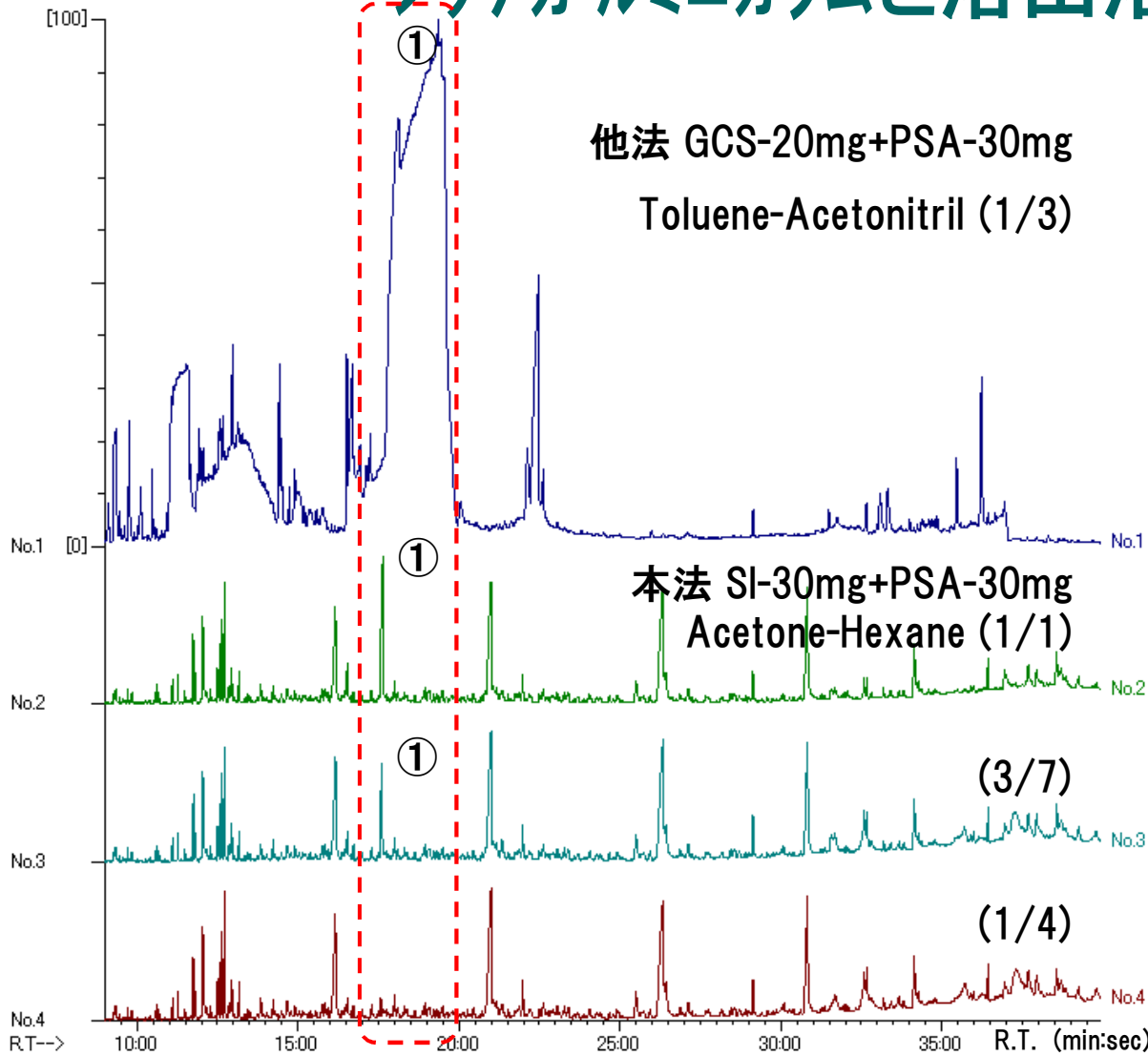
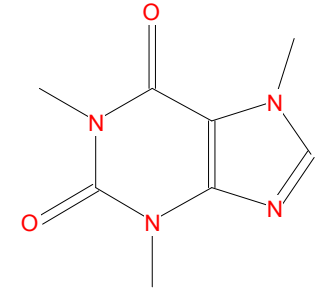


[クロマトグラム] TIC Y軸: 相対値(%)

シリカゲルミニカラムと溶出溶媒による精製効果



① Caffeine



SI
-Si-OH
活性シリカゲル
一次相互作用: 極性

- アセトンの比率を下げるとSIによるカフェインの除去効果が高くなる。
- アセトン-ヘキサン (1/4) が最適と考えられる。

図3. 抹茶を用いたSI+PSAミニカラムと溶出溶媒アセトン-ヘキサンによるSCANトータルイオンクロマトグラム比較



SI+PSAミニカラムと溶出溶媒による回収率①

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	5%	0%
		50%	30%	20%	15%	10%	5%	0%		
1	1-Naphthylacetamide	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2	3-Hydroxycarbofuran	49.9	50.8	52.9	46.9	41.1	0.5	0.0		
3	4,4'-Dichlorobenzophen	95.7	103.3	106.4	97.9	92.0	91.5	73.8		
4	Acephate	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
5	Acetamidpride	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
6	Acetochlor	98.7	107.9	110.5	106.8	101.1	97.6	0.0		
7	Acrinathrin	97.5	111.4	115.7	101.8	92.3	93.9	0.0		
8	Alachlor	99.5	108.5	110.4	105.8	100.2	91.4	0.0		
9	Allethrin-1,2	146.2	173.9	175.9	168.2	154.9	157.2	20.9		
10	Allethrin-3,4	89.3	98.3	100.6	92.9	85.7	78.3	0.0		
11	Ametryn	91.0	97.4	101.5	93.3	93.0	48.8	0.3		
12	Anilofos	107.6	119.8	121.3	120.2	109.9	27.7	0.1		
13	Aramite-3	90.8	101.9	103.6	97.4	89.7	91.6	0.1		
14	Aramite-4	93.1	101.5	107.8	99.4	90.6	92.2	0.8		
15	Atrazine	73.4	72.6	81.3	63.8	72.3	35.9	0.7		
16	Azaconazole	91.6	88.1	40.2	7.6	0.9	0.6	0.3		
17	Azinphos-Methyl	126.2	147.0	141.6	138.4	117.5	11.1	1.1		
18	Benalaxyl	97.5	106.2	108.9	106.2	100.0	81.7	0.0		
19	Bendiocarb	41.3	39.0	48.4	28.2	34.0	1.9	0.8		
20	Benfluranlin	110.4	118.7	121.3	108.1	102.3	101.6	130.5		
21	Benfuresate	97.9	106.2	106.7	102.3	98.1	90.8	1.0		
22	Benoxacor	100.3	107.8	112.4	105.0	102.0	97.3	0.2		
23	BHC-alpha	101.8	107.0	109.5	100.6	98.3	94.7	123.0		
24	BHC-beta	100.2	106.3	106.8	102.3	98.0	95.6	85.6		
25	BHC-delta	94.8	103.4	108.5	101.3	96.8	93.2	0.8		
26	BHC-gamma	89.8	98.3	103.0	100.3	97.6	94.4	2.1		
27	Bifenox	96.0	107.6	111.3	100.1	93.2	89.2	0.3		
28	Bifenthrin	86.2	96.0	101.8	93.1	84.7	84.8	86.5		
29	Bitertanol-1	112.3	121.0	86.4	23.8	0.8	0.3	0.2		
30	Bitertanol-2	115.4	124.6	96.0	26.3	0.8	0.8	0.2		

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	5%	0%
		50%	30%	20%	15%	10%	5%	0%		
31	Bromacil	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
32	Bromobutide	96.9	104.8	107.3	102.0	97.6	95.7	0.0		
33	Bromofos methyl	97.1	107.5	109.1	99.7	92.1	94.1	108.3		
34	Bromopropylate	87.9	96.8	99.8	89.3	82.3	87.1	110.6		
35	Bromopropylate	98.1	107.8	109.5	101.4	93.6	92.0	0.0		
36	Buprimate	91.8	102.5	106.2	102.1	96.2	16.3	0.1		
37	Buprofezin	100.6	109.0	112.7	106.2	101.4	99.4	0.1		
38	Butachlor	91.4	97.8	99.6	95.5	88.7	91.7	0.0		
39	Butamifos	98.0	108.3	112.7	104.3	98.2	94.9	1.6		
40	Butylate	134.3	125.5	121.2	106.3	113.0	102.2	11.1		
41	Cadusafos	118.9	127.1	127.5	121.5	115.2	106.5	0.2		
42	Cafenstrole	126.8	143.5	146.0	138.3	94.4	4.2	1.6		
43	Captafol	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
44	Captan	78.9	87.2	87.5	96.6	84.5	39.2	2.8		
45	Carbaril	70.6	72.4	84.6	50.4	48.3	0.2	0.4		
46	Carbofuran	37.8	36.4	45.6	26.5	32.5	1.5	0.1		
47	Carboxin	72.2	69.1	86.2	54.5	65.7	32.7	0.0		
48	Carfentrazone ethyl	98.4	107.6	110.8	106.9	101.6	91.4	0.1		
49	Chlorbenside	88.1	96.6	98.8	89.9	83.7	84.6	104.7		
50	Chlorbufam	100.3	111.5	117.2	109.9	104.0	77.0	1.9		
51	Chlorethoxyphos	123.9	130.3	127.8	112.7	110.8	106.8	129.1		
52	Chlorfenapyr	94.8	107.5	111.3	100.3	95.0	95.1	0.2		
53	Chlorfenson	94.5	101.6	103.2	94.6	90.5	90.9	16.0		
54	Chlorfenvinphos-1	114.4	126.2	126.8	121.3	114.6	30.9	0.8		
55	Chlorfenvinphos-2	92.9	103.9	105.0	102.4	97.8	21.5	0.1		
56	Chlorobenzilate	100.7	110.7	112.5	105.3	99.0	92.7	0.0		
57	Chloroneb	113.8	117.2	117.7	106.6	109.3	104.3	126.5		
58	Chlorpropham	106.9	117.7	123.2	115.0	110.8	104.8	0.1		
59	Chlorpyrifos	92.8	104.5	108.2	96.6	90.8	93.8	110.9		
60	Chlorpyriphos-methyl	101.1	110.4	110.9	102.2	95.7	96.1	101.7		



SI+PSAミニカラムと溶出溶媒による回収率②

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	5%	0%
		50%	30%	20%	15%	10%	5%	0%		
61	Chlorthal-dimethyl	96.7	102.2	104.7	96.9	92.5	93.9	20.5		
62	Chlozolate	99.1	104.6	106.3	103.8	99.7	100.4	0.5		
63	Cinidon-ethyl	107.6	119.6	122.8	112.4	104.6	97.4	0.1		
64	Clomazone	100.8	107.0	110.5	102.4	100.7	96.3	0.3		
65	Cyanazine	25.0	23.6	30.0	17.2	12.3	0.1	0.4		
66	Cyanophos	95.6	104.5	107.3	101.0	99.1	88.2	0.3		
67	Cyfluthrin-1	98.9	108.5	113.2	105.0	89.5	79.3	0.0		
68	Cyfluthrin-2	99.3	107.7	113.6	100.9	88.1	91.9	0.0		
69	Cyfluthrin-3	93.8	112.7	124.6	96.3	86.6	75.3	9.4		
70	Cyfluthrin-4	112.4	119.4	124.9	89.1	85.8	91.2	20.3		
71	Cyhalofop-butyl	96.9	107.3	109.4	102.2	95.9	93.9	0.1		
72	Cyhalothrin-1	97.9	109.8	113.1	100.1	90.7	96.4	0.4		
73	Cyhalothrin-2	97.3	110.0	111.8	98.1	90.1	93.9	0.0		
74	Cypermethrin-1	127.2	136.6	148.4	123.7	118.0	117.8	4.7		
75	Cypermethrin-2	122.8	125.7	125.1	121.8	93.1	107.5	6.9		
76	Cypermethrin-3	85.7	92.6	97.2	77.5	84.8	91.3	7.5		
77	Cypermethrin-4	91.0	92.3	94.7	85.2	70.9	85.1	24.9		
78	Cyproconazole-1	100.9	113.1	108.0	63.5	0.5	0.0	0.0		
79	Cyproconazole-2	102.1	103.4	86.3	41.8	15.2	20.3	26.1		
80	DEF	90.2	99.4	104.3	95.4	86.0	88.3	0.6		
81	Deltamethrin	98.1	114.2	85.5	91.5	93.6	95.9	0.2		
82	Demeton-S-methyl	36.7	34.5	45.1	25.7	29.6	1.0	1.0		
83	Diallate-1	114.5	120.5	121.4	110.1	106.6	102.6	82.6		
84	Diallate-2	115.7	122.7	125.6	111.7	111.4	106.5	40.7		
85	Diazinone	100.7	109.0	112.2	107.6	102.2	98.2	0.3		
86	Dichlofenthion	90.6	98.8	101.8	92.0	86.3	89.5	112.4		
87	Dichlofluanid	117.6	125.3	97.2	118.6	111.4	97.1	0.4		
88	Dichlorvos	20.2	16.0	20.5	9.9	16.3	3.5	0.3		
89	Diclocymet-1	90.6	100.7	101.7	98.1	90.5	7.2	0.0		
90	Diclocymet-2	95.2	103.8	104.7	100.7	91.1	1.0	0.0		

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	5%	0%
		50%	30%	20%	15%	10%	5%	0%		
91	Diclofop-methyl	90.9	100.9	102.5	94.9	88.3	89.9	0.0		
92	Dicloran	98.5	103.4	116.0	87.4	95.0	70.2	1.7		
93	Dicrotufos	14.2	13.4	15.4	8.8	11.7	1.6	2.7		
94	Diethofencarb	95.0	107.6	110.2	106.2	101.9	89.4	0.1		
95	Difenoconazole-1	132.6	145.9	87.0	24.0	1.4	0.1	0.2		
96	Difenoconazole-2	114.9	125.4	100.3	45.5	3.4	0.0	0.0		
97	Diflufenican	93.9	102.3	105.1	97.2	90.6	85.2	0.0		
98	Dimepiperate	91.4	99.2	101.3	97.0	92.2	92.6	0.4		
99	Dimethametryn	96.1	103.5	105.9	103.7	97.7	69.1	0.1		
100	Dimethenamid	94.4	101.1	112.0	105.5	101.3	95.8	0.2		
101	Dimethipin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
102	Dimethoate	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
103	Dimethylvinphos-z	100.7	108.1	110.7	106.5	92.2	3.0	0.3		
104	Dioxathion	105.4	116.9	117.7	107.7	99.4	92.9	0.1		
105	Diphenamide	98.0	106.2	108.6	102.1	97.6	11.1	0.0		
106	Disulfoton	106.1	112.7	116.8	107.9	101.6	96.5	19.1		
107	Disulfoton sulfone	95.9	105.6	110.5	103.0	82.0	0.3	0.3		
108	Edifenphos	97.2	108.9	109.7	108.4	102.9	57.1	0.3		
109	Endosulfan	84.3	92.2	92.2	85.3	83.9	83.9	105.4		
110	Endosulfan II	91.0	97.5	100.9	95.1	87.3	86.3	0.9		
111	Endosulfan sulfate	99.7	107.2	110.0	103.0	95.5	54.4	0.5		
112	EPN	101.4	111.5	113.2	102.7	94.5	91.5	0.2		
113	Epoxiconazole	100.8	110.2	101.9	59.0	7.5	3.9	0.1		
114	EPTC	145.0	135.2	130.6	113.8	124.5	112.5	1.9		
115	Esprocarb	97.0	105.5	107.9	98.8	93.9	93.6	0.9		
116	Ethalfuralin	111.2	122.3	123.1	108.0	106.5	103.1	128.5		
117	Ethiofencarb	92.7	95.8	120.1	74.5	84.4	9.4	1.2		
118	Ethion	97.6	107.9	108.4	97.1	88.1	90.2	3.4		
119	Ethofumesate	98.7	107.7	110.0	106.8	101.0	68.2	0.6		
120	Ethoprophos	124.3	133.0	135.1	126.2	124.5	106.6	0.0		



SI+PSAミニカラムと溶出溶媒による回収率③

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)		
		50%	30%	20%	15%	10%	5%	0%		
121	Etofenprox	89.5	100.4	106.3	95.1	87.6	89.4	4.6		
122	Etoazole	91.0	98.4	101.0	89.9	82.4	85.6	0.0		
123	Etrimfos	97.1	105.6	109.6	103.8	99.4	100.3	0.0		
124	Fenamidone	102.9	113.8	117.2	112.8	96.9	5.8	0.0		
125	Fenamiphos	101.4	114.1	98.5	46.9	1.1	0.1	0.0		
126	Fenarimol	94.8	101.2	102.8	88.5	25.8	0.5	0.1		
127	Fenbuconazole	109.1	111.0	35.9	3.4	1.5	0.7	0.1		
128	Fenchlorphos	93.3	103.3	105.6	94.5	89.5	90.1	108.7		
129	Fenitrothion	105.0	118.6	121.6	111.5	107.2	106.6	0.0		
130	Fenobucarb	110.3	116.5	120.3	112.1	109.9	68.0	0.5		
131	Fenothiocarb	94.8	101.9	104.5	100.2	95.6	93.9	0.2		
132	Fenoxanil	94.7	107.7	109.4	106.0	99.2	22.8	0.4		
133	Fenpropathrin	106.5	114.0	116.2	103.8	94.9	100.9	1.9		
134	Fenpropemorph	97.6	104.5	105.7	102.7	95.7	89.9	0.2		
135	Fensulfothion	107.7	109.8	30.6	4.3	1.6	1.4	0.0		
136	Fenthion	99.0	108.9	109.2	101.6	96.2	97.2	0.5		
137	Fenvalerate-1	90.1	99.2	104.0	91.0	85.2	88.7	0.2		
138	Fenvalerate-2	99.9	100.2	102.1	88.7	80.7	86.0	0.0		
139	FIPRONIL	91.7	95.7	94.4	97.1	79.0	0.5	0.1		
140	Flamprop-methyl	98.7	107.5	108.7	104.9	99.5	34.9	0.2		
141	Fluacrypyrim	102.7	111.7	115.4	108.0	101.0	89.3	0.2		
142	Flucythrinate-1	99.5	109.5	113.7	101.1	90.3	90.9	0.0		
143	Flucythrinate-2	100.8	111.3	114.6	101.2	91.0	88.4	1.5		
144	Fludioxonil	89.9	95.6	96.4	90.5	85.7	86.1	1.1		
145	Flufenpyl-ethyl	106.3	116.2	120.6	115.6	110.9	89.9	0.1		
146	Flumiclorac-pentyl	114.5	130.4	134.9	126.5	113.5	87.6	0.0		
147	Flumioxazin	118.6	131.4	131.5	115.7	32.1	0.0	0.0		
148	Fluquinacozazole	100.8	112.4	113.5	107.9	56.0	0.2	0.1		
149	Fluridone	101.8	109.9	70.6	9.7	0.1	0.1	0.0		
150	Flusilazole	97.3	105.0	86.1	33.7	1.0	0.0	0.2		

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)		
		50%	30%	20%	15%	10%	5%	0%		
151	Fluthiacet-methyl	146.0	164.7	160.5	154.2	98.5	0.4	0.3		
152	Flutolanil	98.9	106.1	109.6	108.0	86.9	5.5	1.0		
153	Flutriafol	95.7	87.4	22.2	1.3	0.1	0.0	0.0		
154	Fluvalinate-1	97.9	108.8	111.6	99.2	90.1	92.4	0.0		
155	Fluvalinate-2	97.4	109.1	112.9	99.9	90.8	93.4	0.0		
156	Formothion	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
157	Fosthiazate-1	97.2	95.0	103.8	68.3	14.5	0.5	0.2		
158	Fosthiazate-2	92.7	93.7	101.7	70.2	24.2	4.0	1.5		
159	Halfenprox	195.9	220.4	228.2	210.4	185.8	187.4	124.3		
160	Hexaconazole	101.5	108.7	100.0	57.9	5.3	0.8	0.3		
161	Hexazinone	22.7	18.6	5.9	1.3	0.1	0.1	0.0		
162	Imazamethabenz methyl	43.3	41.2	49.5	25.9	4.8	1.4	0.2		
163	Imibenconazole	141.3	154.8	114.8	44.1	1.0	1.0	2.8		
164	Imibenconazole-des-b	20.4	8.9	1.4	0.7	0.2	0.5	0.7		
165	Iprobenfos	102.1	111.5	114.2	110.7	106.1	59.8	0.0		
166	Iprodione	105.0	117.4	121.1	114.9	106.0	17.6	0.0		
167	Isazophos	98.7	105.3	108.2	104.1	98.3	96.0	0.0		
168	Isofenphos	106.1	116.7	120.1	112.4	107.0	107.9	1.9		
169	Isofenphos P=O	105.8	117.5	113.4	79.0	7.7	0.2	0.1		
170	Isoprocarbe	100.4	98.3	108.1	83.3	94.2	46.2	0.3		
171	Isoprothiolane	96.2	105.5	109.6	104.3	98.0	65.0	0.0		
172	Isoxathion	93.8	108.0	111.9	103.3	95.0	89.5	0.6		
173	Isoxathion-ox	93.8	109.8	114.8	105.9	74.2	13.2	0.6		
174	Kresoxim-methyl	96.1	104.2	107.3	101.5	95.7	91.9	0.0		
175	Lenacil	58.6	55.5	64.0	38.4	9.4	0.0	0.0		
176	Malathion	100.0	109.8	113.5	107.5	103.3	99.4	0.5		
177	Mecarbam	97.0	101.9	106.6	102.6	96.9	99.0	0.4		
178	Mefenacet	103.4	114.9	118.3	112.6	100.2	5.4	0.0		
179	Mefenpyr-diethyl	100.0	109.6	113.4	109.1	102.1	96.3	0.0		
180	Mepronil	119.6	128.2	130.4	128.5	117.3	80.7	0.1		



SI+PSAミニカラムと溶出溶媒による回収率④

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)	
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	
		50%	30%	20%	15%	10%	5%	0%	
181	Metalaxyl	90.9	92.8	100.3	86.5	75.8	0.2	0.3	
182	Methamidophos	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
183	Methidathion	97.6	104.6	107.5	101.8	97.5	90.8	0.0	
184	Methiocarb	114.5	128.8	132.2	117.4	107.9	24.4	0.0	
185	Methoprene-1	94.6	101.5	104.8	96.4	91.1	89.7	71.6	
186	Methoprene-2	83.0	90.9	97.3	89.1	83.6	86.1	0.0	
187	Methoxychlor	74.7	81.3	83.2	80.7	74.4	77.6	0.4	
188	Metolachlor	98.8	106.7	108.6	105.3	100.7	97.8	0.0	
189	Metominostrobin	97.7	106.5	110.2	103.4	84.1	2.3	0.2	
190	Metominostrobin-z	94.5	98.4	105.4	89.1	56.9	0.1	0.1	
191	Mevinphos	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
192	Monocrotophos	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
193	Myclobutanil	96.6	103.7	69.0	13.8	1.5	0.9	0.0	
194	Napropamide	94.9	104.4	105.5	102.6	96.3	61.4	0.1	
195	Nitrothal-isopropyl	95.2	106.1	109.8	101.1	95.6	97.3	0.1	
196	Norflurazon	90.4	95.4	90.0	37.0	3.7	0.1	0.0	
197	Oryzalin	13.7	27.6	24.3	10.1	12.9	2.6	0.2	
198	Oxadiazon	87.7	97.6	101.3	95.9	89.3	91.9	0.0	
199	Oxadixyl	23.6	23.2	21.1	8.0	6.5	6.4	0.2	
200	Oxyfluorfen	93.9	103.1	107.4	95.9	88.8	89.7	0.0	
201	p,p'-DDD	93.9	100.8	104.9	92.9	83.9	89.6	98.0	
202	p,p'-DDE	79.1	87.4	92.7	82.7	76.4	78.6	105.1	
203	Paclbutrazol	91.6	102.6	104.7	91.4	16.6	0.0	0.2	
204	Parathion	93.9	105.1	110.2	103.4	100.9	97.4	0.0	
205	Parathion-methyl	110.0	120.9	123.8	116.6	109.6	104.1	2.3	
206	Penconazole	96.1	104.9	101.7	73.5	10.6	0.2	0.3	
207	Pendimethalin	86.2	96.2	102.0	91.6	83.3	93.6	68.0	
208	Permethrin-cis	91.1	100.1	103.9	92.0	84.0	86.5	61.9	
209	Permethrin-trans	92.4	102.3	105.7	92.3	84.9	88.0	18.2	
210	Perthane	86.2	94.9	97.8	86.5	78.6	84.2	109.0	

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下(アセトン含有率)	
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)	
		50%	30%	20%	15%	10%	5%	0%	
211	Phenothrin-1	90.5	102.4	106.1	95.2	86.6	90.8	32.4	
212	Phenothrin-2	89.1	100.8	105.6	94.6	86.3	89.1	27.2	
213	Phenthoate	95.0	112.5	94.5	100.9	104.2	105.2	1.5	
214	Phorate	116.0	124.5	128.1	115.7	113.6	105.7	74.5	
215	Phosalone	116.4	132.5	133.4	124.6	114.1	102.5	0.0	
216	Phosmet	111.9	124.9	122.7	120.9	109.1	22.7	0.0	
217	Phosphamidon	35.9	33.6	20.0	2.8	0.6	0.6	0.7	
218	Phthalide	103.6	109.4	111.4	104.7	101.9	97.8	0.1	
219	Picolinafen	95.4	104.1	107.0	97.0	90.6	80.8	0.0	
220	Piperonyl butoxide	94.1	103.5	106.7	100.7	93.9	93.3	0.0	
221	Piperophos	99.8	114.5	118.3	112.6	104.0	78.4	0.0	
222	Pirimicarb	35.1	33.8	42.9	28.3	33.6	14.2	0.7	
223	Pirimiphos methyl	97.9	106.5	109.8	100.8	97.9	98.5	0.0	
224	Pretilachlor	98.4	107.2	109.5	105.6	100.6	99.0	1.0	
225	Procymidone	92.7	100.3	105.0	100.5	95.0	94.3	0.3	
226	Profenofos	101.0	110.7	115.0	108.6	99.7	96.8	0.3	
227	Prohydrojasmon-1	88.2	97.7	105.2	98.7	100.1	98.4	2.8	
228	Prohydrojasmon-2	106.8	108.3	96.5	103.6	102.0	96.5	2.5	
229	Prometryn	94.2	103.4	106.5	101.0	96.6	86.1	0.5	
230	Propachlor	109.0	108.0	114.7	94.9	104.4	92.5	0.1	
231	Propanil	113.6	120.4	124.8	111.6	103.6	23.6	0.3	
232	Propaphos	96.9	109.4	111.1	108.2	102.2	11.7	0.1	
233	Propargite(BPPS)	100.5	106.8	108.1	97.8	90.3	92.6	0.3	
234	Propazine	93.4	99.3	102.5	96.2	94.2	85.1	0.0	
235	Propiconazole-1	101.3	111.0	109.7	85.7	17.3	0.1	0.1	
236	Propiconazole-2	146.7	165.3	168.8	156.6	71.5	5.2	0.2	
237	Propoxur	26.4	24.4	31.7	17.4	24.8	2.7	0.0	
238	Propyzamide	91.3	99.3	102.7	97.0	93.4	92.0	0.1	
239	Prothiophos	100.5	111.2	117.6	103.0	94.7	98.8	121.9	
240	Pyraclufos	125.7	142.4	143.8	137.8	125.3	20.4	0.0	

SI+PSAミニカラムと溶出溶媒による回収率⑤

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下:(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)		
		50%	30%	20%	15%	10%	5%	0%		
241	Pyraflufen-ethyl	96.8	106.4	109.9	104.3	98.5	9.1	0.0		
242	Pyrazophos	107.5	121.3	124.0	116.4	106.4	97.4	0.0		
243	Pyributicarb	94.0	104.8	106.9	92.4	75.1	75.5	0.3		
244	Pyridaben	88.3	103.1	106.0	93.9	86.3	90.3	0.0		
245	Pyridafenthion	107.4	122.5	125.5	119.7	57.9	0.0	0.1		
246	Pyrifenox-1	92.6	100.6	102.3	97.6	80.4	4.9	0.1		
247	Pyrifenox-2	95.4	105.4	106.5	101.1	94.8	25.1	0.0		
248	Pyrimethanil	91.9	98.4	102.8	95.7	94.3	85.5	0.1		
249	Pyrimidifen	103.1	112.5	114.8	109.5	102.4	29.1	0.0		
250	Pyriminobac-methyl-1	96.9	106.4	111.0	108.5	103.5	49.9	0.1		
251	Pyriminobac-methyl-2	93.2	100.7	103.0	100.4	95.4	65.9	0.0		
252	Pyriproxyfen	92.3	102.3	105.1	96.5	88.6	91.3	0.0		
253	Pyroquilon	13.9	14.4	16.4	10.0	6.3	1.5	0.0		
254	Quinoclamine	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
255	Quinolphos	90.0	101.6	102.5	97.5	93.6	92.5	0.4		
256	Quinomethionate	94.8	98.5	99.1	89.1	83.4	76.8	1.3		
257	Quinoxyfen	87.6	94.3	95.5	89.7	83.3	80.7	0.2		
258	Quintozen	97.1	106.7	108.8	96.1	91.0	89.1	112.5		
259	Resmethrin-1	87.5	99.7	100.6	87.1	79.4	76.6	19.1		
260	Resmethrin-2	85.8	96.2	99.6	88.3	79.3	78.1	14.5		
261	Silafluofen	84.3	100.9	100.5	102.4	87.3	87.5	89.5		
262	Simazin	16.1	15.7	19.3	11.9	16.0	0.7	0.8		
263	Simetryn	63.8	61.6	72.1	54.9	60.3	2.9	0.4		
264	Spirodiclofen	82.6	92.2	97.3	90.8	84.1	89.2	0.0		
265	Spiroxamine-1	61.6	33.3	33.2	16.8	4.2	0.1	0.3		
266	Spiroxamine-2	70.3	42.9	43.3	24.2	6.9	0.2	0.0		
267	TCMTB	104.4	119.1	123.1	111.3	100.8	86.0	0.2		
268	Tebuconazole	167.6	182.1	161.4	77.1	3.6	0.7	0.3		
269	Tebufenpyrad	94.9	105.4	107.9	103.5	95.4	90.6	0.0		
270	Tecnazene	117.8	122.2	122.9	109.8	108.7	102.5	139.6		

番号	化合物名	溶出溶媒 アセトン-ヘキサン比率						下:(アセトン含有率)		
		(50/50)	(30/70)	(20/80)	(15/85)	(10/90)	(5/95)	(0/100)		
		50%	30%	20%	15%	10%	5%	0%		
271	Tefluthrine	87.6	93.9	97.9	87.6	82.4	85.8	109.6		
272	Terbacil	79.2	88.3	99.0	86.0	81.2	83.5	106.0		
273	Terbufos	108.6	117.9	121.3	110.1	106.9	103.4	90.7		
274	Terbutryn	99.7	107.8	110.4	106.5	100.3	83.2	0.0		
275	Tetrachlorvinphos	99.0	109.8	113.2	108.8	101.5	32.2	0.0		
276	Tetraconazole	95.8	104.1	79.9	21.6	0.6	0.2	0.1		
277	Tetradifon	95.6	104.3	107.5	97.7	91.6	91.7	11.3		
278	Thenylchlor	117.5	125.8	129.8	120.1	105.8	89.8	0.2		
279	Thiobencarb	95.8	104.6	107.1	100.6	97.5	94.9	0.2		
280	Thiometon	124.0	127.6	131.3	122.5	116.9	109.3	5.6		
281	Tolclofos-methyl	99.4	108.0	110.1	102.0	95.5	96.2	73.0		
282	Tolfenpyrad	544.0	595.8	608.7	566.9	520.0	295.0	0.3		
283	Toriadimefon	106.1	112.9	115.6	111.9	103.1	14.9	0.3		
284	Triadimenol-1	88.6	98.2	88.8	44.7	0.9	0.6	0.7		
285	Triadimenol-2	94.5	104.1	99.4	53.8	2.4	0.7	0.5		
286	Triallate	96.9	105.3	108.9	98.4	92.5	93.6	84.0		
287	Triazophos	109.2	122.1	123.9	119.2	104.6	5.9	0.0		
288	Tricyclazole	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
289	Trifloxystrobin	103.1	113.2	116.7	109.7	101.8	91.9	0.1		
290	Trifluralin	109.4	119.1	123.5	110.1	104.1	102.3	133.5		
291	Trifluzamide	97.1	105.2	92.0	52.7	5.8	0.2	0.2		
292	Uniconazole	94.2	111.5	112.4	87.0	9.7	0.1	0.2		
293	Vinclozoline	99.7	108.4	110.5	104.8	100.3	98.7	0.6		
294	XMC	68.7	67.3	79.3	51.5	64.0	23.2	0.1		
295	Zoxamide	104.3	118.1	105.6	117.5	106.3	72.0	0.0		

試料：抹茶

添加濃度：試料中0.05ppm（分取後に添加）

シリカゲルミニカラムと溶出溶媒による回収率分布

表1. 抹茶を用いたシリカゲルミニカラムと溶出溶媒アセトン-ヘキサンによる回収率分布

回収率	溶出溶媒アセトン-ヘキサン比率		上(アセトン/ヘキサン比)		下(アセトン含有率%)		
	(1/1)	(3/7)	(1/4)	(15/85)	(1/9)	(5/95)	(0/100)
%以上 - %未満	50%	30%	20%	15%	10%	5%	0%
30 - 50	7	8	11	9	6	9	2
50 - 70	4	5	3	11	6	9	2
70 - 120	244	219	208	215	218	171	24
120 -	18	41	50	20	6	3	10

(単位:成分)