	3.4	1	90.2	2.2	94.8	4.9	96. 1	2.2	5	90.8	18. 7	90.6	4.1	94. 9	4.9	5	102. 7	5.5	89.5	14.8	90.6	4.7
Pyridaphenthion	1	11 0.1	6.8	112. 2	1. 0	98. 8	2.0	1	114. 3	2.4	112. 3	5.4	104 .5	2.5	5	109. 7	7.1	114. 0	3.6	106 .4	4.3	1	104. 7	0.3	103. 1	2.9	103. 9	2.4
Pyriftalid	1	94. 7	4.8	91.1	4. 6	82. 2	0.5	1	115. 4	1.4	106. 0	4.9	93. 0	6.7	1	94.3	3.4	96.3	1.8	84. 6	2.7	1	124. 7	5.4	118. 8	5.5	108. 9	1.6
Pyrimethanil	1	11 7.0	7.3	114. 3	2. 9	89. 4	0.1	1	103. 5	34. 8	71.7	9.8	69. 5	7.8	1	94.8	5.0	95.1	4.3	96. 6	2.5	1	91.6	3.5	110. 9	2.4	100. 3	1.2
Pyrimorph	5	10 3.7	2.4	102. 0	2. 1	91. 8	3.9	1	102. 0	0.8	91.7	7.8	90. 4	4.3	5	95.1	5.9	95.7	7.0	89. 8	0.7	5	105. 9	16. 0	115. 5	6.0	107. 6	2.1
Pyriproxyfen	5	79. 8	9.4	89.0	4. 7	82. 9	2.2	5	96.9	2.3	98.7	7.4	94. 2	3.9	5	97.1	1.9	101. 2	4.5	96. 8	1.2	1	103. 7	1.8	100. 2	3.1	100. 0	0.3

Pyrisoxazole	1	96.0	1.5	104.4	1.9	97.2	2.3	1	98.8	1.6	99.9	8.7	99.4	1.0	1	95.4	4.2	98.3	4.6	97.4	1.4	1	97.3	2.1	98.0	4.0	98.4	3.9
Quinalphos	5	151.9	2.0	134.4	5.9	110.4	2.6	1	153.8	2.1	132.9	1.4	111.5	2.5	5	152.6	3.6	141.5	5.3	111.6	2.7	5	156.5	2.7	143.7	3.8	119.8	0.7
Quinclorac	50	F	F	F	F	5.1	20.6	50	F	F	F	F	4.4	39.8	100	F	F	F	F	F	F	100	F	F	F	F	F	F
Quinoxifen	1	90.7	6.2	88.8	4.0	80.0	2.3	1	94.1	1.9	93.6	2.1	87.6	6.4	1	88.2	1.1	90.8	4.3	84.3	0.8	1	105.8	6.2	99.6	5.6	95.4	2.1
Quizalofop freeAcid	20	F	F	8.2	13.9	16.4	13.1	5	7.6	26.7	12.0	15.9	20.0	11.3	10	F	F	13.2	37.6	23.8	10.8	20	F	F	4.4	62.2	15.8	35.8
Quizalofop-ethyl	1	89.1	5.1	90.5	7.2	78.6	1.9	5	104.1	0.3	98.6	4.0	93.7	4.5	5	92.9	6.9	93.2	3.3	87.9	1.7	5	114.1	3.1	112.2	5.8	104.4	0.9
Rimsulfuron	20	F	F	60.1	7.8	67.6	1.0	20	F	F	62.4	0.7	69.5	5.4	20	F	F	67.5	9.7	75.3	9.2	5	32.3	10.5	44.2	10.6	65.8	9.0
Rotenone	5	107.3	3.5	69.4	1.9	74.9	18.4	5	100.7	4.6	104.5	19.2	111.4	14.5	5	97.2	6.0	84.8	19.0	102.6	27.8	20	F	F	103.9	6.4	97.8	1.6
Saflufenacil	NA	F	F	F	F	F	F	50	F	F	F	F	95.6	5.6	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Sedaxane	1	99.5	3.7	91.4	2.6	82.4	2.6	5	107.7	2.1	96.7	1.5	91.4	2.3	5	101.0	9.1	93.8	2.6	89.1	3.9	5	107.0	1.1	99.5	1.4	95.9	5.2
Sethoxydim	5	29.1	4.3	30.7	6.9	52.6	5.6	5	10.3	3.4	9.1	7.8	35.7	9.5	5	55.3	54.2	54.1	5.6	66.9	3.3	5	102.2	6.0	123.2	2.9	97.3	3.8
Silthiofam	5	105.2	6.6	113.6	3.9	103.6	1.3	1	115.7	1.6	116.8	4.3	111.9	6.4	5	114.0	9.1	113.8	1.5	102.7	2.1	5	116.8	2.1	110.1	4.4	105.9	1.9
Simazine	5	107.8	4.0	100.4	0.5	88.9	0.8	5	111.1	7.3	102.6	6.0	95.4	2.2	5	108.1	3.1	97.2	2.2	86.7	4.1	5	125.2	13.4	111.4	13.5	115.6	5.4

Simetryn	1	90.8	3.9	84.8	2.8	78.6	1.4	1	106.1	2.3	91.8	3.9	87.8	0.9	1	91.3	3.7	83.2	4.0	76.4	1.8	1	111.0	0.8	101.9	3.9	95.1	2.1
Spinetoram	5	72.5	2.2	80.4	8.9	71.0	2.6	5	84.7	1.3	81.2	2.9	85.4	3.9	5	79.6	1.8	80.4	2.6	80.0	2.4	5	97.7	2.3	93.1	3.2	90.0	1.7
Spinosad	5	81.9	1.8	79.5	3.2	78.4	1.3	5	95.1	1.1	86.4	3.2	91.6	2.7	5	75.5	4.2	80.6	4.0	80.5	4.4	50	F	F	F	F	93.7	0.8
Spirodiclofen	1	93.8	8.6	91.0	4.6	84.7	2.7	5	97.4	1.2	89.9	2.4	88.9	6.5	1	88.7	4.4	90.9	3.0	84.8	4.8	5	104.6	4.2	101.1	4.6	99.8	1.5
Spirotetramat	5	126.7	7.2	106.1	4.0	99.6	3.4	5	109.0	4.5	103.2	3.7	95.8	4.5	1	113.5	9.9	108.9	2.7	101.9	8.9	1	125.4	4.6	115.1	4.0	104.8	5.6
Sulcotrione	100	F	F	F	F	F	F	5	103.7	3.1	99.6	5.0	96.0	6.5	5	104.9	3.3	115.4	4.9	107.1	12.6	50	F	F	F	F	41.1	12.2
Sulfentrazone	50	F	F	F	F	19.5	8.3	5	103.7	3.1	99.6	5.0	96.0	6.5	20	F	F	115.0	7.5	106.9	2.3	5	113.0	8.6	114.7	5.5	114.1	4.3
Sulfluramid	1	90.8	5.2	85.0	4.0	88.0	1.6	1	98.3	7.3	88.0	4.4	88.5	7.0	1	92.7	2.4	90.1	7.1	86.2	1.6	1	95.8	6.8	91.0	1.5	88.4	4.2
Sulfotepp	1	116.5	5.9	111.1	6.3	97.9	1.4	1	120.8	1.4	109.0	1.7	100.0	4.2	1	119.4	3.9	115.1	3.0	100.9	2.6	1	136.2	2.2	130.8	3.7	117.0	2.0
Sulfoxaflor	50	F	F	F	F	88.8	1.8	5	122.5	1.4	102.9	1.5	93.9	3.5	20	F	F	77.4	1.1	79.6	3.9	20	F	F	98.9	2.5	90.7	2.7
Tau-fluvalinate	20	F	F	75.0	7.7	81.4	13.0	20	F	F	63.4	7.7	90.6	10.9	50	F	F	F	F	89.6	7.5	50	F	F	F	F	82.5	13.5
Tebuconazole	5	111.2	0.6	103.2	0.6	97.0	2.6	5	119.1	5.3	98.4	1.0	98.8	4.2	5	105.5	0.2	103.4	4.5	94.3	0.5	20	F	F	101.4	5.9	95.1	3.6
Tebufenozide	5	107.8	5.3	97.4	4.9	90.6	2.3	20	F	F	102.0	3.6	104.6	4.4	5	109.7	1.1	111.8	1.0	104.1	1.4	20	F	F	105.3	1.8	101.4	1.5

Tebuthiuron	1	10 2.0	4.0	105. 8	1. 4	95. 1	1.5	1	113. 1	3.6	106. 7	5.2	100 .8	2.1	1	101. 5	5.7	104. 7	0.6	93. 5	1.5	1	95.5	2.8	96.4	4.1	94.5	0.5
Teflubenzuron	5	71. 6	12. 2	83.2	9. 3	75. 6	5.5	50	f	F	F	F	88. 9	7.4	20	F	F	91.6	5.6	75. 2	5.2	10	F	F	47.7	53.1	84.5	17. 6
Terbufos sulfone	5	96. 3	2.6	88.2	4. 8	83. 9	2.4	5	114. 3	2.4	105. 0	2.6	100 .4	3.9	5	92.6	7.1	84.7	0.5	78. 9	3.9	5	115. 3	4.5	108. 0	2.7	100. 2	2.1
Terbufos-sulfoxide	1	10 7.5	4.4	95.6	5. 1	89. 1	2.2	1	132. 8	0.8	116. 2	0.7	105 .4	3.2	1	105. 4	8.2	96.2	2.0	88. 5	2.4	5	116. 4	2.8	109. 6	1.0	100. 8	1.3
Terbufos	20	F	F	55.9	25 .3	65. 8	8.3	5	42.0	43. 0	60.1	9.6	81. 4	3.1	10	F	F	68.8	2.9	75. 4	3.6	20	F	F	97.1	12.3	100. 3	5.4
Terbuthylazine	1	97. 4	3.7	92.6	4. 6	85. 4	2.8	1	113. 7	2.9	99.3	2.0	93. 4	1.0	1	105. 4	3.6	96.5	1.5	89. 9	1.2	1	100. 8	6.1	90.5	3.0	94.5	13. 9
Tetraconazole	20	F	F	93.9	7. 0	92. 7	2.6	5	99.8	4.9	90.3	3.7	86. 7	7.2	5	101. 2	1.6	94.7	1.8	89. 3	3.9	20	F	F	90.6	5.0	91.7	3.4
Thiabendazole	1	89. 7	5.2	84.9	2. 3	80. 4	1.7	1	112. 1	5.9	95.9	6.4	89. 8	1.8	5	88.1	1.0	80.3	1.3	75. 0	3.0	1	97.2	1.4	85.9	2.4	82.3	0.8
Thiacloprid	1	95. 5	9.5	95.6	2. 5	88. 0	1.4	1	109. 5	2.2	93.3	4.0	87. 5	9.4	1	90.6	1.3	84.5	1.6	79. 8	2.6	1	103. 2	3.1	94.6	4.1	92.1	1.8
Thiamethoxam	5	10 2.6	2.0	97.0	1. 0	86. 5	1.8	5	110. 2	2.6	103. 0	4.0	95. 1	5.2	5	81.7	3.1	82.4	3.3	75. 6	2.4	1	119. 9	0.2	112. 0	3.3	97.8	4.3
Thidiazuron	10	F	F	82.0	1. 5	76. 9	2.1	10	F	F	77.0	2.5	79. 1	4.8	5	76.4	0.5	78.2	1.6	74. 9	5.1	20	F	F	88.6	4.8	89.2	1.9
Thiencarbazone-methyl	20	F	F	55.1	0. 6	70. 1	3.2	50	F	F	F	F	62. 1	14.2	5	60.9	4.7	73.1	13. 5	78. 3	2.4	50	F	F	F	F	91.6	7.9
Thifensulfuron-methyl	NA	F	F	F	F	F	F	50	F	F	F	F	70. 1	4.9	20	F	F	63.6	11. 5	71. 9	6.4	20	F	F	30.2	24.3	60.4	13. 2

Thiifluzamide	5	16.5	34.8	66.3	6.3	59.5	4.7	10	F	F	79.8	4.5	78.4	8.8	5	61.3	19.4	83.5	2.1	76.8	1.2	50	F	F	F	F	69.4	14.9	
Thiobencarb	5	83.0	10.1	83.6	6.8	73.0	1.2	1	98.8	3.9	98.8	1.1	92.9	5.1	5	106.4	8.3	115.2	5.4	102.6	2.7	5	114.1	1.6	117.2	8.1	107.1	7.6	
Thiocyclam	50	F	F	F	F	69.1	2.1	20	F	F	67.4	8.8	69.1	2.1	50	F	F	F	F	61.0	8.5	20	F	F	72.2	4.8	72.1	7.7	
Thiodicarb	1	110.1	2.3	105.8	5.5	94.0	1.8	5	109.0	3.2	102.5	3.0	96.2	2.9	5	103.7	2.6	101.4	3.9	91.2	3.5	5	119.0	0.8	123.5	0.4	112.2	2.6	
Thiophanate-methyl	5	51.7	9.9	63.6	3.4	63.7	3.9	5	25.6	2.5	38.8	5.8	48.5	10.2	5	56.4	2.7	74.8	1.2	72.6	0.4	5	106.4	5.3	107.2	3.1	102.6	0.8	
Thiophanate	5	22.0	21.2	39.7	5.7	54.3	2.4	5	5.0	14.3	17.8	14.4	37.4	9.1	5	43.5	7.7	68.0	2.3	71.0	2.2	5	98.7	1.4	106.1	4.6	102.7	3.2	
Tolclofos-methyl	20	F	F	53.8	77.9	80.2	14.4	5	60.6	8.4	83.6	4.0	89.8	3.4	20	F	F	77.0	5.9	83.6	5.4	50	F	F	F	F	79.3	15.6	
Tolfenpyrad	5	73.4	3.9	72.2	6.7	66.9	2.7	5	88.8	6.4	87.0	4.9	92.1	0.8	5	88.9	1.9	86.0	2.6	84.4	1.3	5	100.2	2.7	94.4	3.9	88.0	1.9	
Tolyfluanid	5	117.6	8.6	120.8	4.5	104.6	1.3	5	127.7	1.5	131.2	8.2	113.7	3.7	5	126.7	3.4	126.3	4.0	112.2	5.8	10	F	F	88.4	18.9	103.8	2.5	
Topramezone	50	F	F	F	F	4.1	53.7	50	F	F	F	F	3.7	120.4	N A	F	F	F	F	F	F	F	50	F	F	F	F	23.1	16.4
Tralkoxydim	1	80.5	3.8	83.1	6.7	78.3	0.8	5	96.1	1.7	90.5	2.7	85.9	8.7	5	94.0	3.0	90.4	4.8	88.1	0.6	5	97.5	1.4	93.2	3.7	89.6	1.8	
Triadimefon	1	97.5	8.3	101.4	3.0	93.7	1.1	5	109.3	3.9	110.2	5.6	106.0	1.8	5	114.5	7.0	116.6	4.0	105.4	1.7	5	99.0	3.8	99.3	8.0	98.9	3.1	
Triadimenol	50	F	F	F	F	96.2	0.5	20	F	F	100.1	3.4	97.1	4.2	20	F	F	103.1	4.5	96.6	2.5	5	106.4	1.4	108.9	1.6	108.8	3.2	

Triallate	50	F	F	F	F	75.1	6.4	50	F	F	F	F	91.4	5.2	50	F	F	F	F	88.3	6.2	50	F	F	F	F	100.8	11.1
Triasulfuron	20	F	F	86.3	5.0	88.3	2.8	50	F	F	F	F	89.9	4.3	20	F	F	105.8	5.5	100.7	3.9	50	F	F	F	F	99.4	2.1
Triazophos	1	96.7	8.8	100.0	4.3	91.4	0.9	1	104.3	1.8	107.7	9.0	103.2	3.6	1	120.7	11.4	109.2	1.8	103.1	2.2	1	105.1	2.1	105.3	6.3	102.0	2.6
Tribenuron-methyl	20	F	F	103.1	6.0	95.7	1.6	50	F	F	F	F	97.4	4.4	20	F	F	90.6	5.2	95.1	5.0	50	F	F	F	F	94.6	5.9
Trichlorfon	20	F	F	95.4	2.7	91.0	2.7	5	105.9	4.5	94.4	4.2	89.2	6.4	5	92.4	7.3	92.3	5.6	87.3	0.7	10	F	F	97.4	0.6	96.0	1.8
Triclopyricarb	5	104.3	5.3	100.0	4.6	85.7	1.1	5	114.5	7.4	100.3	1.7	92.2	5.8	5	102.6	2.1	101.4	2.1	88.8	2.7	50	F	F	F	F	90.7	1.0
Triclopyr	10	F	F	6.8	17.4	15.4	19.4	20	F	F	14.8	21.2	20.6	13.0	10	F	F	7.0	45.0	20.6	25.3	20	F	F	5.7	44.9	20.1	25.9
Triflumizole	1	107.1	4.9	94.6	1.3	87.8	1.8	1	129.9	2.7	107.0	4.3	95.8	5.7	1	110.5	3.3	90.9	3.1	84.0	4.0	1	123.3	1.6	104.9	0.7	94.5	1.3
Trifloxystrobin	1	96.1	1.6	85.7	4.4	87.4	F	1	104.8	3.2	98.4	5.0	92.0	F	1	99.1	0.1	96.9	1.4	90.9	1.5	5	107.3	2.1	96.0	3.9	90.7	3.6
Triflumizole	1	77.1	1.5	71.2	3.9	75.6	4.5	1	48.0	8.0	49.6	4.4	75.0	8.2	1	79.9	2.5	85.7	0.9	83.6	2.8	5	102.4	2.2	94.9	5.0	90.7	2.4
Triflumuron	5	97.4	5.6	88.2	8.3	78.6	0.5	20	F	F	97.3	3.7	87.2	1.9	5	111.0	1.2	102.8	0.4	92.1	3.2	20	F	F	77.9	10.7	81.0	15.3
Triflusulfuron-methyl	50	F	F	F	F	86.4	17.5	50	F	F	F	F	65.5	17.1	50	F	F	F	F	76.1	25.2	50	F	F	F	F	60.2	19.4
Triforine	10	F	F	106.3	4.9	96.4	2.2	10	F	F	98.4	4.0	91.8	5.4	5	85.6	7.2	99.4	1.7	85.4	1.5	5	109.8	15.1	114.6	3.8	113.8	1.3

Trinexapac-ethyl	1	83. 3	3.1	71.5	5. 9	55. 0	7.2	5	83.2	21. 6	69.6	27. 4	75. 9	19.4	5	71.2	4.8	75.5	23. 3	68. 3	18. 2	20	F	F	42.6	7.5	58.5	5.6
Uniconazole	5	59. 3	85. 5	86.6	3. 3	56. 2	86. 4	5	32.7	56. 9	86.0	3.3	86. 1	3.6	1	95.6	1.0	92.6	6.0	89. 7	2.2	20	F	F	89.4	1.5	88.2	3.3
Vamidothion	1	10 9.9	7.9	105. 8	2. 4	96. 6	1.6	1	117. 4	3.7	100. 1	8.9	92. 5	6.6	5	98.1	0.5	96.6	3.8	85. 2	3.3	1	110. 1	4.5	108. 7	6.8	95.9	3.5
Zoxamide	1	94. 7	7.7	102. 1	4. 3	92. 3	4.4	5	105. 6	1.7	107. 5	7.9	101 .9	2.1	1	107. 4	4.5	108. 0	2.9	103 .0	0.7	5	103. 6	8.9	99.8	5.6	98.3	2.6
Metamitron	5	10 2.0	5.7	94.7	1. 5	88. 7	2.0	1	108. 6	1.7	101. 6	7.8	97. 5	2.6	1	100. 6	4.2	90.6	2.3	80. 9	0.9	1	112. 7	1.8	101. 5	4.1	95.8	1.1

SDL:Screening detection limits, F: Recovery or RSD is not acceptable, NA: Not detected.

Table S6 The screening detection limit and recoveries for 403 pesticides at 5, 20, 50 µg/kg in carrot, apple, watermelon, and pear.

Pesticides	Carrot							Apple							Watermelon							Pear						
	SD L (µg/ kg)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µg/ kg)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µ g/k g)	5 µg/kg		20 µg/kg		50 µg/kg		SD L (µg /kg)	5 µg/kg		20 µg/kg		50 µg/kg	
		AVE	RS D, % (n=3)	AV E	RS D, % (n=3)	AV E	RS D, % (n=3)		AVE	RS D, % (n=3)	AVE	RS D, % (n=3)	AVE	RSD, % (n=3)		AVE	RS D, % (n=3)	AVE	RS D, % (n=3)	AVE	RSD, % (n=3)		AVE	RS D, % (n=3)	AVE	RSD, % (n=3)	AVE	RS D, % (n=3)
1-naphthylacetic acid	5	119.4	5.0	96.2	14.1	62.7	13.4	5	57.5	20.8	13.8	34.7	12.4	36.5	5	67.4	5.0	33.6	4.6	34.0	14.9	50	F	F	F	F	76.9	13.1
2,4-Dichlorophenoxyacetic acid	20	F	F	13.3	17.3	19.0	5.2	20	F	F	4.0	69.1	11.0	5.3	20	F	F	7.8	20.8	16.0	25.4	50	F	F	F	F	25.2	5.0
Acephate	5	98.3	2.9	103.1	1.5	90.7	5.6	5	109.7	3.5	111.3	1.8	106.0	4.0	5	111.8	3.7	109.8	2.4	102.4	2.2	10	F	F	103.4	9.8	95.1	1.3
Acetamiprid	5	125.8	3.9	122.2	1.7	107.0	0.2	1	122.0	13.6	70.9	10.6	55.1	3.5	1	125.0	3.8	114.2	2.3	107.2	4.1	5	103.4	1.3	107.1	4.8	94.6	4.6
Acetochlor	5	107.0	4.8	101.3	5.1	94.2	2.3	5	117.5	2.5	113.2	1.9	102.9	2.3	5	115.8	1.4	109.8	2.5	104.0	8.1	5	109.2	6.7	106.0	1.3	95.5	2.4
Acifluorfen	5	4.7	10.3	13.2	5.2	26.8	10.1	5	2.8	37.4	8.4	9.5	25.2	3.4	5	3.3	48.3	10.3	10.4	32.8	27.0	20	F	F	14.6	0.5	29.8	4.9
Alachlor	5	107.0	4.8	101.3	5.1	94.2	2.3	5	117.5	2.5	113.2	1.9	102.9	2.3	5	115.8	1.4	109.8	2.5	104.0	8.1	5	109.2	6.7	106.0	4.7	95.5	2.4
Albendazole	1	88.1	3.2	92.3	2.5	89.0	2.6	1	106.5	8.5	102.4	0.1	93.3	0.8	1	104.1	3.9	97.3	3.0	93.2	1.8	5	79.7	1.7	79.5	0.5	80.1	3.2

Aldicarb sulfoxide	10	F	F	106.3	3.2	92.4	2.5	1	107.0	2.8	107.9	1.8	100.4	3.1	20	F	F	102.2	1.8	98.2	1.2	10	F	F	106.7	7.0	95.2	2.4
Aldicarb	5	125.8	9.7	135.0	4.3	112.5	2.0	20	F	F	135.8	6.0	113.6	5.3	5	143.9	5.3	126.9	9.6	101.6	10.4	5	102.2	6.2	105.0	1.3	87.4	12.5
Aldoxycarb	1	127.9	8.6	119.5	2.7	97.7	3.3	1	145.6	3.0	130.3	3.2	108.6	1.7	1	143.7	1.5	125.1	2.7	105.8	3.7	1	114.6	1.3	107.0	11.9	89.4	2.2
Ametoctradin	5	96.0	1.0	92.7	3.2	88.7	5.1	1	111.5	4.4	100.4	3.7	99.0	1.8	1	102.5	2.0	95.6	3.3	94.4	3.1	1	99.5	1.0	90.8	4.8	93.9	6.2
Ametryn	1	108.1	1.7	101.4	1.7	95.6	3.2	1	108.7	1.4	101.9	0.4	104.8	3.3	1	114.3	3.8	106.5	3.5	103.3	3.2	1	105.5	2.1	100.9	2.3	97.7	1.2
Amidosulfuron	5	58.9	6.5	65.4	5.0	74.3	3.3	5	32.3	3.2	44.6	4.1	68.5	2.1	5	52.9	4.4	58.5	3.5	81.9	7.6	20	F	F	74.7	4.0	84.7	2.9
Aminocyclopyrachlor	20	F	F	F	F	F	F	20	F	F	F	F	F	F	20	F	F	F	F	F	F	50	F	F	F	F	1.3	31.9
Aminopyralid	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Amisulbrom	10	F	F	96.9	10.3	112.2	4.6	5	76.4	27.9	130.2	11.0	118.9	4.6	5	126.8	17.8	125.3	8.5	119.5	19.7	5	89.9	14.9	120.2	5.2	103.3	11.3
Amitraz	5	53.5	9.0	6.7	9.0	1.9	9.3	1	139.2	24.3	118.8	27.5	123.7	12.9	5	F	F	F	F	F	F	1	95.2	32.0	153.9	10.3	107.6	4.5
Amitrole	5	7.2	29.2	2.0	28.3	3.1	32.1	5	30.5	97.3	23.4	8.4	11.5	0.9	5	48.8	17.5	13.6	4.0	7.9	10.1	20	F	F	85.3	6.8	41.1	9.6
Anilazine	5	87.6	8.7	98.3	7.9	85.4	6.2	5	144.0	3.8	196.0	3.7	188.6	3.3	5	222.2	3.5	255.0	5.4	222.1	2.2	5	162.3	7.7	179.1	5.2	161.0	6.8
Anilofos	1	114.	9.5	109	2.8	97.4	2.4	1	119	1.6	111.	2.7	101.	3.9	1	114	0.6	106.	3.6	98.4	1.0	1	104	5.7	106	5.2	97.8	1.9

Benzoximate	5	116.9	2.8	121.6	5.6	105.2	3.1	5	126.8	2.3	121.3	5.8	111.0	2.8	5	125.1	4.9	115.6	4.6	113.1	6.1	5	120.7	0.7	124.1	3.1	106.6	3.4
Bifenazate	20	F	F	F	F	F	F	20	F	F	F	F	31.1	31.8	5	62.5	6.4	75.4	2.0	81.6	14.6	50	F	F	F	F	29.6	10.6
Bifenox	5	106.5	15.4	86.7	8.1	63.7	5.5	5	178.4	6.3	146.2	5.0	117.2	2.3	5	153.1	9.8	141.4	3.3	107.7	4.8	50	F	F	F	F	104.1	3.1
Bifenthrin	20	F	F	76.7	3.6	82.3	10.9	50	F	F	F	F	110.4	5.1	1	72.9	46.5	91.8	7.8	103.2	1.6	5	61.8	16.4	78.2	4.9	78.5	10.1
Bispyribac-sodium	50	F	F	F	F	33.7	1.4	20	F	F	2.8	31.6	14.2	12.0	5	4.8	8.5	14.3	13.9	36.8	26.1	5	19.2	12.0	22.8	9.5	42.5	6.1
Bitertanol	10	F	F	106.3	2.4	96.1	0.5	50	F	F	F	F	108.2	3.2	5	119.4	3.3	107.3	1.9	100.0	4.4	10	112.8	3.3	106.5	11.2	98.5	1.1
Boscalid	5	107.5	3.8	110.5	2.7	102.6	2.5	5	112.4	6.7	111.4	4.4	107.1	2.6	5	122.9	2.4	119.2	2.7	112.3	3.8	5	110.6	2.6	110.1	2.6	103.1	2.2
Bromoxyni	1	35.0	7.3	45.3	1.1	58.5	5.4	1	24.7	6.5	37.0	6.4	59.6	1.6	1	32.8	3.9	39.9	5.1	65.8	13.5	1	42.0	1.6	46.7	0.9	60.9	3.5
Bupirimate	1	108.9	2.1	103.2	3.4	96.0	5.8	1	121.5	2.7	112.0	2.2	111.3	3.9	1	116.9	2.5	108.7	3.5	104.1	3.0	1	114.6	2.5	105.1	1.9	101.0	2.3
Buprofezin	1	105.7	3.0	102.9	6.5	98.5	5.0	1	119.3	2.9	105.7	4.9	103.3	4.1	1	111.6	2.1	103.7	0.8	98.7	1.2	1	102.9	5.7	93.9	3.0	94.8	4.2
Butachlor	5	94.1	1.3	76.9	3.5	98.3	3.4	1	80.2	4.7	103.8	3.1	101.5	3.3	5	101.6	11.9	107.3	12.8	97.1	1.6	5	105.3	15.1	91.1	1.4	102.3	16.9
Butralin	1	102.7	2.6	96.0	6.3	91.5	3.2	5	83.8	1.3	85.8	6.7	89.7	1.4	1	93.0	6.6	93.3	0.6	96.2	5.5	1	87.3	7.6	81.7	3.2	85.4	5.4
Cadusafos	1	110.3	1.7	113.6	0.8	104.6	3.6	1	118.2	2.4	116.9	0.9	109.7	1.7	1	114.5	1.6	113.1	2.6	105.5	3.3	1	116.0	1.9	117.1	2.3	106.2	0.7

Captan	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F
Carbaryl	1	119. 6	6.3	106 .3	4.7	94.3	1.4	5	127 .6	3.6	119. 7	1.6	104. 0	1.0	5	114 .8	2.1	103. 1	7.8	99.7	2.0	1	109 .6	3.5	106 .0	6.3	93.7	1.5
Carbendazim	1	120. 3	1.7	107 .0	1.7	90.7	F	1	143 .6	4.9	96.6	5.7	118. 0	1.5	1	111 .0	1.2	103. 2	1.2	95.3	2.7	5	89. 3	3.2	87. 2	3.7	77.5	0.8
Carbofuran	5	107. 9	13. 3	111 .9	0.2	98.8	1.9	5	121 .0	14. 2	128. 0	1.4	106. 8	2.0	5	115 .7	2.2	99.9	14. 5	99.7	4.3	5	110 .8	2.6	102 .6	2.4	87.7	6.8
Carbofuran	1	154. 5	3.8	142 .2	2.4	124. 2	1.5	1	179 .2	3.9	156. 7	4.8	130. 2	3.1	1	166 .4	1.9	149. 2	2.7	123. 5	2.2	1	147 .1	3.8	138 .7	0.6	117. 2	0.8
Carbosulfan	5	27.2	51. 1	24. 2	29. 4	12.6	12. 8	1	35. 2	30. 1	20.4	52. 2	13.2	5.6	1	53. 2	23. 8	31.2	49. 1	24.5	49.6	10	F	F	12. 7	0.6	8.4	36. 6
Carboxin	1	93.5	4.5	93. 7	4.0	92.5	3.5	1	105 .4	4.6	93.7	2.7	85.7	2.2	1	91. 7	14. 8	83.9	7.3	84.7	2.1	5	79. 1	6.4	71. 3	24.2	68.6	5.3
Carfentrazone-ethyl	1	131. 5	2.0	130 .2	1.0	115. 3	1.1	1	128 .1	2.1	126. 9	1.9	110. 3	3.0	1	134 .6	3.2	123. 5	2.7	110. 9	0.7	5	125 .2	3.7	127 .8	5.4	112. 3	0.8
Cartap	20	F	F	92. 7	2.3	92.5	4.4	10 0	F	F	F	F	F	F	1	91. 4	19. 0	82.4	8.8	86.7	2.1	10	F	F	69. 8	3.0	68.4	5.4
Chlorantraniliprole	50	F	F	F	F	102. 2	6.2	50	F	F	F	F	106. 3	1.2	5	124 .5	5.2	117. 0	3.0	108. 2	3.3	5	113 .2	5.6	109 .3	6.1	98.3	2.0
Chlorbenzuron	5	143. 4	5.5	129 .5	4.8	106. 4	1.4	1	F	F	136. 8	10. 6	114. 3	F	1	101 .9	2.6	137. 2	1.8	111. 2	3.3	1	150 .3	2.6	124 .2	3.2	98.1	6.2
Chlordimeform	1	82.3	4.4	87. 7	3.2	86.2	5.8	5	68. 8	1.2	82.1	3.7	86.5	1.8	1	76. 8	2.9	86.7	1.9	91.3	1.6	10	F	F	43. 1	3.2	62.8	1.8
Chlorfenapyr	NA	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F	N A	F	F	F	F	F	F

Chlorfluazuron	5	86.8	11.1	96.2	3.7	89.1	5.8	20	F	F	105.0	2.9	95.5	4.4	5	112.6	1.8	103.5	2.3	99.8	1.8	10	F	F	90.4	3.5	89.5	4.2
Chlorimuron-ethyl	5	70.8	6.9	83.5	6.9	81.9	6.9	20	F	F	50.2	6.3	67.2	0.7	5	66.2	4.0	70.8	4.2	83.7	3.4	5	69.7	12.3	75.8	4.5	79.8	1.8
Chlorotoluron	5	121.6	3.2	112.2	2.1	99.0	1.5	5	131.2	3.6	120.5	1.0	103.0	1.9	5	127.5	1.8	116.7	2.3	102.9	0.9	5	109.3	1.5	109.4	2.7	94.7	3.1
Chlorpyrifos oxon	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Chlorpyrifos-methyl	50	F	F	F	F	53.3	16.5	5	56.2	8.3	81.1	15.2	73.0	5.0	5	66.0	6.4	71.6	17.3	85.9	9.5	20	F	F	83.2	16.1	78.6	6.8
Chlorpyrifos	5	96.1	18.5	101.0	3.5	91.7	6.5	5	95.7	5.0	98.5	3.6	102.5	4.6	5	95.0	9.0	106.9	7.2	102.2	2.8	5	101.6	1.8	104.9	3.1	95.5	5.7
Chlorsulfuron	20	F	F	66.3	2.6	71.2	2.6	20	F	F	33.2	9.1	54.5	2.7	20	F	F	46.6	0.2	64.2	6.3	20	F	F	69.2	2.2	74.6	2.8
Cinosulfuron	5	88.2	1.9	87.0	2.5	87.0	3.1	5	57.8	2.6	67.1	1.9	75.4	2.1	5	81.5	2.7	79.7	4.2	84.6	1.5	20	F	F	91.6	4.6	90.5	2.5
ClethodiM Sulfone	5	99.7	0.4	96.0	3.0	91.2	4.1	1	91.9	4.8	86.4	1.4	92.6	3.8	5	102.7	1.7	97.7	2.9	98.3	3.5	5	104.9	4.8	98.9	6.0	97.2	1.2
ClethodiM Sulfoxide	1	126.0	3.2	114.9	3.3	93.8	5.2	1	79.1	0.8	80.3	1.4	84.1	3.6	1	116.1	10.5	112.8	3.8	94.6	6.8	1	113.4	0.9	107.8	1.9	97.5	1.6
Clethodim	1	58.6	2.3	68.2	2.6	83.6	4.1	1	80.0	5.2	78.0	4.5	85.6	1.3	1	62.4	18.6	60.1	5.3	81.0	3.6	1	68.8	5.7	65.7	3.1	77.8	5.0
ClodinaFop-propargyl	1	144.5	6.8	129.9	2.7	108.7	0.9	1	142.6	1.2	134.1	0.6	110.3	1.7	1	151.6	5.3	126.9	2.2	106.2	1.3	1	130.5	1.9	114.3	4.3	103.4	2.5
Clofentezine	10	F	F	92.1	9.6	84.0	5.0	5	113.7	4.1	F	F	F	F	20	F	F	111.8	1.1	102.1	4.3	10	F	F	98.8	5.8	90.9	7.2

Clomazone	1	104.7	2.5	102.7	0.6	94.8	2.9	1	111.8	2.4	103.0	3.2	100.4	1.3	1	112.0	2.5	105.8	2.3	100.8	3.4	1	101.7	3.0	97.7	4.0	95.0	2.0
Clopyralid	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Clothianidin	10	F	F	110.9	3.7	99.0	2.3	5	140.4	3.8	122.0	1.8	112.7	0.7	5	129.8	1.6	116.1	1.1	109.9	3.4	5	114.1	0.7	102.0	F	93.3	2.7
Clotrimazole	50	F	F	F	F	94.7	6.1	20	F	F	81.5	3.6	118.3	3.0	50	F	F	F	F	122.1	13.5	50	F	F	F	F	64.1	3.3
Coumaphos	5	84.3	14.8	85.8	6.3	87.6	2.9	5	98.6	4.3	101.4	3.3	103.0	2.0	1	105.0	4.6	102.1	1.1	99.9	1.6	20	F	F	89.5	14.0	87.3	1.6
Coumoxystrobin	1	98.3	9.7	106.7	2.4	94.8	5.1	1	104.2	2.5	103.3	1.2	95.0	4.3	1	112.1	2.2	110.8	4.0	106.2	3.2	1	106.2	3.0	103.1	2.0	96.5	1.8
Cyanazine	5	112.5	2.0	105.2	2.1	97.2	1.2	5	120.0	1.2	112.9	3.3	101.8	2.0	5	120.0	0.9	109.3	1.5	99.7	3.0	5	109.0	1.4	106.0	2.1	93.7	2.0
Cyantraniliprole	20	F	F	96.6	2.7	90.9	3.4	20	F	F	100.1	0.6	94.3	0.8	5	105.1	1.6	99.3	3.0	94.2	3.7	10	F	F	92.9	7.5	84.0	3.7
Cyclosulfamuron	5	99.1	8.9	97.1	2.1	90.1	4.8	1	82.6	4.3	79.4	1.4	85.6	3.0	1	102.4	3.6	100.6	5.5	99.9	5.1	5	92.0	3.7	92.9	4.1	89.1	2.6
Cycloxydim	5	42.1	6.2	55.1	3.9	81.2	3.2	1	63.3	3.6	62.1	5.1	78.6	3.7	1	57.5	24.5	54.9	5.6	79.1	1.7	5	44.4	7.5	48.3	5.2	66.7	6.3
Cyflumetofen	1	108.0	0.8	111.9	1.0	103.1	3.8	1	117.3	2.4	115.9	5.0	106.9	0.3	1	115.0	8.0	114.5	6.0	110.3	0.7	1	106.0	3.1	104.0	7.4	103.0	3.2
Cyhalothrin	100	F	F	F	F	F	F	5	118.8	5.9	126.2	3.2	109.0	5.1	5	125.3	6.8	124.9	0.2	114.6	5.3	5	107.0	24.4	109.6	1.1	103.3	3.9
Cyhexatin	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F

Cymoxanil	5	107.3	2.8	104.2	2.4	92.3	3.1	1	105.1	3.0	103.2	1.7	94.3	0.5	1	111.3	1.4	102.1	0.7	93.2	1.2	5	91.5	1.3	90.0	3.0	81.2	3.9
Cypermethrin	50	F	F	F	F	97.4	3.0	50	F	F	F	F	121.3	5.1	5	82.2	7.6	103.1	5.4	101.9	2.6	10	F	F	85.4	3.0	88.5	2.6
Cyproconazole	5	104.4	8.9	89.5	8.9	89.0	4.2	5	101.7	1.8	95.6	1.5	96.1	2.5	5	100.5	4.6	92.8	4.8	96.5	8.2	5	101.3	6.4	90.7	2.0	87.7	2.0
Cyprodinil	1	105.3	1.8	103.3	3.9	94.9	1.3	1	101.3	2.5	100.6	1.5	93.0	1.6	1	106.4	2.1	99.1	2.4	97.1	3.2	1	95.6	0.3	96.2	4.1	89.4	1.6
Cyromazine	5	38.4	6.8	39.4	2.0	41.1	13.5	5	28.6	0.5	30.1	5.2	37.2	7.0	1	33.1	9.5	33.9	7.6	40.6	0.9	1	29.0	10.9	27.9	5.4	34.6	4.1
Daminozide	10	F	F	24.4	8.9	13.5	13.9	10	F	F	20.5	19.5	6.4	23.5	5	86.0	5.1	28.1	10.8	15.4	32.7	10	F	F	58.1	7.4	28.6	11.5
Dazomet	20	F	F	48.4	4.0	66.5	6.7	1	14.6	30.8	24.2	8.7	53.1	13.6	5	37.9	6.4	40.6	3.6	60.8	2.7	50	F	F	F	F	55.2	12.4
Deltamethrin	20	F	F	108.6	6.1	107.4	4.7	20	F	F	121.4	5.9	116.6	5.8	5	76.5	14.1	97.3	13.0	95.8	5.7	5	84.2	15.2	95.2	3.5	79.8	6.7
Demeton-S	5	108.7	10.8	126.0	11.1	91.3	6.5	5	153.6	21.5	116.7	11.5	86.1	4.9	5	87.1	9.6	109.0	5.7	96.9	3.5	5	152.0	4.7	117.4	7.4	101.8	4.2
Desmedipham	5	110.8	2.3	110.1	4.6	96.2	5.0	1	109.8	1.8	103.3	4.9	104.4	1.5	5	112.3	1.6	108.2	4.8	103.8	4.5	5	97.5	2.6	91.2	7.4	95.7	3.1
Diafenthiuron	50	F	F	F	F	4.8	30.8	5	7.1	5.1	12.1	9.2	49.2	15.5	20	F	F	2.0	16.4	15.5	0.5	20	F	F	7.4	1.7	19.0	24.7
Diazinon	1	109.1	4.1	112.5	2.0	104.4	2.4	1	108.4	5.6	110.7	1.9	106.4	5.1	1	107.8	6.0	104.0	2.2	102.6	0.8	1	107.9	4.5	109.1	1.2	105.0	1.4
Dicamba	50	F	F	F	F	9.9	14.8	N A	F	F	F	F	F	F	50	F	F	F	F	22.4	40.2	20	F	F	8.6	1.2	28.9	19.4

Dichlofluanid	5	101.1	5.6	99.0	7.6	94.5	7.3	1	108.7	2.0	103.4	2.7	101.7	4.0	20	F	F	108.0	5.3	108.5	9.2	5	99.5	5.1	99.7	14.6	94.2	0.9
Dichlorvos	5	95.3	0.8	106.1	1.7	102.5	0.2	5	98.4	4.7	105.9	1.5	102.0	1.3	5	97.2	2.4	96.4	2.1	97.4	1.6	5	92.2	0.9	102.2	2.9	96.7	2.0
Diclofop-methyl	10	F	F	125.8	0.4	114.3	3.2	5	148.5	5.9	140.0	6.1	113.8	5.0	50	F	F	F	F	115.5	2.5	10	F	F	125.0	4.0	114.4	4.2
Diethofencarb	5	125.1	1.2	107.2	4.0	94.8	3.0	5	143.8	4.5	111.8	3.7	105.0	2.1	5	146.2	2.8	120.3	2.0	108.8	1.4	5	140.5	2.6	115.5	4.1	104.0	1.0
Difenoconazole	5	98.7	4.5	88.4	8.8	75.2	8.6	1	81.6	6.7	93.7	10.5	111.6	2.6	5	100.8	9.1	87.5	19.2	98.4	2.1	5	106.3	5.0	108.1	2.4	100.7	0.8
Difenzoquat	1	105.4	2.7	98.6	4.0	95.3	3.4	1	105.3	6.3	103.2	1.3	101.6	1.5	1	104.1	2.0	101.0	1.4	94.7	1.4	5	89.9	2.0	88.2	3.3	83.6	1.4
Diflubenzuron	5	192.3	2.6	172.0	1.6	132.5	2.0	5	280.9	5.0	227.2	1.7	154.9	1.8	5	251.1	2.2	193.7	3.4	135.6	0.7	5	243.3	1.3	195.4	4.0	138.2	2.6
Diflufenican	20	F	F	110.8	8.5	102.1	4.4	20	F	F	115.8	11.7	107.0	12.6	1	111.6	11.8	108.9	10.2	104.3	9.1	10	F	F	88.0	3.6	102.3	12.0
Dimepiperate	5	104.8	7.2	100.7	2.6	91.9	1.0	5	118.2	6.2	109.9	1.6	98.4	3.7	5	117.4	3.5	113.9	4.9	104.8	2.9	5	109.7	2.6	108.8	5.5	98.3	2.8
Dimethenamid	1	109.8	2.2	113.8	1.4	101.7	2.3	1	115.9	4.3	114.7	4.7	108.3	1.7	1	112.9	3.7	111.1	4.2	108.1	3.3	1	110.3	1.9	117.0	7.5	107.9	2.1
Dimethoate	1	116.8	2.4	119.5	3.8	103.2	0.1	1	123.8	2.4	119.6	2.7	106.4	2.1	1	118.0	4.5	114.5	3.7	108.3	4.1	1	106.6	2.0	108.0	0.5	95.9	2.2
Dimethomorph	5	112.2	6.2	99.3	4.4	95.2	3.8	50	F	F	F	F	105.9	2.0	5	125.6	0.3	115.3	3.3	116.0	2.0	50	F	F	F	F	103.4	2.1
Diniconazole	5	93.8	4.7	99.9	4.4	95.8	4.7	5	93.9	3.7	94.6	1.4	101.2	3.4	5	94.8	3.3	98.2	3.1	97.4	3.9	5	94.9	2.7	100.1	1.7	97.8	1.8

Dinocap	50	F	F	F	F	74.3	27.3	50	F	F	F	F	93.0	18.3	50	F	F	F	F	53.9	6.9	NA	F	F	F	F	F	F
Dinotefuran	5	116.1	1.7	118.8	1.9	100.0	2.6	1	132.0	6.5	129.2	1.7	114.6	1.4	1	124.2	2.1	116.2	2.4	104.7	3.3	5	101.1	2.0	102.5	F	90.7	1.9
Diphenylamine	10	F	F	54.3	9.0	66.9	1.3	5	94.1	4.5	84.2	2.8	95.0	4.1	5	99.7	5.0	95.5	0.8	99.9	6.0	10	F	F	83.9	0.2	84.0	1.2
Disulfoton sulfone	1	119.6	2.4	108.2	3.6	99.8	4.6	1	130.4	5.2	115.5	3.7	105.6	3.8	1	125.4	1.9	118.5	1.6	107.2	2.8	1	112.9	2.6	106.6	4.0	99.4	2.8
Disulfoton-sulfoxide	1	133.0	1.1	122.6	4.8	102.6	0.9	1	125.0	4.1	113.8	4.2	109.4	2.9	1	136.4	7.6	133.5	2.5	112.9	4.1	1	120.2	2.3	114.9	3.8	102.0	2.7
Disulfoton	50	F	F	F	F	77.7	10.6	5	70.2	24.5	101.1	12.5	109.5	13.9	20	F	F	63.0	0.5	86.3	2.4	50	F	F	F	F	99.5	6.1
Dithianon	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Diuron	5	121.0	2.1	119.0	0.9	107.1	1.0	1	119.8	3.8	119.8	0.5	109.9	3.6	1	119.6	0.6	111.9	1.8	102.9	6.4	1	110.2	4.3	111.0	F	103.4	1.8
Dodine	1	137.3	4.7	119.2	3.2	94.2	3.1	1	140.7	2.6	121.2	0.7	103.3	2.1	1	141.9	3.4	116.9	3.6	101.2	2.3	1	132.4	1.1	114.6	3.3	96.1	1.8
Dufulin	1	106.3	7.4	98.5	6.2	91.8	2.5	1	110.7	1.5	107.6	1.7	97.0	2.5	1	106.9	3.7	102.2	2.5	97.9	2.8	1	99.1	5.2	98.9	4.3	92.4	1.1
Edifenphos	1	124.1	6.9	123.3	1.0	109.3	2.1	1	128.1	4.4	122.1	3.5	109.0	5.3	1	128.4	6.5	117.1	2.0	109.7	1.0	1	120.8	4.7	117.8	2.8	108.9	1.2
Emamectin B1A	5	82.5	3.4	88.3	8.1	86.9	3.6	5	91.7	2.1	96.2	7.2	92.4	1.5	5	92.6	1.4	90.9	1.8	89.4	5.3	5	78.0	3.9	82.8	0.8	85.4	1.7
Endosulfansulfate	5	88.7	4.8	84.4	6.6	90.7	3.4	5	84.8	2.5	82.2	4.4	85.0	2.6	5	99.4	7.2	100.8	4.7	101.1	3.6	5	83.5	1.6	78.8	5.2	82.6	5.2

Enestroburin	1	107.8	2.4	110.2	1.7	99.4	3.7	1	116.3	2.2	115.8	2.1	103.7	7.4	1	113.7	4.3	108.0	0.9	104.5	1.5	1	105.6	5.4	105.0	7.6	101.6	5.0
Epoxiconazole	5	108.2	0.7	106.3	0.8	102.5	1.9	1	112.2	7.8	110.4	2.3	99.5	3.3	1	109.0	3.5	106.5	2.9	104.1	1.3	5	105.2	3.5	105.7	1.4	103.3	0.8
Ethametsulfuron	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Ethion	5	95.2	1.5	95.7	4.6	89.9	2.5	1	106.1	3.9	91.6	7.3	97.6	2.7	1	105.1	2.7	100.5	3.3	99.2	2.8	1	97.8	8.2	90.6	F	88.2	6.3
Ethiprole	5	118.3	1.2	109.2	1.5	100.9	1.6	5	135.7	3.0	119.5	7.9	114.2	2.0	5	131.5	0.4	119.0	2.9	113.3	2.9	5	127.4	4.6	114.1	1.9	104.4	5.6
Ethirimol	1	87.6	1.5	88.5	2.5	85.7	4.3	1	88.1	1.5	84.5	2.7	86.5	2.0	1	90.5	0.6	86.5	0.8	86.0	0.5	1	71.7	2.1	70.1	3.0	71.6	3.7
Ethofenprox	1	99.3	2.5	103.0	2.9	97.7	1.0	1	105.0	4.7	104.2	4.8	100.5	3.1	1	108.9	7.1	105.7	4.6	104.8	3.7	1	95.1	4.5	94.6	2.0	93.3	3.3
Ethofumesate	1	110.0	3.4	104.1	3.2	94.3	3.7	1	120.2	4.3	105.2	3.4	104.0	2.3	1	121.1	1.7	111.9	0.2	105.3	1.3	1	109.1	0.9	103.2	2.6	100.6	2.2
Ethoprophos	1	110.0	4.9	105.5	1.2	95.0	2.0	1	118.3	3.7	111.5	0.8	97.3	3.2	1	117.9	3.0	108.4	1.2	101.7	2.8	1	107.6	0.5	104.6	2.1	93.8	0.1
Ethoxyquin	50	F	F	F	F	F	F	1	2.9	19.7	6.6	17.6	29.8	3.3	5	22.1	19.3	25.0	10.9	36.8	4.2	5	2.2	7.7	5.3	3.2	21.5	16.9
Ethoxysulfuron	10	F	F	55.2	7.9	65.3	5.4	5	16.1	21.0	33.8	5.2	56.9	5.3	20	F	F	45.9	6.4	68.7	15.2	5	62.6	6.2	64.4	67.2	72.4	4.3
Etoazole	1	112.4	2.3	105.8	2.8	98.9	4.9	1	110.7	0.6	101.6	4.6	101.3	1.8	1	113.4	2.3	102.8	2.7	100.0	2.3	1	104.0	1.9	93.6	5.5	92.5	3.2
Famoxadone	5	122.6	7.6	118.7	2.3	105.7	2.5	1	122.3	7.5	118.0	4.5	117.6	0.9	5	161.6	3.3	141.6	3.3	120.4	2.4	5	138.9	0.8	123.1	1.5	109.1	3.1

Fenamidone	1	99.9	2.2	98.2	1.6	89.6	0.5	1	117.2	5.5	109.0	0.9	98.4	3.5	1	118.8	2.8	112.1	0.3	102.8	1.5	1	107.6	0.9	106.9	4.4	95.9	2.7
Fenaminstrobin	1	102.0	2.0	106.0	2.1	97.2	2.4	1	111.5	3.9	107.4	4.8	98.5	2.3	1	100.7	11.9	103.0	4.7	97.0	1.1	1	96.8	1.9	94.6	2.9	89.2	2.9
Fenamiphos sulFone	1	105.5	4.8	109.2	1.0	101.5	2.2	1	110.5	2.4	107.5	4.0	104.1	0.2	1	111.2	3.1	105.9	1.6	107.9	2.6	1	105.7	2.1	110.9	2.1	104.9	1.8
Fenamiphos sulFoxide	1	105.8	2.4	109.7	1.0	102.0	0.8	1	121.9	6.4	119.1	4.4	109.2	4.2	1	119.8	8.1	114.7	4.6	111.7	3.2	1	112.1	3.0	117.2	2.2	104.2	1.0
Fenamiphos	1	110.9	2.7	115.0	1.7	106.9	3.5	1	118.0	9.7	122.7	3.1	107.6	3.8	1	118.4	5.0	116.4	3.0	111.1	3.0	1	104.4	1.8	114.3	1.8	104.3	1.3
Fenarimol	5	97.9	4.1	96.9	0.6	91.6	2.8	10	F	F	95.1	5.2	90.6	3.7	10	F	F	F	F	F	F	50	F	F	F	F	86.9	3.2
Fenazaquin	1	95.5	6.8	94.4	2.7	88.9	1.9	1	113.3	2.7	106.0	0.2	98.4	3.4	1	112.6	2.1	101.2	0.5	97.5	1.5	1	101.6	3.5	94.7	4.0	88.3	2.4
Fenbuconazole	1	108.3	3.6	105.2	3.5	96.7	3.6	5	110.2	3.0	103.1	0.8	99.9	1.8	5	110.9	1.8	104.5	2.0	102.6	3.6	5	108.4	2.9	101.9	5.3	98.3	1.2
Fenbutatinoxide	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Fenhexamid	50	F	F	F	F	91.0	1.2	10	F	F	98.7	4.8	95.3	2.8	10	F	F	100.7	6.0	97.3	2.0	1	100.1	4.5	94.7	2.4	88.6	3.7
Fenobucarb	1	110.9	3.1	104.2	4.5	97.1	4.0	5	112.8	3.0	101.3	3.5	100.9	1.4	1	108.7	0.9	102.5	2.1	99.9	2.0	1	104.0	2.0	96.2	4.4	94.0	2.4
Fenothiocarb	1	117.5	2.1	119.9	3.3	106.7	1.7	1	120.8	5.6	122.2	4.3	112.0	2.9	1	122.0	5.7	115.5	1.0	110.6	1.9	1	116.1	4.5	120.0	4.1	110.0	4.2
Fenoxanil	5	89.7	5.3	89.8	0.8	92.6	17.0	1	119.4	41.1	31.9	5.9	92.0	35.8	5	65.8	65.1	58.3	63.1	106.7	7.8	5	111.3	2.5	114.5	2.3	100.5	7.0

Fenoxaprop-ethyl	1	103.9	5.6	104.2	3.9	96.9	1.5	1	118.6	3.2	107.7	4.9	99.5	1.3	1	113.2	2.0	108.5	1.5	96.8	1.3	1	99.9	5.9	100.0	2.3	92.5	1.8
Fenpropathrin	10	F	F	104.2	4.5	95.2	2.4	1	87.9	51.2	103.2	14.3	99.4	6.4	20	F	F	103.1	1.3	94.9	3.9	20	F	F	96.6	2.3	95.0	1.4
Fenpropidin	1	107.5	2.4	109.3	3.0	100.5	0.6	5	105.4	5.6	105.6	2.3	103.1	4.1	1	110.0	2.7	105.5	2.4	108.3	1.5	1	92.9	3.1	97.6	5.3	93.4	1.4
Fenpropimorph	1	99.0	4.2	95.5	2.7	92.8	3.5	1	98.6	1.5	93.3	0.5	100.5	3.8	1	104.4	4.6	99.5	3.5	99.9	2.7	1	95.2	1.6	92.1	1.3	92.2	1.9
Fenpyroximate	1	94.6	5.9	91.0	6.0	92.2	7.7	1	95.0	5.1	89.5	3.8	98.1	5.2	1	93.2	4.4	91.0	5.8	92.1	4.1	1	94.1	2.9	79.0	3.1	87.0	5.9
Fenthion sulfone	1	109.2	3.5	110.6	0.8	102.6	3.2	1	104.3	2.4	107.7	1.5	104.6	0.5	1	116.2	3.3	112.3	5.9	108.0	2.6	1	100.8	4.2	106.9	3.8	105.6	1.2
Fenthion sulfoxide	1	115.9	4.0	117.8	1.8	105.0	2.5	1	125.0	2.5	117.2	4.5	110.3	2.1	1	123.9	2.9	116.8	1.9	112.8	3.7	1	114.5	2.0	117.7	2.3	108.2	3.6
Fenthion	5	105.2	3.5	104.8	6.6	92.3	5.2	5	88.0	11.4	112.1	1.3	108.6	3.6	20	F	F	104.9	6.7	91.9	2.6	5	94.2	7.5	114.8	2.0	94.8	8.3
Fentinacetate	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Fenvalerate	5	71.8	10.2	104.9	9.2	94.1	7.7	5	93.4	14.1	116.2	3.7	112.2	6.0	5	81.6	28.7	110.4	8.0	107.2	8.2	5	64.1	12.2	82.6	4.8	81.1	4.3
Fipronil-desulfinyl	5	98.4	4.5	98.3	3.8	96.9	3.1	1	106.1	3.3	100.6	3.1	99.6	4.1	5	104.6	1.6	97.6	1.4	97.3	2.3	5	91.3	1.4	92.0	10.0	87.1	2.2
Fipronil-sulfide	1	97.2	0.2	104.7	1.2	101.5	3.7	1	106.4	2.5	103.1	1.3	102.0	6.9	1	100.9	2.1	97.2	2.0	99.0	2.3	1	96.2	4.2	98.7	3.0	96.1	1.0
Fipronil-sulfone	5	138.8	7.8	131.3	3.8	106.7	2.4	5	183.4	1.4	163.9	3.1	133.2	5.2	5	193.8	9.2	168.8	2.4	131.1	1.8	5	169.9	4.4	162.6	4.3	124.9	5.5

Fipronil	5	127.2	4.3	134.6	5.8	112.1	4.1	5	185.1	4.0	163.5	8.8	133.6	5.1	5	175.6	10.8	149.4	3.6	128.2	1.3	5	163.0	7.4	159.4	2.1	128.7	8.2
Flonicamid	5	102.7	15.6	114.9	7.0	99.2	3.7	50	F	F	F	F	113.0	4.8	5	117.4	3.6	109.6	3.8	103.1	4.6	5	58.0	16.3	67.9	9.2	102.3	2.6
Florasulam	20	F	F	73.8	8.0	78.8	8.3	5	36.5	9.6	47.7	7.8	68.2	2.7	5	61.1	8.1	68.0	3.4	79.4	6.3	5	74.8	6.4	81.4	4.4	85.0	11.4
Fluazifop-butyl	1	112.8	1.6	115.9	5.5	106.4	1.1	1	F	F	F	F	F	F	1	116.9	3.3	109.6	F	107.0	1.8	1	105.4	3.7	103.6	1.0	104.0	0.9
Fluazinam	10	F	F	97.0	1.0	97.0	5.8	5	97.9	5.3	96.7	0.6	92.2	0.3	20	F	F	90.7	0.5	94.1	3.2	5	93.7	3.9	93.7	3.5	89.5	4.2
Flubendiamide	20	F	F	184.2	1.5	143.0	2.2	50	F	F	F	F	147.3	2.8	50	F	F	F	F	142.7	2.4	20	F	F	185.7	5.6	147.6	3.8
Flucarbazone	100	F	F	F	F	F	F	10	F	F	27.3	9.4	59.0	3.0	20	F	F	27.8	13.6	55.0	14.3	10	7.4	45.3	29.1	4.0	46.9	7.8
Flucetosulfuron	10	F	F	71.9	7.9	80.2	1.4	5	18.0	29.3	37.7	6.6	64.2	0.1	10	F	F	59.8	1.1	79.8	7.1	5	65.3	11.8	76.5	6.3	83.5	4.3
Flucythrinate	20	F	F	114.5	4.7	106.6	3.8	20	F	F	116.2	2.6	105.8	2.2	10	F	F	111.7	1.0	105.8	0.7	20	F	F	113.2	2.2	108.4	4.7
Fludioxonil	1	113.6	2.2	115.1	1.8	106.6	1.5	1	107.9	3.6	105.5	1.4	101.9	1.6	1	103.7	5.0	105.9	1.5	107.9	2.3	5	102.7	2.1	99.5	1.0	97.4	1.2
Flufenacet	1	112.4	2.8	113.2	4.2	104.8	1.4	1	122.4	5.2	120.3	2.7	110.5	5.0	1	119.1	4.7	114.7	2.7	112.3	5.7	5	117.9	3.6	118.3	2.2	107.3	2.7
Flufenoxuron	20	F	F	98.3	5.6	92.2	7.0	20	F	F	102.9	3.1	99.6	3.6	20	F	F	99.4	6.1	92.5	4.3	20	F	F	88.1	2.0	87.0	4.0
Flufiprole	1	113.9	9.3	113.2	2.7	93.7	2.9	1	106.8	3.9	108.4	0.5	98.0	0.6	1	116.4	4.0	107.5	0.6	97.3	4.8	5	94.4	2.0	94.5	0.8	87.4	4.3

Flumetrain	NA	F	F	F	F	F	F	50	F	F	F	F	77.6	6.9	50	F	F	F	F	84.4	12.9	50	F	F	F	F	92.7	4.5
Flumetsulam	50	F	F	F	F	84.8	2.4	20	F	F	42.5	3.7	60.7	1.8	20	F	F	75.9	3.5	86.1	8.7	20	F	F	86.0	61.6	90.7	6.7
Flumiclorac-pentyl	5	112.4	3.3	108.4	3.9	99.1	3.1	1	119.0	2.1	117.4	2.6	99.6	5.4	1	120.8	4.4	109.1	0.6	98.5	1.0	5	117.1	3.4	110.3	2.7	100.2	3.7
Flumioxazin	5	78.7	13.1	111.3	8.1	108.8	4.5	50	F	F	F	F	114.5	2.9	10	F	F	133.5	7.6	121.7	4.9	20	F	F	111.6	2.6	106.3	1.8
Flumorph	1	106.0	0.7	98.5	3.9	92.4	1.7	1	115.9	3.4	106.2	1.4	106.0	2.8	1	113.9	1.1	104.2	3.7	101.7	5.6	1	111.7	3.2	103.2	7.5	100.5	1.5
Fluopicolide	5	119.3	3.1	112.2	4.7	98.4	2.6	1	126.3	2.2	123.0	1.5	113.1	2.1	1	125.9	3.9	116.0	4.3	111.0	2.8	1	110.5	3.1	116.1	1.9	108.0	5.3
Fluopyram	5	106.5	2.0	101.5	8.0	97.2	0.5	1	103.0	4.4	110.6	0.5	103.5	1.7	5	110.4	1.4	102.7	4.9	107.6	16.5	5	111.7	11.9	110.2	1.1	99.8	5.1
Fluoroglycofen-ethyl	1	107.6	7.3	106.5	3.6	101.3	5.2	1	117.4	1.3	114.5	4.2	103.2	2.7	1	111.4	7.1	107.8	2.0	98.1	4.9	1	107.0	1.8	99.1	5.4	93.4	4.2
Fluroxypyr	NA	F	F	F	F	F	F	5	F	F	F	F	F	F	NA	F	F	F	F	F	F	50	F	F	F	F	20.9	82.2
Flurtamone	5	113.6	1.8	113.0	0.8	107.9	1.3	1	118.0	3.7	117.1	2.0	110.5	2.5	1	112.1	2.1	109.5	3.7	106.0	1.4	1	109.3	3.7	112.7	1.8	108.6	2.8
Flusilazole	1	110.2	0.6	104.2	2.2	95.3	2.1	5	112.3	3.2	110.2	0.8	98.8	3.0	5	111.1	6.3	104.6	1.7	99.4	2.9	5	96.4	1.4	96.2	4.7	91.0	0.8
Fluthiacet-methyl	5	103.3	3.3	108.9	2.7	100.0	3.3	5	109.1	3.4	107.2	3.6	76.7	23.0	5	114.0	3.6	104.3	0.8	102.7	2.5	5	112.8	7.4	106.9	3.9	101.2	1.5
Flutolanil	1	113.3	2.2	110.2	2.2	101.5	1.2	1	119.8	0.8	118.1	1.0	112.5	1.9	1	118.4	1.8	110.6	3.9	108.6	0.6	1	110.6	3.3	115.8	0.8	109.7	0.5
Flutriafol	5	98.6	5.4	97.4	4.2	95.4	5.0	5	102.9	2.9	98.7	4.2	98.3	3.5	1	104.5	5.1	98.6	1.1	99.4	0.6	5	91.4	4.4	87.2	2.8	88.8	1.0

				2					.2							.6							6		4			
Fluxapyroxad	1	111.3	2.6	107.2	4.3	94.9	4.0	1	117.9	1.1	113.9	3.0	104.4	2.3	1	120.4	1.8	112.3	1.2	103.5	3.0	1	108.5	5.0	102.9	1.1	96.4	0.7
Fomesafen	1	79.7	4.9	86.8	1.3	94.2	6.9	1	48.6	3.7	57.9	14.8	81.2	2.4	5	50.1	62.5	74.9	11.5	97.4	7.7	5	72.8	3.9	69.7	15.0	84.2	3.3
Fonophos	5	93.5	13.7	91.3	9.8	94.1	8.1	5	88.1	1.9	92.8	5.1	113.4	11.3	5	90.9	11.0	96.5	5.3	97.4	5.9	5	88.6	6.5	83.6	7.9	83.8	13.3
Forchlorfenuron	5	103.6	1.0	108.2	1.4	95.0	4.3	1	107.5	1.2	103.3	3.1	97.2	0.8	1	109.1	3.2	102.0	1.9	97.8	1.6	1	92.4	2.0	90.1	3.0	88.9	2.5
Fosthiazate	1	106.2	3.1	109.1	0.5	102.2	3.1	1	101.5	5.0	106.8	1.4	105.5	1.0	1	106.4	2.9	104.1	4.7	104.4	2.7	1	101.4	2.1	105.4	0.9	100.2	1.5
Halosulfuron-methyl	50	F	F	F	F	76.6	1.3	20	F	F	56.5	7.4	72.0	2.8	50	F	F	F	F	86.1	8.6	1	58.0	4.2	70.2	4.6	78.7	3.9
Haloxypop-methyl	1	105.3	1.9	104.8	1.4	92.6	3.8	1	115.2	4.1	112.2	3.4	103.8	2.9	1	114.0	4.1	108.5	4.9	104.1	1.7	1	109.0	2.8	109.9	1.3	102.5	0.8
Hexaconazole	5	90.5	6.0	92.3	3.6	89.4	0.7	5	86.7	1.6	90.3	3.7	95.2	0.9	5	84.5	2.3	88.9	1.4	91.1	2.6	5	82.1	3.9	84.8	2.3	86.9	3.5
Hexaflumuron	5	98.4	6.5	117.6	3.4	104.9	4.5	5	182.1	9.1	132.8	4.0	120.5	2.2	5	139.3	10.2	129.6	3.5	106.4	6.4	50	F	F	F	F	106.3	3.7
Hexanoic acid	10	F	F	113.9	17.3	102.8	3.6	5	107.2	97.8	140.8	27.1	121.2	5.3	50	F	F	F	F	107.5	5.2	50	F	F	F	F	102.9	11.4
Hexazinone	1	105.4	4.4	106.9	2.7	107.7	3.3	1	118.2	3.7	111.4	2.4	99.6	1.5	1	115.8	1.1	109.0	0.4	99.8	2.9	1	103.7	1.6	102.4	0.5	89.5	1.3
Hexythiazox	5	113.4	8.7	88.6	36.7	99.3	0.9	5	137.8	6.8	107.0	6.2	105.1	109.3	5	103.6	15.5	98.7	7.1	83.4	2.6	1	121.6	4.9	105.6	7.9	91.2	4.3
Hymexazol	5	107.	9.2	103	3.8	94.3	3.1	5	116	0.6	106.	4.6	106.	3.4	5	115	1.4	103.	1.7	99.0	3.0	5	111	13.	90.	6.4	94.0	3.0

Malathion	1	109.3	1.5	110.5	4.6	104.3	2.2	1	105.4	4.2	98.8	2.4	96.2	1.6	1	98.6	9.0	103.5	7.8	103.5	7.4	1	97.0	1.5	108.1	0.6	103.5	2.2
Maleic Hydrazide	50	F	F	F	F	F	F	1	F	F	F	F	F	F	20	F	F	F	F	F	F	50	F	F	F	F	F	F
Mandipropamid	5	112.1	1.1	103.2	5.2	94.5	1.4	1	108.4	2.3	108.6	0.4	102.7	0.8	1	110.8	1.0	104.6	3.5	102.4	2.3	1	93.3	5.2	97.0	1.2	94.4	4.7
Matrine	5	23.6	5.4	31.8	3.2	47.9	3.6	5	17.7	2.1	17.8	5.6	34.4	2.6	5	F	F	F	F	39.0	4.6	5	30.7	3.6	31.8	1.4	36.6	2.3
Mefenacet	1	99.3	2.8	88.9	10.0	89.0	3.7	1	90.5	5.9	99.8	3.0	98.5	F	1	102.9	3.4	97.0	3.0	100.1	16.2	1	103.9	13.4	91.4	5.4	88.1	1.0
Mepronil	1	117.8	2.3	110.6	2.9	100.1	2.4	1	117.2	1.8	113.2	3.0	104.1	1.3	1	118.0	0.9	110.7	2.6	103.6	3.2	1	103.0	3.3	101.9	3.0	94.3	0.9
Mesosulfuron-methyl	10	F	F	84.3	2.3	84.7	4.0	5	51.0	5.8	57.4	4.2	69.6	3.8	5	83.0	1.0	82.9	6.1	93.7	2.3	5	76.3	4.1	78.2	3.2	85.6	6.2
Mesotrione	100	F	F	F	F	F	F	50	F	F	F	F	31.6	0.8	50	F	F	F	F	29.8	23.1	20	F	F	9.6	4.5	21.8	8.4
Metaflumizone	20	F	F	90.5	10.0	86.5	2.4	5	104.6	10.9	100.3	0.9	93.9	2.7	5	86.5	6.8	98.8	7.9	90.6	6.4	5	88.6	4.9	94.3	9.8	85.6	1.7
Metalaxyl-M	5	110.7	6.3	118.6	0.9	101.9	1.7	1	123.6	3.1	117.0	0.9	107.6	3.7	1	115.7	3.1	113.4	2.3	110.0	1.2	1	109.2	3.4	109.4	1.6	97.5	1.7
Metaldehyde	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Metamifop	1	106.7	3.0	107.2	4.8	100.6	1.5	1	112.8	7.2	110.5	1.7	101.7	2.1	1	109.6	5.3	101.3	3.0	95.3	1.3	1	106.5	2.8	98.5	3.6	95.3	1.1
Metazachlor	1	114.0	2.6	110.7	1.1	103.2	2.7	1	112.1	2.2	114.2	2.3	106.9	3.7	1	111.8	3.2	110.9	4.4	106.1	2.1	1	103.5	0.9	109.9	2.3	101.1	1.3
Metazosulfuron	50	F	F	F	F	63.7	0.5	5	23.4	7.6	37.6	11.9	62.7	1.9	20	F	F	44.2	3.7	70.0	14.7	50	F	F	F	F	62.5	7.1

Methamidophos	1	F	F	F	F	F	F	1	65.5	2.3	64.3	1.6	66.5	2.5	1	69.2	0.9	65.6	2.5	68.1	4.8	1	73.5	19.5	70.4	7.4	83.0	18.6
Methidathion	1	98.9	4.9	95.5	1.6	91.7	2.5	1	104.6	3.5	98.8	5.1	99.7	2.0	1	108.3	4.0	104.3	2.0	100.6	5.7	1	91.3	2.3	89.5	4.6	93.1	4.4
Methiocarb sulfone	1	121.6	5.9	115.0	2.7	97.3	2.2	5	123.7	1.9	119.8	2.0	101.3	2.6	1	121.3	2.4	117.2	1.2	106.9	1.7	5	101.7	4.7	103.7	5.0	90.6	2.1
Methiocarb sulfoxide	1	105.8	3.8	103.7	3.6	93.1	1.3	1	115.7	3.6	109.3	1.3	101.5	3.1	1	109.2	0.6	99.1	1.6	95.7	1.3	1	97.8	2.7	98.5	3.3	88.8	3.0
Methiocarb	1	116.1	4.1	111.0	1.7	102.0	2.0	1	124.8	1.4	119.8	0.7	105.2	1.3	1	119.9	6.0	111.9	1.9	101.3	1.6	1	107.9	1.7	107.6	5.4	99.5	2.0
Methomyl	5	128.8	1.6	124.4	3.6	100.3	3.0	10	F	F	129.2	2.1	103.5	3.8	5	132.8	1.7	118.7	1.6	100.5	3.7	10	F	F	107.4	0.7	91.3	1.5
Methoxyfenozide	5	93.2	3.9	97.3	0.5	89.4	3.6	1	106.0	4.2	107.2	4.6	104.9	3.5	1	102.2	0.6	102.8	2.4	99.4	2.6	1	99.3	3.2	101.3	1.7	94.3	2.1
Metolachlor	1	113.0	4.7	106.5	3.8	94.8	2.3	1	129.2	2.5	120.1	0.5	107.7	1.5	1	116.6	0.5	113.2	1.8	104.9	1.9	1	115.1	0.9	103.9	4.3	96.7	3.6
Metrafenone	5	103.9	0.6	108.9	1.5	101.0	4.6	1	112.4	1.5	109.5	2.3	107.1	2.2	1	110.5	2.0	109.0	4.8	104.1	4.5	1	113.8	3.0	114.8	0.2	105.4	2.2
Metribuzin	5	108.2	3.4	106.6	5.1	98.0	3.4	1	105.0	2.0	98.8	4.9	98.5	2.6	1	111.6	4.1	105.4	4.2	101.6	1.8	5	100.9	7.9	94.8	0.1	89.9	3.1
Metsulfuron-methyl	5	61.4	7.0	64.9	2.1	72.9	6.5	5	23.4	7.3	31.0	5.6	55.0	4.5	5	46.2	2.2	52.8	4.6	69.4	5.5	5	71.1	1.1	70.4	3.3	78.9	3.7
Molinate	5	108.4	7.3	97.8	1.1	91.2	2.5	5	103.7	3.9	101.1	4.8	96.4	1.0	5	100.6	2.1	95.5	2.6	95.0	4.5	5	88.4	2.2	93.5	1.9	89.2	1.5
Monocrotophos	1	110.8	2.2	105.9	3.0	83.4	13.1	1	113.6	3.7	107.5	2.1	95.3	1.9	1	114.0	0.9	103.6	1.2	89.8	10.8	1	96.6	1.4	94.2	2.5	78.0	14.9

Monosulfuron	20	F	F	57.9	5.7	60.9	4.2	10	F	F	21.9	11.7	42.0	3.9	50	F	F	F	F	53.4	12.8	20	F	F	65.2	4.2	68.5	6.0
Moroxydinehydrochloride	1	9.3	9.5	11.5	2.0	16.9	4.2	1	9.2	5.9	11.5	4.7	15.4	4.9	1	11.1	5.1	12.2	3.8	15.7	14.0	1	11.7	7.1	12.3	2.6	15.5	2.6
Myclobutanil	5	121.8	2.5	99.4	2.0	92.5	5.1	1	97.7	3.8	98.1	2.6	93.8	1.5	5	102.9	4.7	97.8	0.7	95.6	1.3	5	90.7	3.0	95.1	3.1	91.8	2.5
Napropamide	1	114.2	0.9	109.0	0.5	100.5	2.0	1	118.5	5.1	114.6	2.3	106.6	2.2	1	118.0	3.6	111.6	1.1	109.9	3.9	1	107.6	3.2	100.7	3.9	98.1	3.1
NicosulFuron	10	F	F	41.4	1.8	49.2	4.9	5	7.0	8.3	11.6	1.2	26.2	4.2	5	26.2	5.3	28.8	4.5	41.2	11.4	5	54.4	7.1	48.0	3.5	57.2	3.8
Nicotine	1	128.9	7.4	103.4	6.4	46.8	25.9	1	130.8	14.0	91.4	24.9	131.7	3.4	1	129.4	7.1	179.7	19.5	149.8	9.5	1	129.5	8.5	77.1	6.5	46.8	2.0
Novaluron	5	126.5	6.1	128.7	3.7	114.0	1.1	1	150.2	4.0	136.4	1.3	116.1	4.0	5	143.9	1.4	128.9	6.9	112.5	10.4	5	136.7	7.3	128.1	2.0	113.5	4.4
Dimethoate oxon	1	112.7	1.1	111.3	0.4	96.6	3.0	1	116.0	5.1	115.8	1.8	110.2	2.9	1	117.5	3.9	110.5	2.0	104.2	1.7	1	104.5	2.9	104.7	1.0	93.6	2.1
OrthosulFamuron	20	F	F	94.3	6.7	86.4	4.0	20	F	F	61.1	4.4	68.2	1.4	20	F	F	84.9	0.9	89.2	1.8	20	F	F	92.7	3.3	90.8	1.8
Oxadiargyl	5	97.2	4.4	105.6	6.3	92.1	4.7	5	111.3	4.7	83.1	19.9	87.9	10.1	50	F	F	F	F	110.2	11.4	10	115.0	4.5	116.4	3.8	105.4	17.8
Oxadiazon	5	123.6	4.8	112.4	1.8	104.5	1.0	1	121.0	5.2	120.8	3.1	113.9	3.0	1	129.4	4.2	121.4	2.1	109.5	1.5	10	120.4	0.8	118.8	2.8	108.6	4.8
Oxadixyl	5	103.4	5.4	109.4	4.1	104.1	1.8	1	122.2	3.0	118.2	2.0	114.2	4.2	1	119.9	2.6	112.4	6.7	104.9	9.5	1	104.4	5.2	106.8	3.7	95.6	4.0
Oxamyl	5	136.6	4.9	129.3	7.0	105.7	4.8	20	F	F	129.4	4.5	112.9	1.1	20	F	F	148.8	2.8	117.8	1.8	20	F	F	137.0	2.7	108.0	7.3

Oxaziclomefone	1	112.8	2.5	116.4	2.1	108.7	2.2	1	120.0	4.2	115.9	5.5	105.5	4.7	1	107.8	16.9	109.5	3.6	104.1	0.7	1	111.8	0.9	109.3	1.3	100.9	4.5
OxiMinoOxaMyl	5	117.1	2.5	113.2	1.1	103.2	0.7	20	F	F	126.2	0.5	115.6	1.5	1	136.9	5.8	130.8	2.7	118.1	2.1	5	113.0	0.5	114.6	2.1	102.8	3.0
Oxycarboxin	20	F	F	108.8	15.3	77.7	24.8	50	F	F	F	F	54.5	4.8	5	96.2	37.7	125.7	12.2	105.9	78.9	10	F	F	99.6	9.8	93.1	2.8
Oxydemeton-methyl	1	102.7	3.3	100.0	4.0	90.5	5.9	1	110.9	2.8	99.3	4.0	97.2	1.6	1	116.6	1.4	104.4	2.5	98.1	2.5	1	102.6	2.1	93.6	5.5	84.5	2.8
Paclobutrazol	1	99.4	4.1	103.2	2.0	99.5	2.4	1	97.6	5.4	99.6	5.2	99.2	2.7	1	98.4	1.8	98.6	1.1	102.6	2.4	1	96.2	2.4	98.3	1.2	97.3	1.0
Parathion-methyl	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Parathion	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Penconazole	1	119.0	2.6	112.3	3.8	102.0	3.7	1	132.8	3.0	115.7	1.1	110.9	2.2	1	121.4	0.2	111.5	3.1	103.8	2.2	1	118.7	1.0	108.9	4.2	104.0	3.4
Pendimethalin	5	87.7	5.5	89.0	7.0	88.5	3.5	5	94.2	4.9	95.3	1.9	93.4	1.7	1	94.6	3.0	92.3	3.3	92.5	0.8	1	85.4	3.2	87.1	1.2	85.5	3.4
Penoxsulam	5	81.4	0.2	82.9	7.4	85.5	4.3	1	44.0	7.2	50.0	3.6	64.0	1.4	1	79.4	3.0	81.0	3.5	91.9	5.5	1	84.0	1.5	82.3	0.8	81.1	4.9
Penthiopyrad	1	128.5	4.0	126.5	1.4	113.1	1.7	1	132.6	2.3	129.1	3.1	114.9	3.9	1	129.7	2.2	115.8	0.2	112.9	0.3	1	122.5	4.8	125.3	1.7	110.9	1.5
Phenamacril	1	118.6	1.9	107.5	2.0	99.8	4.4	1	125.8	3.2	110.5	5.9	104.0	1.1	1	119.9	2.0	107.3	3.5	101.8	0.8	1	101.3	4.7	94.9	2.6	91.1	1.8
Phenazino-1-carboxylicacid	1	96.9	3.4	91.9	2.6	87.3	5.0	1	61.4	2.5	60.7	2.7	63.4	3.8	1	89.1	1.6	82.9	3.3	83.6	2.3	1	95.1	1.9	85.5	5.5	85.3	1.9

Phenmedipham	5	121.0	4.4	112.1	3.0	98.1	3.1	1	127.6	6.7	108.2	1.1	102.9	1.9	5	119.4	0.8	111.4	1.3	104.5	1.7	5	102.1	3.7	92.1	5.3	96.1	6.0
Phenthoate	5	146.3	3.6	146.4	2.4	127.2	1.5	1	157.3	5.7	139.7	9.8	127.8	9.0	1	152.0	5.5	136.5	5.0	124.4	3.1	5	136.1	1.8	137.1	3.2	123.1	3.3
Phorate oxon sulfone	1	F	F	F	F	F	F	N A	F	F	F	F	F	F	1	F	F	F	F	F	F	1	F	F	F	F	86.5	F
Phorate oxon sulfone	5	119.3	9.3	109.6	5.2	101.0	2.3	1	128.2	3.5	114.9	1.2	111.6	2.2	1	127.7	3.1	115.8	1.6	103.5	1.2	1	117.8	0.5	102.6	2.4	89.4	6.6
Phorate oxon	5	78.9	34.8	92.7	11.5	106.7	4.0	5	71.3	14.0	94.7	19.8	90.4	7.0	5	80.5	13.6	96.5	22.6	108.5	6.3	5	62.0	12.2	94.0	11.7	85.2	3.4
Phorate sulfone	1	122.2	6.0	114.3	2.7	101.4	1.0	1	130.5	3.1	123.8	1.0	104.2	1.8	1	129.8	2.1	120.3	2.7	105.8	0.4	1	108.7	1.6	113.5	3.0	97.6	2.5
Phorate sulfoxide	1	124.0	5.2	115.3	2.9	101.1	2.5	1	124.7	3.2	117.5	2.0	106.1	2.0	1	123.4	2.2	115.6	0.8	107.1	1.2	1	112.5	2.2	111.3	3.2	96.1	1.7
Phorate	10	F	F	62.4	14.9	85.2	11.5	5	55.4	22.3	82.9	4.1	94.9	0.7	5	65.4	29.9	83.4	6.5	105.1	7.2	5	51.1	1.7	76.0	2.6	85.0	4.2
Phosalone	5	105.7	0.5	109.8	1.6	103.6	3.2	1	119.3	3.4	118.6	4.8	110.9	3.8	1	120.7	2.6	114.6	1.9	109.3	5.0	5	105.2	3.7	104.8	1.1	101.8	2.6
Phosfolan-methyl	1	110.9	3.9	104.3	4.1	94.7	5.0	1	116.2	3.6	105.2	6.3	96.7	1.5	1	115.6	2.6	109.5	2.4	102.8	3.3	1	100.5	3.1	92.5	2.3	86.4	2.5
Phosfolan	1	112.9	6.5	106.8	4.1	97.5	7.1	1	112.2	1.4	104.3	3.2	103.3	2.3	1	119.6	0.7	110.0	2.1	101.3	1.3	1	102.2	2.4	94.3	2.2	89.2	3.3
Phosmet	1	128.9	1.4	128.6	1.4	110.6	2.5	1	142.9	4.9	130.6	4.8	113.6	1.6	1	141.6	2.6	129.6	4.5	118.4	2.2	1	117.8	0.9	119.7	1.4	111.3	1.9
Phosphamidon	1	100.1	5.1	100.3	3.7	94.8	2.1	1	112.2	3.2	111.2	1.2	104.0	1.3	1	104.5	3.2	100.3	3.0	95.9	3.4	1	98.9	5.1	98.5	7.3	89.2	4.0

Phoxim	5	94.8	4.2	91.4	5.0	91.2	5.2	5	100.1	1.3	96.7	5.4	98.8	3.9	5	104.7	1.6	97.6	2.3	96.8	4.7	5	93.2	1.6	89.9	3.5	91.2	3.4
Phthalide	1	155.0	21.9	139.6	10.5	104.8	2.0	5	156.3	3.0	116.8	4.1	101.1	1.2	1	115.5	4.9	122.4	3.1	106.6	1.7	1	114.9	7.0	125.0	5.8	101.4	1.1
Picoxystrobin	1	101.7	1.7	113.2	2.6	105.4	3.3	1	102.0	5.9	109.6	5.5	108.9	3.4	1	103.9	6.3	104.6	1.5	107.8	2.5	1	100.3	4.4	112.6	1.8	110.1	6.0
Pinoxaden	1	89.5	3.3	86.9	2.4	89.8	4.1	1	94.3	4.6	92.9	5.0	98.1	1.0	1	101.4	2.9	100.1	3.3	102.8	0.6	1	94.8	0.3	96.0	0.7	95.6	3.8
Piperonyl butoxide	1	115.4	7.2	106.6	2.0	96.7	2.4	1	108.5	1.6	106.1	2.2	98.2	1.6	1	114.3	0.8	105.3	0.3	97.2	0.2	1	101.6	1.9	101.0	2.8	95.9	3.3
Pirimicarb	1	112.7	0.6	101.9	2.2	95.3	5.8	1	110.1	2.1	101.4	3.2	100.8	3.0	1	108.9	4.1	98.7	2.7	96.8	2.9	1	103.7	1.3	95.3	1.2	87.4	2.3
Pirimiphos-methyl	1	105.0	1.6	106.7	2.6	101.0	1.1	1	98.4	5.2	104.3	3.4	103.2	1.2	1	107.6	2.2	105.6	1.5	106.3	2.1	1	100.1	1.3	106.2	1.8	103.1	2.6
Pretilachlor	5	98.0	1.9	98.8	1.8	90.4	2.9	1	115.5	1.4	111.6	1.2	105.1	2.4	5	110.2	3.6	104.1	4.5	101.3	3.1	5	107.1	0.4	110.3	1.6	104.3	3.4
Probenazole	5	107.0	2.3	99.7	1.8	96.8	4.4	5	86.9	3.6	84.3	3.7	91.0	5.2	5	98.6	2.8	92.7	1.7	93.0	1.7	5	93.8	3.6	91.2	2.2	88.4	5.1
Prochloraz	1	95.1	7.1	93.4	3.8	90.5	1.7	1	98.6	3.2	99.7	1.6	98.6	1.8	1	102.7	2.3	100.3	1.0	95.1	1.7	1	91.2	3.0	92.7	2.0	90.0	1.9
Profenophos	1	113.3	1.4	118.2	2.4	106.3	1.9	1	123.4	3.3	111.5	11.8	110.5	3.8	1	109.8	13.1	114.1	5.5	108.0	1.9	1	116.5	1.2	113.8	1.0	107.3	1.8
Prohexadione	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F
Prometryn	1	105.3	6.2	104.0	1.1	94.7	0.8	1	102.5	4.1	100.1	5.0	99.1	1.5	1	107.8	1.4	100.6	0.7	97.9	1.6	1	98.0	3.3	96.5	3.1	92.0	2.5

Propachlor	1	121.8	1.4	120.3	1.3	109.2	1.4	1	120.8	4.0	119.7	2.0	109.2	1.8	1	121.4	2.4	114.2	2.7	108.6	1.7	1	114.2	3.4	117.3	2.3	105.3	1.8
Propamocarb	1	92.0	0.1	84.8	2.0	80.0	5.2	1	90.3	5.9	82.5	2.6	88.3	3.6	1	92.0	4.5	86.1	2.4	86.5	1.1	1	77.0	1.6	72.6	1.9	72.0	2.2
Propanil	50	F	F	F	F	101.4	2.5	20	F	F	128.7	3.6	122.5	4.1	50	F	F	F	F	125.8	4.9	20	F	F	119.5	1.5	111.7	3.5
Propargite	1	106.8	5.1	106.3	3.5	96.4	1.7	1	120.6	2.9	113.2	2.2	100.3	2.9	1	106.9	1.0	103.1	0.3	93.8	2.1	1	109.3	2.6	102.9	3.9	95.2	1.3
Propiconazole	1	99.2	1.8	103.7	1.6	95.1	4.9	1	105.0	2.3	112.1	1.3	107.8	5.1	1	108.0	3.7	99.1	2.6	98.2	4.1	1	106.3	5.9	94.5	1.4	93.4	3.7
Propisochlor	1	104.3	4.7	124.9	4.2	107.8	2.0	5	108.9	1.5	124.8	4.3	112.9	2.7	5	107.4	3.4	124.8	2.3	113.7	1.3	5	99.8	4.6	127.6	4.6	108.1	4.3
Propyrisulfuron	5	82.6	0.8	85.3	6.5	88.3	2.3	5	47.0	1.0	56.7	1.8	70.5	4.3	5	74.0	6.9	80.9	4.4	89.6	7.7	5	84.3	7.1	86.4	5.6	84.0	6.7
Propyzamide	5	127.2	3.6	115.0	4.7	103.5	1.6	5	123.8	1.9	118.8	3.1	103.1	2.8	5	130.9	5.5	120.4	3.7	107.2	2.8	5	109.4	1.6	108.7	1.8	94.9	4.1
Prothioconazole	20	F	F	35.2	1.5	64.3	3.7	50	F	F	F	F	79.9	7.4	5	58.2	4.8	64.9	4.7	83.8	3.9	N A	F	F	F	F	F	F
Pymetrozine	5	81.6	6.3	65.1	4.4	61.9	3.9	20	F	F	59.6	0.6	57.7	3.7	5	82.0	6.1	64.0	2.6	67.1	7.0	20	F	F	51.2	5.8	105.7	8.1
Pyraclostrobin	1	117.3	7.8	116.9	5.3	102.6	2.6	1	107.9	0.5	115.4	2.0	104.4	4.1	1	110.6	3.5	105.8	3.0	98.8	5.4	1	97.6	3.3	96.7	3.3	89.9	2.5
Pyraflufen-ethyl	1	110.6	3.5	112.5	3.1	105.6	0.9	1	118.3	2.6	115.7	2.7	110.6	1.6	1	118.1	1.7	116.7	0.9	108.3	3.8	1	111.9	2.8	110.7	3.7	108.9	2.4
Pyrametostrobin	1	140.9	3.4	129.0	5.6	112.5	3.3	1	158.3	0.3	137.2	0.5	120.0	2.7	1	155.2	1.0	130.9	6.4	115.8	5.5	1	144.3	3.1	127.3	4.3	113.0	4.0

Pyraoxystrobin	1	98.7	1.3	96.3	2.1	93.5	7.5	1	106.2	2.9	99.4	2.9	102.3	2.6	5	101.9	2.3	102.5	1.9	97.4	3.6	5	106.2	2.5	96.5	2.1	95.2	4.0
Pyrazosulfuron-ethyl	10	F	F	80.2	2.2	80.1	7.4	5	38.3	4.9	51.8	5.2	76.2	1.7	5	66.8	3.3	72.7	1.3	89.0	9.3	5	76.9	3.0	76.5	3.5	85.5	6.7
Pyrethrin 1	5	88.5	25.2	84.7	99.4	125.4	7.4	20	F	F	108.2	4.0	107.1	2.6	1	118.2	17.4	102.1	55.7	114.9	8.5	10	F	F	93.0	0.6	93.2	3.4
Pyrethrin 2	5	79.7	6.9	63.8	14.6	80.2	23.2	5	117.5	25.7	103.4	4.2	101.0	2.9	5	64.7	3.4	81.1	4.2	89.4	8.5	5	106.0	17.0	103.3	4.3	101.5	10.7
Pyribenzoxim	5	115.6	6.2	109.1	2.0	95.1	3.0	1	114.7	2.1	112.8	2.7	98.8	8.2	5	112.7	5.2	102.1	1.2	98.3	1.1	5	107.5	5.4	104.8	6.1	100.5	6.2
Pyridaben	1	98.6	3.4	102.4	0.9	98.0	3.8	1	106.8	3.8	104.6	1.4	103.2	5.1	1	112.6	3.4	105.4	2.1	106.3	0.9	1	100.8	5.6	99.8	3.5	97.0	0.7
Pyridalyl	1	114.4	8.5	115.3	3.9	114.2	2.4	1	81.9	4.1	82.2	7.2	98.6	12.0	1	113.2	0.7	109.8	0.8	98.5	12.3	1	65.2	12.7	68.0	4.8	75.1	16.6
Pyridaphenthion	1	112.9	0.7	113.8	1.9	102.2	3.5	1	118.1	5.6	119.8	2.4	109.1	2.2	1	119.5	2.5	114.4	1.5	112.3	4.3	1	114.1	2.7	116.4	2.0	108.9	2.3
Pyrifthalid	1	108.2	3.5	106.0	3.3	92.5	2.4	1	113.2	4.5	107.9	3.2	102.0	0.8	1	113.5	2.3	105.9	3.9	100.0	1.9	1	105.0	1.6	104.0	3.8	97.7	1.9
Pyrimethanil	1	118.7	5.2	103.8	2.9	93.1	1.9	1	98.6	1.6	97.5	2.2	93.7	1.1	1	96.8	4.3	94.9	3.1	101.7	2.5	1	91.9	5.0	107.1	3.5	91.5	1.0
Pyrimorph	5	108.3	8.3	106.7	1.8	93.3	1.6	1	107.8	4.2	105.9	2.5	98.7	2.7	1	111.3	2.1	99.3	1.6	94.1	5.2	1	106.6	3.7	102.0	1.6	89.4	1.6
Pyriproxyfen	5	102.0	2.5	103.3	2.3	98.4	2.1	1	113.9	2.2	107.9	2.4	102.9	4.2	5	103.8	3.9	100.3	2.3	100.1	2.5	1	105.9	1.3	103.3	1.3	98.3	1.1
Pyrisoxazole	1	96.8	3.4	103.0	4.5	99.2	0.9	1	109.3	3.7	111.6	1.3	109.4	2.1	1	112.7	7.2	109.9	3.9	109.4	2.5	1	82.2	3.5	94.0	2.3	97.2	3.8

Quinalphos	5	159.1	3.4	140.8	3.9	115.0	1.4	5	158.8	2.7	145.8	3.4	118.1	0.5	5	159.1	2.7	132.1	3.2	110.3	1.2	5	147.1	1.9	130.8	6.0	112.1	0.8
Quinclorac	NA	F	F	F	F	F	F	100	F	F	F	F	F	F	50	F	F	F	F	7.3	42.8	50	F	F	F	F	8.4	13.7
Quinoxifen	1	98.2	3.9	95.8	2.7	91.6	3.0	1	112.8	2.6	100.0	3.7	98.0	2.3	1	108.1	1.5	103.4	1.4	95.6	4.8	1	100.2	1.6	96.1	3.0	84.5	2.8
Quizalofop FreeAcid	50	F	F	F	F	6.9	12.5	10	F	F	0.8	134.4	11.4	8.5	5	4.0	1.5	9.0	14.0	22.0	18.2	1	20.0	16.0	24.7	4.8	39.1	4.0
Quizalofop-ethyl	1	109.0	5.4	107.2	5.5	99.1	2.3	1	128.5	3.7	118.2	3.5	106.7	1.6	1	115.3	1.2	107.0	1.5	96.2	1.3	1	104.2	5.0	98.6	2.0	94.4	1.7
Rimsulfuron	5	64.7	6.9	67.4	3.9	74.1	0.6	5	21.0	8.1	29.0	5.0	54.4	5.4	5	44.0	2.0	52.8	3.1	71.7	8.9	5	67.9	5.0	70.7	3.3	77.8	7.1
Rotenone	5	103.1	3.4	101.2	3.1	95.3	3.5	5	170.8	1.2	128.6	26.9	94.7	32.5	20	F	F	78.3	31.0	106.3	1.3	5	122.9	4.1	113.3	5.8	115.6	31.8
Saflufenacil	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	NA	F	F	F	F	F	F	F	NA	F	F	F	F	F
Sedaxane	1	101.9	1.1	95.8	3.6	90.1	5.0	1	109.9	2.1	104.5	2.3	101.0	1.0	1	108.3	3.9	101.5	3.0	102.5	4.2	5	104.2	3.0	97.6	1.6	96.7	4.0
Sethoxydim	1	60.3	4.0	71.9	2.6	87.7	4.7	1	88.7	3.3	82.1	5.5	89.0	1.8	1	68.7	18.0	64.6	2.7	86.8	1.6	5	76.3	5.4	71.7	6.9	79.8	5.2
Silthiofam	1	118.0	1.5	117.8	1.3	107.0	2.4	1	117.3	7.6	121.9	3.9	109.4	3.3	1	122.2	3.1	116.5	3.7	111.5	3.0	1	111.8	1.4	117.0	4.0	105.5	2.0
Simazine	5	118.2	5.6	106.3	4.6	94.5	1.6	5	127.6	3.6	119.7	1.6	104.0	1.0	1	114.8	2.2	103.1	7.8	99.7	2.0	5	109.6	3.6	105.9	3.7	93.8	1.5
Simetryn	5	102.7	1.2	96.1	6.6	89.7	2.9	1	105.0	4.3	96.0	3.7	98.5	4.4	1	104.4	1.3	95.5	4.1	95.8	0.9	1	96.6	1.8	90.6	4.5	87.5	5.1

Spinetoram	1	97.4	4.4	101.2	4.5	96.2	5.7	1	97.3	2.5	93.5	3.7	96.0	2.9	1	87.6	3.4	88.8	4.2	91.9	6.0	5	77.3	3.0	79.8	2.6	81.6	4.6
Spinosad	50	F	F	F	F	89.5	8.7	5	88.0	1.9	86.0	3.7	90.0	6.9	5	81.3	3.9	81.4	1.6	88.1	4.1	5	84.1	3.2	80.9	1.4	86.3	3.1
Spirodiclofen	1	102.4	3.9	105.7	2.0	97.2	0.4	1	104.7	2.4	102.7	1.7	95.9	3.9	1	114.2	5.1	106.0	2.2	98.4	3.4	1	98.2	6.6	96.2	3.2	91.8	1.2
Spirotetramat	1	109.7	5.3	101.6	1.6	93.3	2.5	5	118.7	4.7	111.3	5.2	101.7	2.7	20	F	F	113.4	3.2	109.8	3.3	5	120.1	2.9	103.5	2.7	93.6	5.0
Sulcotrione	100	F	F	F	F	F	F	50	F	F	F	F	31.0	1.4	50	F	F	F	F	27.7	24.6	50	F	F	F	F	19.3	9.4
Sulfentrazone	5	81.9	15.3	96.1	4.3	87.3	1.4	5	98.9	6.0	94.5	3.7	95.0	1.7	5	104.2	4.9	99.4	1.8	99.4	3.6	5	92.2	5.3	95.0	2.9	94.2	4.8
Sulfluramid	1	104.8	3.5	97.3	4.1	97.1	5.1	1	106.7	5.4	95.7	2.8	102.1	3.9	1	86.7	0.5	94.2	0.9	96.6	3.9	1	101.7	3.6	95.8	1.5	97.4	3.0
Sulfotepp	1	128.0	3.9	126.6	3.0	111.0	1.1	1	134.5	2.8	130.0	0.6	110.6	1.5	1	136.2	1.8	122.5	4.0	111.0	2.5	1	121.2	1.9	122.5	4.4	109.2	2.4
Sulfoxaflor	5	117.1	3.1	110.9	2.2	97.8	4.7	1	124.1	9.1	106.0	2.9	113.0	1.2	5	124.6	4.0	114.3	3.6	103.7	1.5	5	102.5	5.1	95.5	3.2	88.3	4.5
Tau-fluvalinate	20	F	F	108.4	4.6	102.6	3.1	20	F	F	97.9	4.5	98.1	1.9	20	F	F	74.1	15.0	94.0	9.9	5	53.5	55.1	76.5	5.8	82.4	0.6
Tebuconazole	1	99.0	10.4	113.0	2.3	97.9	3.1	1	98.3	10.5	81.7	6.2	81.0	6.3	5	108.8	4.5	101.0	3.3	101.2	3.2	5	108.2	4.7	97.0	3.2	96.2	2.0
Tebufenozide	5	92.6	3.6	101.4	1.0	99.6	1.8	1	116.6	7.3	116.3	4.2	106.3	3.2	5	101.9	5.6	105.3	3.7	106.2	4.5	5	101.1	3.2	107.3	7.1	102.4	1.8
Tebuthiuron	1	114.8	3.5	116.2	0.8	104.3	2.3	1	121.7	2.1	118.0	4.0	108.0	0.9	1	119.2	3.9	112.4	2.6	108.9	2.2	1	107.5	2.8	111.2	3.0	100.1	1.3
Teflubenzuron	5	101.	14.	106	1.3	103.	4.7	5	123	4.3	116.	3.1	108.	0.9	5	113	6.3	110.	2.8	104.	1.1	5	97.	10.	96.	6.2	89.1	4.9

				6					.9						3							2		0				
Vamidotion	1	114.8	8.6	104.8	5.1	99.3	2.2	1	122.2	4.5	109.9	1.2	108.9	2.2	1	119.3	1.0	110.6	1.6	99.8	1.7	1	108.4	1.1	98.0	2.6	86.0	6.5
Zoxamide	1	111.8	2.8	113.5	1.8	106.7	1.0	1	117.1	4.7	114.6	1.8	108.9	1.4	1	118.6	2.8	116.3	1.7	109.1	3.1	1	109.8	3.4	111.5	2.6	106.7	1.4
Metamitron	5	116.8	1.8	110.9	0.5	97.9	2.7	1	110.9	0.7	107.6	0.8	101.9	2.6	1	118.6	2.5	107.9	2.8	106.2	2.4	1	107.2	3.7	101.4	1.9	92.8	1.0

SDL refers to screening detection limits, F represents recovery or RSD is not acceptable, NA is defined as not detected.

Table S7 Matrix effects for the 403 database compounds in the eight representative matrices.

No.	Compound name	Asparagus bean (ME, %)	Cucumber (ME, %)	Chinese cabbage (ME, %)	Ginger (ME, %)	Carrot (ME, %)	Apple (ME, %)	Watermelon (ME, %)	Pear (ME, %)
1	Triclopyricarb	-28.03	-24.50	-31.20	-69.18	-30.23	-7.37	-37.85	-19.49
2	Amitrole	-46.97	-31.78	-30.15	6.57	-28.79	-32.76	-29.14	-86.51
3	Moroxydinehydrochloride	-33.50	-20.80	-38.29	-17.63	-24.46	-20.09	-14.10	-37.05
4	Nicotine	-24.01	8.37	-92.73	-89.53	-89.56	-83.38	-84.13	-87.92
5	Matrine	-13.80	-7.64	-27.15	-3.15	-9.30	1.53	2.10	-22.45
6	Methamidophos	-33.31	-15.29	-39.91	-6.91	-9.34	-2.80	-4.20	-20.04
7	Maleic hydrazide	ND	ND	ND	ND	ND	ND	ND	ND
8	Daminozide	-94.04	-94.98	-96.76	-95.75	-95.32	-95.07	-94.55	-93.44
9	Cyromazine	-93.09	-89.54	-93.27	-90.80	-90.40	-85.75	-84.13	-91.84
10	Aminocyclopyrachlo	-96.99	-34.19	-22.87	-40.31	-26.81	-32.62	-17.65	-45.96
11	Acephate	-23.99	-5.52	-37.65	4.73	-0.96	11.17	17.55	-12.38
12	Thiocyclam	-7.10	-4.31	-15.86	3.28	-6.18	-2.72	-8.07	-10.87
13	Pymetrozine	-17.19	-15.47	-59.53	-1.16	1.44	-5.10	-0.91	-9.51
14	Aminopyralid	4.31	-10.09	-72.09	7.64	5.83	-15.96	-4.19	-2.99
15	Omethoate	-13.75	-13.18	-44.66	-1.84	-12.26	2.55	7.09	-13.96
16	Propamocarb	-4.57	-3.84	-4.52	0.90	-5.42	4.40	8.24	-9.66
17	Aldicarb sulfoxide	-21.27	-18.00	-27.04	-10.95	-22.85	0.28	7.73	-15.14
18	OxiMinoOxaMyl	-19.77	-11.82	-56.85	13.40	8.24	-2.07	23.11	0.34
19	Metaldehyde	ND	ND	ND	ND	85.92	ND	ND	ND
20	Aldoxycarb	-20.15	-17.81	-14.82	-20.18	-17.95	-3.22	-1.52	-13.98
21	Dinotefuran	-37.38	-31.94	-54.93	-28.29	-32.52	-19.55	-24.50	-38.50
22	Oxamyl	3.27	-23.99	-31.08	-23.08	14.36	-10.72	0.86	-21.44
23	Clopyralid	-53.42	-67.02	ND	-62.28	-23.49	-23.66	102.26	274.72
24	Oxydemeton-methyl	-25.55	-24.91	-34.91	-23.33	-22.77	-13.57	-6.83	-25.51
25	Thiamethoxam	-8.45	-9.47	-28.84	-8.17	-3.75	7.62	2.67	-20.08
26	Dazomet	-27.25	-33.17	-27.73	-33.84	-27.80	-13.11	-7.52	-85.08
27	Flonicamid	-45.22	-45.15	-54.92	-43.54	-39.02	-26.15	-27.64	-45.70
28	Methomyl	-22.12	-26.75	-37.54	-29.64	-19.13	-11.86	4.14	-27.61
29	Chlordimeform	-12.66	-11.04	-30.84	-19.07	-8.95	-3.67	3.14	-34.64
30	Monocrotophos	-11.90	-19.01	-28.61	-16.99	-15.51	-6.15	6.23	-25.18
31	Phosfolan-methyl	-20.77	-26.23	-36.19	-17.85	-15.54	-9.71	-3.10	-31.69
32	Topramezone	-35.92	-32.31	-27.21	-22.60	-26.90	-17.24	-0.69	-19.79
33	Carbendazim	-21.58	-21.95	-32.50	-29.86	-11.89	-10.30	-2.21	-43.25
34	Imidacloprid	-13.66	-16.44	-27.05	-9.37	-11.74	-1.69	-3.03	-9.67
35	Imazapyr	-7.83	-12.38	-14.52	-18.05	-8.69	1.64	0.50	-14.95
36	Clothianidin	-35.60	-33.00	-45.55	-35.24	-30.19	-26.78	-26.65	-23.49
37	Methiocarb sulfoxide	-10.38	-13.81	-21.71	-20.50	-11.85	-1.73	-0.62	-17.44

38	Flumetsulam	0.38	-3.88	11.10	21.01	-10.29	-11.64	7.44	-10.02
39	Hexanoic acid	-54.33	-48.09	-61.19	-51.79	-40.99	-26.24	-16.10	-40.74
40	Phthalide	68.29	5.93	4.34	-4.66	-0.76	3.21	8.02	14.10
41	Phorate oxon sulfoxide	-8.99	-7.91	-22.44	-13.00	-9.98	-3.87	7.28	-17.53
42	Vamidothion	-12.07	-9.97	-24.01	-7.12	-10.06	-2.60	8.47	-19.64
43	3OH-Carbofuran	-9.67	-6.40	-21.92	-14.72	-6.32	1.57	5.64	-13.93
44	Difenzoquat	2.90	-1.38	-7.98	-0.87	-3.92	4.86	16.46	-97.14
45	Imidaclothiz	0.32	-4.01	-18.30	2.71	-6.77	-0.70	12.13	-13.59
46	Acetamiprid	-6.01	-5.29	-18.52	-12.03	-9.57	-31.33	4.21	-10.80
47	Thiabendazole	-27.86	-20.05	-38.75	-32.04	-20.42	-8.67	-9.90	-25.34
48	Benziothiazolinone	-11.90	-14.62	-13.46	-3.47	-12.03	-4.55	677.02	-8.02
49	Trichlorfon	-14.67	-13.28	-28.88	-16.26	-15.91	-13.32	-9.10	-14.79
50	Dimethoate	-13.57	-14.00	-21.96	-15.91	-10.98	-4.86	-1.18	-15.18
51	Metamitron	-19.74	-19.30	-24.00	-23.24	-15.03	-9.09	-6.78	-21.64
52	Oxycarboxin	90.55	112.94	-31.43	-37.11	-12.87	-19.02	21.86	62.72
53	Methiocarb sulfone	-2.16	-8.06	-13.86	-14.65	-3.64	-0.44	2.95	-6.24
54	Sulfoxafloz	-22.69	-18.13	-30.76	-28.62	-14.88	-13.31	-8.83	-21.66
55	Imazamox	-4.75	-10.49	-14.50	-10.70	-9.85	-1.46	0.48	-9.20
56	Imazapic	1.27	-7.06	-14.16	-8.51	-2.18	4.04	3.80	-7.06
57	Thiacloprid	-7.93	-6.46	-28.91	-14.49	-8.71	-2.99	-2.48	-14.39
58	Cymoxanil	-16.97	-16.89	-40.65	-24.68	-14.91	-10.71	-10.99	-19.36
59	Mesotrione	17.54	10.51	-20.16	12.11	4.15	17.66	24.02	2.96
60	Flucarbazone	9.94	14.25	-19.02	12.51	3.12	9.35	20.28	-12.94
61	Dicamba	139.53	148.30	261.83	102.53	61.48	73.52	133.50	146.74
62	Phosfolan	-19.31	-12.46	-24.21	-16.79	-13.98	-11.60	-11.96	-18.95
63	Florasulam	24.52	9.02	-1.37	3.92	-13.47	-16.07	7.02	2.37
64	Tricyclazole	-6.33	0.00	-14.16	-6.96	-3.83	1.45	2.03	-9.40
65	Aldicarb	-12.73	-26.93	-42.13	-41.76	-23.38	-13.08	-19.62	-31.70
66	Ethirimol	-27.00	-20.47	-31.19	-22.27	-15.16	-11.45	-9.80	-24.22
67	Phosphamidon	56.50	61.15	41.76	44.30	52.86	68.51	69.37	9.32
68	Prohexadione	-13.71	0.58	-18.84	-18.26	-4.55	-2.32	-5.88	54.41
69	Oxadixyl	-11.69	-7.25	-23.45	-23.76	-20.47	2.11	-14.18	-31.39
70	Quinclorac	-2.08	-1.32	-2.50	0.38	-5.43	0.28	1.04	-0.05
71	Monosulfuron	110.76	117.68	103.84	108.83	68.43	115.19	127.33	101.57
72	Sulcotrione	-0.13	-4.74	-22.49	-14.69	-13.91	-6.49	-0.20	-17.37
73	Thiencarbazone- methyl	23.16	16.13	7.33	8.11	-0.89	5.32	15.21	5.67
74	Imazethapyr	3.76	-1.15	-7.14	-8.09	-4.89	1.81	7.65	-9.27
75	Bentazone	23.89	17.98	8.86	33.23	-1.75	-0.90	40.42	6.05
76	Cyanazine	-5.08	-13.89	-17.08	-20.25	-16.66	-2.06	2.31	-7.21
77	Cinosulfuron	6.47	2.24	-22.13	-19.36	-30.59	-22.10	-11.33	-21.94
78	Pirimicarb	-17.73	-24.54	-20.34	-11.11	-5.48	-3.02	-6.58	-10.69

79	Probenazole	-22.49	-21.28	-32.65	-25.05	-7.71	-16.54	-6.73	-20.55
80	Benazolin	-6.26	14.14	-4.07	13.42	2.55	-4.43	12.16	4.67
81	Dichlorvos	-11.56	-22.82	-9.88	-9.14	-2.93	-1.32	-11.41	-16.68
82	Fluroxypyr	1.76	-33.51	-33.51	21.19	14.65	25.70	22.01	32.16
83	Triasulfuron	51.07	57.21	16.27	32.33	-1.97	10.08	51.02	0.79
84	Carbofuran	-13.69	-9.93	-3.09	-36.83	-0.55	3.63	2.30	-2.06
85	Phenamacril	-22.90	-22.84	-21.21	-31.23	-5.57	0.50	-6.70	-4.82
86	Thifensulfuron-methyl	29.64	17.58	9.61	50.51	-1.02	23.78	4.38	-0.97
87	Metribuzin	-9.62	-8.58	-13.63	-34.87	-5.07	-11.95	-1.57	-8.41
88	Hexazinone	-4.79	-7.60	-12.29	-30.71	-1.51	3.59	3.02	-5.78
89	Fenamiphos sulfoxide	5.85	2.78	-3.55	-10.67	-7.73	6.04	2.01	-8.21
90	Thiophanate-methyl	-14.25	-10.63	-21.28	-14.32	-14.79	7.63	5.52	-16.11
91	Ethametsulfuron	ND	ND	ND	ND	ND	ND	ND	ND
92	Nicosulfuron	0.16	3.68	-16.72	1.61	-12.22	-2.67	4.91	-16.31
93	Fenamiphos sulfone	0.74	-1.19	-12.60	3.17	-11.17	-3.54	0.90	-10.76
94	Tebuthiuron	-15.99	-21.61	-19.83	-36.77	-14.45	-3.43	-2.25	-15.99
95	Imazaquin	-4.99	-8.22	-10.57	-24.61	-9.08	1.71	5.66	-13.52
96	Metsulfuron-methyl	6.48	13.54	-6.73	25.59	-7.63	-4.51	4.02	-6.81
97	Fenthion sulfoxide	-2.61	-0.87	-6.30	-2.71	-12.63	0.87	12.00	-1.94
98	Sulfentrazone	15.20	21.01	21.01	5.24	-0.04	2.72	23.74	8.21
99	Thidiazuron	-36.92	-21.02	-22.65	-26.63	-17.53	-9.84	-0.08	-13.15
100	Simazine	-11.22	-15.44	-11.41	-23.59	-8.95	-0.66	4.19	-10.27
101	Simetryn	-18.07	-15.67	-18.25	-13.96	-4.33	0.00	-13.13	-4.20
102	Carbaryl	-5.18	-9.79	-8.13	-11.06	-5.40	5.60	-1.66	-3.45
103	Imazalil	-11.82	-11.75	-16.23	-8.37	-3.47	3.74	1.25	-8.82
104	Dithianon	ND	ND	ND	ND	ND	ND	ND	ND
105	Carboxin	-44.68	-33.72	-26.66	-8.82	-6.23	-1.54	-4.48	-20.71
106	Cartap	-43.62	-30.60	-25.50	-5.49	-7.70	-1.64	-3.84	-18.56
107	Chlorsulfuron	12.34	20.27	1.19	14.97	2.97	9.13	8.57	-2.70
108	Fosthiazate	-10.87	-16.11	-14.84	-9.69	-7.31	1.10	-0.42	-8.30
109	Fenthion sulfone	-2.84	-0.52	-14.09	-9.59	-10.46	-1.27	9.29	-3.36
110	Cyantranilprole	-21.15	-17.04	-25.22	-28.60	-23.07	-4.08	-2.49	-20.57
111	Penoxsulam	13.05	35.35	-2.73	15.78	-6.32	0.13	19.71	-1.93
112	Disulfoton-sulfoxide	-3.90	-10.30	-10.91	-12.47	-6.75	-0.52	-0.87	-3.64
113	Phorate sulfoxide	-5.91	-13.41	-12.94	-14.53	-4.78	4.90	3.37	-4.78
114	Phorate oxon sulfone	ND	ND	ND	ND	ND	ND	ND	ND
115	Amidosulfuron	14.41	30.18	13.07	10.03	-8.22	-0.40	0.44	-13.24
116	Rimsulfuron	-7.49	-11.34	-15.63	-6.91	-11.15	-3.75	-5.51	-21.05
117	Phenazino-1-carboxylicacid	-16.49	-17.24	-23.87	-18.92	-9.49	-0.57	-1.78	-9.02
118	Isoproc carb	-6.78	-7.02	-9.31	-5.92	-0.21	3.39	3.74	0.46
119	Disulfoton sulfone	-3.00	-7.59	-12.33	-7.21	-8.27	-0.39	0.68	-4.81
120	Metazachlor	-10.55	-19.33	-13.29	-11.21	-10.00	-81.17	2.76	-9.51

121	1-naphthylacetic acid	20.30	-7.33	-5.75	31.00	-39.23	38.58	46.85	41.96
122	Phorate sulfone	-6.25	-16.17	-13.69	-12.07	-8.73	4.20	4.50	-8.53
123	Chlorotoluron	-3.76	-10.16	-8.58	-8.43	-4.14	6.40	6.25	-6.17
124	Bromoxynil	28.87	29.14	29.27	31.26	23.19	20.28	14.13	15.03
125	Flutriafol	-0.41	-2.48	-8.45	-4.64	-1.16	-2.15	0.50	-1.53
126	Thiodicarb	0.35	-5.39	-7.77	-6.34	-1.61	4.83	5.70	-6.23
127	Propachlor	-9.39	-16.48	-16.32	-13.85	-7.40	-2.63	1.19	-10.99
128	2,4-Dichlorophenoxyacetic acid	28.15	24.56	25.58	24.15	12.01	13.03	10.65	8.75
129	Phorate oxon	1.64	-44.33	-37.59	-0.39	1.97	-4.72	26.02	-8.58
130	Atrazine	-7.77	-12.76	-11.97	-11.59	-5.31	-0.40	5.76	-0.20
131	Metalaxyl	-6.41	-8.31	-9.49	-5.82	-1.31	1.70	6.02	-2.81
132	Fenpropidin	-4.93	-10.52	-6.77	-4.77	0.15	-3.90	4.87	-0.92
133	Isoproturon	-8.62	-11.31	-2.29	-2.47	2.87	7.94	-3.77	3.95
134	Isoxaflutole	-30.11	-27.34	-42.28	-36.31	-33.49	-26.04	-5.91	-22.93
135	Ethoxyquin	-90.90	-80.26	-91.90	-94.01	-52.40	-5.38	-23.36	-55.90
136	Mesosulfuron-methyl	8.32	25.12	-1.95	11.05	-1.92	7.91	15.79	-1.64
137	Tribenuron-methyl	0.14	-0.57	-12.62	-9.03	-7.32	13.50	14.24	-24.49
138	Pyrisoxazole	-13.56	-21.10	-14.34	-13.52	-13.54	3.80	0.27	-8.11
139	Fenpropimorph	-9.12	-17.64	-8.90	-11.81	-6.32	2.75	4.67	-1.70
140	Ametryn	-11.55	-16.26	-13.62	-16.96	-7.14	1.43	3.37	-4.89
141	Clotrimazole	-9.09	0.00	0.00	81.82	-9.09	-9.09	127.27	-9.09
142	Orthosulfamuron	-2.66	0.59	-19.61	-8.41	-19.74	-6.60	-1.28	-36.45
143	Isocarbophos	-32.56	-51.81	-28.17	-25.72	-20.43	2.94	-1.00	-7.65
144	Trinexapac-ethyl	-1.31	0.90	-2.83	-4.42	-0.08	6.84	7.17	-6.48
145	Flumorph	-4.41	3.66	-19.53	-11.47	-10.53	-5.81	1.40	-1.33
146	ClethodiM Sulfone	48.24	90.63	24.18	76.48	26.03	29.43	32.72	33.43
147	Diuron	-9.22	-15.62	-10.53	-20.68	-9.61	-1.37	-0.39	-9.25
148	Thiophanate	-16.77	-12.18	-17.74	-13.39	-18.43	3.56	3.10	-21.95
149	ClethodiM Sulfoxide	56.42	63.87	23.96	38.57	19.11	26.35	30.67	30.46
150	Captan	ND	ND	ND	ND	ND	ND	ND	ND
151	Clomazone	-6.02	-8.68	-11.28	-11.92	-3.00	4.63	4.14	-3.84
152	Hymexazol	-6.23	-6.85	-16.51	-9.87	0.89	8.00	7.08	1.11
153	Methidathion	-11.03	-19.60	-16.88	-20.48	-5.77	6.05	6.29	-5.41
154	Demeton	33.69	21.38	63.66	49.85	58.38	82.16	85.29	66.31
155	Desmedipham	-3.71	-5.41	-8.80	-7.03	-4.83	3.39	5.68	-0.10
156	Chlorantraniliprole	-6.72	-7.89	-9.61	-15.99	-6.28	1.88	11.56	-7.92
157	Forchlorfenuron	2.36	0.94	-3.02	-10.27	-1.71	8.35	9.09	-2.49
158	Triforine	-32.51	-41.37	-37.87	-45.83	-25.41	-17.46	-2.51	-26.76
159	Pyrimethanil	-8.95	-14.77	-13.42	-8.17	0.71	9.02	7.24	-5.11
160	Flumioxazin	-93.06	-52.37	-47.51	-55.05	-31.39	-6.04	3.03	-18.37
161	Fenobucarb	-12.36	-9.49	-16.23	-8.48	-3.99	3.72	3.58	-2.00

162	Albendazole	-14.81	-17.17	-25.79	-29.99	-5.08	5.55	7.07	-4.81
163	Azinphos-methyl	-52.35	-43.44	-57.75	-48.44	-31.44	-21.40	-22.74	-23.63
164	Terbufos-sulfoxide	68.01	81.62	56.38	73.08	81.41	98.75	100.21	88.49
165	Phenmedipham	-14.33	-9.40	-29.79	-16.42	-7.32	1.30	5.19	4.10
166	Terbufos sulfone	-13.04	-7.16	-21.96	-12.49	-6.04	0.71	4.74	4.79
167	Triclopyr	55.70	48.28	34.89	29.67	15.75	22.25	15.46	15.67
168	IodosulFuron-methyl-Sodium	50.05	13.60	78.50	34.81	11.33	4.20	19.86	2.20
169	Fentinacetate	ND	ND	ND	ND	ND	ND	ND	ND
170	Saflufenacil	-99.08	ND	ND	ND	-99.10	-98.33	-99.25	-99.39
171	Phosmet	-22.75	-21.52	-41.84	-44.34	-17.02	-5.04	3.23	-11.26
172	Dimethenamid	-20.53	-16.60	-28.76	-25.93	-13.63	-6.10	4.13	-11.39
173	Pyrifitalid	-14.88	-4.52	-21.73	-12.82	-5.32	1.00	9.50	-5.32
174	Cyhexatin	ND	ND	ND	ND	ND	ND	ND	ND
175	BensulFuron-methyl	44.16	15.59	49.17	27.48	13.92	3.28	11.16	-8.13
176	Ethofumesate	-15.94	-20.38	-27.13	-28.83	-15.26	-6.37	2.16	-8.67
177	Diethofencarb	-14.57	-15.70	-29.07	-24.53	-15.42	-5.48	5.56	-7.97
178	Fenamidone	3.07	-12.97	-20.28	-31.57	-13.66	-1.66	7.31	-10.24
179	Azoxystrobin	-11.17	-2.61	-13.22	-15.32	-3.60	2.44	6.05	-4.14
180	Parathion-methyl	ND	ND	ND	ND	ND	ND	ND	ND
181	Flucetosulfuron	53.85	16.34	-2.18	58.33	-9.48	-1.49	6.62	-14.72
182	Flurtamone	-21.18	-16.03	-18.75	-52.72	-11.10	-4.93	-1.91	-11.40
183	Methiocarb	-16.03	-11.66	-14.37	-89.24	-6.42	3.06	-10.31	-16.54
184	Terbuthylazine	-21.83	-18.10	-26.18	-78.00	-14.30	-5.28	-5.75	-10.80
185	Paclobutrazol	6.69	-4.05	-7.73	-5.50	-8.31	-2.40	1.30	-19.17
186	Prometryn	-8.91	-17.08	-12.90	-51.83	-3.45	7.27	5.87	-7.06
187	Ethiprole	7.44	-22.93	-31.53	-60.96	-26.12	-13.17	2.50	-26.78
188	Propanil	-26.57	-33.19	-25.87	-30.64	-16.09	-8.81	3.16	32.75
189	Boscalid	-12.32	-19.66	-27.46	-34.55	-16.43	-5.75	5.90	-41.07
190	Bispyribac-sodium	225.93	126.10	141.74	150.37	229.02	-2.18	18.61	-0.52
191	Fluopicolide	-27.36	-20.69	-24.42	-36.87	-35.07	-1.59	1.67	-9.71
192	Triadimefon	1.72	-2.62	-3.78	-14.47	4.72	3.82	4.42	-1.85
193	Mandipropamid	-10.63	-4.21	-16.30	-22.98	-15.55	3.63	12.10	-3.75
194	Molinate	-3.08	-2.78	-11.25	-21.45	-12.71	4.57	6.82	4.50
195	Isoprothiolane	-28.52	-18.07	-23.95	-26.50	-23.77	1.36	0.45	-5.90
196	Flutolanil	-24.20	-19.69	-19.88	-36.26	-26.98	1.50	1.67	-7.76
197	Malathion	-21.74	-18.32	-17.98	-17.23	-18.39	0.95	7.72	-7.90
198	Anilazine	-20.28	-35.18	-39.36	-38.71	-37.92	-15.94	-27.70	-59.99
199	Dimethomorph	9.82	11.32	-32.08	-8.21	15.59	3.15	8.77	-37.44
200	Fludioxonil	18.55	19.56	22.68	24.32	14.50	9.74	5.85	3.82
201	Metazosulfuron	47.47	19.96	-18.48	-17.77	9.26	-8.08	5.14	-25.38
202	Mepronil	-14.90	-7.59	-8.57	-14.83	-6.62	2.65	10.45	-1.32
203	Propyzamide	-20.82	-12.43	-28.59	-41.89	-16.78	120.41	-16.27	-22.30

204	Chlorimuron-ethyl	102.55	14.39	2.99	5.89	5.04	4.54	13.16	-10.61
205	Methoxyfenozide	-24.16	-13.65	-14.40	-8.13	-10.07	4.46	13.93	2.70
206	Fluxapyroxad	-31.66	-19.99	-24.73	-27.29	-14.41	1.05	4.10	-5.19
207	Fomesafen	165.05	111.13	98.82	198.54	96.73	13.34	13.89	14.51
208	Isopropyl-N	-7.44	-0.97	-15.09	ND	-13.86	0.77	13.84	-32.15
209	Myclobutanil	16.06	8.40	0.03	-4.84	0.63	4.08	7.77	-3.41
210	Triflusalufuron-methyl	23.03	26.78	-26.67	-31.30	11.16	-7.08	4.90	-20.90
211	Fenhexamid	-5.50	-10.52	-17.20	-42.44	-14.97	-3.97	2.16	-12.47
212	Isazophos	-14.28	-7.64	-9.80	-12.47	-10.12	3.18	4.47	-4.87
213	Ethoxysulfuron	-7.03	-20.29	-41.68	7.89	-23.21	-17.64	-14.99	-38.38
214	Pyridaphenthion	-0.51	-7.44	-13.91	-34.83	-10.69	-2.48	2.98	-7.08
215	Sedaxane	-10.97	-10.05	-20.09	-21.32	-13.11	-3.91	-1.30	-4.91
216	Triadimenol	9.11	1.89	-3.15	-7.80	-2.24	5.15	9.94	-4.45
217	Diphenylamine	-0.57	-7.81	-7.81	-2.22	-4.23	-2.08	0.50	-8.67
218	Acifluorfen	52.42	39.12	13.59	27.26	14.32	11.86	8.97	5.50
219	Bifenazate	-9.92	-16.64	-31.37	-48.20	-8.35	1.51	-0.92	-22.42
220	Mefenacet	-17.30	-17.72	-36.89	-33.97	-17.02	-13.71	-14.84	-17.86
221	Dichlofluanid	-21.98	-17.14	-26.70	-35.99	-13.09	-2.23	-1.41	-7.63
222	Fluopyram	-19.34	-25.52	-37.41	-38.45	-21.26	-16.47	-16.33	-25.14
223	Acetochlor	-25.55	-38.33	-29.18	-49.73	-17.09	-7.28	-29.27	-35.58
224	Alachlor	-25.55	-38.33	-29.18	-49.73	-17.09	-7.28	-29.27	-35.58
225	Flufenacet	-17.71	-20.91	-20.57	-31.17	-14.90	-4.80	-1.26	-9.67
226	Cyproconazole	-2.87	-6.12	-21.01	-11.53	-8.60	-5.18	-5.18	-7.89
227	Triazophos	-11.62	-15.31	-16.47	-15.99	-12.03	-2.94	-1.50	-7.72
228	Propyrisulfuron	-85.71	1.77	-9.60	18.37	-1.62	3.57	2.84	-8.48
229	Ethoprophos	-14.55	-12.70	-14.89	-37.47	-9.50	-0.93	2.94	-10.51
230	Fenarimol	4.89	0.50	-4.59	-5.86	0.30	2.40	8.28	-4.17
231	Spirotetramat	23.67	13.23	-2.65	3.38	-5.35	-1.95	12.38	11.45
232	Napropamide	-8.85	-8.19	-16.22	-11.41	-6.39	-1.58	1.80	31.57
233	Tetraconazole	-5.55	-5.55	-16.18	-8.06	-8.59	-2.45	0.12	-9.81
234	Metolachlor	-5.56	-6.38	-11.39	-15.40	-3.10	5.65	6.93	-0.91
235	Bupirimate	-4.42	-5.58	-14.03	-13.81	-3.89	2.70	5.15	0.63
236	Chlorpyrifos oxon	ND	ND	ND	ND	ND	ND	ND	ND
237	Cyclosulfamuron	21.52	12.47	-5.54	10.44	-5.11	-10.29	7.04	-19.41
238	Halosulfuron-methyl	7.22	10.96	-14.30	9.60	-2.52	-3.28	8.97	-15.07
239	Uniconazole	-3.04	-2.16	-13.66	-5.73	-6.61	-1.54	-2.86	-6.61
240	Pyrazosulfuron-ethyl	27.46	22.63	-2.35	17.20	-3.74	-0.30	4.59	-11.04
241	Fenoxanil	-16.25	-15.86	-13.17	-30.61	-22.61	3.44	-1.42	6.13
242	Fipronil-desulfinyl	23.83	16.95	23.35	22.00	9.45	17.75	22.35	11.46
243	Fenamiphos	5.10	2.02	-2.64	7.64	-0.35	10.02	10.63	2.99
244	Tebufenozide	-21.17	-20.76	-20.79	-20.31	-19.67	-4.11	-10.27	-15.85
245	Thifluzamide	-50.09	-46.94	-46.34	-81.73	-36.89	-21.11	-15.93	-29.09
246	Iprodione	-62.37	-71.51	-55.68	-55.68	-57.42	ND	-5.36	1.59

247	Azadirachtin	-92.12	-83.66	-59.42	-10.02	-8.49	-5.59	-28.54	-56.03
248	Fenbuconazole	5.54	0.00	-8.63	-2.77	-2.92	4.46	0.35	-19.14
249	Flusilazole	84.88	0.46	87.24	-6.57	-0.32	132.48	7.24	-0.82
250	Silthiofam	-6.54	-7.51	-12.11	-15.70	-7.97	2.57	0.90	-9.05
251	Cyprodinil	-4.03	-8.43	-8.92	-25.73	-6.80	10.23	5.22	0.65
252	Rotenone	4.36	-2.47	-10.77	-5.06	-11.01	1.00	1.65	-1.71
253	Epoxiconazole	-2.23	-3.46	-9.76	-8.83	-5.63	2.40	-0.33	-4.76
254	Iprobenfos	-1.16	-1.78	-15.65	-9.19	-5.55	2.78	2.19	-1.92
255	Propisochlor	-20.92	-14.54	-31.31	-26.67	-9.99	0.04	-3.48	-1.20
256	Fipronil	-58.65	-59.88	-57.47	-78.58	-53.94	-36.24	-38.83	-27.61
257	Picoxystrobin	-12.39	-11.49	-16.69	-15.48	-12.44	6.35	-2.10	-10.81
258	Sulfotepp	-18.70	-19.17	-21.87	-28.52	-16.67	-13.81	-14.29	-21.24
259	Isofenphos-methyl	-62.48	-60.34	-60.16	-44.11	-52.87	-42.59	-30.87	-29.57
260	Quizalofop FreeAcid-	-12.54	6.23	-3.56	2.15	-1.89	0.34	-0.57	13.52
261	Kresoxim-methyl	-31.67	-31.59	-41.66	-39.76	-28.79	-26.02	-26.07	-31.70
262	Diflubenzuron	-24.19	-19.85	-42.92	-73.04	-38.82	1.59	2.40	-5.73
263	Phenthoate	-87.75	-90.78	-90.81	-91.66	-89.36	-10.04	-10.69	-19.50
264	Dodine	-0.97	-2.91	-0.60	-4.56	0.30	4.41	4.04	-3.51
265	Pyrametostrobin	-6.85	-3.41	-12.66	-16.34	-4.49	-4.13	-2.72	-5.07
266	Parathion	ND	ND	ND	ND	ND	ND	ND	ND
267	Fenothiocarb	-11.37	-12.90	-15.37	-16.39	-11.12	1.59	-1.14	-6.80
268	Quinalphos	1.27	-13.29	-13.12	-26.82	-16.62	-13.63	-9.99	-15.39
269	Flubendiamide	16.03	-6.41	-17.08	-29.90	30.61	36.73	30.13	47.81
270	Clodinafop-propargyl	25.23	9.33	5.88	-25.91	8.10	10.03	12.48	8.61
271	Penconazole	1.69	7.51	-2.37	-19.54	4.27	6.23	6.34	7.84
272	Tolyfluanid	-8.26	-8.62	-6.55	-54.15	-4.31	3.05	3.95	-2.51
273	Fipronil-sulfide	17.82	13.40	15.89	34.22	11.21	5.13	8.61	5.53
274	Penthiopyrad	-6.19	-11.19	-5.74	-31.72	-5.74	3.28	4.74	-0.91
275	Carfentrazone-ethyl	1.62	-2.71	-2.27	-24.79	0.78	7.01	11.00	2.63
276	Diazinon	-13.74	-13.68	-15.97	-41.54	-7.26	-1.31	2.23	-9.62
277	Fonophos	-20.89	-19.65	-23.54	-20.36	-20.42	-22.70	-3.67	1.98
278	Benalaxyl	-7.72	-8.64	-18.41	-10.06	-5.81	4.04	1.35	-14.24
279	Propiconazole	-10.38	-8.37	-12.23	-40.12	-8.42	-6.76	0.22	-7.53
280	Tebuconazole	1.48	-1.87	-1.63	-1.18	-1.42	-6.10	1.90	-3.72
281	Edifenphos	-10.58	-11.34	-17.50	-18.99	-5.58	-0.93	1.52	-15.06
282	Anilofos	-7.94	-10.29	-13.32	-22.26	-2.36	3.28	5.61	-4.42
283	Spinosad	-22.27	-15.45	-21.08	-26.01	-11.96	-2.79	-1.89	-14.30
284	Benzovindiflupyr	-6.44	-9.21	-11.86	-29.37	-7.73	-3.44	1.03	-9.32
285	Fluthiacet-methyl	-3.07	-3.97	4.70	-53.07	-5.70	-3.93	4.30	-9.93
286	Fenthion	-15.61	-17.90	-24.87	-56.08	-4.22	-4.14	0.59	-9.90
287	Pyrimorph	-2.37	-9.37	-7.01	-43.96	-6.65	1.49	7.94	-7.25
288	Chlorbenzuron	-23.56	-55.42	-47.89	-76.15	-21.05	2.91	4.92	-11.85
289	Flufiprole	-17.90	-29.92	-32.76	-62.04	-14.58	-1.20	-0.97	-14.47

290	Prochloraz	-6.38	-12.55	-8.49	-22.25	-9.81	1.72	2.25	-8.11
291	Pyraflufen-ethyl	-15.67	-36.05	-31.86	-38.63	-14.14	-30.29	-0.74	-33.48
292	Famoxadone	-54.63	-49.67	-47.60	-60.26	-44.13	-26.82	-15.62	-34.21
293	Fipronil-sulfone	-48.44	-66.53	-56.72	-75.73	-52.61	-34.66	-28.70	-40.99
294	Zoxamide	-22.51	-26.79	-20.92	-33.66	-14.82	-1.20	0.57	-7.14
295	Hexaconazole	-1.16	-8.21	-2.38	-8.10	-3.22	6.99	5.93	-3.05
296	Pinoxaden	-12.00	-4.58	-11.92	0.10	-7.58	9.32	13.20	-3.02
297	Pirimiphos-methyl	-17.48	-14.70	-15.51	-23.10	-13.21	6.64	5.01	-4.88
298	Phoxim	-28.74	-14.42	-16.14	-20.20	-30.02	-0.99	-3.94	-10.80
299	Endosulfan sulfate	152.45	67.33	71.04	98.26	52.93	16.38	23.73	19.30
300	Phorate	-20.36	-6.88	-9.93	-8.86	10.41	10.95	5.66	-6.09
301	Prothioconazole	21.06	20.97	-4.62	43.88	12.70	71.74	59.74	24.11
302	Coumaphos	-12.37	-10.86	-11.69	-17.36	-40.05	9.24	19.32	-6.92
303	Phosalone	-46.54	-26.28	-25.28	-29.26	-36.18	-4.17	-4.10	-11.64
304	Thiobencarb	-22.77	-11.31	-6.20	-22.39	-30.86	14.99	2.68	-4.10
305	Oxadiazyl	-4.54	-7.46	-16.23	-13.14	-10.10	6.99	19.01	-2.63
306	Bitertanol	-24.35	-32.45	-29.91	-22.05	-28.23	-10.95	4.18	-23.26
307	Pyraclostrobin	-6.72	-7.90	-13.58	-19.65	-10.46	2.76	2.89	-9.49
308	Tolclofos-methyl	-12.44	-0.87	-11.32	-17.91	-5.76	3.75	-7.68	-9.01
309	Benzoximate	-43.13	-41.85	-40.97	-15.28	-38.87	-19.28	-21.08	-28.77
310	Diniconazole	-6.00	-9.90	-11.42	-18.18	-7.58	-1.24	-5.33	-9.20
311	Spinetoram	-19.64	-14.91	-21.50	-20.71	-18.77	-7.83	-3.73	-16.69
312	Triflumuron	-56.63	-57.72	-62.53	-86.88	-40.82	-36.17	-33.80	-41.31
313	Cadusafos	-12.22	-14.89	-14.82	-34.66	-13.85	0.46	1.50	-5.20
314	Disulfoton	-80.84	-47.12	-53.72	ND	-40.93	-18.10	-16.41	-29.90
315	Pyraoxystrobin	-15.19	-15.79	-22.57	-42.43	-17.86	-3.36	-5.29	-4.96
316	Metrafenone	-17.20	-24.28	-24.17	-63.14	-20.04	-7.43	-6.22	-14.10
317	Dimepiperate	-13.38	-18.47	-22.45	-49.82	-18.47	5.68	2.02	-9.33
318	Clofentezine	-11.28	-19.29	-29.17	-50.42	-16.37	-2.20	7.79	-11.39
319	Bifenox	-61.23	-51.03	-60.85	-77.31	-52.78	-8.56	-33.32	-39.29
320	Isopyrazam	-5.34	-7.84	-9.99	-19.27	-6.89	2.33	5.43	-3.19
321	Chlorpyrifos-methyl	-6.86	-5.68	-10.20	14.01	-0.14	-4.09	10.57	-2.58
322	Dufulin	-0.29	-4.30	-4.84	-14.97	-1.67	4.38	6.63	-2.63
323	Difenoconazole	-21.86	-22.52	-28.45	-28.64	-24.03	-13.10	4.69	-12.33
324	Haloxypop-methyl	-15.78	-15.19	-15.64	-37.04	-14.13	-3.15	-3.12	-9.16
325	Pretilachlor	-16.87	-13.07	-16.05	-29.05	-17.92	-0.99	-5.29	-8.93
326	Pyrethrin II	-45.41	-35.05	-57.96	-91.75	-84.53	-23.75	-5.42	-30.10
327	Triflumizole	-22.61	-14.11	-21.62	-28.10	-20.54	5.94	-7.89	-12.12
328	Ametoctradin	-14.78	-7.16	-18.68	-25.78	-17.90	-4.62	-6.64	-12.76
329	Trifloxystrobin	-21.05	-11.99	-21.88	-27.78	-21.13	-1.46	-5.95	-9.19
330	Indoxacarb	-28.71	-25.11	-33.35	-34.92	-18.82	-11.30	-14.13	-20.26
331	Diflufenican	-15.61	-22.49	-17.87	-24.79	-8.36	-2.95	-1.15	-3.05
332	Clethodim	0.44	8.85	4.00	26.82	19.88	29.28	28.94	18.79

333	Cycloxydim	-22.76	-11.66	-10.70	16.91	4.26	8.12	6.29	-3.78
334	Fluoroglyphen-ethyl	-7.97	-32.98	-41.48	-42.90	-26.56	4.24	0.08	-6.96
335	Chlorfenapyr	ND	ND	ND	ND	ND	ND	ND	ND
336	Iaconazole	-3.39	-4.51	-14.80	-3.80	-3.36	-4.16	4.35	-3.64
337	Benfuracarb	-58.30	-61.60	-61.60	-73.02	-61.15	-48.88	-34.68	-78.37
338	Fenaminstrobin	-10.68	-9.05	-14.13	-21.42	-12.18	-13.83	-5.61	-8.89
339	Cyflumetofen	-21.57	-18.50	-24.48	-31.12	-19.62	7.72	-5.60	-11.15
340	Profenophos	-20.37	-18.60	-22.98	-29.38	-17.78	9.75	-9.29	-11.82
341	Emamectin B1A	-15.55	-5.31	-17.59	-10.04	-4.61	-4.29	-11.26	-6.65
342	Oxaziclomefone	-11.81	-14.13	-14.52	-16.32	-11.75	-14.97	-4.83	-7.52
343	Buprofezin	-30.18	-17.64	-35.79	-32.56	-14.07	-5.10	-35.17	-7.66
344	Fluazifop-butyl	-24.36	-19.26	-30.27	-49.43	-17.85	-14.00	-33.26	-15.09
345	Hexaflumuron	-87.76	-78.87	-86.70	-88.63	-67.90	-42.76	-64.81	-61.85
346	Fenoxaprop-ethyl	-18.52	-15.55	-20.52	-31.47	-10.39	-0.96	-35.54	-8.73
347	Quizalofop-ethyl	-20.74	-15.38	-24.77	-34.12	-12.81	-1.59	-36.97	-10.01
348	Terbufos	-33.71	-29.51	-35.00	-57.09	-27.88	2.19	-45.52	-15.25
349	Butachlor	14.03	3.81	-1.74	-10.35	4.41	17.02	-23.17	4.20
350	Amisulbrom	-95.59	-61.45	ND	ND	-64.22	-60.39	-45.38	-40.77
351	Novaluron	29.97	34.08	47.30	54.19	13.42	19.20	-22.92	10.91
352	Sethoxydim	-9.87	-1.89	-1.83	-13.26	0.20	12.09	-26.64	0.06
353	Metamifop	-4.82	-6.37	-21.44	-33.84	-9.99	4.58	-35.18	-7.85
354	Diclofop-methyl	-47.50	-52.92	-61.60	ND	-50.01	-38.10	-59.66	-42.55
355	Flumiclorac-pentyl	-13.12	-15.30	-22.89	-57.56	-16.82	-8.68	-39.23	-16.33
356	Lactofen	-28.67	-24.95	-31.64	-76.56	-35.12	-18.18	-41.70	-11.29
357	Enestroburin	-16.00	-13.64	-17.88	-40.35	-19.37	-1.71	-32.71	-13.45
358	Piperonyl butoxide	-8.05	-7.55	-8.88	-29.17	-8.80	3.90	-22.66	-6.31
359	Oxadiazon	-31.68	-26.53	-36.61	-49.31	-21.39	-12.26	-38.83	-16.82
360	Pyribenzoxim	-6.46	-2.57	-15.52	39.85	-14.55	0.71	-26.80	-13.45
361	Fluazinam	17.53	14.68	14.74	9.11	10.19	7.84	-4.45	14.06
362	Tolfenpyrad	-29.73	-31.85	-32.76	-21.35	-22.23	-15.74	-32.98	-12.08
363	Metaflumizone	-50.64	-41.58	-46.04	-52.33	-34.96	-21.39	-59.00	-34.57
364	Azocyclotin	ND	ND	ND	ND	ND	ND	ND	ND
365	Ethion	-33.95	-16.36	-26.12	-24.45	-16.11	-2.65	-43.44	-9.38
366	Hexythiazox	-75.72	-75.59	-71.82	-70.69	-45.46	-24.73	-69.28	-27.00
367	Pyriproxyfen	-44.12	-31.87	-28.76	-31.08	-22.27	-3.01	-48.36	-15.09
368	Coumoxystrobin	-21.21	-29.77	-19.43	-20.18	-16.59	0.50	-36.81	-10.07
369	Tralkoxydim	10.79	11.08	8.85	15.79	13.43	16.02	-11.96	15.40
370	ChlorpyriFos	-28.04	-15.20	-29.84	-41.92	-26.16	-11.10	-51.60	-14.02
371	Quinoxifen	-26.40	-25.77	-27.19	-53.22	-24.86	-3.91	-42.32	-14.33
372	Teflubenzuron	-68.05	-61.72	-74.91	-88.04	-62.92	-47.25	-57.47	-59.10
373	Pendimethalin	17.41	9.48	7.33	-12.64	12.22	16.04	-19.44	12.88
374	Propargite	-23.33	-29.48	-27.59	-37.77	-26.64	-10.01	-32.98	-16.40
375	Flucythrinate	-18.43	-30.65	-35.24	-16.62	-25.64	-10.16	-27.35	-20.78

376	Lufenuron	-74.46	-74.67	-81.35	-79.60	-60.67	-71.51	-64.85	-58.02
377	Pyrethrin 1	-35.12	-26.93	-34.50	-90.22	-85.10	-23.99	-28.68	-19.29
378	Butralin	2.26	2.65	-15.88	-10.75	-2.48	4.03	-17.08	4.17
379	Etoxazole	-15.07	-6.75	-14.32	-15.83	-7.62	-3.67	-23.01	-5.78
380	Fenpropathrin	-40.03	-11.06	-43.23	-45.46	-34.77	-45.23	-31.40	-20.07
381	Flumetrain	-62.35	-50.31	-23.52	ND	-7.92	15.29	28.53	-22.43
382	Diafenthiuron	-89.36	-87.13	ND	-99.39	-99.31	-99.30	-33.65	-90.22
383	Cyhalothrin	-35.87	18.12	-49.47	-55.86	-39.88	-13.81	28.92	-32.33
384	Fenbutatinoxide	ND	ND	ND	ND	ND	ND	ND	ND
385	Spirodiclofen	-30.47	-36.81	-41.18	-51.14	-34.43	-29.47	-3.64	-29.93
386	Flufenoxuron	-6.87	-77.68	-36.37	-49.54	-10.96	-6.73	46.63	-4.57
387	Fenpyroximate	56.67	43.66	31.28	45.06	47.95	48.48	48.48	38.99
388	Cypermethrin	-14.54	-15.48	-4.22	3.08	-9.45	65.15	96.18	41.29
389	Amitraz	-97.69	ND	ND	ND	ND	ND	ND	ND
390	Deltamethrin	-57.15	-73.32	-84.63	-83.12	-52.69	-46.23	-31.12	-51.90
391	Chlorfluazuron	145.07	30.39	14.35	10.14	101.06	58.49	101.79	41.51
392	Pyridaben	24.48	16.02	13.94	13.24	29.52	40.75	52.90	31.68
393	Fenazaquin	56.94	42.15	37.83	30.25	43.97	66.79	68.01	48.14
394	Fenvalerate	35.01	-14.50	-18.79	-47.87	7.19	10.03	21.15	-0.83
395	Dinoca	ND	ND	ND	ND	ND	-23.26	ND	ND
396	Tau-fluvalinate	-47.13	-67.50	-57.18	-71.60	-59.04	-42.60	1.91	-56.54
397	Carbosulfan	-49.89	-66.78	ND	-86.15	-72.13	-46.59	-21.73	-76.68
398	Avermectins	184.52	87.11	212.89	45.29	136.85	-11.79	265.48	161.66
399	Bifenthrin	-13.34	-9.86	-19.69	-41.08	-13.59	20.90	15.79	0.62
400	Ethofenprox	10.57	10.37	5.26	-1.99	13.06	42.68	39.05	38.69
401	Pyridalyl	-40.76	-51.15	-58.95	-58.61	-47.78	-14.43	-38.19	-19.32
402	Sulfluramid	70.31	70.12	57.81	67.05	68.26	42.16	37.61	49.52
403	Triallate	-26.74	-25.58	-31.34	-33.17	-17.72	-8.77	-38.28	-8.81

Table S8 Applications of high-throughput screening technology in pesticide residue detection.

Matrix	Compound	Analytical method	Preparation method	Recovery (%)	LOQ ($\mu\text{g}/\text{kg}$)	References
Banana, watermelon, pear and strawberry	191	GC-Q-Orbitrap MS	QuEChERS	70~120	5	[1]
Tropical fruits and vegetables	201	UHPLC-Q-Exactive MS	QuEChERS	70~120	0.01 (92% pesticides)	[2]
Coffee, potato corn, chili pepper	322	GC-MS/MS	QuEChERS	60~120	≤ 0.01	[3]
Green tea	479	LC-Q-TOF MS	Optimized solid-phase extraction	70~120 (92.7% pesticides)	5~55	[4]
Cottonseed hull	237	GC/LC-Q-TOF MS	QuEChERS	70~120 (91.6% pesticides)	0.2~20	[5]
Fruits and vegetables	318	HPLC-Q-TOF MS	1.5 g NaCl, 4 g MgSO ₄ , solid-phase extraction	/	/	[6]
Apple, grape, watermelon, Grapefruit, spinach, tomato	733	GC/LC-Q-TOF MS	QuEChERS	82.9~100.7	/	[7]
cabbage, celery						
Orange, kiwi, banana, garlic, cowpea, bean sprouts, sweet pepper, celery, leeks and lettuce	420	UPLC-Q-TOF MS	1.5 g NaCl, 4 g MgSO ₄ and SinChERS-Nano purification tube	70.1~119.7	0.1~5.0	[8]
Pear, watermelon, apple, chinese cabbage, carrot, cucumber, asparagus bean and ginger	403	UHPLC-Q-Exactive MS	QuEChERS	82.4~105.1	/	This work

Notes: “/” refers to not mentioned. “LOQ” is abbreviation of limit of quantitation.



Fig. S1. Example of fast screening and identification of propamocarb $[M+H]^+$ (m/z 189.15975; t_R = 3.10 min) in solvent at 2 mg L^{-1} using Thermo Xcalibur software. The identification of propamocarb in sample was defined on the basis of t_R variation, accurate mass measurement, fragment ions, and isotope peak. (a) Extracted ion chromatogram of propamocarb; (b) Experimental isotopic pattern (in blue) against a theoretical pattern based on the elemental composition and adduct (in red); (c) Product ion spectrum (in blue) matched against the pesticides of in-house database using solvent (in red).

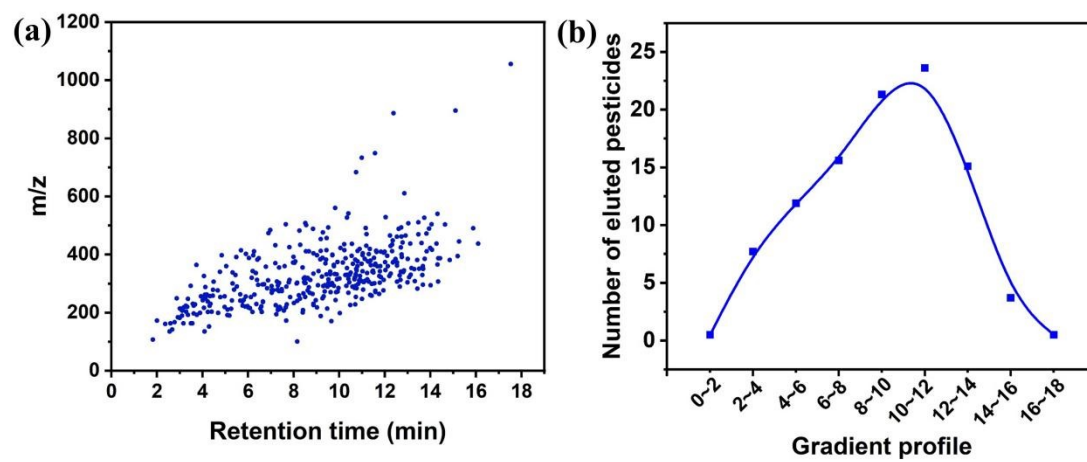


Fig. S2. (a) Retention time distribution of 403 pesticides in a single LC running time; (b) plot of gradient range with the percentage of eluted pesticides.

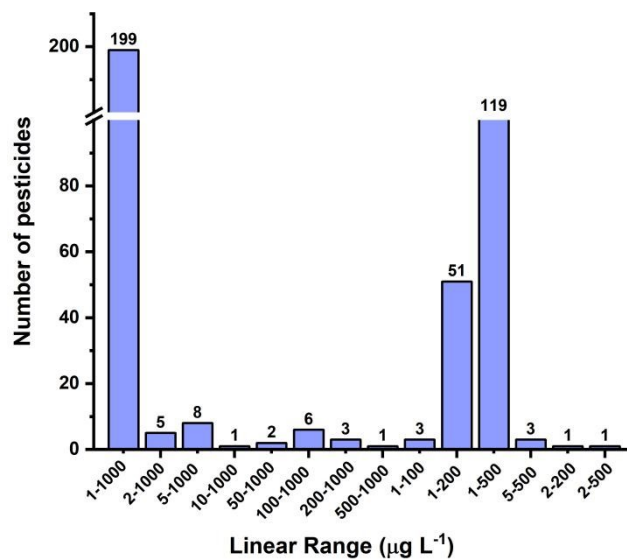


Fig. S3. Distribution of 403 pesticides in different linearity ranges of concentration for UHPLC-Q Exactive HRMS.

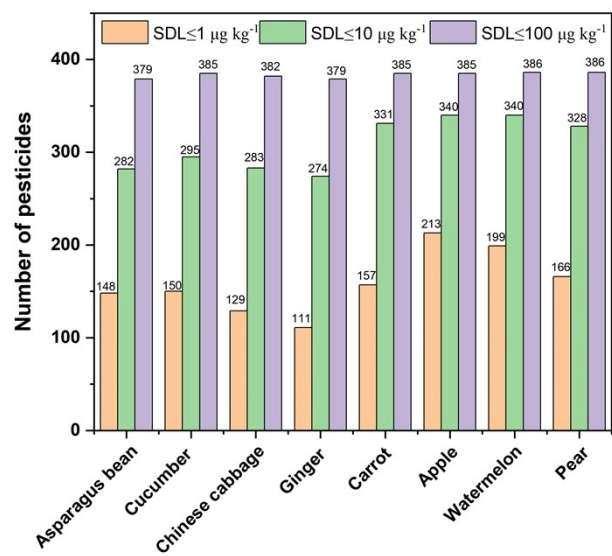


Fig. S4. Screening capability of UHPLC-Q Exactive HRMS For 403 pesticides in eight matrices when SDLs are no higher than 1, 10 and 100 µg kg⁻¹.

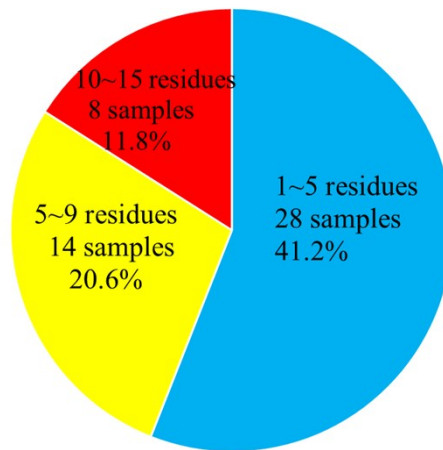


Fig. S5. The number of detectable pesticides residues in fruits and vegetables.