

■ Analysis Method I

Fig. 1 shows the TIC of 28 components, including oxones and those stipulated in Table 1 to be analyzed by Analysis Method I. Table 3 shows the analysis conditions and peak numbers for each component.

Fig. 2 shows the mass spectra of newly added components metalaxyl, dithiopyr, trichlopyr-butoxylethyl and oxones. Fig. 3 shows the SIM chromatograms at 10ppb.

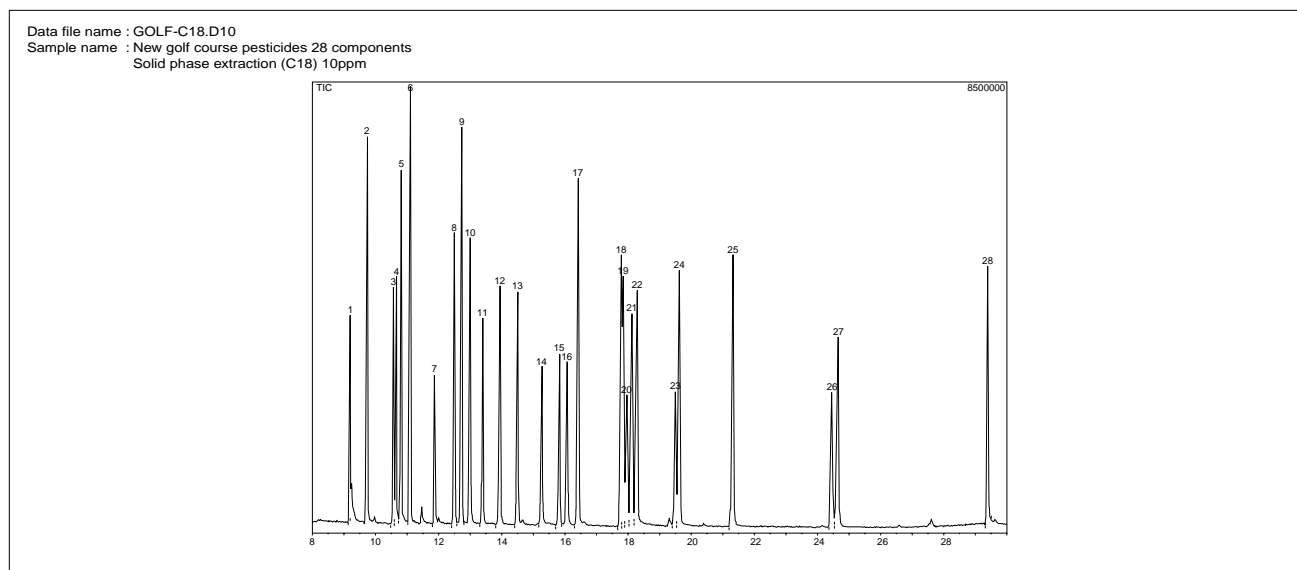


Fig. 1 TIC of Pesticides (Analysis Method I)

Table 3 Analytical Conditions

Instrument: Shimadzu GCMS-QP5050A			Carrier gas: He 40kPa (2min)-2kPa/min-80kPa (16min)		
-GC-			Injection method: splitless (sampling time: 2min)		
Column: DB-1 (30m × 0.32mm I.D. df=0.25µm)			-MS-		
Column temperature: 70°C(2min)-20°C/min-150°C-3°C/min-210°C-10°C/min-300°C(5min)			Interface temperature: 280°C		
Injector temperature: 270°C			Mass number range: m/z 35 to 400		
Peak number	Component name	SIM mass number	Peak number	Component name	SIM mass number
1	Pencycuron	180,109	15	Pendimethalin	252,162
2	Simazine (CAT)	201,186	16	Methyl-dymron	107,119
3	Diazinon oxone	273,137	17	Isofenphos	213,255
4	Chlorothalonil (TPN)	266,264	18	Isoprothiolane	290,162
5	Propyzamide	173,273	19	Napropamide	271,128
6	Diadione	304,179	20	Butamifos	286,200
7	MEP oxone	244,109	21	Isoxathion oxone	105,161,254
8	Trichlorophos-methyl	265,267	22	Flutolanil	323,173
9	Terbucarb (MBPMC)	220,205	23	Isoxathion	105,177,313
10	Metalaxyl (newly added)	206,160	24	Trichlopyr-butoxylethyl	210,212,182
11	Fenitrothion (MEP)	277,260	25	Mepronil	119,269
12	Dithiopyr (newly added)	354,306	26	Pyridafenthion	340,199
13	Chlorpyrifos	314,197	27	Iprodione	314,316
14	Captan	79,107,119	28	Bensulide (SAP)	215,131

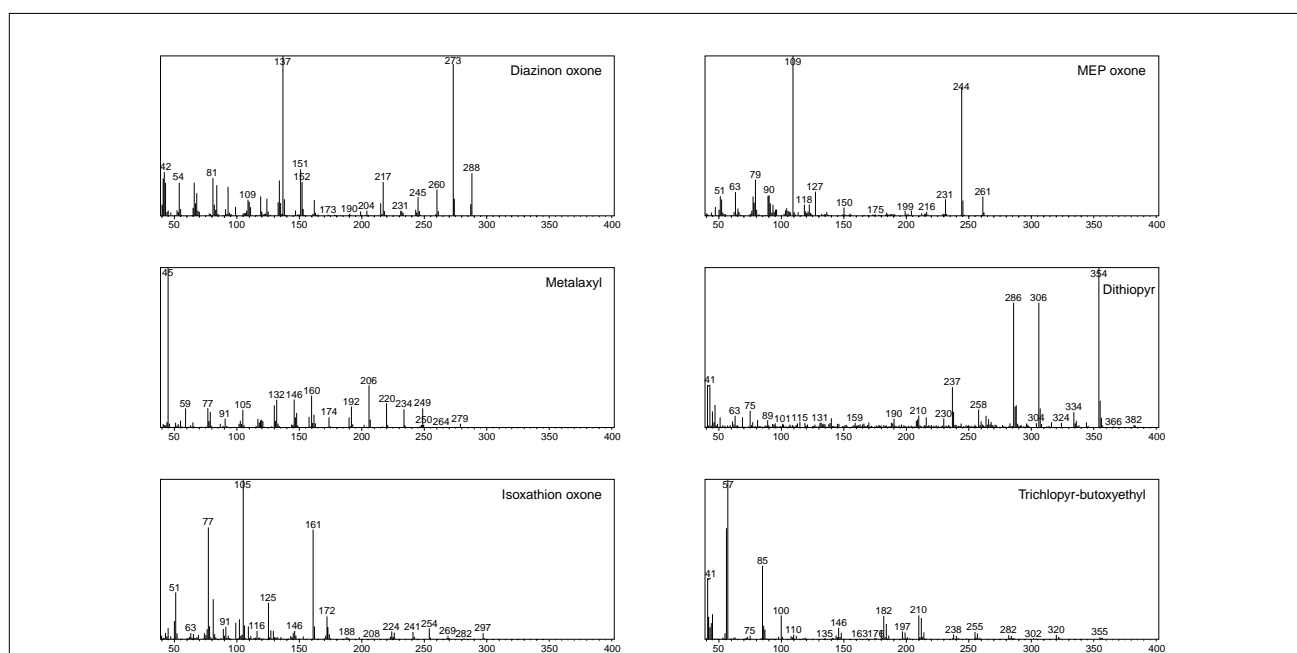


Fig.2 Mass Spectra of Pesticides

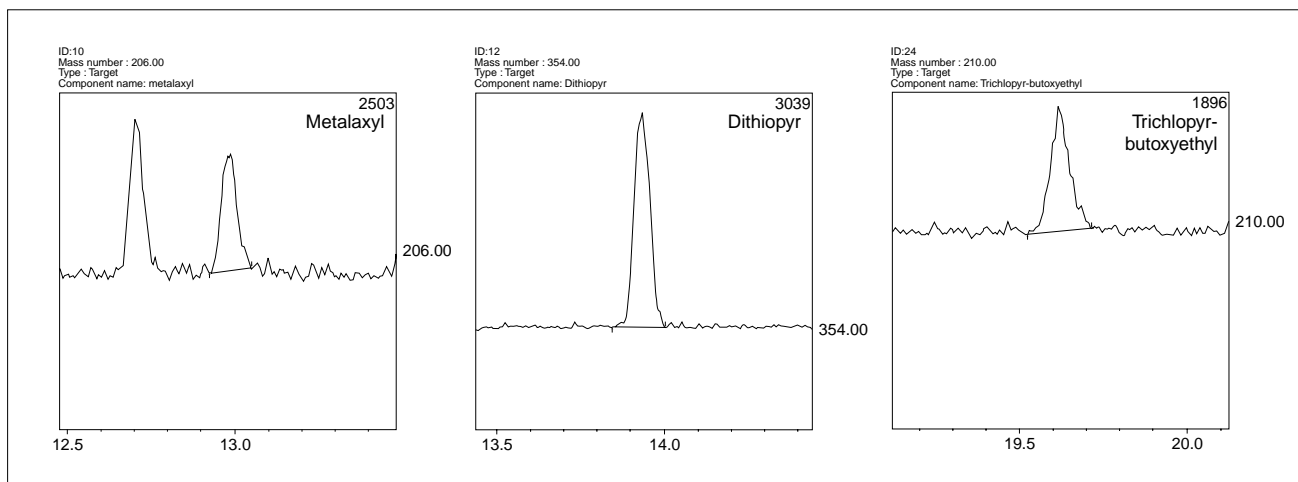


Fig.3 SIM chromatogram (10 ppb)

■ Analysis Method II

Fig.4 shows the TIC of the components stipulated in Table 1 to be analyzed by Analysis Method II. Table 4 shows the analysis conditions and peak numbers for

each component. Fig.5 shows the mass spectrum of pyributicarb, a newly added component. Fig.6 shows the SIM chromatogram at 10ppb.

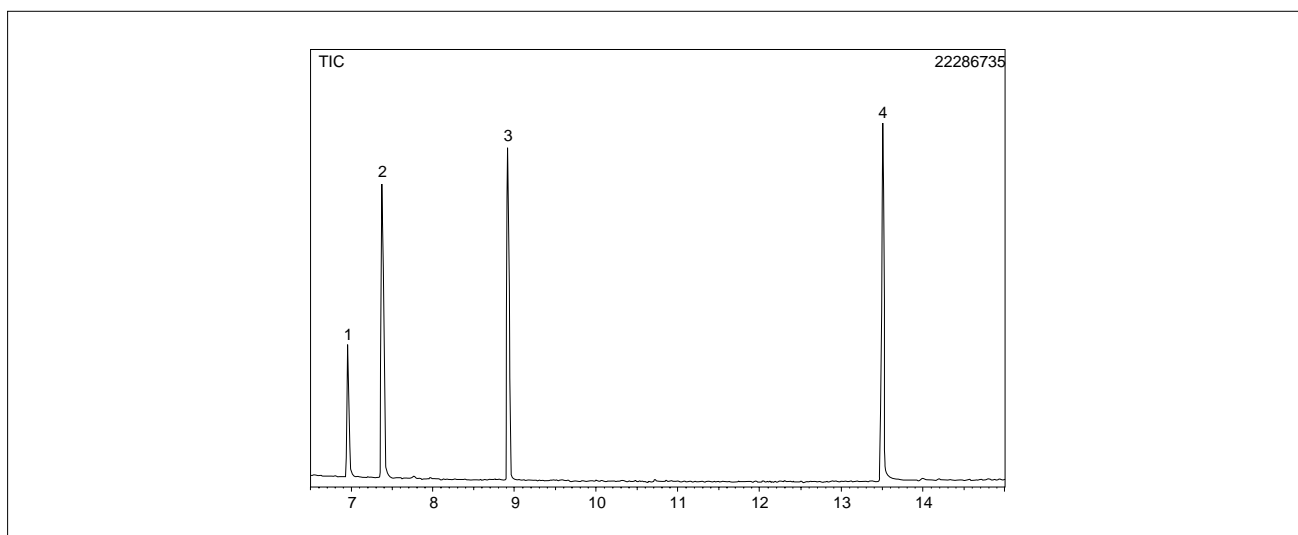


Fig. 4 TIC chromatogram of Pesticides (Analysis Method II)

Table 4 Analytical Conditions

Instrument: Shimadzu GCMS-QP5050A
 -GC-
 Column: DB-1 (30m × 0.32mm I.D. df=0.25μm)
 Column Temperature: 70°C(2min)-20°C/min-100°C-15°C/min-300°C(5min)
 Injector temperature: 270°C
 Carrier gas: He 40kPa (2min)-3kP/min-80kPa (6min)
 Injection method: splitless (sampling time: 2min)
 -MS-
 Interface temperature: 280°C
 Mass number range: m/z 35 to 400

Peak number	Component name	SIM mass number
1	Echlomezol	211,183,213
2	Chloroneb	191,193,206
3	Benfluralin	292,264,335
4	Pyributicarb	108,165,181

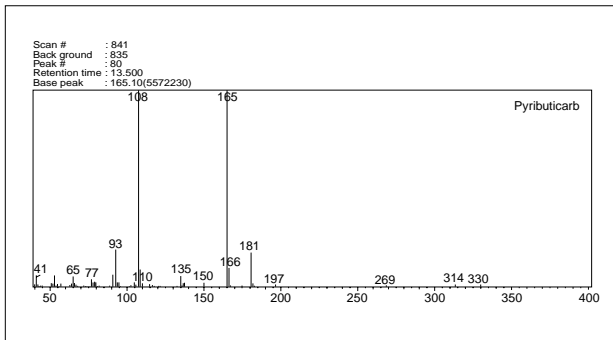


Fig.5 Mass spectrum of Pyributicarb

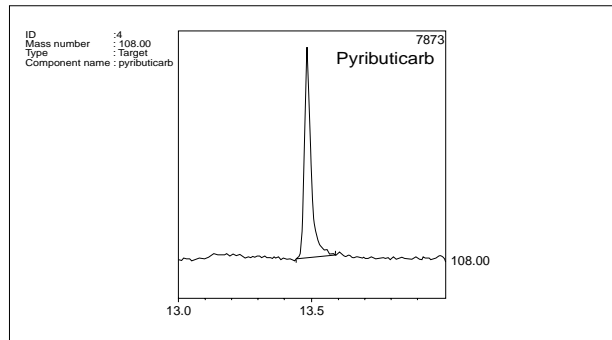


Fig.6 SIM chromatogram (10 ppb)

■ Analysis Method I (separate extraction)

Fig.7 shows the TIC of acephate and trichlorfon (DEP). Table 5 shows the analysis conditions. Because DEP decomposes if being exposed to a high temperature at the injection port, the measurement must be performed at a low temperature or by on-column injection. Here, to analyze DEP, the temperature at the injection port was kept low. Although DEP does not decompose under these conditions, the sensitivity for acephate decreases. Fig.8 shows the mass spectrum and Fig.9 shows the SIM chromatogram at 500ppb.

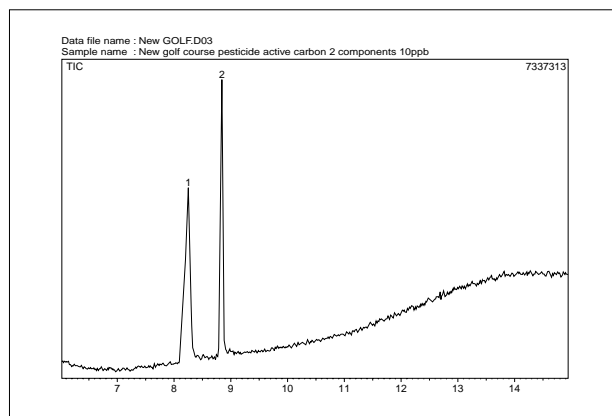


Fig. 7 TIC of Pesticides (Analysis Method I separate extraction)

Table 5 Analytical Conditions

Instrument: Shimadzu GCMS-QP5050A
 -GC-
 Column: DB-1 (30m × 0.32mm I.D. df=0.25μm)
 Column Temperature: 100°C (4min)-7°C/min-150°C-
 15°C/min-280°C (3min)
 On-column injector temperature: 70°C (0.5min)-100°C/min-
 300°C (22min)
 Carrier gas: He 50kPa (pressure control)
 Injection method: on-column injection
 -MS-
 Interface temperature: 230°C
 Mass number range: m/z 35 to 400

Peak number	Component name	SIM mass number
1	Acephate	136,94,183
2	Trichlorfon (DEP)	79,109,145

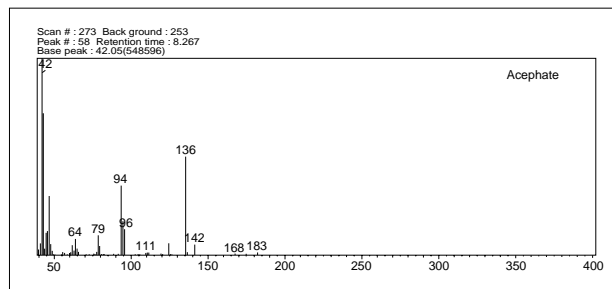


Fig.8 Mass spectrum of Acephate

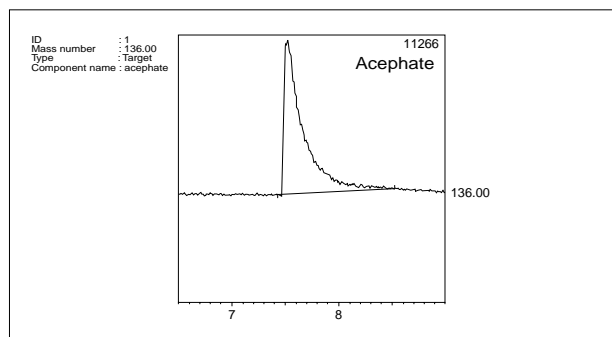


Fig.9 SIM chromatogram (500 ppb)



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