

Table 1. Retention time windows (RTWs) and MS/MS conditions for each compound

Compound	RTWs, min	Precursor ion	Quantification transition (CE ^a , V; CXP ^b , V)	Confirmation transition (CE ^a , V; CXP ^b , V)	Declustering Potential (V)
Alachlor	5.55-5.75	[M + H] ⁺	270.1 > 238.0 (15, 22)	270.1 > 162.1 (27,14)	76
Aldicarb sulfone	0.50-0.53	[M + H] ⁺	223.1 > 86.1 (21, 8)	223.1 > 76.1 (11, 8)	101
Aldicarb sulfoxide	0.47-0.50	[M + H] ⁺	207.1 > 132.0 (9, 12)	207.1 > 89.0 (21, 8)	86
Ametrine	4.20-4.40	[M + H] ⁺	228.0 > 186.0 (25, 16)	228.0 > 116.0 (35, 10)	71
Avermectin B1a	10.08-10.60	[M + NH ₄] ⁺	890.5 > 305.2 (33, 28)	890.5 > 145.1 (53, 28)	91
Azinphos ethyl	5.07-5.33	[M + H] ⁺	346.0 > 132.2 (23, 12)	346.0 > 160.2 (15, 12)	76
Azinphos methyl	3.34-3.52	[M + H] ⁺	318.1 > 132.1 (23, 12)	318.1 > 261.1 (9, 24)	106
Azoxystrobin	3.99-4.20	[M + H] ⁺	404.1 > 371.9 (21, 34)	404.1 > 343.9 (29, 34)	101
Benalaxyl	6.21-6.52	[M + H] ⁺	326.0 > 148.0 (31, 12)	326.0 > 294.0 (15, 28)	81
BF 500-3	6.42-6.75	[M + NH ₄] ⁺	358.0 > 132.1 (41, 12)	358.0 > 164.0 (19, 16)	56
Bitertanol	6,42-6,75	[M + NH ₄] ⁺	358.0 > 132.1 (41,12)	358.0 > 164.0 (12,16)	56
Boscalid	4.36-4.92	[M + H] ⁺	343.0 > 307.0 (27, 28)	343.0 > 139.9 (27, 28)	126
Buprofezin	8.15-8.30	[M + H] ⁺	306.2 > 201.1 (17, 18)	306.2 > 116.0 (21, 10)	56
Cadusafos	7.17-7.30	[M + H] ⁺	271,1 > 159.0 (19, 18)	271,1 > 215.0 (13, 10)	76
Carbaryl	1.95-2.05	[M + H] ⁺	202.2 > 145.1 (15, 14)	202.2 > 127.1 (39, 12)	66
Carbendazim	0.95-1.00	[M + H] ⁺	192.0 > 160.1 (25, 14)	192.0 > 132.1 (41, 12)	56
Carbofuran	1.75-1.84	[M + H] ⁺	222.1 > 165.2 (17, 2)	222.1 > 123.0 (29, 2)	70
Carpropamid	6.32-6.46	[M - H] ⁻	334,0 > 139.0 (25, 12)	334,0 > 139.0 (59, 10)	81
Chlorfenvinphos	6.53-6.86	[M + H] ⁺	359.9 > 155,0 (21, 26)	359.9 > 99,2 (31, 22)	56
Chlorpyrifos methyl	6,77-7,12	[M + H] ⁺	321,9 > 125,0 (27,0)	321,9 > 289,8 (23,0)	106
Ciflufenamide	7,02-7,16	[M + H] ⁺	413.1 > 294.9 (21, 26)	413.1 > 241.0 (31, 22)	56
Clorbufan	7.02-7.16	[M + H] ⁺	241.1 > 172.0 (17, 16)	241.1 > 154.0 (29, 14)	51
Cloroxuron	4.68-4.92	[M + H] ⁺	291.2 > 72.0 (53, 8)	291.2 > 218.0 (33, 20)	91
Cyazofamid	5.25-5.52	[M + H] ⁺	324.9 > 108.0 (19, 10)	324.9 > 261.0 (13, 24)	66
Cyhalofop-butyl	7.42-7.52	[M + NH ₄] ⁺	375.1 > 256.0 (23, 22)	375.1 > 120.0 (41, 10)	61
Cyproconazole	4.74-5.00	[M + H] ⁺	292.1 > 70.1 (23, 6)	292.1 > 125.0 (37, 12)	81

Cyprodinil	5.98-6.28	[M + H] ⁺	226.1>92.9 (45, 34)	226.1>76.9 (63, 34)	71
Desmedipham	3.35-3.60	[M + NH ₄] ⁺	318.1 > 182.0 (19, 16)	318,1 > 182.0 (37, 12)	46
Diazinon	6.32-6.65	[M + H] ⁺	305.1>97.0 (49, 10)	305.1>169.1 (31, 16)	71
Dicrotophos	0.47-0.83	[M + H] ⁺	238.1 > 112.0 (17, 10)	238,1 > 193.0 (23, 18)	71
Difenoconazole	6.63-6.97	[M + H] ⁺	406.1>250.9 (35, 24)	406.1>337.2 (23, 24)	96
Diflufenicam	7.40-7.52	[M + H] ⁺	395.1 > 266.0 (35, 24)	395.1 > 246 (51, 22)	141
Diniconazole	6.86-7.00	[M + H] ⁺	326.1 > 70.0 (59, 12)	326.1 > 70.0 (61, 8)	76
Disulfoton	6,64-6,99	[M + H] ⁺	275,1 > 89,1 (19, 8)	275,1 > 61,1 (45, 10)	66
Disulfoton sulfone	2.57-2.71	[M + H] ⁺	307.0>153.0 (17, 14)	307.0>171.0 (17, 14)	91
Diuron	3,00-3,20	[M + H] ⁺	233,1 > 72,0 (23, 8)	233,1 > 159,9 (35, 14)	81
Ethiprole	4,36-4,55	[M + H] ⁺	397,0 > 350,9 (29, 30)	397,0 > 254,9 (47, 22)	156
Ethofumesate	3.93-4.14	[M + NH ₄] ⁺	304.1>121.1 (29, 12)	304.1>161.2 (31, 12)	71
Ethoprofos	5.29-5.57	[M + H] ⁺	243.1>131.0 (27, 12)	243.1>96.9 (41, 10)	91
Ethyl cinidon	7,68-8,10	[M + NH ₄] ⁺	410,9 > 347,9 (31,0)	410,9 > 365,9 (25,0)	51
Etione	7.93-8.34	[M + H] ⁺	385.0>199.1 (15, 18)	385.0>171.0 (23, 18)	91
Etrimfos	5.98-6.29	[M + H] ⁺	293.1>125.0 (33, 12)	293.1>265.1 (21, 12)	66
Fenamidone	4.26-4.48	[M + H] ⁺	312.1>92.1 (35, 8)	312.1>236.1 (19, 22)	71
Fenamiphos	5.58-5.87	[M + H] ⁺	304.1>217.1 (29, 20)	304.1>202.0 (45, 20)	11
Fenarimol	5.07-5.34	[M + H] ⁺	330.9>268.0 (31, 24)	330.9>139.0 (47, 12)	101
Fenhexamide	5.13-5.40	[M + H] ⁺	302.1>97.2 (31, 10)	302.1>55.1 (55, 8)	116
Fenthion	5.97-6.28	[M + H] ⁺	279.0>247.0 (19, 22)	279.0>169.0 (25, 14)	58
Fluasifop-p-butyl	7.75-8.15	[M + H] ⁺	384.1 > 282.0 (29,0)	384.1 > 328.0 (23,0)	116
Fluzilazol	5.88-6.02	[M + H] ⁺	316.1 > 247.0 (25, 22)	316.1 > 165.1 (37, 14)	86
Furathiocarb	7.64-8.04	[M + H] ⁺	383.2> 195.2 (17, 3)	383.2> 252.2 (24, 3)	72
Imazalil	5.92-6.23	[M + H] ⁺	297.0>159.0 (29, 14)	297.0>200.9 (23, 14)	81
Indoxacarb	7.15-7.52	[M + H] ⁺	528.0>203.1 (59, 18)	528.0>150.1 (31, 14)	136
Iprovalicarb	5.14-5.41	[M + H] ⁺	321.2>203.2 (23, 3)	321.2>119.0 (12, 2)	61
Isoproturon	2.86-3.01	[M + H] ⁺	207.3>72.1 (23, 8)	207.3>165.1 (19, 14)	71
Kresoxim methyl	5.95-6.26	[M + H] ⁺	314.1 > 222.1 (21,0)	314.1 > 116.0 (19,0)	76
Linuron	3.71-3.90	[M + H] ⁺	249.1>159.2 (25, 4)	249.1>182.0 (21, 4)	76
Malathion	4.48-4.72	[M + H] ⁺	330.9>127.1 (17, 12)	330.9>285.1 (11, 26)	111

Metazachlor	2.89-3.04	[M + H] ⁺	278.1>134.1 (29, 12)	278.1>210.1 (15, 18)	51
Methidation	3.15-3.32	[M + H] ⁺	303.0>145.0 (13, 14)	303.0>85.1 (29, 8)	86
Methiocarb	3.90-4.10	[M + H] ⁺	226.1>169.1 (13, 14)	226.1>121.1 (25, 10)	76
Methoxyfenozide	4.90-5.04	[M + H] ⁺	369.1 > 149.0 (23, 14)	369.1 > 313.1 (11, 28)	71
Meticonazol	6,39-6,72	[M + H] ⁺	320,1 > 70,1 (59,0)	320,1 > 125,1 (57,0)	96
Monocrotophos	0.54-0.57	[M + H] ⁺	224.1>127.0 (23, 12)	224.1>98.0 (17, 12)	71
Monolinuron	2.16-2.28	[M + H] ⁺	215.1>125.9 (27, 12)	215.1>148.0 (19, 12)	91
Myclobutanil	4,64-4,88	[M + H] ⁺	289,1 > 70,1 (33,0)	289,1 > 125,1 (39,0)	91
Nuarimol	3.90-4.20	[M + H] ⁺	314.9>252.0 (31, 22)	314.9>81.1 (51, 8)	81
Omethoate	0.44-0.47	[M + H] ⁺	214.1>183.0 (15, 16)	214.1>125.0 (29, 12)	56
Oxamyl	0.50-0.53	[M + NH ₄] ⁺	237.1>72.1 (25, 8)	237.1>90.0 (11, 10)	51
Paclobutrazol	4.48-4.72	[M + H] ⁺	294.0>70.1 (55, 6)	294.0>125.0 (55, 12)	81
Pencicurom	6.72-7.07	[M + H] ⁺	329.0 > 125.0 (31, 12)	329.0 > 218.0 (23, 20)	91
Penconazole	5.90-6.21	[M + H] ⁺	284.2>70.1 (21, 8)	284.2>159.0 (41, 14)	66
Pendimethalin	8.15-8.57	[M + H] ⁺	282.2>212.1 (15, 20)	282.2>91.0 (33, 8)	36
Phenthoate	5.80-6.10	[M + H] ⁺	321.0>79.1 (51, 16)	321.0>163.1 (17, 16)	96
Phosalone	6.54-6.88	[M + H] ⁺	367.9 > 182.0 (21, 16)	367.9 > 111.0 (57, 10)	121
Phosmet	3.42-3.59	[M + H] ⁺	318.0 > 133.0 (51,0)	318.0 > 130.1 (51,0)	96
Picolinafen	7.71-8.10	[M + H] ⁺	377.2 > 238.3 (35, 14)	377.2 > 145.0 (69, 14)	91
Pirifitalid	3.81-3.97	[M + H] ⁺	319.0 > 139 (37, 12)	319.0 > 220.1 (33, 20)	96
Pirimicarb	2,71-2,84	[M + H] ⁺	239,2 > 72,1 (34,0)	239,2 > 182,2 (21,0)	73
Pirimiphos methyl	6.63-6.97	[M + H] ⁺	306.1 > 164.1 (29, 14)	319.0 > 108.1 (39, 10)	51
Prochloraz	6.51-6.85	[M + H] ⁺	376.0 > 308.0 (17, 28)	376.0 > 265.9 (25, 28)	56
Propham	2.61-2.74	[M+ H] ⁺	180.1 > 138.1 (13, 14)	180.1 > 120.1 (25, 14)	61
Profenofos	7.42-7.81	[M+ H] ⁺	372.9> 302.9 (25, 28)	372.9> 97.0 (35, 28)	126
Promecarb	4.55-4.75	[M + H] ⁺	208.1 > 109.1 (23, 10)	208.1 > 151.1 (13, 14)	56
Propaquizafop	8.07-8.20	[M + H] ⁺	444.1 > 370.9 (21, 34)	446.2 > 100.0 (23, 10)	111 / 86
Propiconazole	6.24-6.57	[M + H] ⁺	342.1> 159.1 (37, 14)	342.1> 89.1 (99, 8)	111 / 86
Propoxur	1.68-1.77	[M + H] ⁺	210.1 > 111.0 (19, 3)	210.1 > 168.1 (11, 3)	61
Propyzamide	4.36-4.59	[M + H] ⁺	256.1 > 190.0 (19, 16)	256.1 > 173.0 (31, 16)	61
Pyraclofos	6.84-6.94	[M + H] ⁺	361.0 > 256.9 (31, 24)	361.0 > 111.0 (81, 10)	111

Pyraclostrobin	6.46-6.80	[M + H] ⁺	388.0>194.1 (17, 18)	388.0>163.1 (33, 14)	51
Pyrazophos	6.51-6.85	[M + H] ⁺	374.1>222.1 (29, 20)	374.1>194.1 (43, 20)	91
Pyrimethanil	4.00-4.21	[M + H] ⁺	200.2>107.1 (33, 10)	200.2>80.0 (39, 8)	41
Quinalphos	5.73-6.03	[M + H] ⁺	299.1>163.1 (33, 14)	299.1>147.1 (31, 14)	61
Quinoclamine	1.40-1.65	[M + H] ⁺	208.1> 105.0 (33, 10)	208.1> 89.0 (51, 8)	106
Quizalofop-p-ethyl	7.77-7.88	[M + H] ⁺	373.0 > 299.0 (27, 26)	373.0 > 271.0 (35, 26)	151
Sulfotep	6.22-6.34	[M + H] ⁺	323.0 > 96.9 (57, 10)	323.0 > 171.0 (21, 16)	91
Tebuconazole	5.98-6.29	[M + H] ⁺	308.1>70.1 (57, 8)	308.1>125.1 (53, 12)	71
Tebufenpyrad	7.80-8.20	[M + H] ⁺	334.1>145.1 (39, 4)	334.1>117.1 (67, 6)	111
Tebufenozide	5.73-6.03	[M + H] ⁺	353.1>133.1 (25, 12)	353.1>297.1 (11, 28)	56
Temephos	8.10-8.20	[M + H] ⁺	466.9 > 418.9 (25, 34)	466.9 > 125.0 (41, 12)	86
Thiamethoxam	0.54-0.57	[M + H] ⁺	292.1>211.1 (17, 20)	292.1>181.1 (31, 16)	76
Thiobencarb	6.96-7.08	[M + H] ⁺	258.0 > 125.0 (23, 12)	260.1 > 127.0 (25, 14)	56
Thiophanate methyl	1.47-1.55	[M + H] ⁺	343.0 > 151.1 (-29, -14)	343.0 > 93.1 (69, 8)	86
Tiacloprid	0.80-0.85	[M + H] ⁺	253.3>126.0 (29, 12)	253.3>186.0 (21, 12)	101
Triadimefon	4.67-4.91	[M + H] ⁺	294.0>197.0 (21, 18)	294.0>225.0 (17, 20)	66
Triadimenol	4.84-5.09	[M + H] ⁺	296.1>70.1 (31, 8)	296.1>70.0 (33, 8)	46
Triazophos	4.80-5.05	[M + H] ⁺	314.1>97.0 (45, 10)	314.1>65.1 (85, 10)	81
Trichlorfon	0.79-0.84	[M + H] ⁺	257.0>109.0 (23, 10)	257.0>221.0 (15, 20)	101
Tricyclazole	1.00-1.25	[M + H] ⁺	190.1 > 163.0 (31, 14)	190.1 > 136.0 (39, 12)	61
Trifloxystrobin	7.20-7.57	[M + H] ⁺	409.1 > 186.1 (23, 16)	409.1 > 145.1 (63, 14)	66
Triflumizole	7.12-7.48	[M + H] ⁺	346.0>278.0 (15, 26)	346.0>73.1 (21, 8)	51
Triforin	3.51-3.69	[M + H] ⁺	434.9>389.8 (17, 36)	434.9>215.1 (37, 20)	56
Triticonazole	5.45-5.60	[M + H] ⁺	318.1 > 70.0 (43, 12)	318.1 > 69.9 (43, 12)	61, 71

Table 2. Validation parameters obtained for the optimized method: Average Recovery (%), Intermediate Precision (%), Measurement Uncertainty, Limit of Detection (LOD), Limit of Quantification (LOQ); and maximum residue levels (MRL) for pesticides in peanuts according to Brazilian legislation.

Analyte	0.010 mg kg ⁻¹			0.025 mg kg ⁻¹			0.050 mg kg ⁻¹			0.100 mg kg ⁻¹			LOD	LOQ	MRL
	Rec. %	CV	U %	Rec. %	CV	U %	Rec. %	CV	U %	Rec. %	CV%	U %	mg kg ⁻¹	mg kg ⁻¹	mg kg ⁻¹
Alachlor	94.9	12.6	29.7	91.2	10.4	14.4	98.0	10.4	12.1	91.3	9.30	11.9	0.0050	0.010	0.05
Aldicarb sulfone	98.4	10.8	54.0	103	14.4	20.7	104	13.9	13.8	91.5	16.5	13.7	0.0050	0.010	<i>c</i>
Aldicarb sulfoxide	94.0	15.1	41.2	91.7	13.1	17.7	91.8	8.70	13.2	84.8	11.9	14.7	0.0050	0.010	<i>c</i>
Ametrine	91.1	7.10	34.3	90.0	10.5	15.4	95.0	8.20	12.1	89.6	7.60	11.9	0.0050	0.010	<i>c</i>
Avermectin B1a	94.3	18.6	51.7	94.9	12.5	19.7	94.0	8.70	13.0	84.0	15.6	13.4	0.0050	0.010	<i>c</i>
Azinphos ethyl	93.0	11.5	39.7	93.5	6.80	16.4	93.9	8.30	12.3	93.8	9.10	12.2	0.0050	0.010	<i>a</i>
Azinphos methyl	97.7	13.8	27.8	94.4	9.40	14	97.9	6.50	11.7	97.9	9.20	11.9	0.0050	0.010	<i>b</i>
Azoxystrobin	98.7	9.60	37.3	101	8.80	16	99.0	8.90	12.3	105	14.4	12.7	0.0050	0.010	0.2
Benalaxyl	94.2	8.70	39.5	92.8	11.0	16.7	93.7	7.00	12.2	94.0	8.40	12.2	0.0050	0.010	<i>c</i>
BF 500-3	91.2	10.9	30.0	93.0	12.4	15	93.0	8.20	12.2	91.1	12.7	12.8	0.0050	0.010	0.1
Bitertanol	93.8	8.20	23.6	91.9	7.60	13.3	95.6	8.80	11.9	91.0	7.70	11.9	0.0050	0.010	0.2
Boscalid	95.7	6.10	26.7	93.5	8.80	13.9	97.1	7.60	11.9	92.6	7.30	11.9	0.0050	0.010	<i>c</i>
Buprofezin	81.9	15.6	47.7	91.2	11.8	18.7	95.0	9.60	12.9	86.8	23.6	14.6	0.0050	0.010	<i>c</i>
Cadusafos	90.2	8.70	33.4	88.7	6.40	15.2	88.6	9.00	12.3	88.6	10.5	12.6	0.0050	0.010	<i>c</i>
Carbaryl	103	9.70	30.5	95.2	8.30	14.6	95.6	7.70	12.1	94.0	10.0	12.3	0.0050	0.010	<i>c</i>
Carbendazim	102	11.5	50.0	92.7	15.6	19.7	97.4	10.6	13.1	98.6	13.9	13.1	0.0050	0.010	<i>c</i>
Carbofuran	118	8.30	30.6	111	9.70	14.7	112	5.10	11.8	106	8.80	12.0	0.0050	0.010	0.1
Carpropamid	95.3	12.8	33.4	94.5	8.80	15.3	94.9	4.50	12.1	92.8	12.0	12.9	0.0050	0.010	<i>c</i>
Chlorfenvinphos	89.2	11.4	42.9	92.4	7.90	17.5	97.3	7.30	12.6	95.4	12.8	12.7	0.0050	0.010	<i>a</i>
Chlorpyrifos methyl	89.2	13.9	25.6	92.2	11.0	14.1	88.3	9.40	12.1	86.3	7.80	11.9	0.0050	0.010	<i>b</i>
Ciflufenamide	98.1	5.90	33.3	94.8	6.90	15.7	95.9	8.50	12.6	93.2	9.90	12.6	0.0050	0.010	<i>b</i>
Clorbufan	97.9	11.8	44.1	88.2	10.7	18.1	97.2	11.0	13.1	89.6	10.5	12.8	0.0050	0.010	<i>b</i>
Cloroxuron	97.9	12.2	30.8	95.2	7.70	14.8	98.8	6.70	12.1	94.2	11.7	12.5	0.0050	0.010	<i>b</i>
Cyazofamid	99.5	9.20	34.6	90.9	6.90	15.5	99.5	8.20	12.3	91.4	7.40	12.2	0.0050	0.010	<i>c</i>
Cyhalofop-butyl	99.9	6.30	36.5	95.1	9.10	16.2	95.4	6.90	12.4	93.3	7.50	12.2	0.0050	0.010	<i>c</i>
Cyproconazole	94.1	11.7	27.9	89.5	8.60	14.0	93.5	5.80	11.7	90.7	10.2	11.9	0.0050	0.010	<i>c</i>

Cyprodinil	83.1	10.7	30.5	84.8	6.90	14.5	86.1	8.60	12	83.4	8.40	11.9	0.0050	0.010	<i>c</i>
Desmedipham	99.8	9.00	29.8	96.1	7.90	14.5	97.3	6.50	12	94.0	7.40	12.0	0.0050	0.010	<i>b</i>
Diazinon	88.6	8.40	27	90.8	10.2	14.1	89.9	4.90	11.7	91.3	10.3	12.0	0.0050	0.010	<i>c</i>
Dicrotophos	100	12.8	49.6	97.1	12.8	19.3	99.1	8.40	12.8	89.7	14.0	13.1	0.0050	0.010	<i>a</i>
Difenoconazole	97.1	10.8	31.8	93.6	8.50	15.0	96.6	8.90	12.4	92.1	9.70	12.8	0.0050	0.010	0.1
Diflufenicam	92.2	10.5	40.5	93.3	8.80	17.1	92.1	6.90	12.6	91.7	13.1	13.0	0.0050	0.010	<i>c</i>
Diniconazole	94.2	7.20	32.1	89.4	6.70	15.0	91.2	6.40	12.1	88.4	9.70	12.2	0.0050	0.010	<i>b</i>
Disulfoton	85.7	8.70	27.1	79.4	8.70	13.9	82.4	9.10	12.0	79.0	8.70	11.9	0.0050	0.010	<i>c</i>
Disulfoton sulfone	102	8.20	26.4	100	5.80	13.7	98.5	6.20	11.8	101	9.50	12.1	0.0050	0.010	<i>c</i>
Diuron	94.3	6.00	28.1	94.3	7.40	13.9	98.0	6.40	11.7	91.5	8.20	11.8	0.0050	0.010	<i>c</i>
Ethiprole	94.6	10.2	38.8	101	6.90	16.5	101	6.30	12.6	97.1	10.6	13.3	0.0050	0.010	<i>c</i>
Ethofumesate	95.2	7.30	43.7	95.7	10.7	17.6	101	11.5	12.8	97.5	12.1	12.7	0.0050	0.010	<i>b</i>
Ethoprosfos	98.2	8.50	38.6	89.3	5.30	16.4	92.4	7.20	12.5	85.5	7.10	13.0	0.0050	0.010	<i>c</i>
Ethyl cinidon	93.5	11.0	44.2	90.9	12.0	18.1	90.4	9.30	12.9	84.0	12.7	13.1	0.0050	0.010	<i>b</i>
Etione	96.4	9.10	52.6	89.6	12.0	20.2	92.2	10.9	13.4	82.2	23.4	15.0	0.0050	0.010	<i>c</i>
Etrimfos	89.5	8.30	33.4	90.1	6.00	15	92.2	6.40	11.9	86.4	7.70	11.9	0.0050	0.010	<i>a</i>
Fenamidone	88.6	11.6	32.7	84.1	11.3	15.3	87.3	9.60	12.3	83.5	10.2	12.3	0.0050	0.010	<i>c</i>
Fenamiphos	92.9	10.9	26.1	90	11.1	14.1	93.9	8.50	12	90.6	8.20	12.1	0.0050	0.010	<i>c</i>
Fenarimol	94.6	9.80	31.5	86.7	7.10	14.8	92.6	10.1	12.3	91.6	13.1	12.5	0.0050	0.010	<i>c</i>
Fenhexamide	86.9	11.9	32.7	85.6	10.3	15.2	86.7	9.80	12.3	84.3	10.5	12.3	0.0050	0.010	<i>b</i>
Fenthion	91.3	11.8	30.9	89.5	12.3	15.1	87.8	9.30	12.3	90.8	9.70	12.5	0.0050	0.010	<i>c</i>
Fluasifop-p-butyl	94.2	9.20	44	87.0	8.60	17.8	93.3	6.80	12.6	88.7	15.4	13.3	0.0050	0.010	<i>c</i>
Fluzilazol	93.1	8.70	37.1	90.6	7.50	16.1	92.5	8.10	12.4	92.1	9.40	12.6	0.0050	0.010	<i>b</i>
Furathiocarb	94.0	11.0	37.6	87.4	7.10	16.1	87.8	6.70	12.3	80.5	13.5	13.0	0.0050	0.010	<i>c</i>
Imazalil	87.0	11.3	45.8	85.7	6.30	18.2	84.0	6.20	12.6	82.0	9.30	12.5	0.0050	0.010	<i>c</i>
Indoxacarb	98.5	9.40	25.8	95.4	9.10	13.8	98.2	5.70	11.8	92.6	8.70	12.2	0.0050	0.010	<i>c</i>
Iprovalicarb	94.1	7.80	23.6	95.8	8.90	13.4	96.8	6.00	11.7	94.4	8.70	11.9	0.0050	0.010	<i>c</i>
Isoproturon	99.5	5.40	23.8	93.2	5.00	13.2	95.7	5.30	11.7	92.0	8.30	12.0	0.0050	0.010	<i>b</i>
Kresoxim methyl	96.8	19.2	34.9	96.1	13.9	16	101	8.90	12.3	100	17.3	13.3	0.0050	0.010	<i>c</i>
Linuron	87.5	10.0	27.1	87.6	6.00	13.8	94.0	6.50	11.8	89.4	8.80	12.0	0.0050	0.010	<i>c</i>
Malathion	96.6	9.20	28.9	92.5	6.60	14.1	94.3	7.50	11.9	94.1	7.10	11.9	0.0050	0.010	<i>c</i>

Metazachlor	97.7	9.10	26.8	93.6	7.30	13.9	95.3	4.90	11.8	90.7	8.70	12.0	0.0050	0.010	<i>b</i>
Methidation	97.9	10.7	29.7	95.7	10.5	14.6	95.4	5.70	11.9	91.7	10.0	12.3	0.0050	0.010	<i>c</i>
Methiocarb	93.9	8.40	27.4	91.2	6.80	13.8	93.3	5.10	11.7	89.8	7.60	11.7	0.0050	0.010	<i>c</i>
Methoxyfenozide	103.7	10.2	32	94.2	7.30	15.1	95.6	6.10	12.3	96.4	12.8	13.0	0.0050	0.010	<i>c</i>
Meticonazol	90.3	7.70	33	92.9	9.00	15.3	94.1	10.6	12.4	90.2	10.6	12.4	0.0050	0.010	0.20
Monocrotophos	94.9	10.2	45.3	94.6	11.2	18.1	98.9	6.90	12.5	86.4	14.1	13.3	0.0050	0.010	<i>a</i>
Monolinuron	95.2	7.10	29.4	91.3	9.10	14.4	96.7	5.70	11.9	92.2	7.10	12.0	0.0050	0.010	<i>b</i>
Myclobutanil	106.7	11.8	37.9	91.9	7.40	16.1	93.1	8.00	12.3	92.6	8.90	12.4	0.0050	0.010	<i>c</i>
Nuarimol	97.0	8.80	38.0	90.6	6.50	16.1	92.2	7.10	12.3	87.8	6.90	12.1	0.0050	0.010	<i>b</i>
Omethoate	89.0	10.5	39.6	87.6	11.2	16.8	93.1	8.70	12.5	81.9	12.0	13.0	0.0050	0.010	<i>a</i>
Oxamyl	NQ*	NQ*	NQ*	93.1	17.1	19.2	96.4	10.0	13.3	93.5	13.7	13.2	0.010	0.025	<i>a</i>
Paclobutrazol	97.3	10.1	35.3	90.7	9.00	15.7	90.8	7.20	12.2	90.6	8.50	12.2	0.0050	0.010	<i>c</i>
Pencicurom	93.9	11.2	35.4	90.5	9.10	15.6	92.5	9.20	12.3	86.5	11.0	12.5	0.0050	0.010	<i>c</i>
Penconazole	82.9	10.5	30.4	87.9	10.5	14.8	92.1	7.20	12.1	84.0	9.90	12.2	0.0050	0.010	<i>b</i>
Pendimethalin	85.1	9.70	27.9	81.5	9.40	14.1	87.6	9.40	12	78.8	6.50	11.8	0.0050	0.010	0.1
Phenthoate	94.6	8.90	45.8	94.1	7.50	18.2	95.6	7.40	12.8	94.2	9.10	12.9	0.0050	0.010	<i>c</i>
Phosalone	94.4	9.90	31.6	90.1	7.70	14.9	92.6	6.00	12	89.4	12.5	12.5	0.0050	0.010	<i>c</i>
Phosmet	96.8	9.00	31.0	91.4	7.30	14.6	96.5	5.60	11.9	91.4	7.70	12.0	0.0050	0.010	<i>c</i>
Picolinafen	91.1	11.3	50.0	88.2	14.5	19.8	92.8	9.10	13.1	81.6	21.0	14.3	0.0050	0.010	<i>b</i>
Piriftalide	96.8	5.60	28.2	94.0	6.70	14.1	94.4	4.50	11.8	91.4	8.20	11.9	0.0050	0.010	<i>b</i>
Pirimicarb	93.5	6.70	29.5	93.1	6.50	14.2	95.8	4.70	11.8	91.1	8.20	12.0	0.0050	0.010	<i>c</i>
Pirimiphos methyl	85.2	8.20	30.1	86.6	7.40	14.4	87.2	4.60	11.9	86.2	10.7	12.6	0.0050	0.010	<i>c</i>
Prochloraz	92.0	11.4	42.1	93.7	10.9	17.5	94.2	7.60	12.7	90.3	13.4	13.4	0.0050	0.010	<i>c</i>
Propham	99.1	15.0	33.7	90.2	11.0	15.6	92.1	8.40	12.4	94.1	14.1	13.0	0.0050	0.010	<i>b</i>
Profenofos	94.8	9.80	39.8	86.5	6.50	16.7	87.3	7.00	12.4	85.0	13.4	12.8	0.0050	0.010	0.02
Promecarb	96.5	8.10	30.5	94.6	8.40	14.6	95.7	5.40	11.9	91.7	7.50	12.0	0.0050	0.010	<i>b</i>
Propaquizafop	90.9	10.7	52.9	90.1	12.9	20.3	97.8	11.3	13.5	80.6	15.3	13.7	0.0050	0.010	<i>c</i>
Propiconazole	95.3	8.40	26.4	89.6	6.70	13.8	93.5	7.80	11.9	87.1	10.5	12.2	0.0050	0.010	0.05
Propoxur	102.4	14.4	34.8	95.8	12.5	16.0	97.8	6.10	12.2	95.1	9.90	12.4	0.0050	0.010	<i>c</i>
Propyzamide	87.9	8.30	36.9	88.2	9.50	16.2	93.6	6.90	12.4	88.0	8.20	12.6	0.0050	0.010	<i>b</i>
Pyraclofos	94.2	10.8	32.6	93.0	10.1	15.3	93.4	7.10	12.2	91.0	10.3	12.4	0.0050	0.010	<i>b</i>

Pyraclostrobin	104	13.2	53.9	89.6	6.60	20	87.0	9.30	13.1	86.9	15.2	13.5	0.0050	0.010	0.1
Pyrazophos	97.6	15.5	42.7	90.1	9.20	17.5	93.6	8.00	12.7	93.0	10.5	12.9	0.0050	0.010	<i>c</i>
Pyrimethanil	86.1	13.9	32.5	84.9	8.30	15	84.6	6.40	12	83.8	7.50	12.3	0.0050	0.010	<i>c</i>
Quinalphos	87.9	6.30	31.3	91.1	9.80	14.8	91.6	10.1	12.2	90.0	10.3	12.2	0.0050	0.010	<i>b</i>
Quinoclamine	90.9	17.1	48.7	88.9	13.2	19.3	85.1	13.9	13.5	85.8	11.8	12.9	0.0050	0.010	<i>b</i>
Quizalofop-p-ethyl	92.6	10.8	43.8	86.3	8.70	17.8	90.9	7.10	12.7	85.2	15.8	13.4	0.0050	0.010	0.05
Sulfotep	96.7	11.1	42.9	91.4	8.00	17.4	91.5	6.10	12.5	91.1	7.50	12.7	0.0050	0.010	<i>b</i>
Tebuconazole	92.2	11.1	34.0	89.4	8.40	15.4	95.3	7.30	12.2	88.4	8.20	12.0	0.0050	0.010	0.1
Tebufenpyrad	88.0	6.90	29.2	89.7	6.40	14.1	91.3	6.30	11.8	85.6	4.80	11.8	0.0050	0.010	<i>b</i>
Tebufenozide	98.3	11.0	36.4	95.6	7.90	16.2	95.4	8.60	12.6	96.3	9.40	12.7	0.0050	0.010	<i>c</i>
Temephos	94.6	12.5	52.8	92.0	12.6	20.2	99.4	11.7	13.4	81.4	10.1	13.2	0.0050	0.010	<i>c</i>
Tetraconazole	100	12.0	35.1	93.2	10.2	15.6	94.3	6.80	12	95.8	13.6	12.5	0.0050	0.010	<i>c</i>
Thiamethoxam	99.8	12.6	49.6	97.6	18.7	19.8	103	12.6	13.2	88.4	19.4	13.9	0.0050	0.010	0.02
Thiobencarb	89.0	8.50	26.2	85.4	8.90	13.7	87.4	6.50	11.7	81.9	10.0	11.9	0.0050	0.010	<i>c</i>
Thiophanate methyl	102	13.5	42.6	92.1	13.2	17.5	102	10.0	12.6	96.0	10.5	12.5	0.0050	0.010	0.1
Tiacloprid	98.0	16.8	54.7	98.6	12.6	20.6	102	10.0	13.2	88.5	19.1	14.0	0.0050	0.010	<i>c</i>
Triadimefon	89.4	11.6	42.7	91.6	9.00	17.3	93.4	9.30	12.5	91.3	10.8	12.5	0.0050	0.010	<i>c</i>
Triadimenol	101	10.1	34.1	93.7	8.50	15.2	92.9	7.50	12	89.8	9.50	12.1	0.0050	0.010	<i>c</i>
Triazophos	102	9.80	35.3	91.4	7.20	15.4	90.6	7.40	12.1	87.3	7.90	12.0	0.0050	0.010	<i>c</i>
Trichlorfon	94.4	14.5	48.5	97.5	14.7	19.1	102	9.30	12.8	92.5	19.6	13.9	0.0050	0.010	<i>a</i>
Tricyclazole	NQ*	NQ*	NQ*	88.7	12.9	23.6	86.9	12.2	14.2	86.4	16.2	14.2	0.010	0.025	<i>c</i>
Trifloxystrobin	99.3	8.60	35.7	92.2	7.80	15.6	94.2	3.90	11.9	95.8	12.9	12.5	0.0050	0.010	0.05
Triflumizole	98.7	5.30	25.7	89.4	6.20	13.4	91.0	6.50	11.7	90.8	11.0	12.0	0.0050	0.010	<i>c</i>
Triforin	101	9.60	36.9	94.1	8.70	16	98.4	6.50	12.2	98.3	8.90	12.2	0.0050	0.010	<i>c</i>
Triticonazole	92.3	9.40	34.3	87.8	7.40	15.4	90.7	6.70	12.1	88.4	11.9	12.6	0.0050	0.010	<i>c</i>

NQ* Not quantifiable

a. prohibited

b. use not legislated in Brazil

c. use not allowed for peanut crops