

表 4 - 2

本機関において回収率不適の農薬

120-140%(▲), 50-70%(△)

農薬名	玄米	ばれいしょ	ほうれんそう	りんご	キャベツ	オレンジ
1 ジクロルボス					△	
2 プチレート					△	
3 テルブホス						△
4 α-BHC	△			△		
5 テフルトリン	△					
6 アセタミプリド					△	
7 チオメトン					△	
8 トリクロホスメチル	△					
9 アルドリン	△					
10 イソフェンホスP=O			▲			
11 イソフェンホス		△	△			
12 フルシラゾール	△			△		△
13 カブタホール	△					△
14 フルバリネート				△		
15 フェノブカルブ				△		
16 エトリムホス				△		
17 ピリミカルブ				△		
18 ベンフレセート				△		
19 キャプタン				△		
20 ディルドリン		△		△		
21 テブフェンピラド				▲		
22 メタミドホス	△	△			△	△
23 EPTC	△	△	△		△	△
24 ジクロフルアニド	△			△		
25 フェンチオン	△					△
26 アミトラズ				△		
27 テルブホス						
28 ジメチピン						▲
29 ピリフェノックス(Z)					△	
30 ピリフェノックス(E)						▲
31 EPN						▲
32 アミトラズ			△			△
33 ピラクロホス						▲
34 ペルメトリン						▲
35 ジフェノコナゾール						▲
36 イミベンコナゾール						▲
37 アセフェート			△		△	
38 ブタミホス			△			
39 カルバリル		▲				
40 バミドチオン					△	
41 ミクロブタニル					△	

表5 各農作物ごとのGC/MSIによる測定対象農葉数

( )内の数値は各標準混液のtotal数を示している。

農作物	A(55種)	B(56種)	C(12種)	合計(123種)
1 米(玄米)	27	26	8	61
2 米以外の穀類	38	28	4	70
3 豆類	32	32	3	67
4 核果果実	34	38	3	75
5 柑橘類	35	37	2	74
6 仁果果実	36	39	3	78
7 バナナ	29	20	2	51
8 バナナ以外の熱帯産果実	24	17	1	42
9 ペリー類	29	25	4	58
10 果実	41	38	4	83
11 あぶらな科野菜	35	31	3	69
12 ばれいしよ	35	35	2	72
13 ばれいしよ以外のいも類	28	23	1	52
14 うり科野菜	35	39	4	78
15 きく科野菜	28	30	1	59
16 きのご類	21	16	1	38
17 せり科野菜	32	30	1	63
18 なす科野菜	35	39	4	78
19 ゆり科野菜	27	28	2	57
20 野菜	31	26	2	59
21 茶	21	29	3	53

表6

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

米(玄米)

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
7	Isoprocarb	A	9.53	121.2	136.1	91.1
9	Ethoprophos	A	10.69	157.9	97.0	125.9
11	Trifluralin	C	10.99	306.0	264.0	290.0
12	Bendiocarb	A	11.09	151.1	126.0	166.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
20	Terbufos	A	12.29	231.0	97.0	153.0
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Benfuresate	B	13.29	163.0	256.0	121.0
29	Dimethenamid	C	13.35	154.0	230.0	203.0
30	Metribuzin	A	13.45	198.0	199.0	144.0
31	Parathion-Me	B	13.59	263.0	125.0	109.0
33	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
36	Methiocarb	A	14.14	168.0	153.0	109.0
38	Malathion	A	14.28	173.1	125.0	93.0
39	Esprocarb	B	14.30	222.1	162.1	91.1
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
43	(Z)-Dimethylvinphos	A	14.47	295.0	296.9	109.0
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
62	Vamidotion	B	15.94	145.0	87.0	146.0
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
69	Tricyclazole	B	16.52	189.1	161.9	161.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
79	Pyriminobac-Me(Z)	C	17.17	302.0	256.0	330.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
84	Edifenphos	B	18.00	310.1	173.0	109.0
87	Pyriminobac-Me(E)	C	18.03	302.0	256.0	330.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
89	Thenylchlor	A	18.33	127.2	288.0	287.0
90	Tebconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
92	Pyributicarb	C	18.80	165.0	108.0	181.0
93	Iprodione	B	18.89	314.0	315.9	186.9
96	EPN	B	19.12	157.1	169.0	141.0
98	Furametpyr	C	19.55	157.0	298.0	291.0
102	Cyhalofop butyl	C	20.00	256.0	229.0	357.0
103	Mefenacet	A	20.06	192.1	120.1	136.1
112	Cafenstrole	C	21.50	100.0	188.0	119.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
117	Silafluofen	B	22.48	179.1	286.0	258.0
122	Deltamethrin-1	A	24.16	181	252.9	254.8

表7

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

米以外の穀類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
5	Butylate	A	8.28	146.0	156.0	69.0
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
12	Bendiocarb	A	11.09	151.1	126.0	166.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
20	Terbufos	A	12.29	231.0	97.0	153.0
22	Tefluthrin	A	12.70	177.0	197.0	199.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	236.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
27	Dimethenamid	C	13.35	154.0	230.0	203.0
28	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Tolclofos-methyl	A	13.61	264.9	266.9	124.9
32	Alachlor	C	13.62	160.0	188.0	146.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofuanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	196.9	196.9
43	(Z)-Dimethylvinphos	A	14.47	295.0	296.9	109.0
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
53	Isofenpos	A	15.30	213.0	120.0	121.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
65	Flutoluanil	A	16.26	173.2	323.1	145.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
72	Flusilazole	A	16.64	233.1	206.0	234.0
73	Dieldrin	B	16.69	262.8	278.8	276.8
74	Difenzoquat	B	16.71	234.0	77.0	233.1
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
80	Fensulfiothion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Propiconazole-1	A	18.10	259.0	172.9	261.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
90	Tebuconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.69	314.0	315.9	186.9
95	Bifenthrin	C	19.08	181.0	165.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
109	Bitertanol-1	A	20.92	170.1	171.1	168.1
110	Permethrin-1	B	21.11	183.2	184.0	165.0
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	161.0
121	Difenoconazole-1	B	23.62	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表8 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

豆類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorobos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
22	Tefluthrin	A	12.70	177.0	197.0	199.0
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
28	Dimethenamid	C	13.35	154.0	230.0	203.0
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
32	Alachlor	C	13.62	160.0	188.0	146.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
50	Fosthiazate-1	B	14.95	194.9	96.9	198.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
53	Isofenpos	A	15.30	213.0	120.0	121.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
64	Butamifos	B	16.12	286.0	199.9	231.9
66	Prothiofos	B	16.37	309.0	161.9	260.9
70	<i>p,p'</i> -DDE	A	16.54	246.0	315.9	317.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
80	Fensulfothion	A	17.25	292.0	293.0	156.0
81	<i>p,p'</i> -DDD	B	17.40	235.0	237.0	165.1
82	<i>o,p'</i> -DDT	A	17.45	235.0	237.0	199.0
87	Propiconazole-1	A	18.10	259.0	172.9	261.0
88	<i>p,p'</i> -DDT	B	18.16	235.0	237.0	165.1
90	Tebuconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
106	Acrinathrin	B	20.23	181.0	93.1	208.0
108	Pyraclufos	B	20.64	360.0	138.0	193.9
109	Bitertanol-1	A	20.92	170.1	171.1	168.1
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8
123	Imibenconazole	B	25.68	125.0	127.0	252.9

表9

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

核果果実

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
2	Metamidophos	B	8.10	94.0	95.0	141.0
3	Dichlorobos	A	8.26	109.1	184.9	79.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	280.0
14	$\alpha$ -BHC	A	11.48	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diezinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
28	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
32	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofuanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	182.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.8	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
49	Dicofol	A	14.79	139.0	251.0	252.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
54	(Z)-Pyrifenox	B	15.34	261.9	170.9	172.9
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
56	Phenthoate	B	15.46	273.9	246.0	121.0
57	Quinalphos	A	15.48	146.0	157.1	156.1
60	(E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
63	Pactobutrazol	A	15.95	236.1	125.0	238.0
65	Flutoluanil	A	16.26	173.2	323.1	145.0
68	Fludioxonil	C	16.39	248.0	127.0	154.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
72	Flusilazole	A	16.64	233.1	206.0	234.0
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
79	Chlorobenzilate	B	17.20	250.9	253.0	139.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
87	Propiconazole-1	A	18.10	259.0	172.9	261.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
90	Tebuconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
101	Pyriproxyfen	B	19.95	136.0	96.0	226.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
105	Amitraz	B	20.09	293.2	132.1	121.1
106	Acrinathrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclufos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
114	Halfenprox	B	22.01	262.9	264.9	183.0
115	Cypermethrin-1	A	22.08	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
118	Pyrimidifen	A	22.79	184.0	186.0	185.0
119	Fenvalerate-1	B	23.00	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8
123	Imibenzconazole	B	25.68	125.0	127.0	252.9

表10

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン  
柑橋類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichrolobos	A	6.26	109.1	184.0	79.0
4	EPTG	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
16	Dimethoate	A	11.76	87.0	125.0	93.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrinfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Tolclofos-methyl	A	13.61	264.9	266.9	124.9
33	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
49	Dicohol	A	14.79	139.0	251.0	252.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
53	Isofenpos	A	15.30	213.0	120.0	121.0
54	(Z)-Pyrifinox	B	15.34	261.9	170.9	172.9
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
56	Phenthoate	B	15.46	273.9	246.0	121.0
57	Quinalphos	A	15.48	146.0	157.1	156.1
60	(E)-Pyrifinox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
65	Flutoluanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
70	<i>p,p'</i> -DDE	A	16.54	246.0	315.9	317.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
79	Chlorobenzilate	B	17.20	250.9	253.0	139.0
81	<i>p,p'</i> -DDD	B	17.40	235.0	237.0	165.1
82	<i>o,p'</i> -DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	<i>p,p'</i> -DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
101	Pyriproxyfen	B	19.95	136.0	96.0	226.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
105	Amitraz	B	20.09	293.2	132.1	121.1
106	Acrinathrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclufos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
114	Halfenprox	B	22.01	262.9	264.9	183.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
118	Pyrimidifen	A	22.79	184.0	186.0	185.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
123	Imibenconazole	B	25.68	125.0	127.0	252.9

表11 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン  
仁果果実

Pesticides	Group	RT (min)	Monitor ion		
			1	2	3
3 Dichlorobos	A	8.26	109.1	184.9	79.0
8 Fenobcarb	B	10.34	121.2	150.1	122.0
10 Chlorpropham	B	10.95	127.0	213.0	154.0
11 Trifluralin	C	10.99	308.0	264.0	290.0
12 Bendiocarb	A	11.09	151.1	126.0	166.0
14 $\alpha$ -BHC	A	11.49	181.0	182.9	216.9
15 Thiometon	B	11.64	88.0	93.0	125.0
18 $\beta$ -BHC	A	12.05	218.9	218.8	180.9
19 $\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21 Diazinon	B	12.41	179.1	304.1	137.0
23 Etrimfos	B	12.77	292.0	277.0	181.1
24 $\delta$ -BHC	A	12.84	219.0	180.9	182.9
25 Pirimicarb	B	12.95	166.1	72.0	238.1
26 Ethiofencarb	A	13.14	107.0	168.0	108.1
30 Parathion-Me	B	13.59	263.0	125.0	109.0
31 Toloclofos-methyl	A	13.61	264.9	266.9	124.9
33 Carbaryl	B	13.73	144.0	115.0	116.0
34 Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35 Fenitrothion	B	14.11	277.1	125.0	260.0
36 Methiocarb	A	14.14	168.0	153.0	109.0
37 Dichlofluanid	B	14.27	123.0	223.9	225.9
38 Malathion	A	14.28	173.1	125.0	93.0
41 Chlorpyrifos	B	14.43	313.9	198.9	198.9
42 Diethofencarb	A	14.45	124.0	267.2	225.1
46 Aldrin	A	14.56	262.8	260.8	284.8
47 Parathion	B	14.61	291.1	97.0	109.0
49 Dicohol	A	14.79	139.0	251.0	252.9
51 Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
54 (Z)-Pyrifenox	B	15.34	261.9	170.9	172.9
55 Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
56 Phenthoate	B	15.46	273.9	246.0	121.0
57 Quinalphos	A	15.48	146.0	157.1	156.1
59 Captan	B	15.55	79.0	80.1	149.0
60 (E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61 Chinomethionate	A	15.91	234.0	206.0	116.1
62 Vamidothion	B	15.94	145.0	87.0	146.0
63 Paclobutrazol	A	15.95	236.1	125.0	238.0
65 Flutoluanil	A	16.26	173.2	323.1	145.0
66 Prothiofos	B	16.37	309.0	181.9	266.9
70 p,p'-DDE	A	16.54	246.0	315.9	317.9
71 Myclobutanil	B	16.61	179.0	181.0	149.9
72 Flusilazole	A	16.64	233.1	206.0	234.0
73 Dieldrin	B	16.69	262.8	278.8	276.8
75 Chlorfenspyr	C	16.86	247.0	137.0	328.0
76 Cyproconazole-1	B	16.99	222.1	139.0	125.0
77 Endrin	A	17.13	262.8	260.8	242.9
79 Chlorobenzilate	B	17.20	250.9	253.0	139.0
81 p,p'-DDD	B	17.40	235.0	237.0	165.1
82 o,p'-DDT	A	17.45	235.0	237.0	199.0
83 Mepronil	B	17.65	269.1	119.1	91.1
86 Lenacil	A	18.08	153.0	110.0	136.0
88 p,p'-DDT	B	18.16	235.0	237.0	165.1
90 Tebconazole	B	18.43	125.0	250.0	127.0
91 Captfol	A	18.62	79.1	80.1	77.0
93 Iprodione	B	18.89	314.0	315.9	186.9
94 Acetamiprid	A	19.01	152.0	126.0	166.0
95 Bifenthrin	C	19.08	181.0	165.0	141.0
96 EPN	B	19.12	157.1	169.0	141.0
97 Tebfenpyrad	B	19.37	333.1	171.0	318.0
100 Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104 Cyhalothrin-2	A	20.08	181.0	197.0	199.0
105 Amitraz	B	20.09	293.2	132.1	121.1
106 Acrinathrin	B	20.23	181.0	93.1	208.0
107 Fenarimol	A	20.38	139.0	219.0	250.9
109 Bitertanol-1	A	20.92	170.1	171.1	166.1
110 Permethrin-1	B	21.11	183.2	184.0	165.0
111 Pyridaben	A	21.17	147.1	148.1	132.1
113 Cyfluthrin-1	B	21.64	206.0	226.0	199.0
114 Halfenprox	B	22.01	262.9	264.9	183.0
115 Cypermethrin-1	A	22.09	181.0	163.0	164.9
116 Flucythrinate-1	A	22.09	199.1	451.2	157.0
117 Silafluofen	B	22.48	179.1	266.0	258.0
118 Pyrimidifen	A	22.79	184.0	186.0	185.0
119 Fenvalerate-1	B	23.06	167.1	225.1	181.0
120 Fluvalenate-1	A	23.27	250.1	252.0	181.0
121 Difenoconazole-1	B	23.82	323.0	284.9	324.9
122 Deltamethrin-1	A	24.16	181.0	252.0	254.8
123 Imibenconazole	B	25.68	125.0	127.0	252.9



表12 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

バナナ

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichlorbos	A	6.26	109.1	184.9	79.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
13	Cadusafos	B	11.28	159.0	157.9	96.9
15	Thiometon	B	11.64	88.0	93.0	125.0
20	Terbufos	A	12.29	231.0	97.0	153.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
49	Dicohol	A	14.79	139.0	251.0	252.9
53	Isofenpos	A	15.30	213.0	120.0	121.0
54	(Z)-Pyrifenox	B	15.34	261.9	170.9	172.9
57	Quinalphos	A	15.48	146.0	157.1	156.1
60	(E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
65	Flutoluanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
72	Flusilazole	A	16.64	233.1	206.0	234.0
80	Fensulfothion	A	17.25	292.0	293.0	156.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
87	Propiconazole-1	A	18.10	259.0	172.9	261.0
90	Tebconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
95	Bifenthrin	C	19.08	181.0	165.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
109	Bitertanol-1	A	20.92	170.1	171.1	168.1
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表13 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

バナナ以外の熱帯産果実

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
15	Thiometon	B	11.64	88.0	93.0	125.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
54	(Z)-PyrifenoX	B	15.34	261.9	170.9	172.9
57	Quinalphos	A	15.48	146.0	157.1	156.1
58	Triadimenol	A	15.55	112.0	168.1	128.0
60	(E)-PyrifenoX	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
65	Flutoluanil	A	16.26	173.2	323.1	145.0
71	Myclobutanil	B	16.61	179.0	181.0	149.9
80	Fensulfothion	A	17.25	292.0	293.0	156.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
87	Propiconazole-1	A	18.10	259.0	172.9	261.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表14

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

## ベリー類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
22	Tefluthrin	A	12.70	177.0	197.0	199.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
33	Alachlor	C	13.62	160.0	188.0	146.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
46	Aldrin	A	14.56	262.8	260.8	264.8
49	Dicohol	A	14.79	139.0	251.0	252.9
57	Quinalphos	A	15.48	146.0	157.1	156.1
61	Chinomethionate	A	15.91	234.0	206.0	116.1
65	Flutoluanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
68	Fludioxonil	C	16.39	248.0	127.0	154.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.81	179.0	181.0	149.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
77	Endrin	A	17.13	262.8	260.8	242.9
79	Chlorobenzilate	B	17.20	250.9	253.0	139.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
105	Amitraz	B	20.09	293.2	132.1	121.1
106	Acrinathrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表15

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

果実

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	88.0	100.0
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorobos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobosarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	284.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiomaton	B	11.64	88.0	93.0	125.0
16	Dimethoate	A	11.76	87.0	125.0	93.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.8
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrifos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Tolclofos-methyl	A	13.61	264.9	266.9	124.9
33	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.8
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	198.9
42	Diathofencarb	A	14.45	124.0	267.2	225.1
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
49	Dicofol	A	14.79	139.0	251.0	252.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
54	(Z)-Pyrifenox	B	15.34	281.9	170.9	172.9
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
57	Quinalphos	A	15.48	146.0	157.1	156.1
58	Triadimenol	A	15.55	112.0	168.1	128.0
60	(E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
64	Butemifos	B	16.12	286.0	199.9	231.9
65	Flutolanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	268.9
68	Fludioxonil	C	16.39	248.0	127.0	154.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
72	Flusilazole	A	16.64	233.1	206.0	234.0
73	Dieldrin	B	16.89	262.8	278.8	276.8
75	Chlorfenepry	C	16.86	247.0	137.0	328.0
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.8
79	Chlorobenzilate	B	17.20	250.9	253.0	139.0
80	Fensulfothion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
87	Propiconazole-1	A	18.10	259.0	172.9	261.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Inrodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	120.0	166.0
95	Bifenthrin	C	19.08	181.0	105.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
99	Phosalone	A	19.70	181.0	390.9	103.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	194.0
105	Amitraz	B	20.09	293.2	132.1	121.1
106	Acrinethrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
109	Bitertenol-1	A	20.92	170.1	171.1	188.1
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
117	Silafluofen	B	22.48	179.1	288.0	258.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8
123	Imibenconazole	B	25.68	125.0	127.0	252.9

表16

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

あぶらな科野菜

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorobos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
16	Dimethoate	A	11.76	87.0	125.0	93.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.81	264.9	266.9	124.9
33	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
49	Dicohol	A	14.79	139.0	251.0	252.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
54	(Z)-Pyrifenox	B	15.34	261.9	170.9	172.9
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
57	Quinalphos	A	15.48	146.0	157.1	156.1
58	Triadimenol	A	15.55	112.0	168.1	128.0
60	(E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutolanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
75	Chlorfenapyr	C	16.86	247.0	137.0	328.0
77	Endrin	A	17.13	262.8	260.8	242.9
80	Fensulfothion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclafos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表17

検出農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

ばれいしよ

	Pesticides	Group	RT (min)	Monitor Ion		
				1	2	3
1	Aldicarb(deo)	A	—	115	68.0	100.0
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorobos	A	6.28	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	138.0	94.0	95.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
12	Bendiocarb	A	11.09	151.1	126.0	166.0
13	Cadusafos	B	11.28	159.0	157.9	96.9
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
16	Dimethoate	A	11.76	87.0	125.0	93.0
17	Dimethipin	B	12.02	54.0	53.1	59.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
33	Carbaryl	B	13.73	144.0	115.0	116.0
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofuanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
44	Thiobencarb	B	14.49	100.2	72.1	257.0
45	Fenthion	B	14.53	278.1	169.0	125.0
46	Aldrin	A	14.56	262.8	260.8	264.8
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
50	Fosthiazate-1	B	14.95	194.9	98.9	198.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	182.1	253.0
53	Isofenpos	A	15.30	213.0	120.0	121.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
62	Vamidothion	B	15.94	145.0	87.0	146.0
63	Paclobutrazol	A	15.95	236.1	125.0	236.0
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutoluanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
73	Dieldrin	B	16.69	262.8	278.8	278.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
80	Fensulfothion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	188.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	144.0
108	Pyrethofos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
114	Halfenprox	B	22.01	262.9	264.9	183.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表18 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

ばれいしよ以外のいも類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
1	Aldicarb(dec)	A	—	115.0	68.0	100.0
3	Dichlorobos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
22	Tefluthrin	A	12.70	177.0	197.0	199.0
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
44	Thiobencarb	B	14.49	100.2	72.1	257.0
50	Fosthiazate-1	B	14.95	194.9	96.9	198.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
62	Vamidotion	B	15.94	145.0	87.0	146.0
63	Paclobutrazol	A	15.95	236.1	125.0	238.0
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutoluanil	A	16.26	173.2	323.1	145.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
80	Fensulfotion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
108	Pyraclofos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-i	A	24.16	181.0	252.9	254.8

表19 検出農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

うり科野菜

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
2	Metamidophos	B	8.10	94.0	95.0	141.0
3	Dichlorobos	A	8.28	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	308.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.84	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	218.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Tolclofos-methyl	A	13.61	284.9	266.9	124.9
34	Pirimphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	182.1	238.0	148.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	287.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	282.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
49	Dicohol	A	14.79	139.0	251.0	252.9
50	Fosthiazate-1	B	14.95	194.9	98.9	198.9
51	Chlorfenviphos-E	A	15.11	286.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	182.1	253.0
54	(Z)-Pyrifenox	B	15.34	281.9	170.9	172.9
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
56	Phenthoate	B	15.46	273.9	246.0	121.0
58	Triadimenol	A	15.55	112.0	168.1	128.0
59	Captan	B	15.55	79.0	80.1	149.0
60	(E)-Pyrifenox	B	15.87	170.9	172.9	261.9
61	Chinomethionate	A	15.91	234.0	206.0	116.1
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutolanil	A	16.28	173.2	323.1	145.0
68	Fludioxonil	C	16.39	240.0	127.0	154.0
70	p,p'-DDE	A	16.54	240.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	101.0	149.9
73	Dieldrin	B	16.69	262.8	278.8	278.8
75	Chlorfenapyr	C	16.86	247.0	137.0	328.0
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	289.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	185.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
101	Pyriproxyfen	B	19.95	136.0	96.0	226.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
105	Amitraz	B	20.09	293.2	132.1	121.1
106	Acrinathrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclufos	B	20.64	360.0	138.0	193.9
109	Bitertanol-1	A	20.92	170.1	171.1	168.1
110	Permethrin-1	B	21.11	183.2	184.0	185.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8



表20 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

きく科野菜

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutoluanil	A	16.26	173.2	323.1	145.0
66	Prothiofos	B	16.37	309.0	161.9	266.9
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
96	EPN	B	19.12	157.1	169.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表21 検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオンの種類

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
3	Dichlorbos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
8	Fenobcarb	B	10.34	121.2	150.1	122.0
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
12	Bendiocarb	A	11.09	151.1	126.0	166.0
15	Thiometon	B	11.64	88.0	93.0	125.0
22	Tefluthrin	A	12.70	177.0	197.0	199.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
65	Flutoluanil	A	16.26	173.2	323.1	145.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0

表22

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

せり科野菜

	Pesticides	Group	RT (min)	Monitor ion		
				1	2	3
3	Dichlorbos	A	6.28	109.1	184.9	79.0
4	EPTC	B	7.48	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	306.0	264.0	290.0
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	238.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Toloclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
48	Isofenpos-oxon	A	14.61	120.0	228.9	200.9
50	Fosthiazate-1	B	14.95	194.9	96.9	198.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	162.1	253.0
53	Isofenpos	A	15.30	213.0	120.0	121.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutoluanil	A	16.26	173.2	323.1	145.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
73	Dieldrin	B	16.69	262.8	278.8	276.8
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	186.9
96	EPN	B	19.12	157.1	189.0	141.0
100	Cyhalothrin-1	A	19.89	181.0	197.0	199.0
104	Cyhalothrin-2	A	20.08	181.0	197.0	199.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclufos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	252.0	181.0
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8

表23

検討農薬の保持時間(RT)及びGC/MS(SIM)測定に用いるモニターイオン

なす科野菜

	Pesticides	Group	RT (min)	Monitor Ion		
				1	2	3
2	Metamidophos	B	6.10	94.0	95.0	141.0
3	Dichlorobos	A	6.26	109.1	184.9	79.0
4	EPTC	B	7.49	128.0	86.0	132.1
6	Acephate	B	8.29	136.0	94.0	95.0
8	Fenobcarb	B	10.34	121.2	150.1	122.0
9	Ethoprophos	A	10.69	157.9	97.0	125.9
10	Chlorpropham	B	10.95	127.0	213.0	154.0
11	Trifluralin	C	10.99	308.0	264.0	290.0
13	Cadusafos	B	11.28	159.0	157.9	96.9
14	$\alpha$ -BHC	A	11.49	181.0	182.9	218.9
15	Thiometon	B	11.64	88.0	93.0	125.0
16	Dimethoate	A	11.76	87.0	125.0	93.0
18	$\beta$ -BHC	A	12.05	218.9	216.8	180.9
19	$\gamma$ -BHC	B	12.22	218.9	180.9	216.9
21	Diazinon	B	12.41	179.1	304.1	137.0
23	Etrimfos	B	12.77	292.0	277.0	181.1
24	$\delta$ -BHC	A	12.84	219.0	180.9	182.9
25	Pirimicarb	B	12.95	166.1	72.0	236.1
26	Ethiofencarb	A	13.14	107.0	168.0	108.1
29	Metribuzin	A	13.45	198.0	199.0	144.0
30	Parathion-Me	B	13.59	263.0	125.0	109.0
31	Tolclofos-methyl	A	13.61	264.9	266.9	124.9
34	Pirimiphos-methyl	A	14.03	290.0	276.0	305.1
35	Fenitrothion	B	14.11	277.1	125.0	260.0
36	Methiocarb	A	14.14	168.0	153.0	109.0
37	Dichlofluanid	B	14.27	123.0	223.9	225.9
38	Malathion	A	14.28	173.1	125.0	93.0
40	Metolachlor	A	14.39	162.1	238.0	146.1
41	Chlorpyrifos	B	14.43	313.9	198.9	196.9
42	Diethofencarb	A	14.45	124.0	267.2	225.1
44	Thiobencarb	B	14.49	100.2	72.1	257.0
46	Aldrin	A	14.56	262.8	260.8	264.8
47	Parathion	B	14.61	291.1	97.0	109.0
50	Fosthiazate-1	B	14.95	194.9	96.9	198.9
51	Chlorfenviphos-E	A	15.11	266.9	268.9	323.0
52	Pendimethrin	B	15.13	252.1	182.1	253.0
55	Chlorfenviphos-Z	A	15.34	266.9	268.9	323.0
59	Captan	B	15.55	79.0	80.1	149.0
61	Chinomethionate	A	15.91	234.0	206.0	116.1
64	Butamifos	B	16.12	286.0	199.9	231.9
65	Flutolanil	A	16.26	173.2	323.1	145.0
67	Pretilachlor	A	16.37	238.2	162.1	176.1
68	Fludioxonil	C	16.39	248.0	127.0	154.0
70	p,p'-DDE	A	16.54	246.0	315.9	317.9
71	Myclobutanil	B	16.61	179.0	181.0	149.9
73	Dialdrin	B	16.69	262.8	278.8	276.0
75	Chlorfenvipyr	C	16.66	247.0	137.0	328.0
76	Cyproconazole-1	B	16.99	222.1	139.0	125.0
77	Endrin	A	17.13	262.8	260.8	242.9
79	Chlorobenzilate	B	17.20	250.9	253.0	139.0
80	Fensulfothion	A	17.25	292.0	293.0	156.0
81	p,p'-DDD	B	17.40	235.0	237.0	165.1
82	o,p'-DDT	A	17.45	235.0	237.0	199.0
83	Mepronil	B	17.65	269.1	119.1	91.1
86	Lenacil	A	18.08	153.0	110.0	136.0
88	p,p'-DDT	B	18.16	235.0	237.0	165.1
90	Tebuconazole	B	18.43	125.0	250.0	127.0
91	Captafol	A	18.62	79.1	80.1	77.0
93	Iprodione	B	18.89	314.0	315.9	180.9
94	Acetamiprid	A	19.01	152.0	126.0	166.0
95	Bifenthrin	C	19.08	181.0	165.0	141.0
96	EPN	B	19.12	157.1	169.0	141.0
97	Tebfenpyrad	B	19.37	333.1	171.0	318.0
100	Cyhalothrin-1	A	19.69	181.0	197.0	199.0
101	Pyriproxyfen	B	19.95	136.0	96.0	226.0
104	Cyhalothrin-2	A	20.08	181.0	147.0	149.0
106	Acrinathrin	B	20.23	181.0	93.1	208.0
107	Fenarimol	A	20.38	139.0	219.0	250.9
108	Pyraclifos	B	20.64	360.0	138.0	193.9
110	Permethrin-1	B	21.11	183.2	184.0	165.0
111	Pyridaben	A	21.17	147.1	148.1	132.1
113	Cyfluthrin-1	B	21.64	206.0	226.0	199.0
115	Cypermethrin-1	A	22.09	181.0	163.0	164.9
116	Flucythrinate-1	A	22.09	199.1	451.2	157.0
119	Fenvalerate-1	B	23.06	167.1	225.1	181.0
120	Fluvalenate-1	A	23.27	250.1	262.0	181.0
121	Difenoconazole-1	B	23.82	323.0	264.9	324.9
122	Deltamethrin-1	A	24.16	181.0	252.9	254.8