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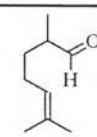
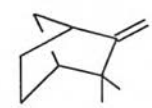
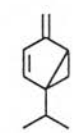
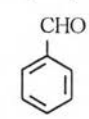
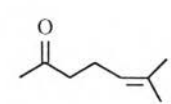
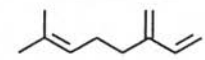
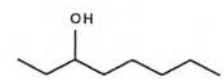
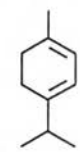
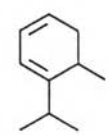
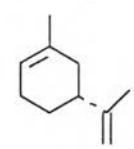
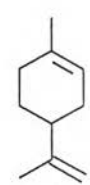
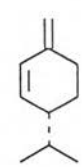
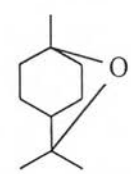
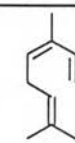
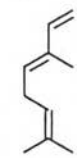
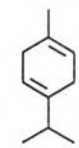
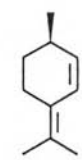
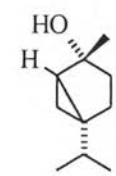
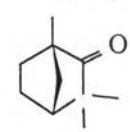
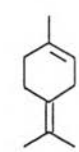
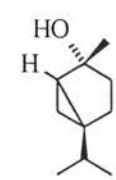
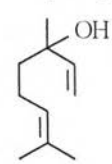
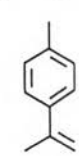
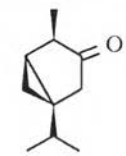
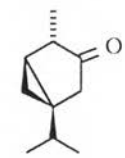
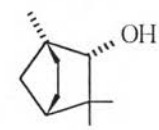
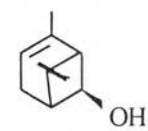
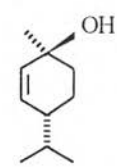
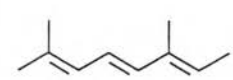
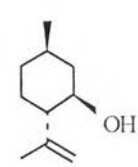
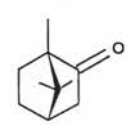
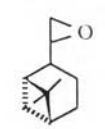
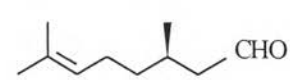
APPENDICES

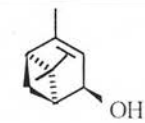
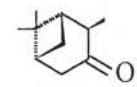
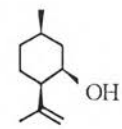
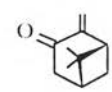
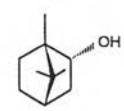
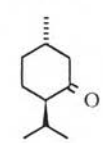
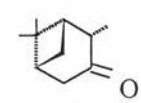
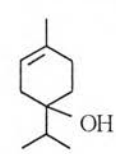
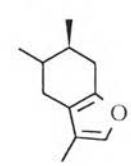
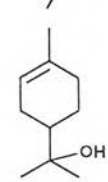
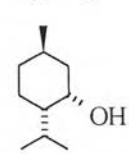
A. The chemical components of essential oil isolated from selected Lamiaceous plants.

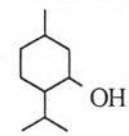
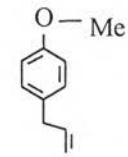
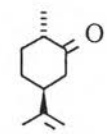
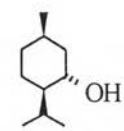
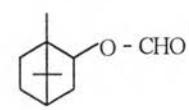
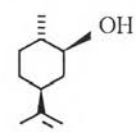
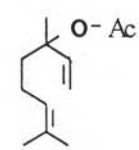
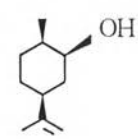
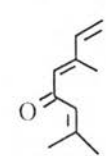
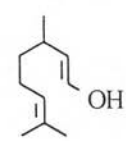
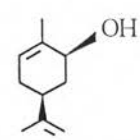
Retention time (min)	Compound	Structure
3.86	bergamal	
5.28	tricyclene	
5.33	α-pinene	
5.50	α-thujene	
5.66	camphene	
5.78	thuja 2,4 (10) - diene	
6.31	benzaldehyde	
6.35	sabinene	
6.41	β-pinene	
6.53	6-methyl-5-hepten-2-one	
6.67	3-octanone	-$CH_3CH_2C(=O)(CH_2)_4CH_3$
6.79	1-octen-3-ol	-CH_2=CHCH(OH)$(CH_2)_4CH_3$

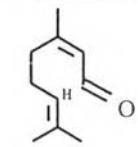
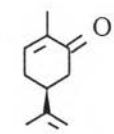
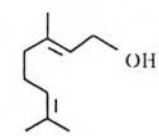
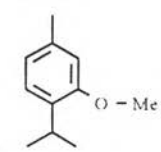
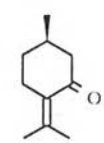
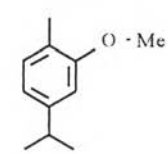
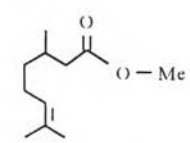
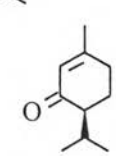
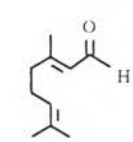
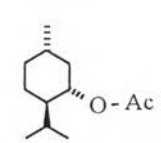
Retention time (min)	Compound	Structure
6.90	myrcene	
7.12	δ-2-carene	
7.26	α-phellandrene	
7.40	δ-3-carene	
7.56	3-octanol	
7.61	α-terpinene	
7.75	*O*-cymene	
7.90	sylvestrene	
8.01	limonene	
8.03	β-phellandrene	
8.13	1,8-cineole	

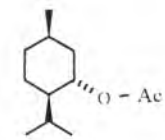
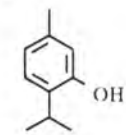
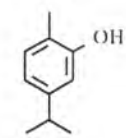
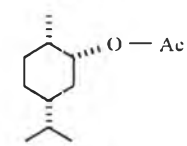
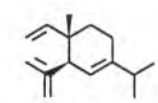
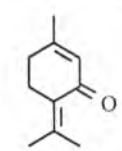
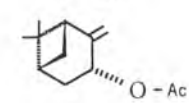
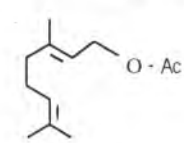
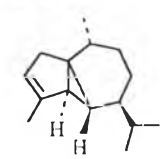
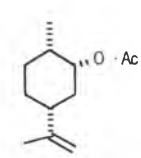
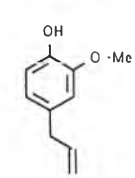
Retention time (min)	Compound	Structure
8.23	*(Z)*-β-ocimene	
8.60	*(E)*-β-ocimene	
9.08	γ-terpinene	
9.63	para-mentha-2,4(8)-diene	
10.01	*cis*-sabinene hydrate	
10.08	fenchone	
10.13	terpinolene	
10.48	*trans*-sabinene hydrate	
10.63	linalool	
10.83	dimethyl styrene isomer # 1	

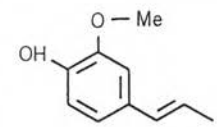
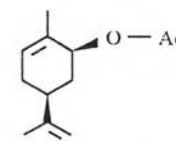
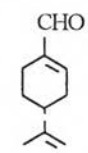
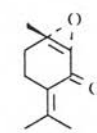
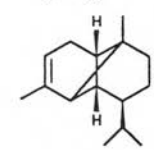
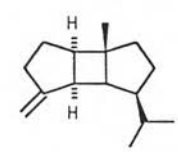
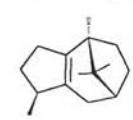
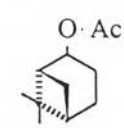
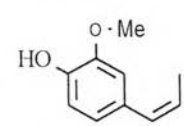
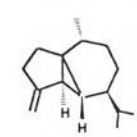
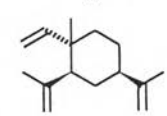
Retention time (min)	Compound	Structure
10.89	*cis*-thujone	
11.33	*trans*-thujone	
11.39	(*exo*)-fenchol	
11.43	chrysanthenone	
11.59	*trans*-para-menth-2-en-1-ol	
11.66	octanol acetate	$CH_3CH_2CH(O\text{-}Ac)(CH_2)_4CH_3$
11.76	neo-allo-ocimene	
12.13	isopulegol	
12.55	camphor	
12.76	β-pinene oxide	
12.88	citronellal	

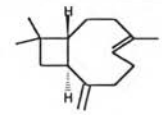
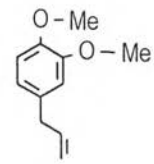
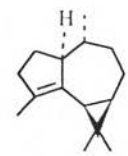
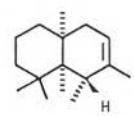
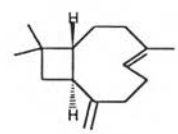
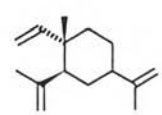
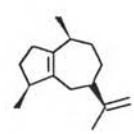
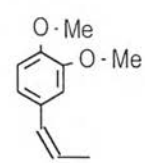
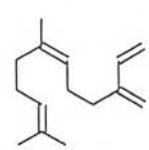
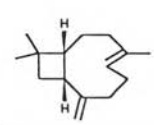
Retention time (min)	Compound	Structure
13.06	*trans*- verbenol	
13.09	*trans*-pinocamphone	
13.30	*neo-iso*-isopulegol	
13.33	*cis*-chrysanthenol	
13.34	pinocarvone	
13.61	borneol	
13.62	menthone	
13.76	*cis*-pinocamphour	
13.94	terpin-4-ol	
14.10	menthofuran	
14.21	α-terpineol	
14.23	neo-menthol	

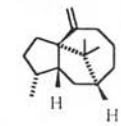
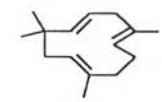
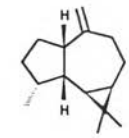
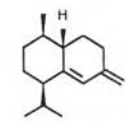
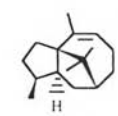
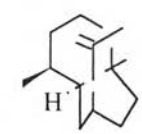
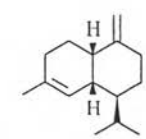
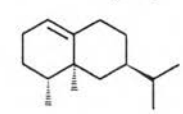
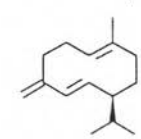
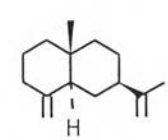
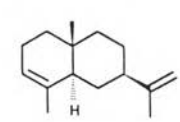
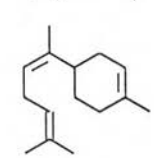
Retention time (min)	Compound	Structure
14.64	menthol	
14.73	methyl chavicol	
14.97	*trans*-dihydro carvone	
15.07	isomenthol	
15.35	isobonyl formate	
15.73	dihydro carveol	
15.88	linalool acetate	
16.05	neo-iso-dihydrocarveol	
16.30	(*E*)-ocimenone	
16.32	nerol	
16.48	*cis*-carveol	

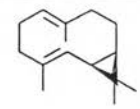
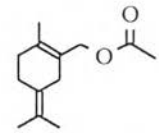
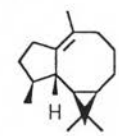
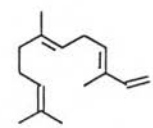
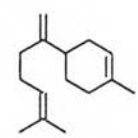
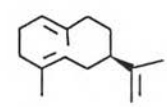
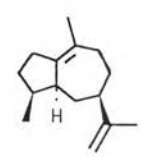
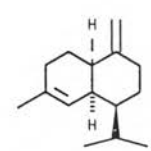
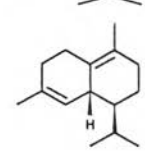
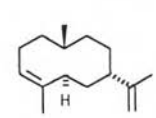
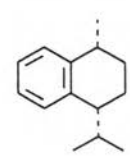
Retention time (min)	Compound	Structure
16.60	neral	
16.86	carvone	
17.01	geraniol	
17.06	methyl ether , thymol	
17.23	pulegone	
17.50	methyl ether, carvacrol	
17.53	methyl citronellate	
17.95	piperitone	
17.81	geranial	
18.50	bornyl acetate	
18.73	menthyl acetate	

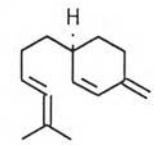
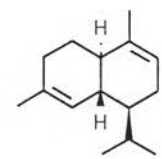
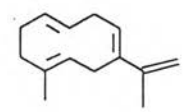
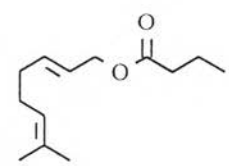
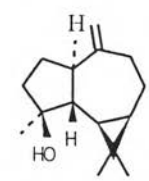
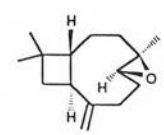
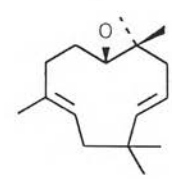
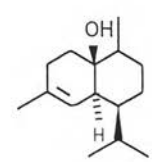
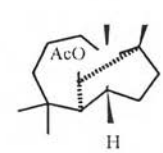
Retention time (min)	Compound	Structure
19.68	isomethyl acetate	
20.04	thymol	
20.33	carvacrol	
20.38	neo-iso-carvomethyl acetate	
20.79	*δ*-elemene	
20.86	piperitenone	
21.13	*cis*-pinocarvyl acetate	
21.15	geranyl acetate	
21.28	*α*-cubebene	
21.31	neo-iso-dihydrocarveol acetate	
21.31	eugenol	

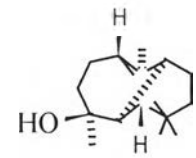
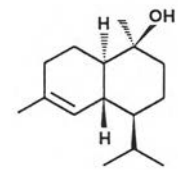
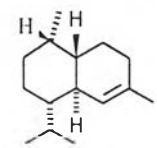
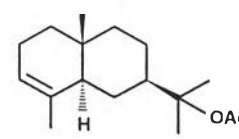
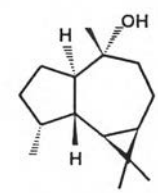
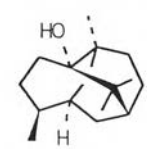
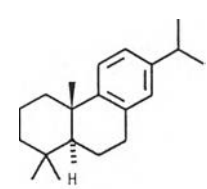
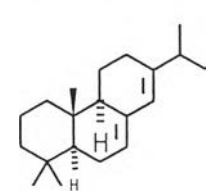
Retention time (min)	Compound	Structure
21.53	(*E*)-isoeugenol	
21.60	*cis*-carvyl acetate	
21.69	perillaldehyde	
21.83	piperitenone oxide	
22.50	α-copaene	
22.58	β-bourbonene	
22.90	β-patchoulene	
22.93	*trans*-myrtanol acetate	
23.00	(*Z*)-isoeugenol	
23.06	β-cubebene	
23.09	β-elemene	

Retention time (min)	Compound	Structure
23.48	(*Z*)-caryophyllene	
23.66	methyl eugenol	
23.86	α-gurjunene	
24.20	*cis*-thujopsene	
24.38	(*E*)-caryophyllene	
24.60	γ-elemene	
24.85	α-guaiene	
25.01	α-*trans*-bergamotene	
25.23	(*Z*)-methyl isoeugenol	
25.34	(*Z*)-β-farnesene	
25.43	9-*epi*-(*E*)-caryophyllene	

Retention time (min)	Compound	Structure
25.63	γ-patchoulene	
25.91	α-humulene	
26.08	allo-aromadendrene	
26.10	cis-muurola-4(14), 5-diene	
26.15	α-patchoulene	
26.28	seychellene	
26.43	γ-muurolene	
26.45	valencene	
26.56	germacrene D	
26.80	β-selinene	
27.18	α-selinene	
27.59	(*Z*)-α-bisabolene	

Retention time (min)	Compound	Structure
27.61	bicyclogermacrene	
27.63	geranyl N propanoate	
27.68	viridiflorene	
27.73	*(E,E)*-α-farnesene	
27.78	β-bisabolene	
27.89	germacrene A	
28.00	α-bulnesene	
28.04	γ-cadinene	
28.56	δ-cadinene	
28.59	*7-epi*-α-selinene	
28.61	*cis*-calamenene	

Retention time (min)	Compound	Structure
28.84	β-sesquiphellandrene	
28.88	α-cadinene	
29.53	germacrene B	
30.22	geranyl N-butyrate	
30.90	spathulenol	
31.10	caryophyllene oxide	
32.23	humulene epoxide II	
32.48	(1-epi)-cubenol	
32.56	longiborneol acetate	

Retention time (min)	Compound	Structure
33.01	longipinanol	
33.55	epi-α-cadinol	
34.04	α-cadinol	
34.13	α-eudesmol acetate	
34.18	globulol	
34.64	patchouli alcohol	
35.36	(Z)-α-trans-bergamotol acetate	
48.10	abietatriene	
49.13	abietadiene	

B. Mass spectra of terpenoid and nonterpenoid compound.

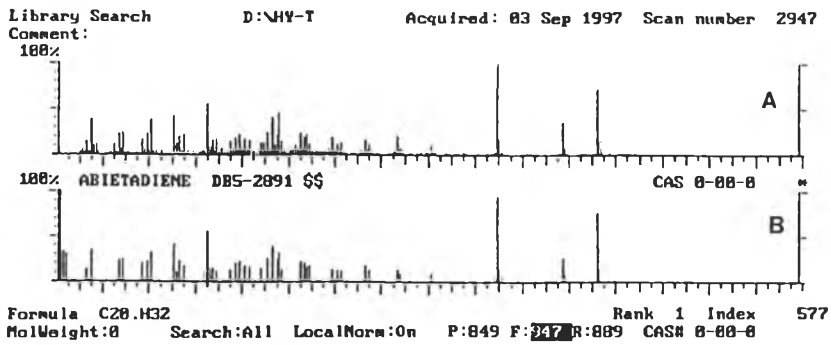


Figure 52 Mass spectra of abietadiene (A) and authentic abietadiene (B) by GC-MS

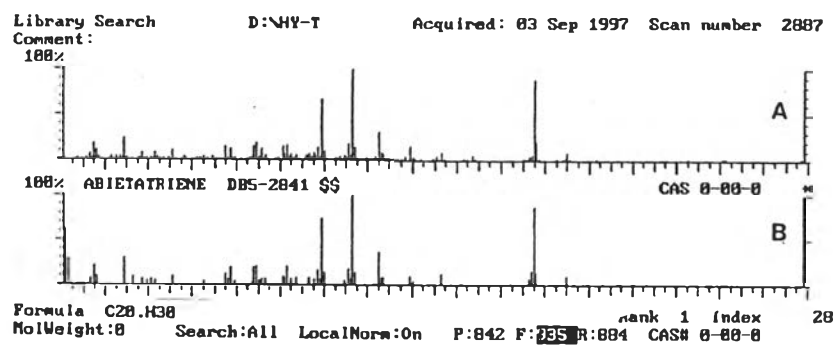


Figure 53 Mass spectra of abietatriene (A) and authentic abietatriene (B) by GC-MS

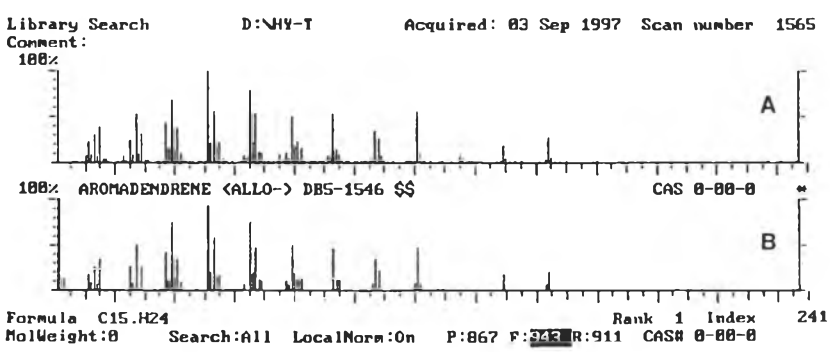


Figure 54 Mass spectra of aromadendrene <*allo*-> (A) and authentic aromadendrene <*allo*-> (B) by GC-MS

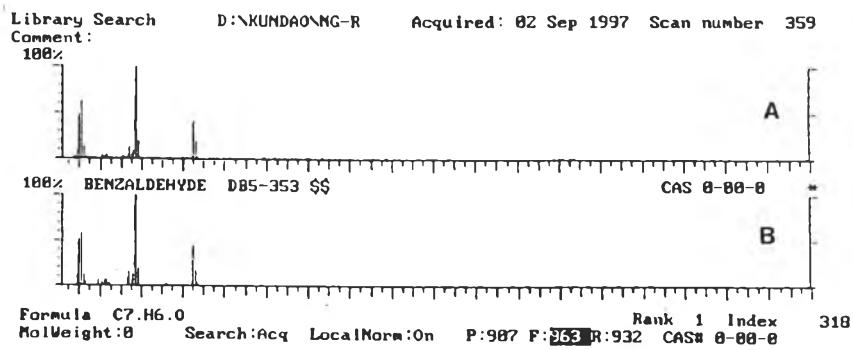


Figure 55 Mass spectra of benzaldehyde (A) and authentic benzaldehyde (B) by GC-MS

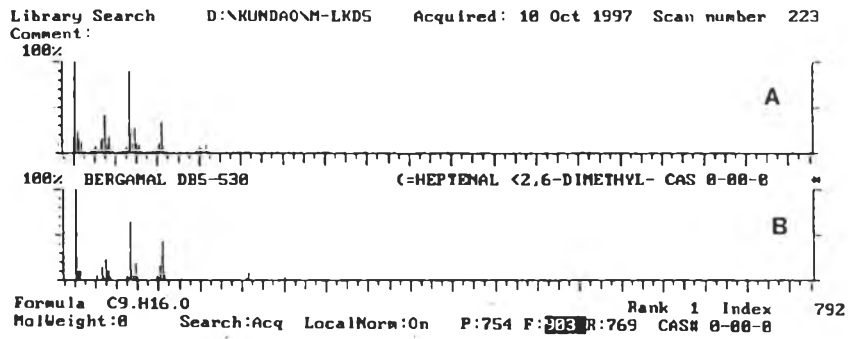


Figure 56 Mass spectra of bergamal (A) and authentic bergamal (B) by GC-MS

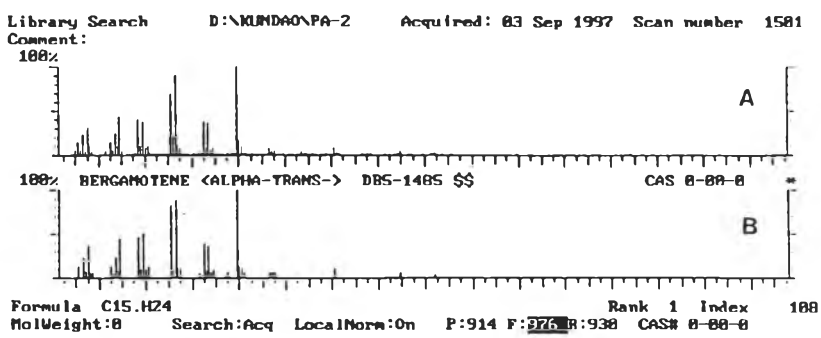


Figure 57 Mass spectra of bergamotene <*α-trans-*> (A) and authentic bergamotene <*α-trans-*> (B) by GC-MS

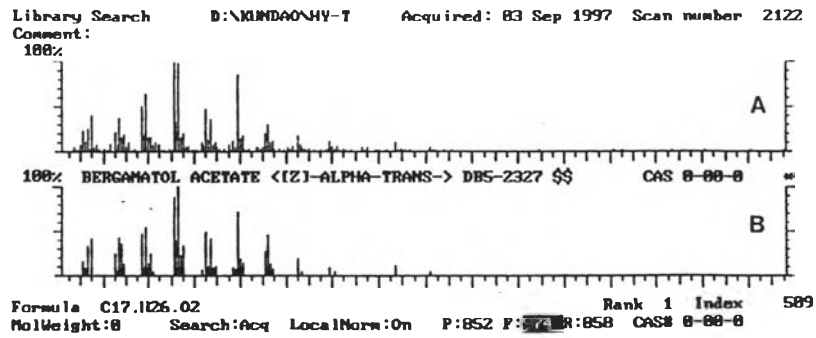


Figure 58 Mass spectra of bergamatol acetate <*(Z)-α-trans->* (A) and authentic bergamatol acetate <*(Z)-α-trans->* (B) by GC-MS

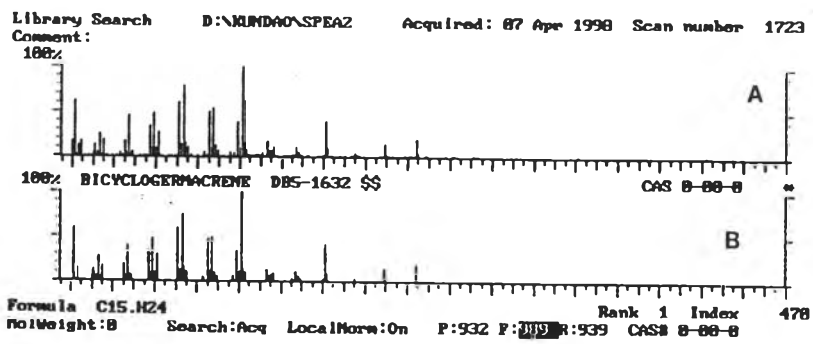


Figure 59 Mass spectra of bicyclogermacrene (A) and authentic bicyclogermacrene (B) by GC-MS

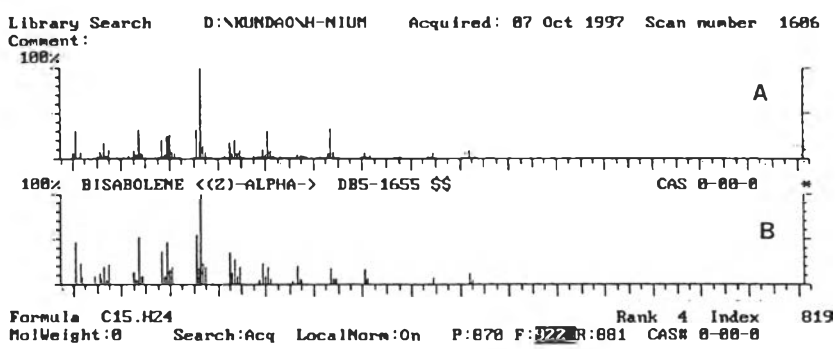


Figure 60 Mass spectra of bisabolene <*(Z)-α->*(A) and authentic bisabolene <*(Z)-α->* (B) by GC-MS

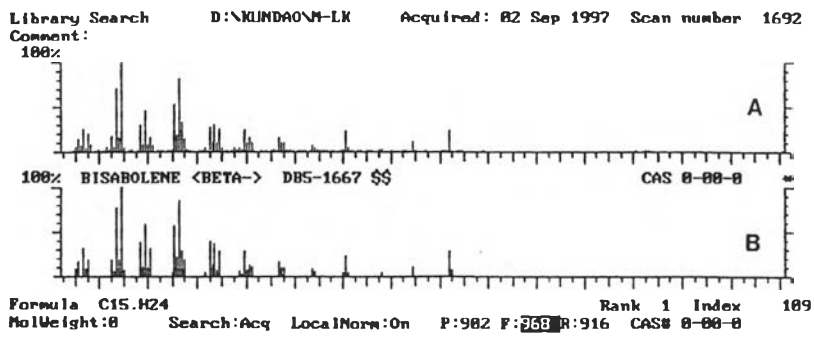


Figure 61 Mass spectra of bisabolene <β-> (A) and of authentic bisabolene <β-> (B) by GC-MS

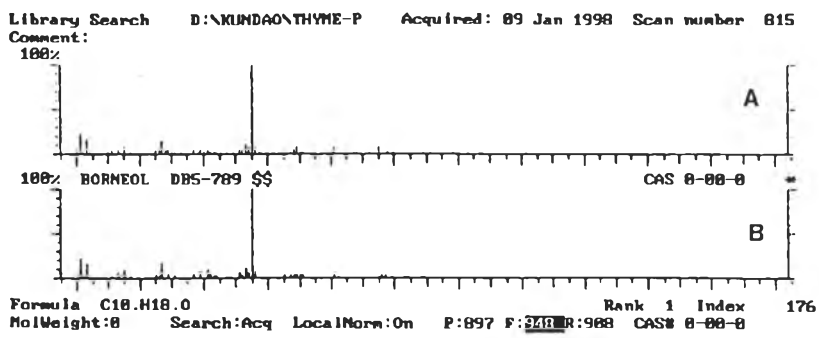


Figure 62 Mass spectra of borneol (A) and authentic borneol (B) by GC-MS

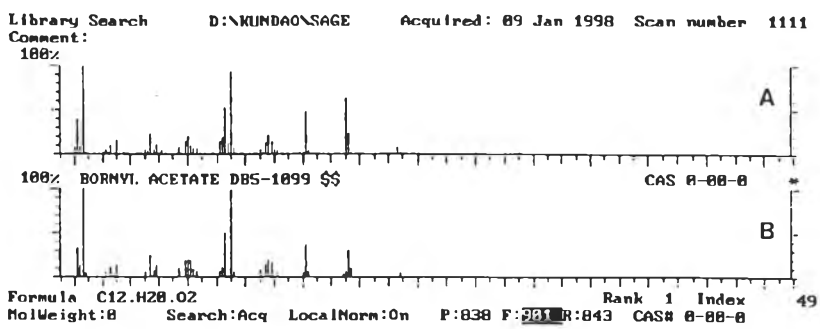


Figure 63 Mass spectra of bornyl acetate (A) and authentic bornyl acetate (B) by GC-MS

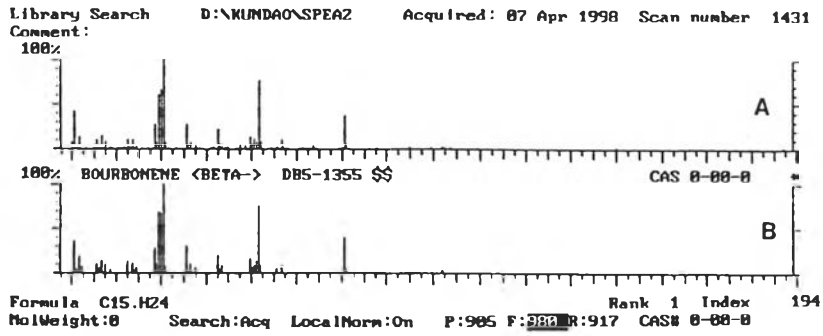


Figure 64 Mass spectra of bourbonene <β-> (A) and authentic bourbonene <β-> (B) by GC-MS

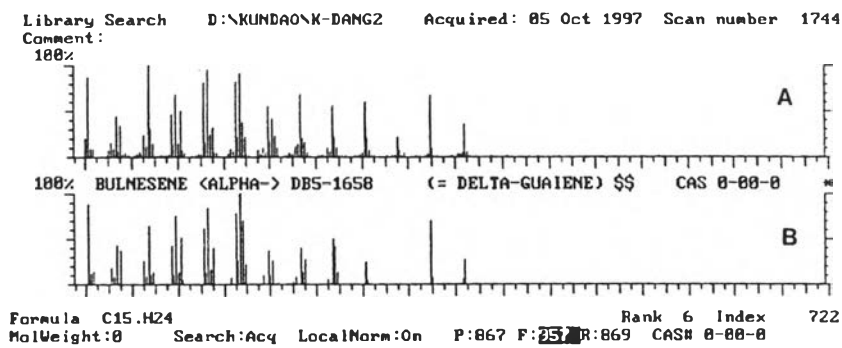


Figure 65 Mass spectra of bulnesene <α> (A) and authentic bulnesene <α> (B) by GC-MS

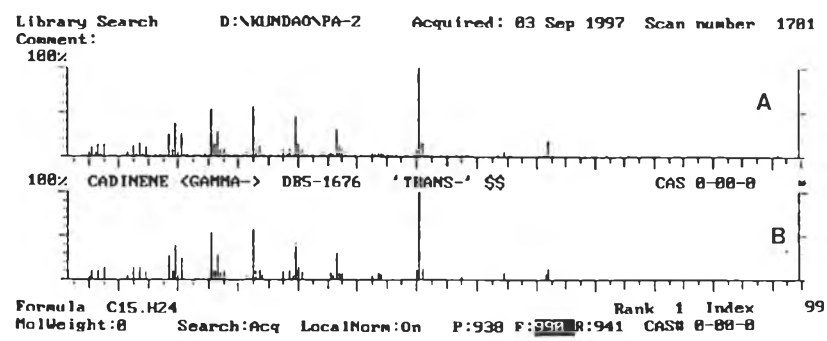


Figure 66 Mass spectra of cadinene <γ-> (A) and authentic cadinene <γ-> (B) by GC-MS

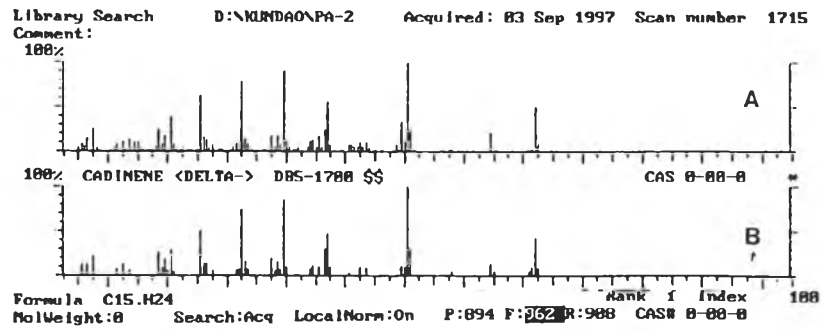


Figure 67 Mass spectra of cadinene <δ-> (A) and authentic cadinene <δ-> (B) by GC-MS

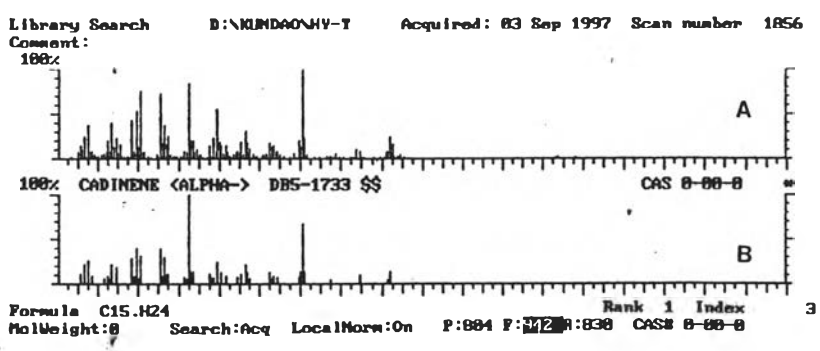


Figure 68 Mass spectra of cadinene <α-> (A) and authentic cadinene <α-> (B) by GC-MS

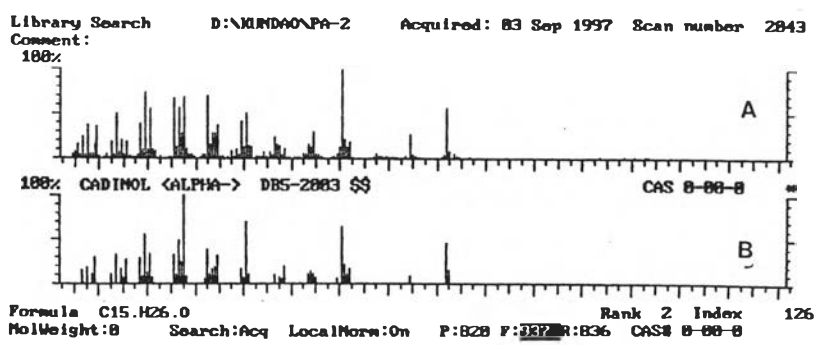


Figure 69 Mass spectra of cadinol <α-> (A) and authentic cadinol <α-> (B) by GC-MS

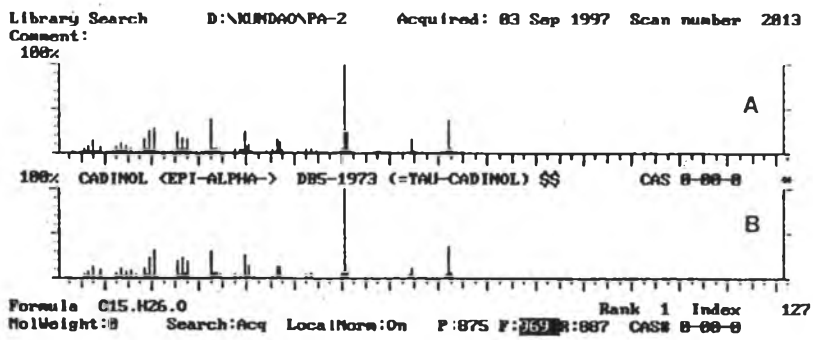


Figure 70 Mass spectra of cadinol <*epi*-α-> (A) and authentic cadinol <*epi*-α-> (B) by GC-MS

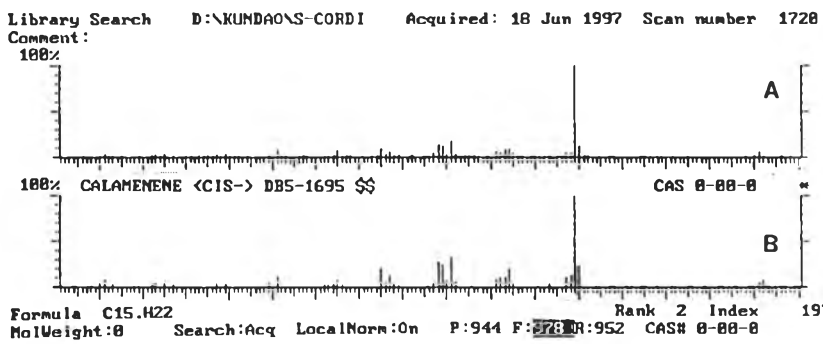


Figure 71 Mass spectra of calamenene <*cis*-> (A) and authentic calamenene <*cis*-> (B) by GC-MS

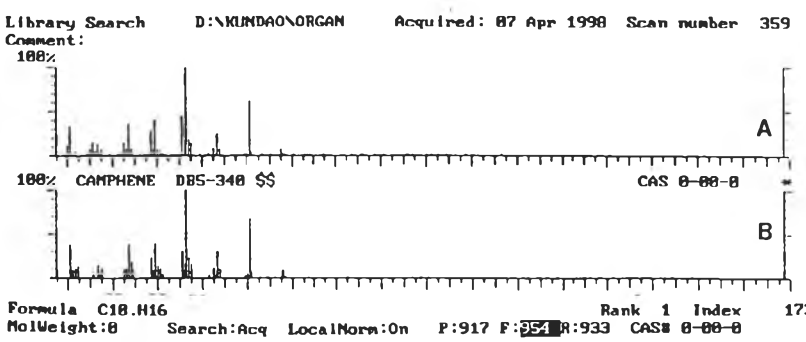


Figure 72 Mass spectra of camphene (A) and authentic camphene (B) by GC-MS

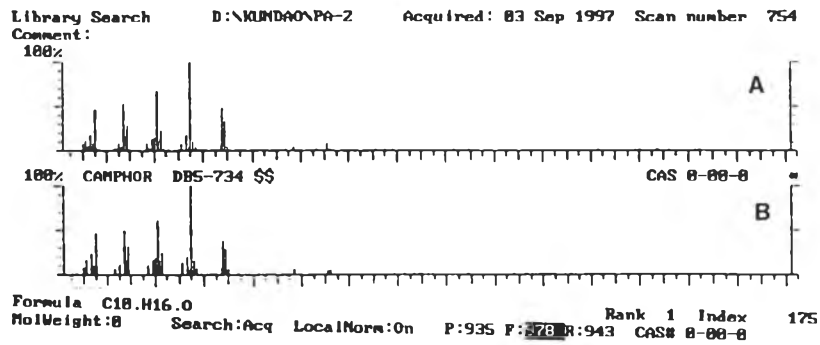


Figure 73 Mass spectra of camphor (A) and authentic camphor (B) by GC-MS

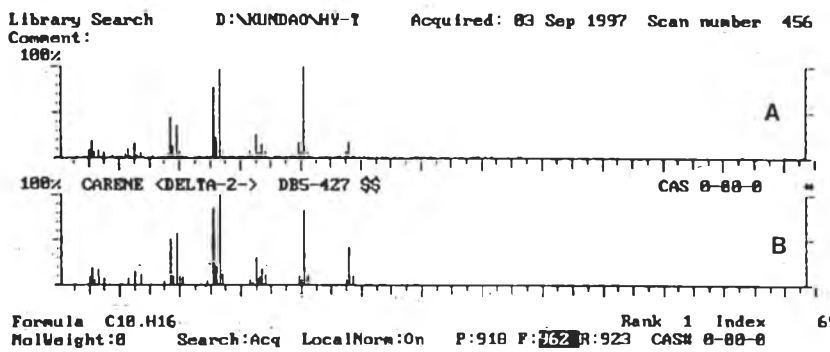


Figure 74 Mass spectra of carene <δ-2-> (A) and authentic carene <δ-2-> (B) by GC-MS

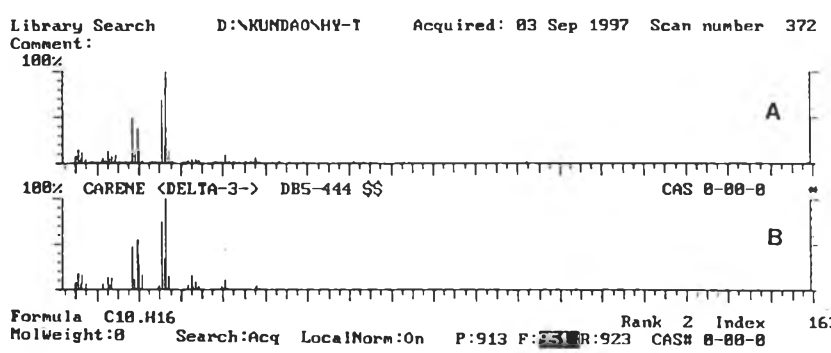


Figure 75 Mass spectra of carene <δ-3-> (A) and authentic carene <δ-3-> (B) by GC-MS

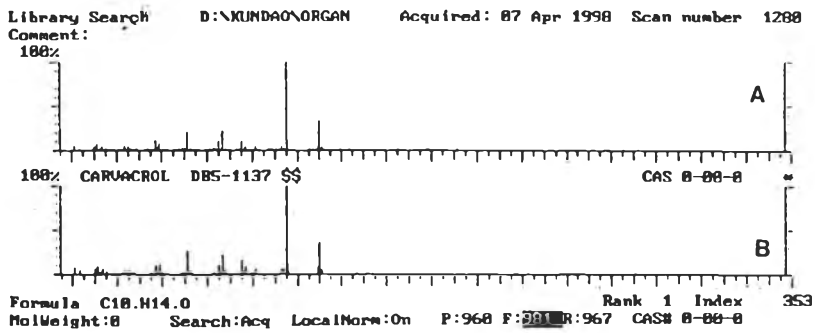


Figure 76 Mass spectra of carvacrol (A) and authentic carvacrol (B) by GC-MS

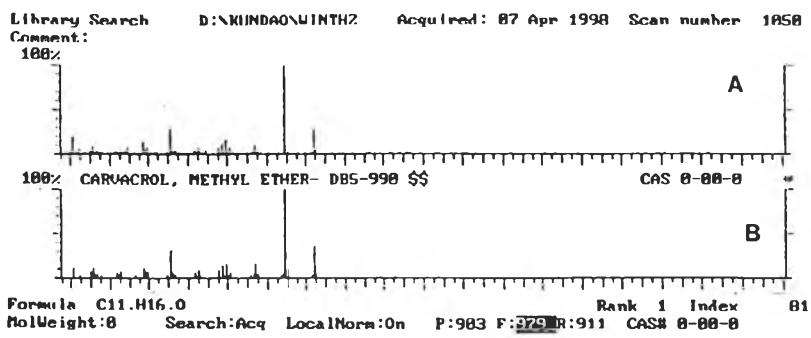


Figure 77 Mass spectra of carvacrol, methyl ether (A) and authentic carvacrol, methyl ether (B) by GC-MS

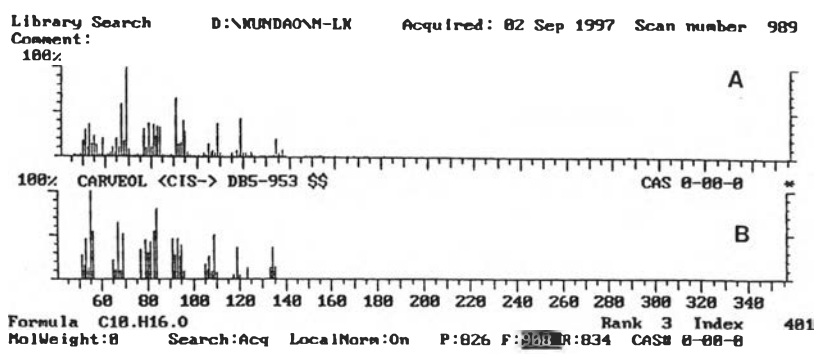


Figure 78 Mass spectra of carveol <*cis*-> (A) and authentic carveol <*cis*-> (B) by GC-MS

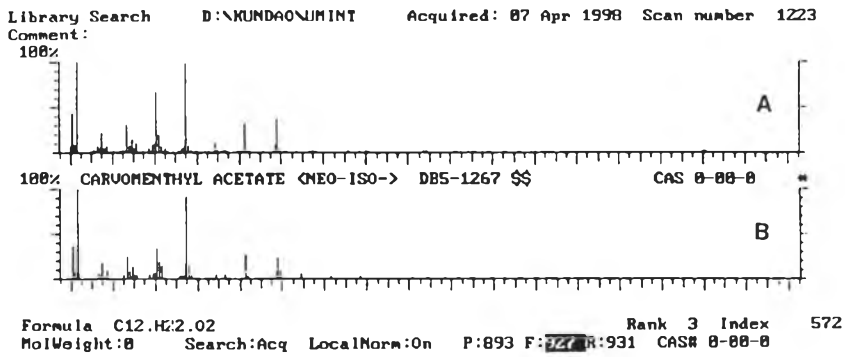


Figure 79 Mass spectra of carvomenthyl acetate <*neo-iso-*> (A) and authentic carvomenthyl acetate <*neo-iso-*>(B) by GC-MS

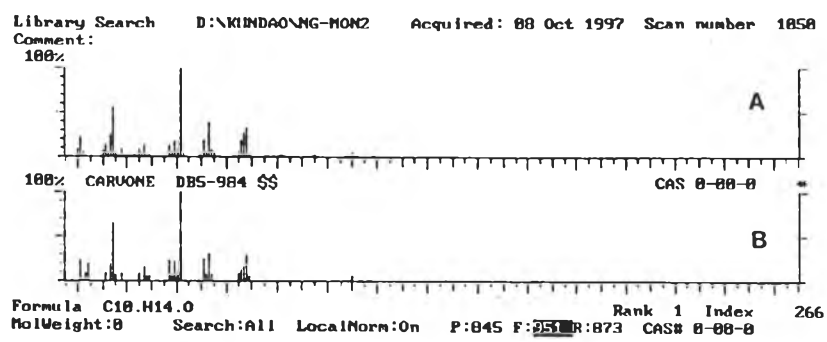


Figure 80 Mass spectra of carvone (A) and authentic carvone (B) by GC-MS

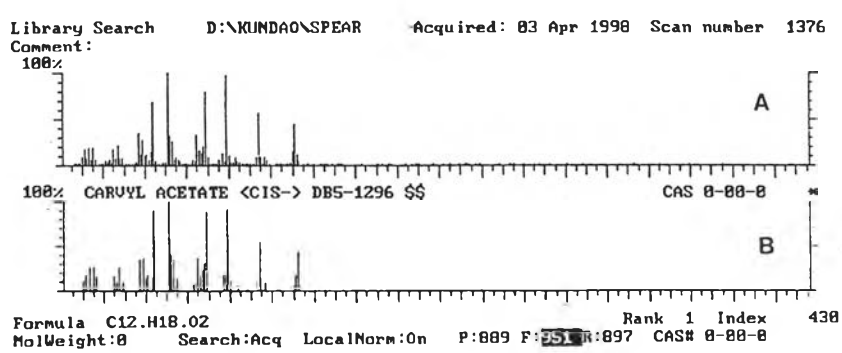


Figure 81 Mass spectra of carvyl acetate <*cis-*> (A) and authentic carvyl acetate <*cis-*> (B) by GC-MS

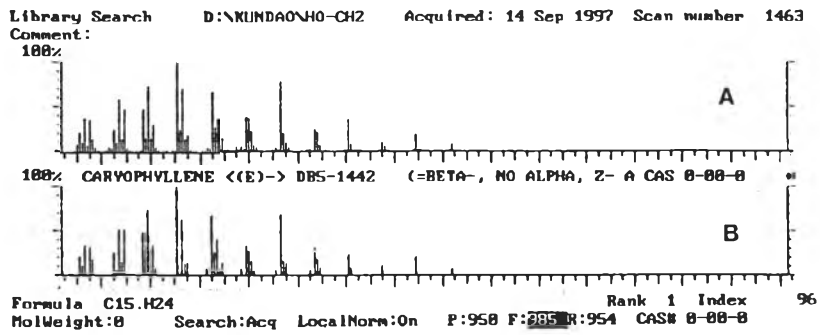


Figure 82 Mass spectra of caryophyllene <(*E*)-> (A) and authentic caryophyllene <(*E*)-> (B) by GC-MS

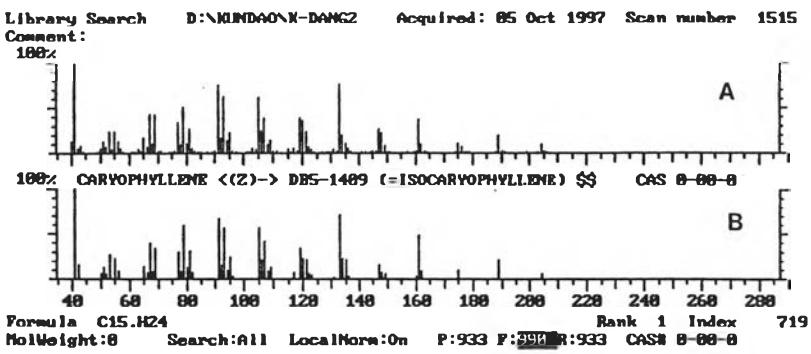


Figure 83 Mass spectra of caryophyllene <(*Z*)-> (A) and authentic caryophyllene <(*Z*)-> (B) by GC-MS

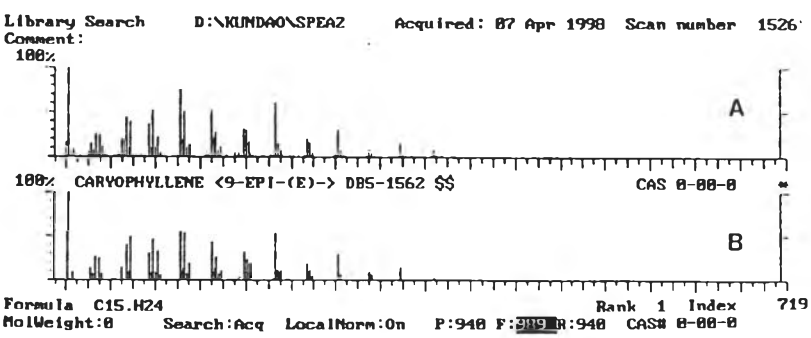


Figure 84 Mass spectra of caryophyllene <9-*epi*-(*E*)-> (A) and authentic caryophyllene <9-*epi*-(*E*)-> (B) by GC-MS

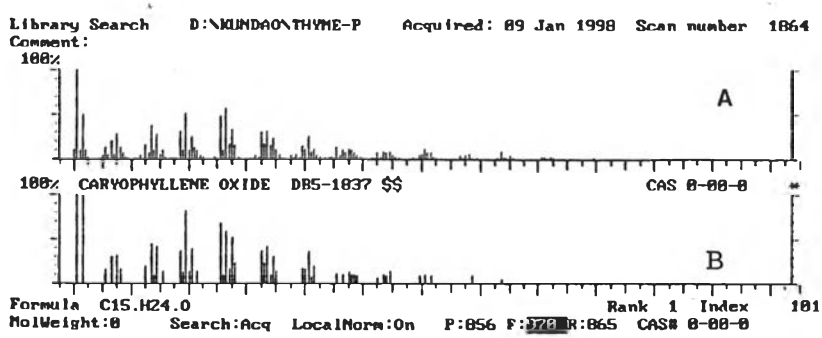


Figure 85 Mass spectra of caryophyllene oxide (A) and authentic caryophyllene oxide (B) by GC-MS

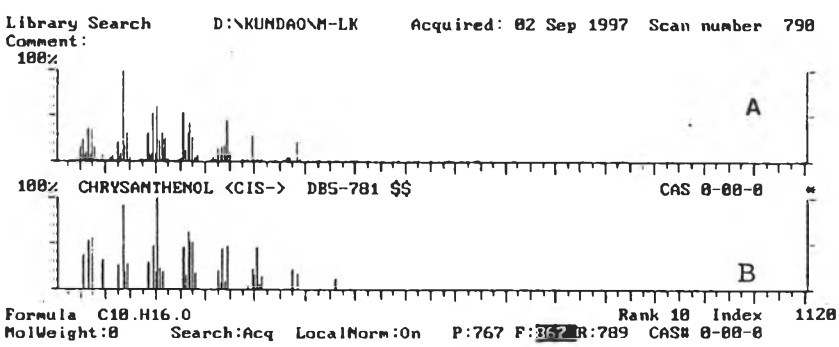


Figure 86 Mass spectra of chrysanthenol <*cis*-> (A) and authentic chrysanthenol <*cis*-> (B) by GC-MS

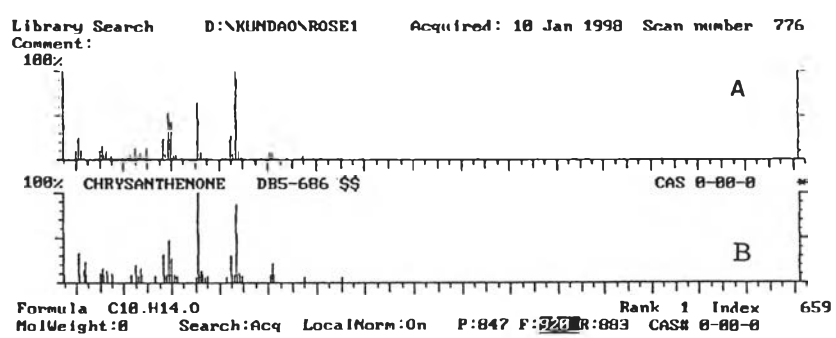


Figure 87 Mass spectra of chrysanthenone (A) and authentic chrysanthenone (B) by GC-MS

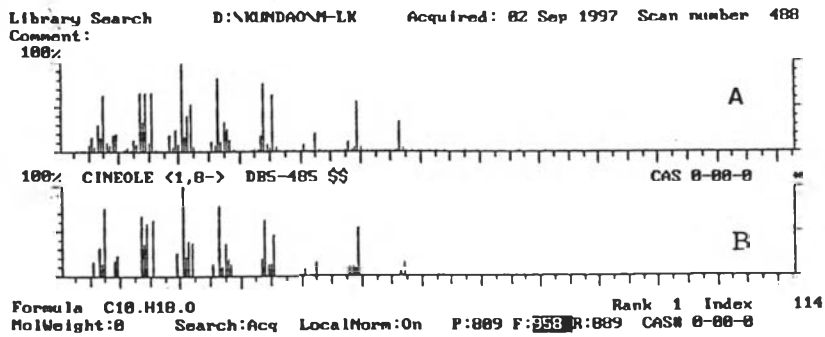


Figure 88 Mass spectra of cineole <1,8-> (A) and authentic cineole <1,8-> (B) by GC-MS

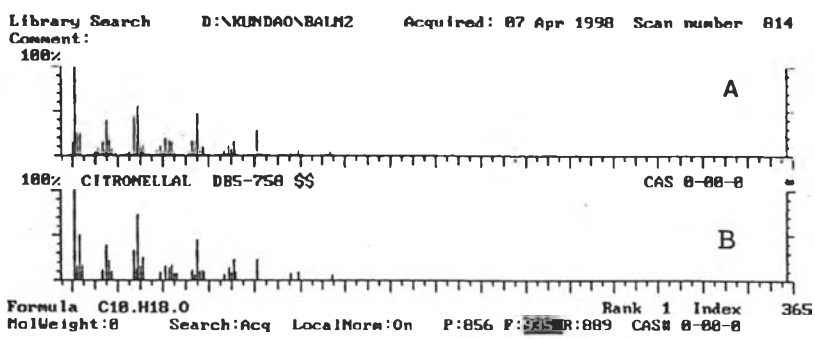


Figure 89 Mass spectra of citronellal (A) and authentic citronellal (B) by GC-MS

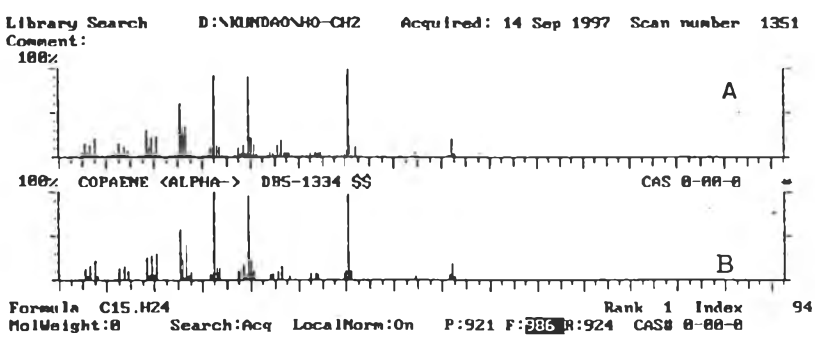


Figure 90 Mass spectra of copaene <α-> (A) and authentic copaene <α-> (B) by GC-MS

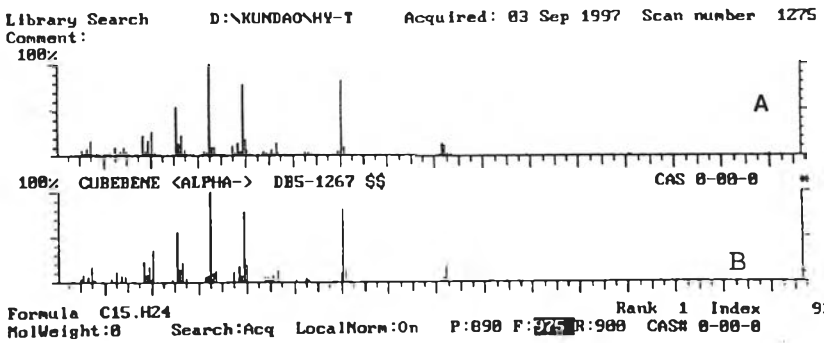


Figure 91 Mass spectra of cubebene <α-> (A) and authentic cubebene <α-> (B) by GC-MS

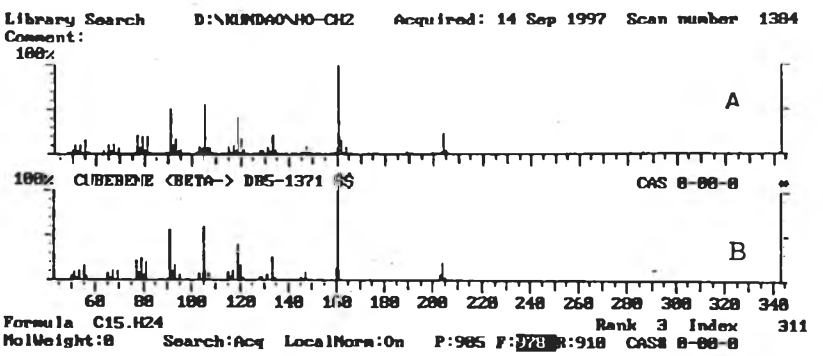


Figure 92 Mass spectra of cubebene <β-> (A) and authentic cubebene <β-> (B) by GC-MS

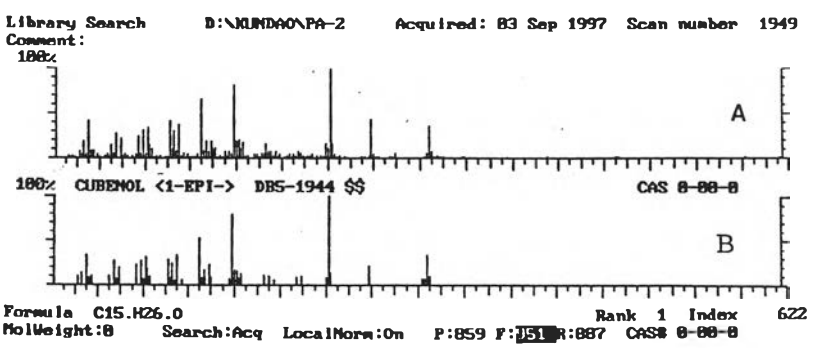


Figure 93 Mass spectra of cubenol <(1-*epi*)-> (A) and authentic cubenol <(1-*epi*)-> (B) by GC-MS

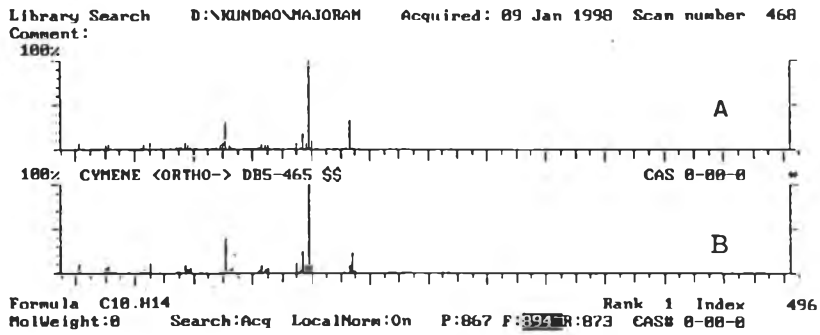


Figure 94 Mass spectra of cymene <*ortho*-> (A) and authentic cymene <*ortho*-> (B) by GC-MS

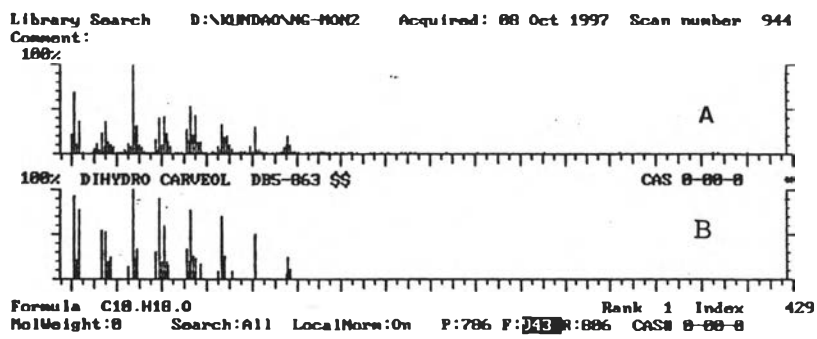


Figure 95 Mass spectra of dihydro carveol (A) and authentic dihydro carveol (B) by GC-MS

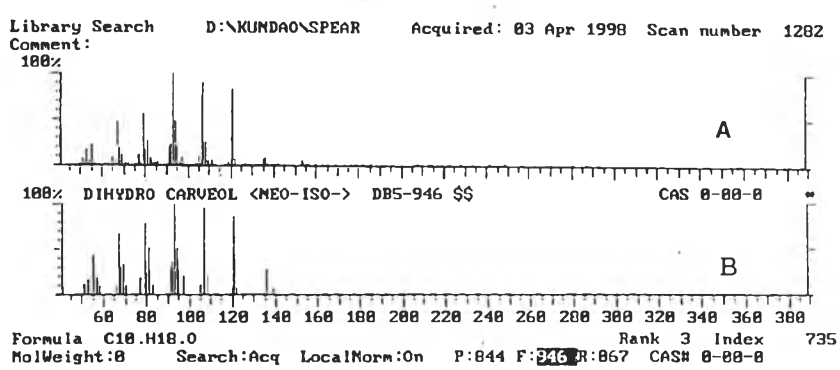


Figure 96 Mass spectra of dihydro carveol <*neo-iso*-> (A) and authentic dihydro carveol <*neo-iso*-> (B) by GC-MS

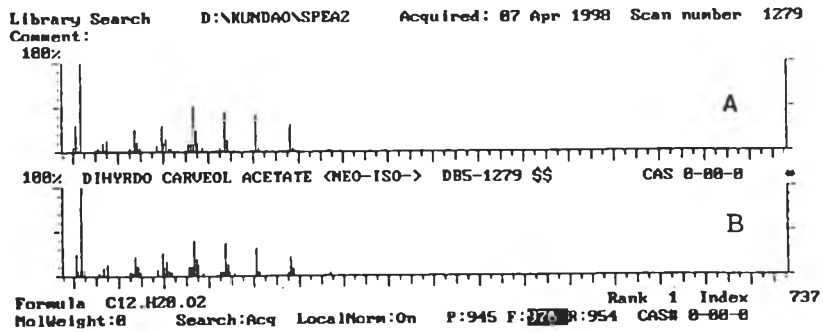


Figure 97 Mass spectra of dihydrocarveol acetate <*neo-iso-*> (A) and authentic dihydrocarveol acetate <*neo-iso-*> (B) by GC-MS

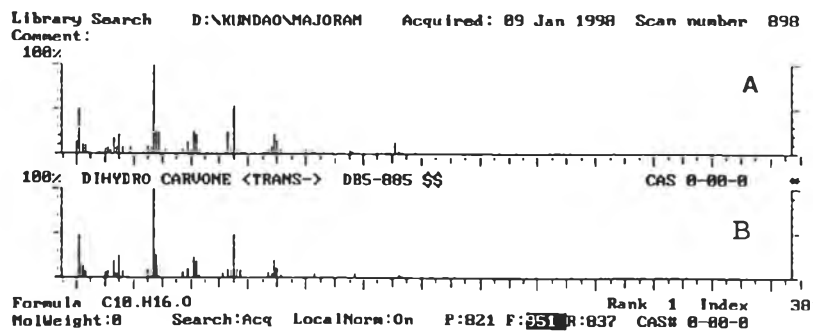


Figure 98 Mass spectra of dihydrocarvone <*trans-*> (A) and authentic dihydrocarvone <*trans-*> (B) by GC-MS

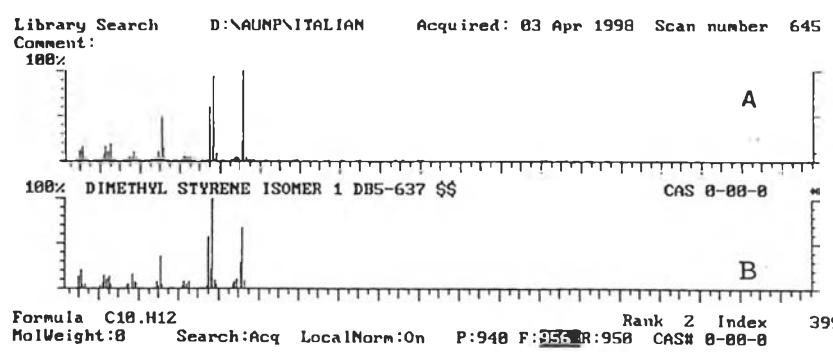


Figure 99 Mass spectra of dimethyl styrene isomer # 1 (A) and authentic dimethyl styrene isomer # 1 (B) by GC-MS

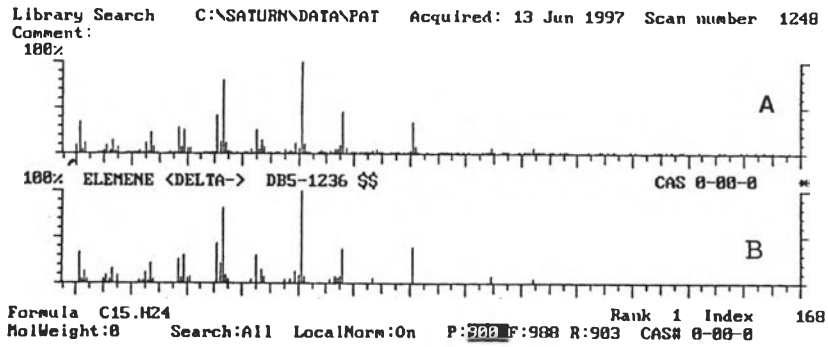


Figure 100 Mass spectra of elemene <δ-> (A) and authentic elemene <δ-> (B) by GC-MS

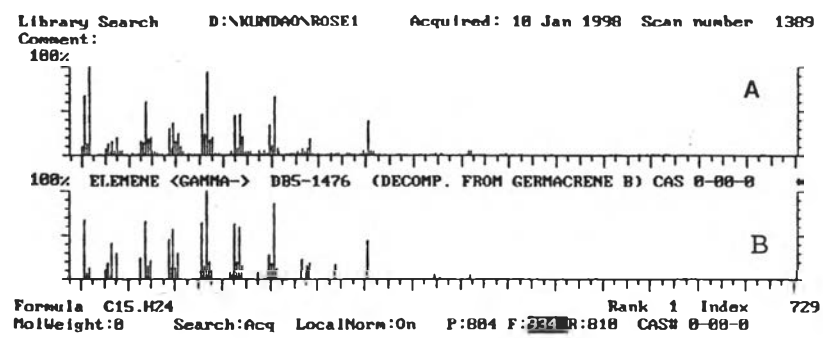


Figure 101 Mass spectra of elemene <γ-> (A) and authentic elemene <γ-> (B) by GC-MS

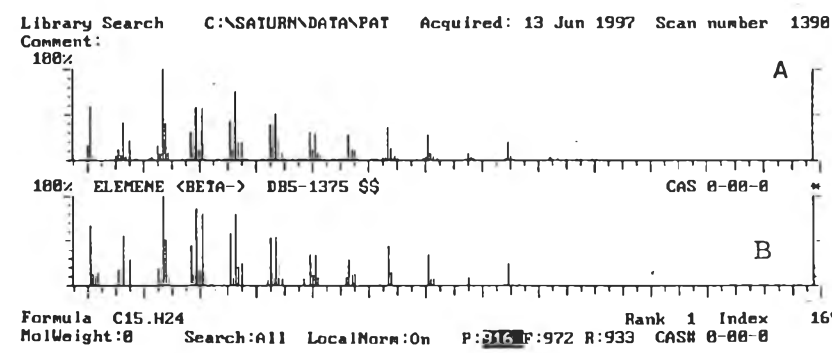


Figure 102 Mass spectra of elemene <β-> (A) and authentic elemene <β-> (B) by GC-MS

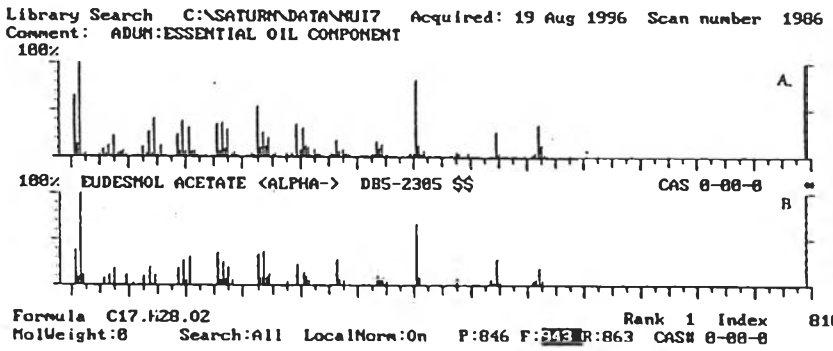


Figure 103 Mass spectra of eudesmol acetate <α-> (A) and authentic eudesmol acetate <α-> (B) by GC-MS

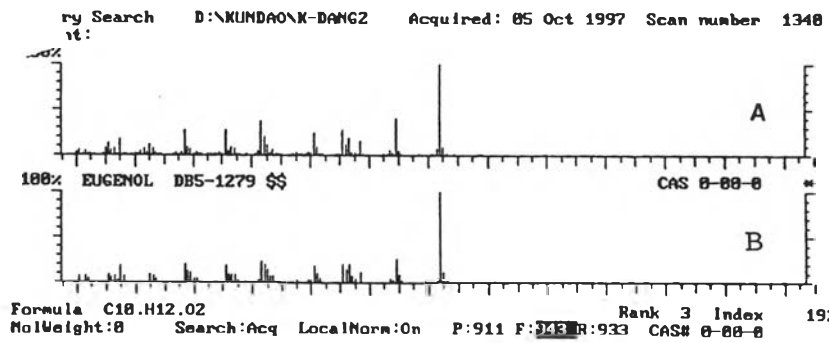


Figure 104 Mass spectra of eugenol (A)and authentic eugenol (B) by GC-MS

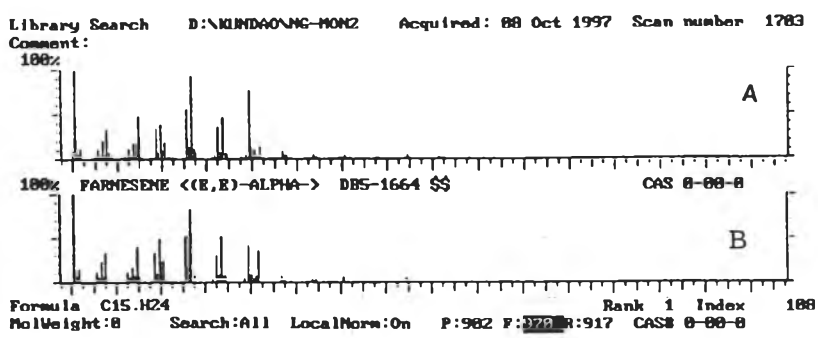


Figure 105 Mass spectra of farnesene <(E,E)-α-> (A) and authentic farnesene <(E,E)-α-> (B) by GC-MS

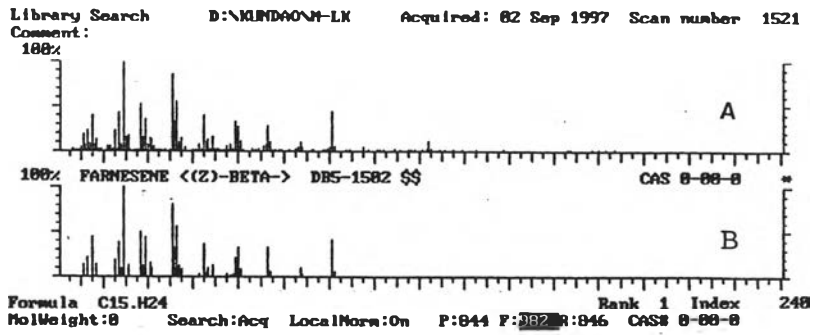


Figure 106 Mass spectra of farnesene <(*Z*)-*β*-> (A) and authentic farnesene <(*Z*)-*β*-> (B) by GC-MS

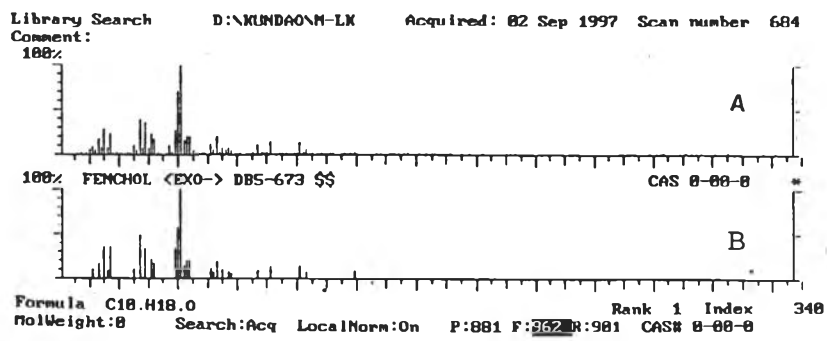


Figure 107 Mass spectra of fenchol <(*exo*)-> (A) and authentic fenchol <(*exo*)-> (B) by GC-MS

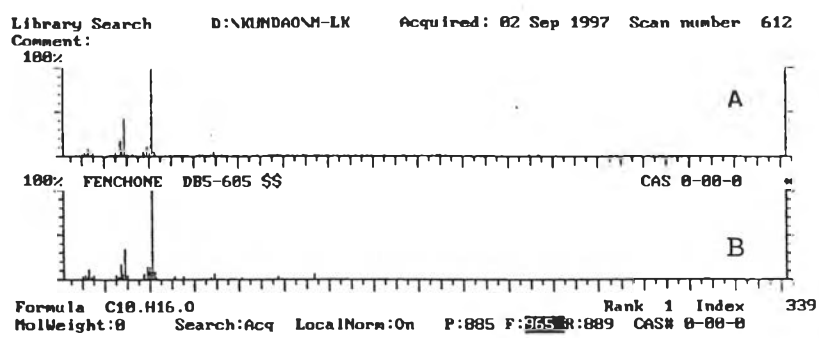


Figure 108 Mass spectra of fenchone (A) and authentic fenchone (B) by GC-MS

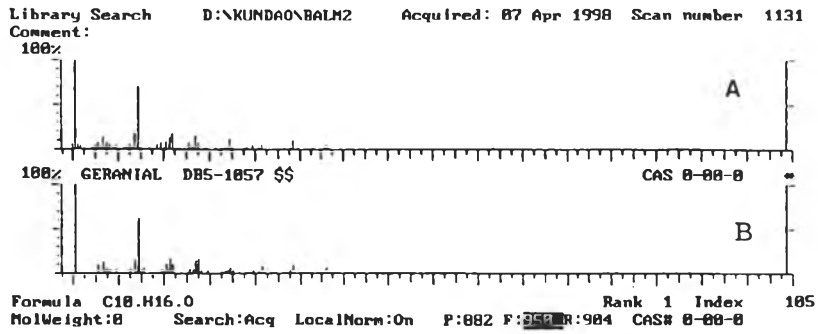


Figure 109 Mass spectra of geranial (A) and authentic geranial (B) by GC-MS

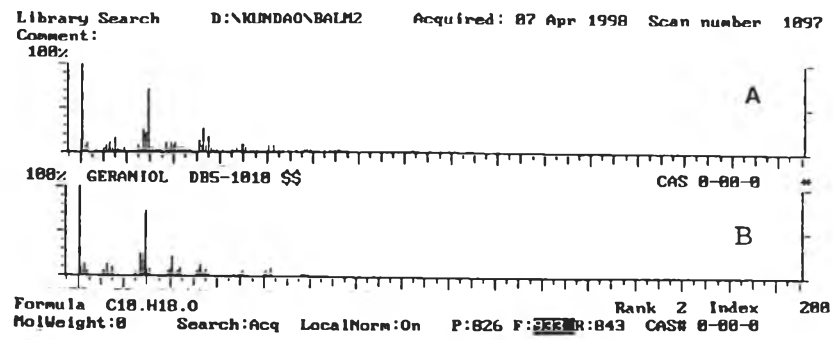


Figure 110 Mass spectra of geraniol (A) and authentic geraniol (B) by GC-MS

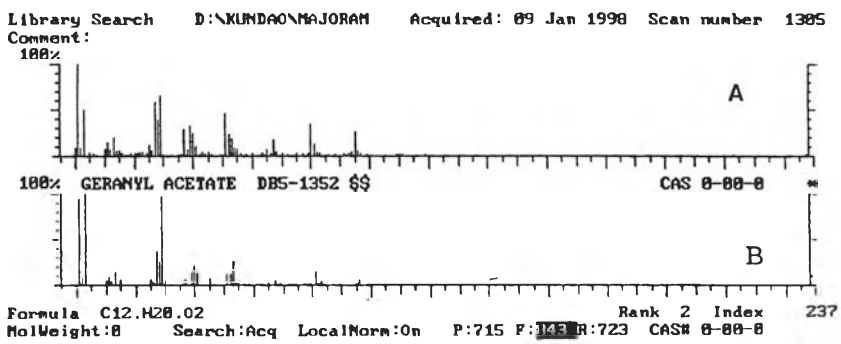


Figure 111 Mass spectra of geranyl acetate (A) and authentic geranyl acetate (B) by GC-MS

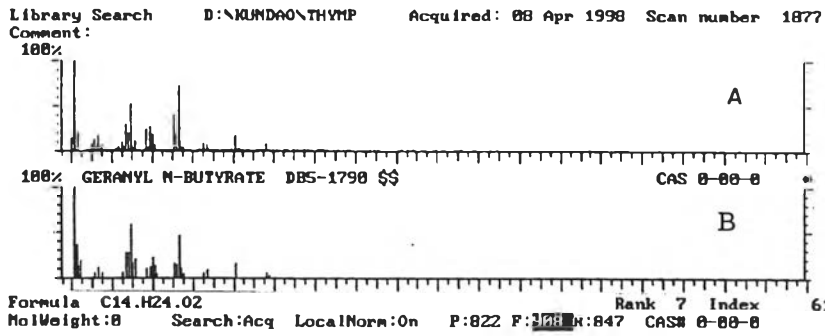


Figure 112 Mass spectra of geranyl N-butyrate (A) and authentic geranyl N- butyrate (B) by GC-MS

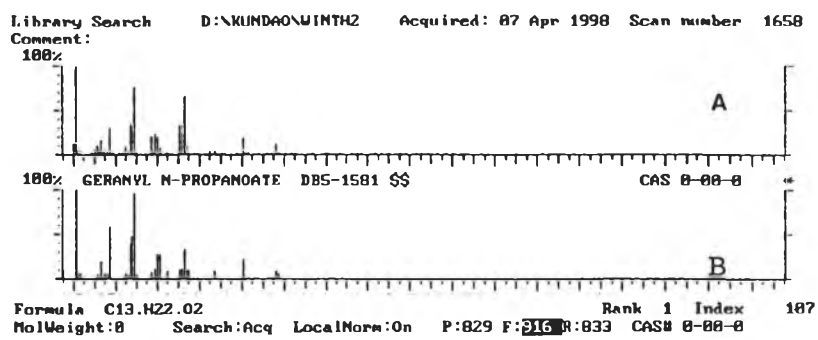


Figure 113 Mass spectra of geranyl N- propanoate (A) and authentic geranyl N- propanoate (B) by GC-MS

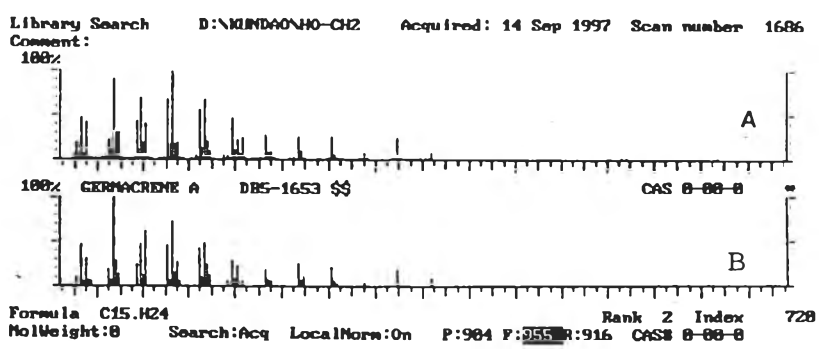


Figure 114 Mass spectra of germacrene A (A) and authentic germacrene A (B) by GC-MS

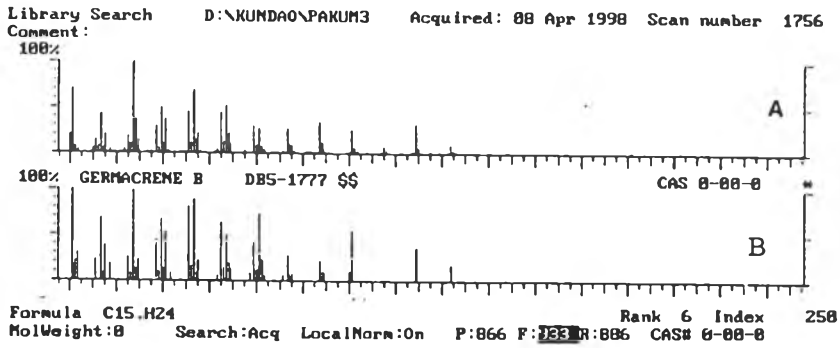


Figure 115 Mass spectra of germacrene B (A) and authentic germacrene B (B) by GC-MS

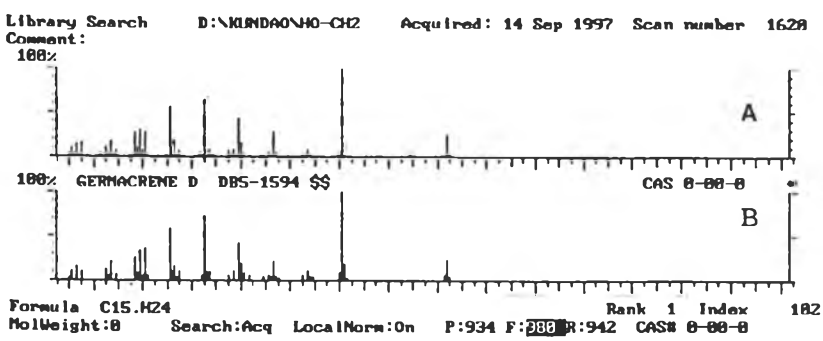


Figure 116 Mass spectra of germacrene D (A) and authentic germacrene D (B) by GC-MS

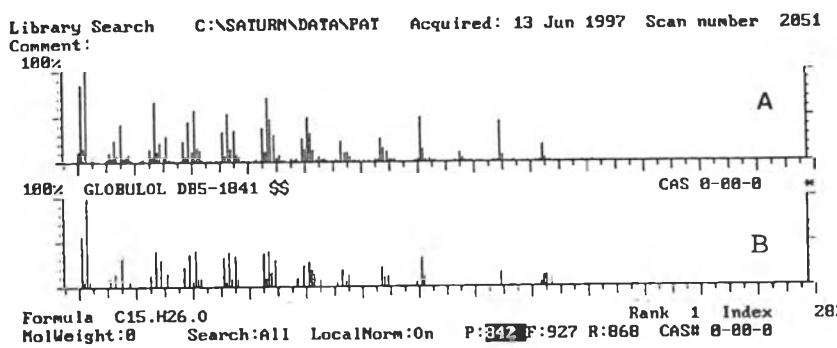


Figure 117 Mass spectra of globulol (A) and authentic globulol (B) by GC-MS

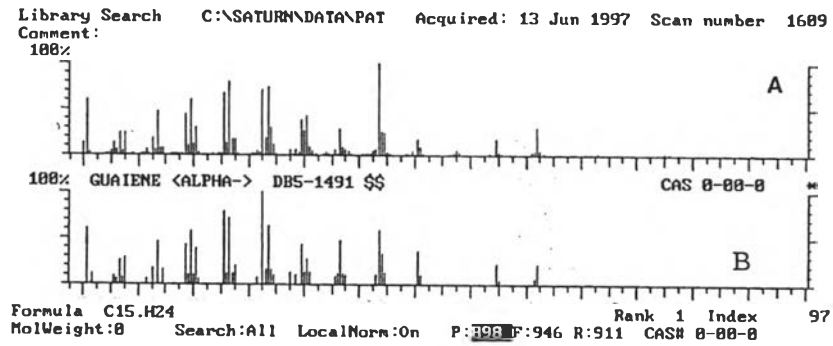


Figure 118 Mass spectra of guaiene <α-> (A) and authentic guaiene <α-> (B) by GC-MS

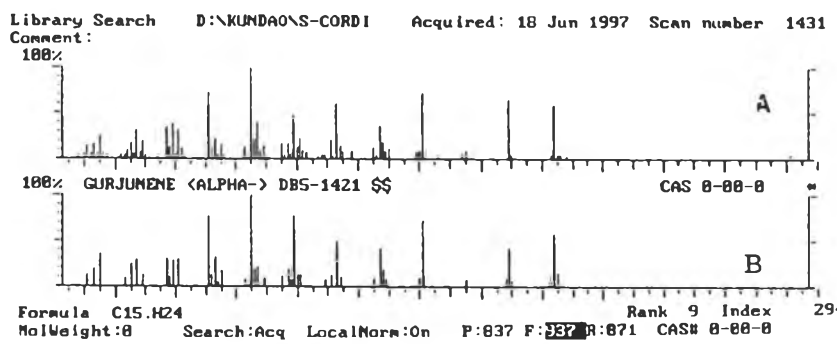


Figure 119 Mass spectra of gurjunene <α-> (A) and authentic gurjunene <α-> (B) by GC-MS

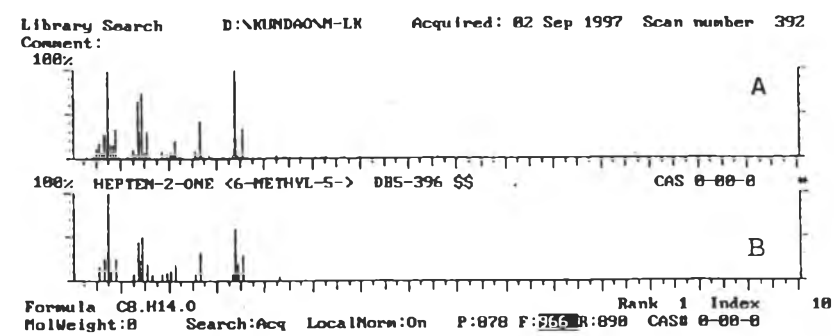


Figure 120 Mass spectra of hepten-2-one -<6-methyl-5-> (A) and authentic hepten-2-one -<6-methyl-5-> (B) by GC-MS

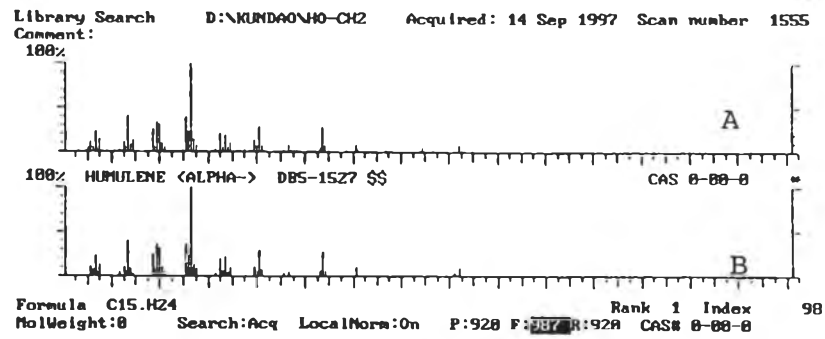


Figure 121 Mass spectra of humulene <α-> (A) and authentic humulene <α-> (B) by GC-MS

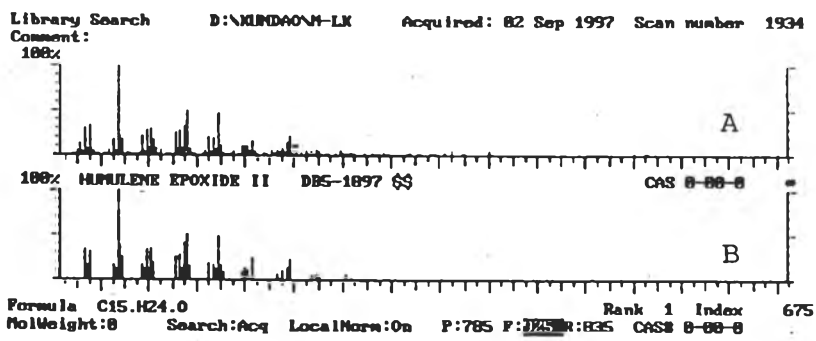


Figure 122 Mass spectra of humulene epoxide II (A) and authentic humulene epoxide II (B) by GC-MS

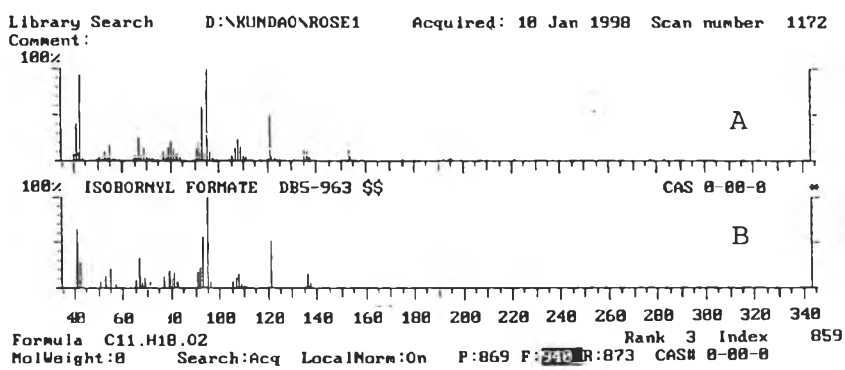


Figure 123 Mass spectra of isobonyl formate (A) and authentic isobonyl formate (B) by GC-MS

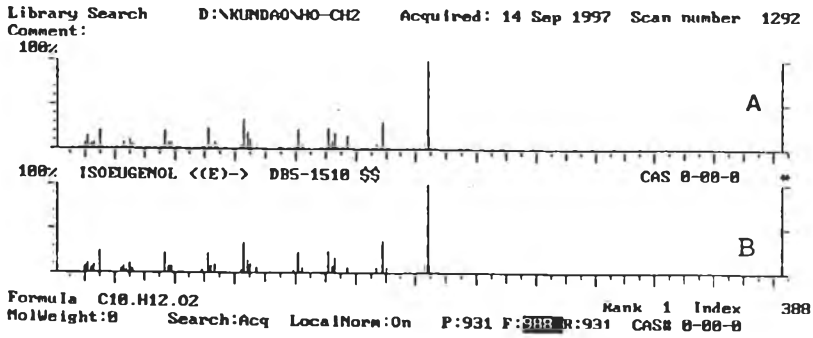


Figure 124 Mass spectra of isoeugenol <(*E*)-> (A) authentic isoeugenol <(*E*)-> (B) by GC-MS

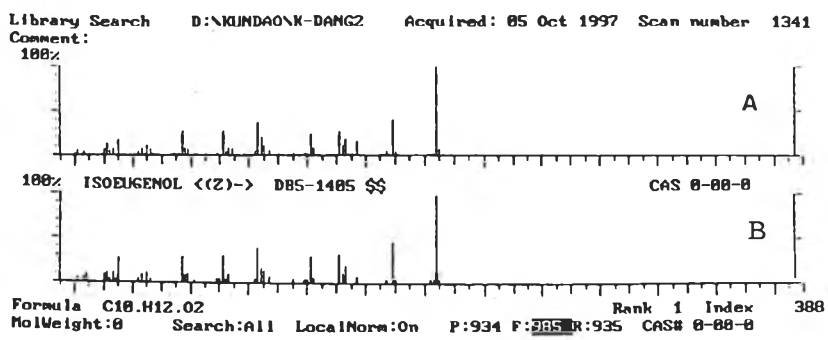


Figure 125 Mass spectra of isoeugenol <(*Z*)-> (A) and authentic isoeugenol <(*Z*)-> (B) by GC-MS

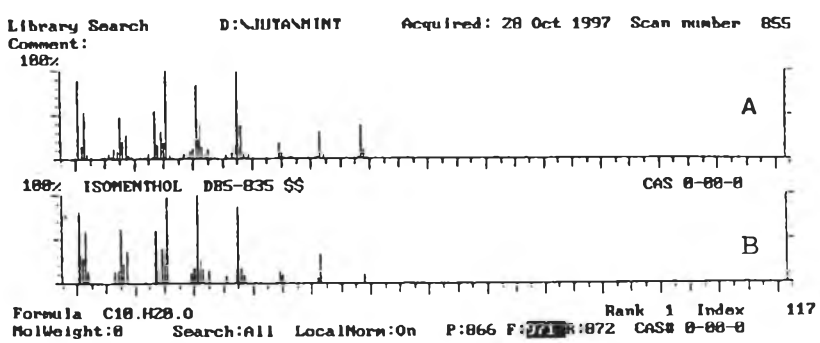


Figure 126 Mass spectra of isomenthol (A) and authentic isomenthol (B) by GC-MS

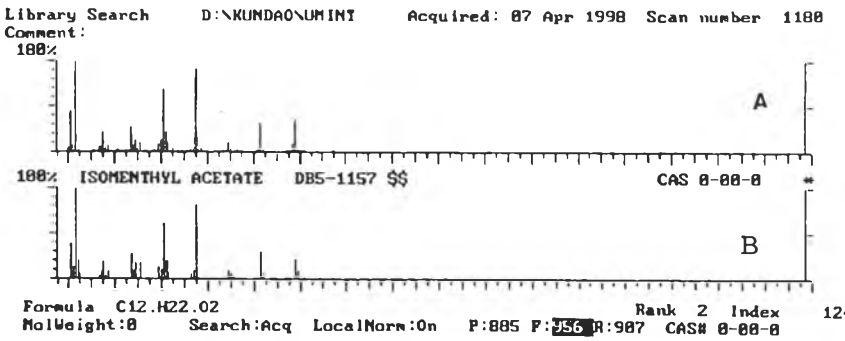


Figure 127 Mass spectra of isomenthyl acetate (A) and authentic isomenthyl acetate (B) by GC-MS

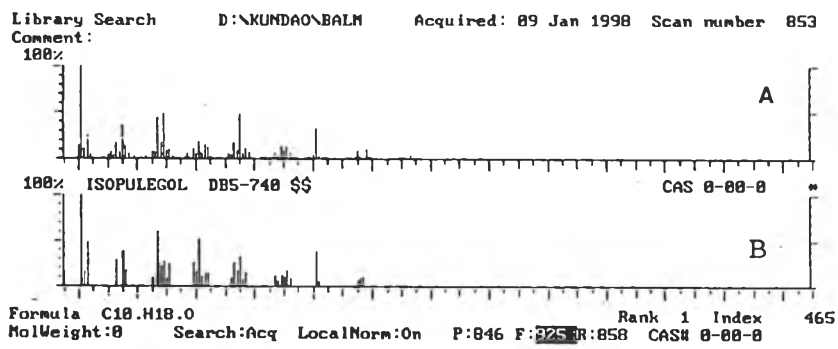


Figure 128 Mass spectra of isopulegol (A) and authentic isopulegol (B) by GC-MS

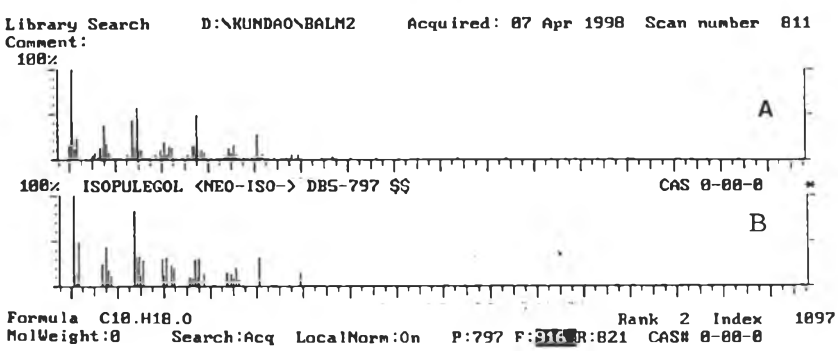


Figure 129 Mass spectra of isopulegol <*neo-iso-*> (A) and authentic isopulegol <*neo-iso-*> (B) by GC-MS

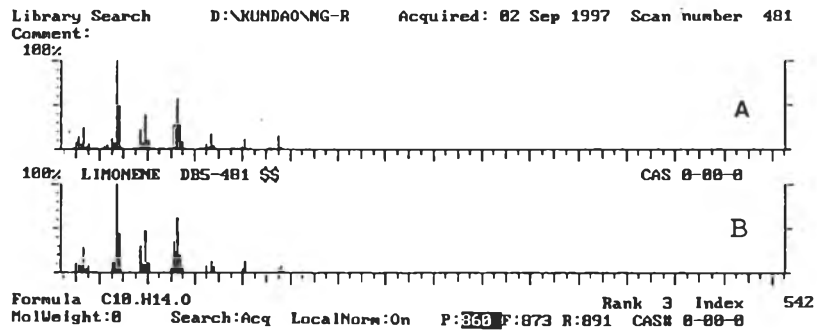


Figure 130 Mass spectra of limonene (A) and authentic limonene (B) by GC-MS

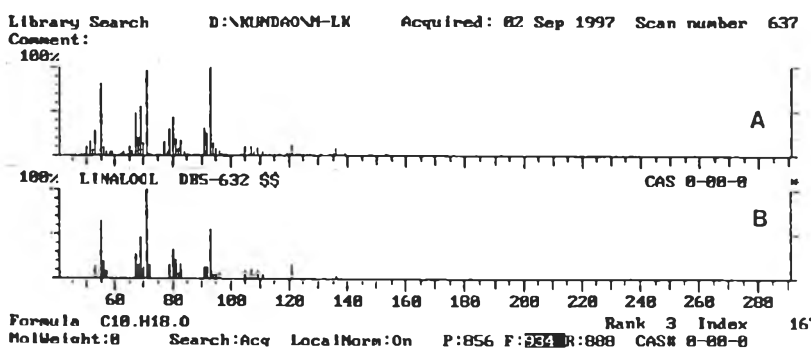


Figure 131 Mass spectra of linalool (A) and authentic linalool (B) by GC-MS

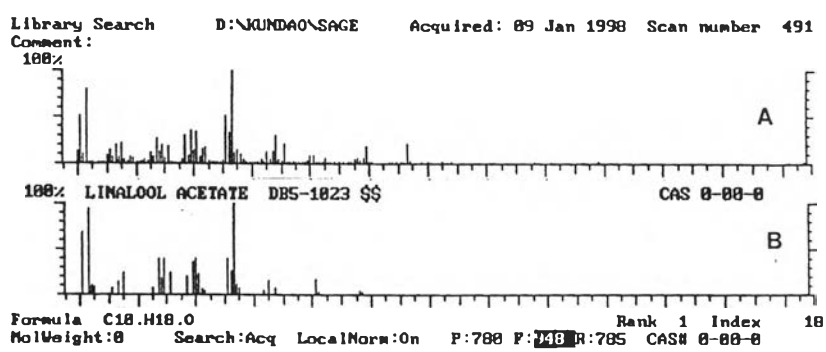


Figure 132 Mass spectra of linalool acetate (A) and authentic linalool acetate (B) by GC-MS

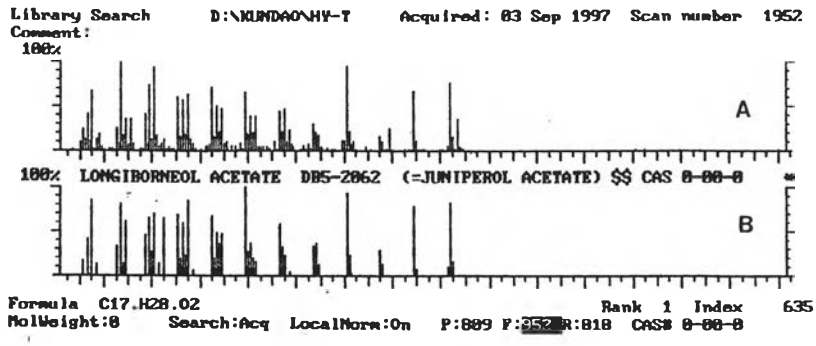


Figure 133 Mass spectra of longiborneol acetate (A) and authentic longiborneol acetate (B) by GC-MS

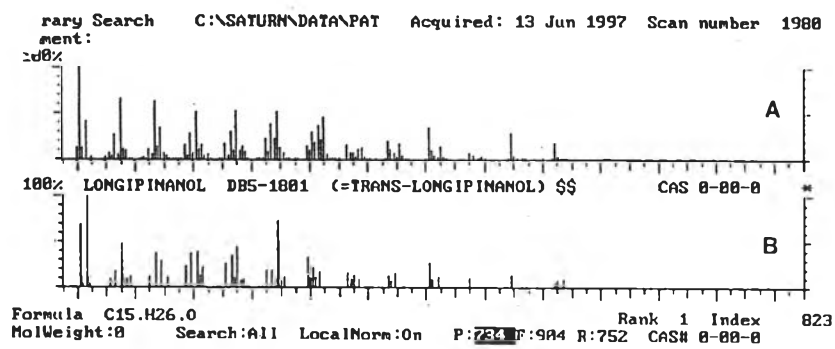


Figure 134 Mass spectra of longipinanol (A) and authentic longipinanol (B) by GC-MS

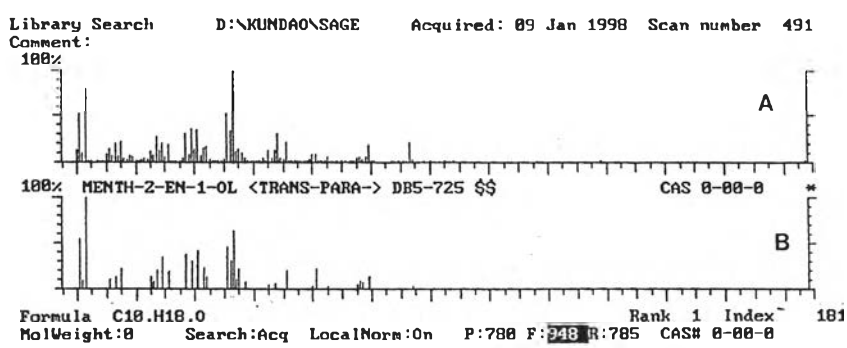


Figure 135 Mass spectra of menth-2-en-1-ol <*trans-para-*> (A) and authentic menth-2-en-1-ol <*trans-para-*> (B) by GC-MS

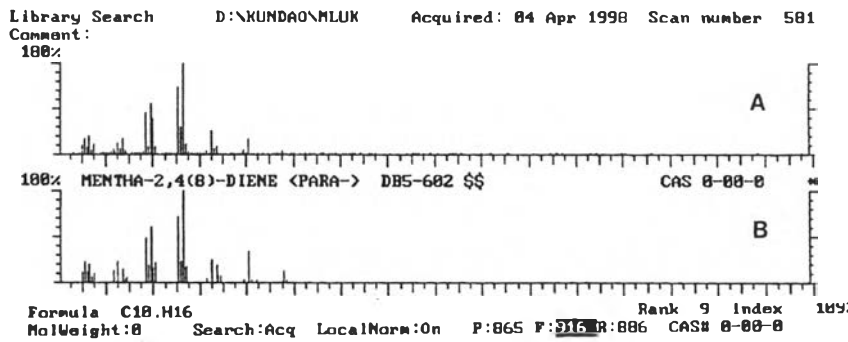


Figure 136 Mass spectra of mentha-2,4(8)-diene <*para*->(A) and authentic mentha-2,4(8)-diene <*para*->(B) by GC-MS

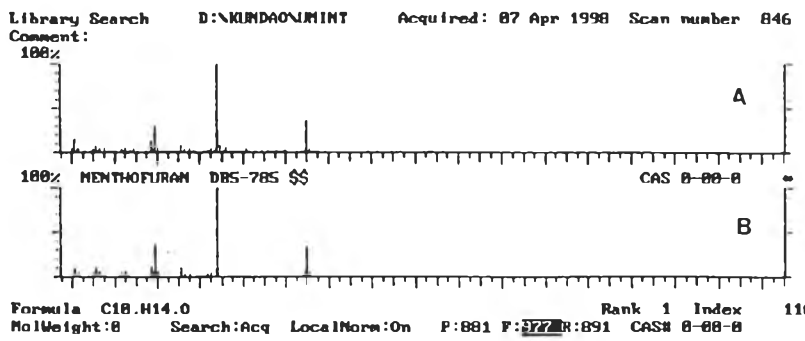


Figure 137 Mass spectra of menthofuran (A) and authentic menthofuran (B) by GC-MS

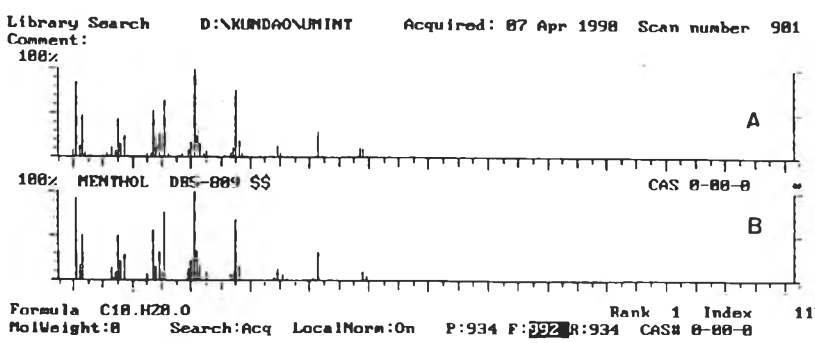


Figure 138 Mass spectra of menthol (A) and authentic menthol (B) by GC-MS

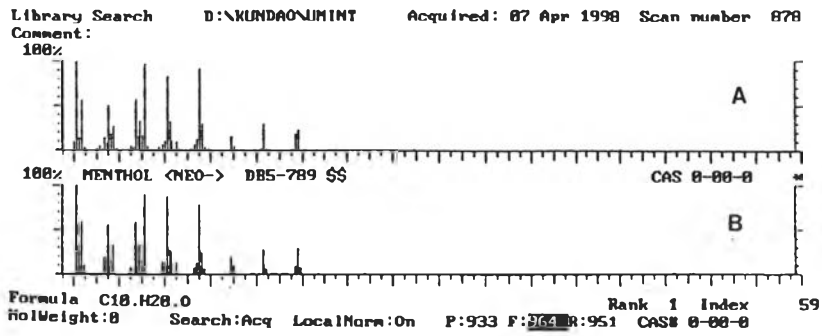


Figure 139 Mass spectra of menthol <*neo*-> (A) and authentic menthol <*neo*-> (B) by GC-MS

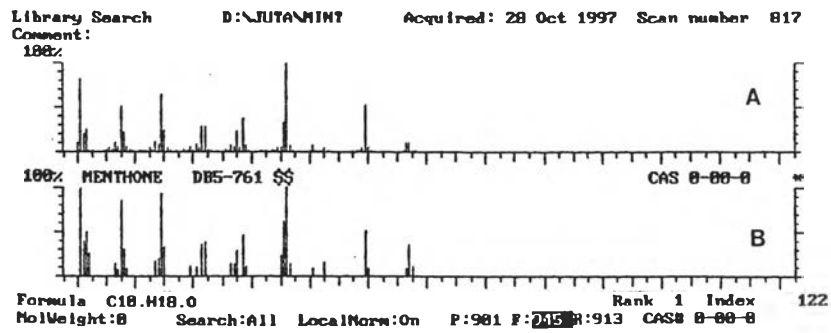


Figure 140 Mass spectrum of menthone (A) and authentic menthone (B) by GC-MS

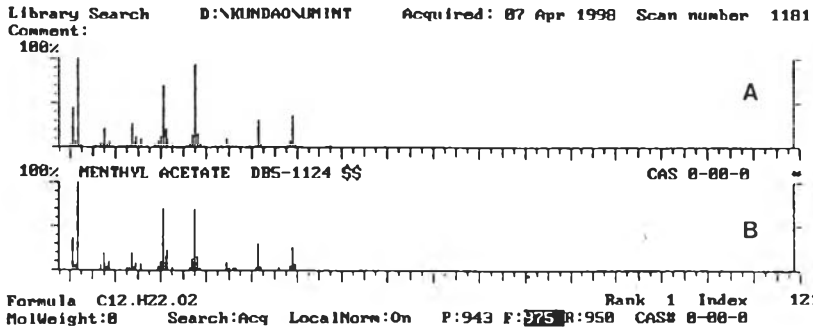


Figure 141 Mass spectra of menthyl acetate (A) and authentic menthyl acetate (B) by GC-MS

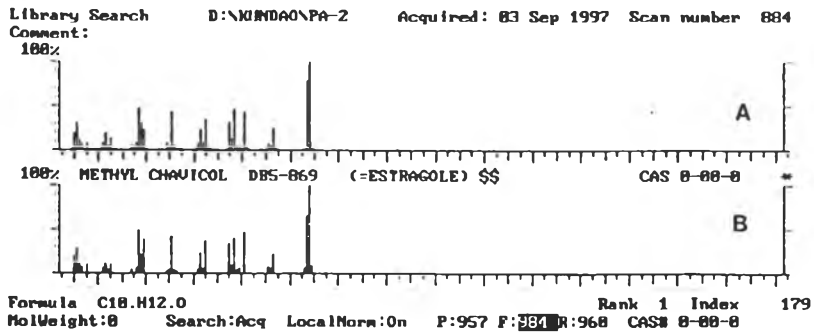


Figure 142 Mass spectra of methyl chavicol (A) and authentic methyl chavicol (B) by GC-MS

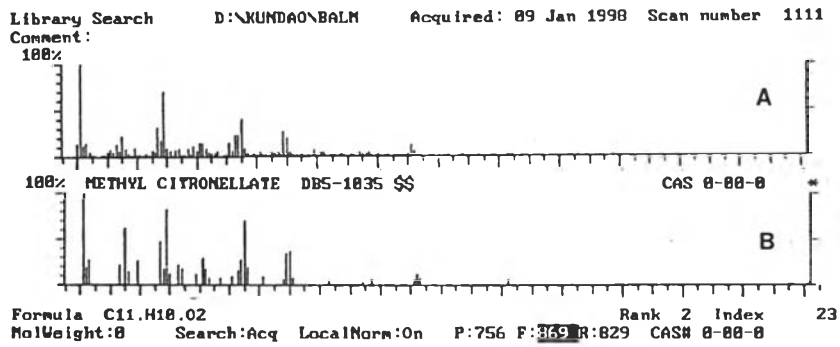


Figure 143 Mass spectra of methyl citronellate (A) and authentic methyl citronellate (B) by GC-MS

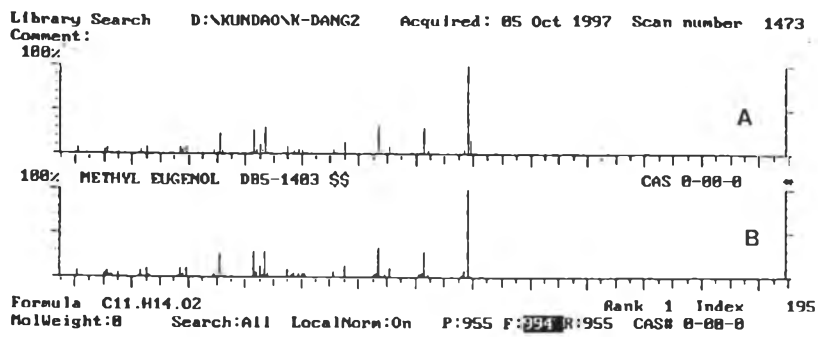


Figure 144 Mass spectra of methyl eugenol (A) and authentic methyl eugenol (B) by GC-MS

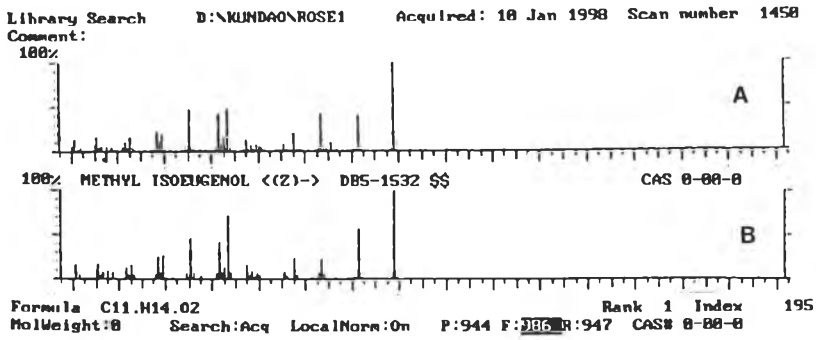


Figure 145 Mass spectra of methyl isoeugenol <(*Z*)-> (A) and authentic methyl isoeugenol <(*Z*)-> (B) by GC-MS

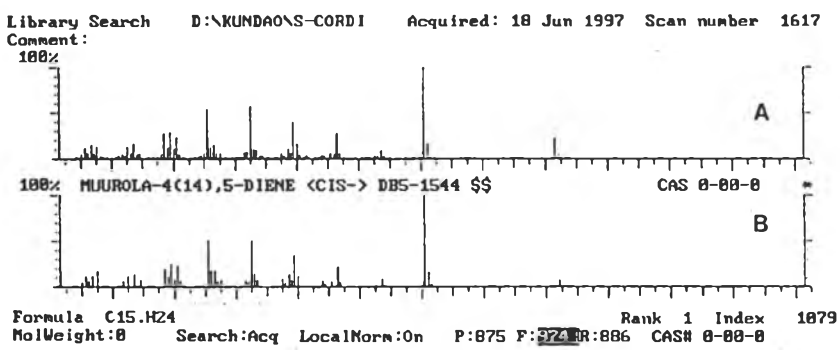


Figure 146 Mass spectra of muurola-4(14), 5-diene <*cis*-> (A) and authentic muurola-4(14), 5-diene <*cis*-> (B) by GC-MS

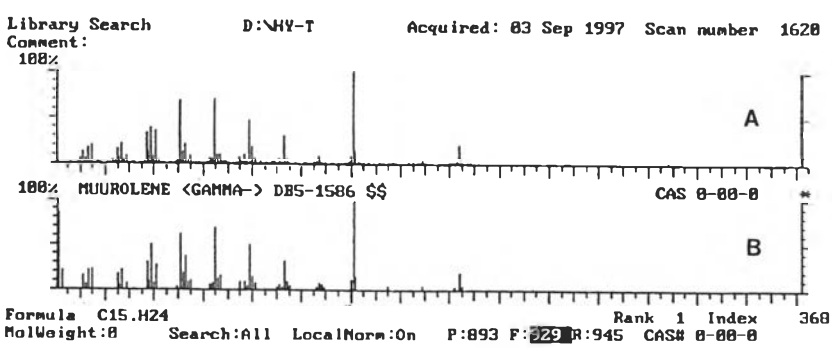


Figure 147 Mass spectra of muurolene <γ-> (A) and authentic muurolene <γ-> (B) by GC-MS

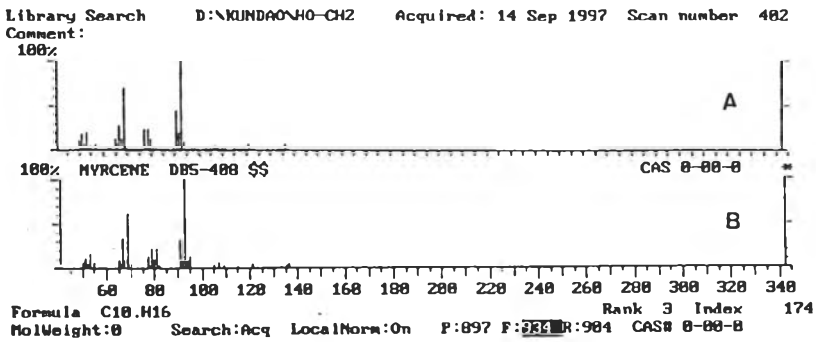


Figure 148 Mass spectra of myrcene (A) and authentic myrcene (B) by GC-MS

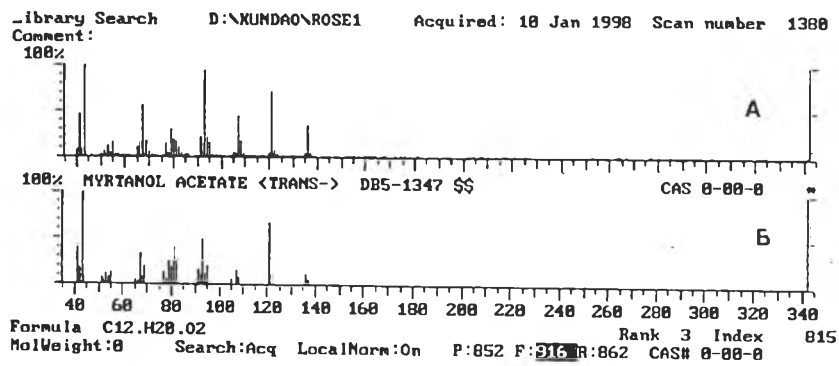


Figure 149 Mass spectra of myrcene (A) and authentic myrcene (B) by GC-MS

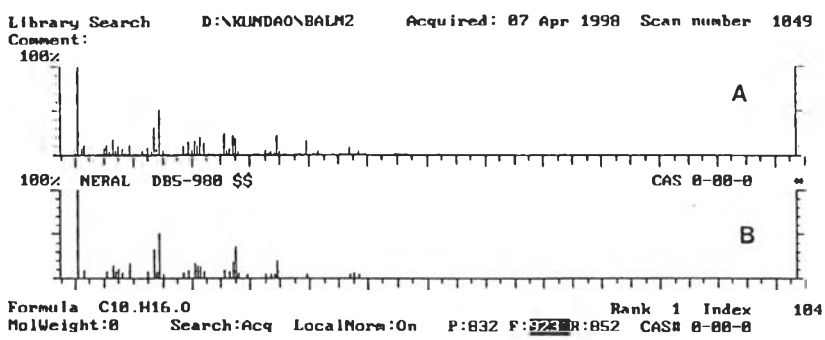


Figure 150 Mass spectra of neral (A) and authentic neral (B) by GC-MS

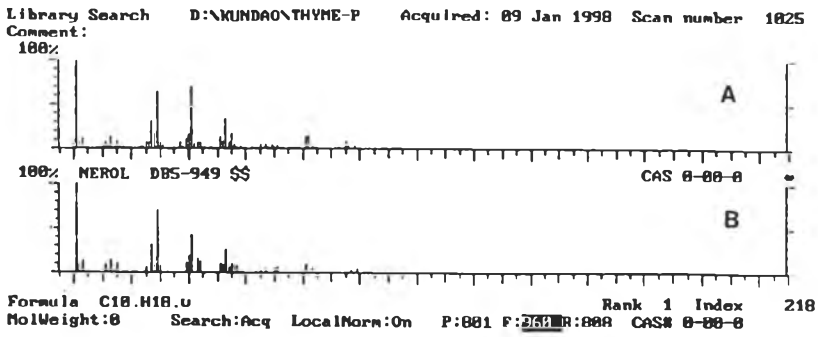


Figure 151 Mass spectra of nerol (A) and authentic nerol (B) by GC-MS

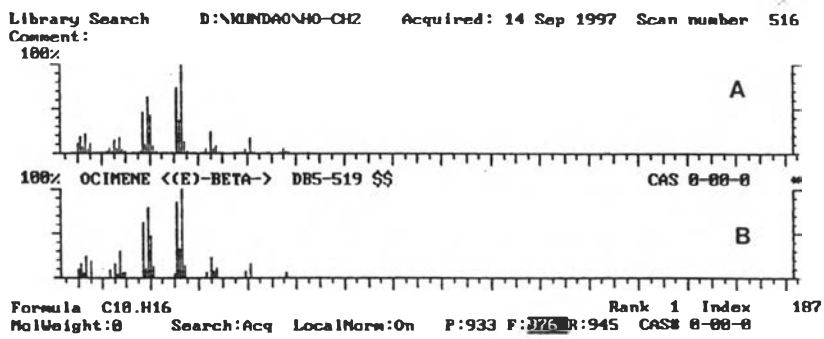


Figure 152 Mass spectra of ocimene <*(E)-β-*> (A) and authentic ocimene <*(E)-β-*> (B) by GC-MS

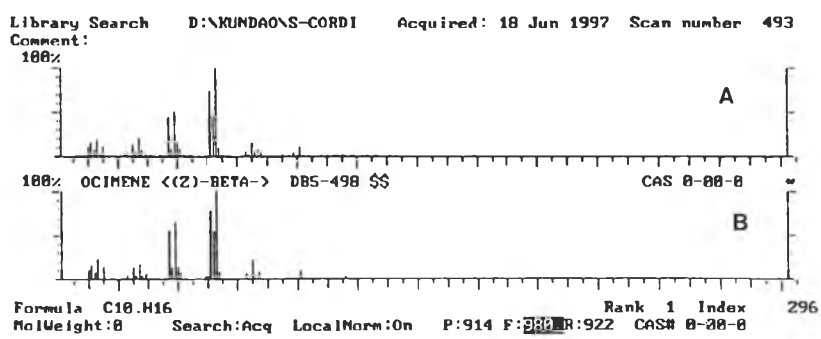


Figure 153 Mass spectra of ocimene <*(Z)-β-*> (A) and authentic ocimene <*(Z)-β-*> (B) by GC-MS

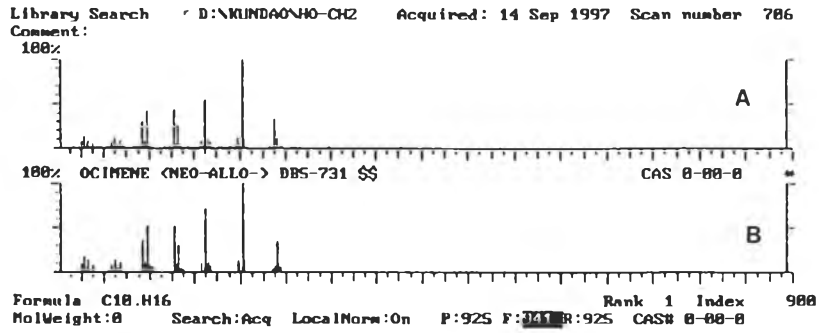


Figure 154 Mass spectra of ocimene <*neo-allo*-> (A) and authentic ocimene <*neo-allo*-> (B) by GC-MS

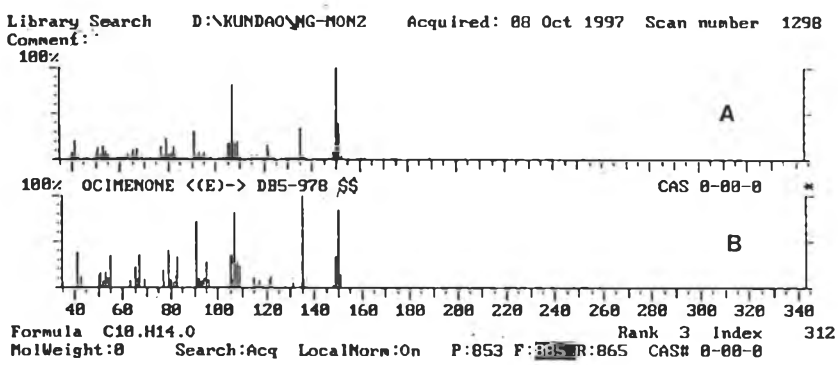


Figure 155 Mass spectra of ocimenone <(*E*)-> (A) and authentic ocimenone <(*E*)-> (B) by GC-MS

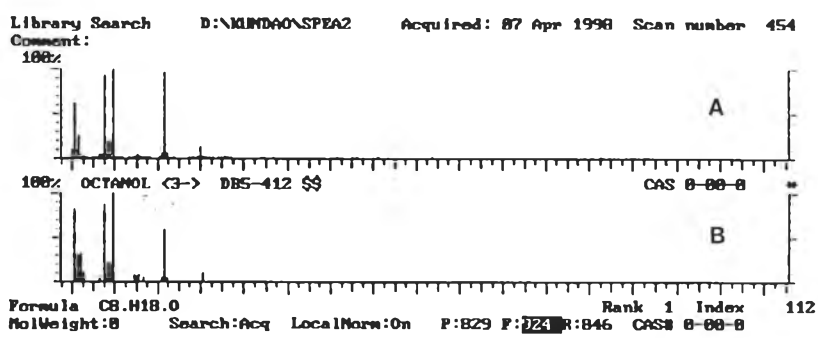


Figure 156 Mass spectra of octanol <3-> (A) and authentic octanol <3-> (B) by GC-MS

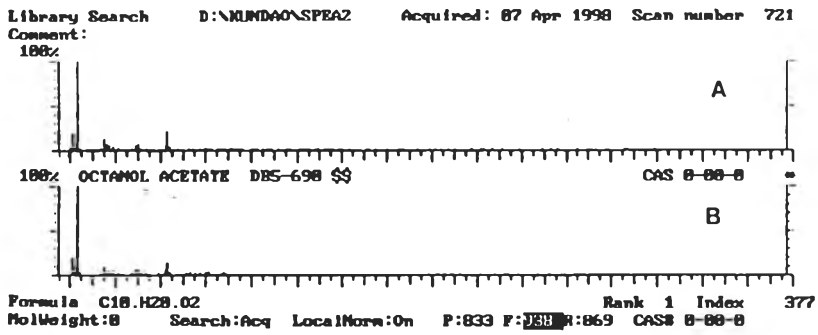


Figure 157 Mass spectra of octanol acetate (A) and authentic octanol acetate (B) by GC-MS

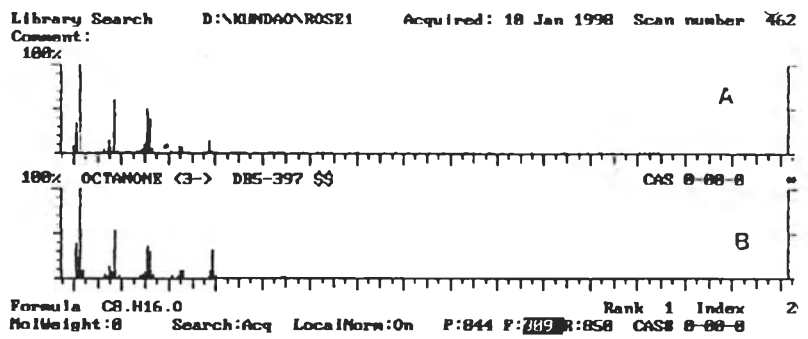


Figure 158 Mass spectra of octanone <3-> (A) and authentic octanone <3-> (B) by GC-MS

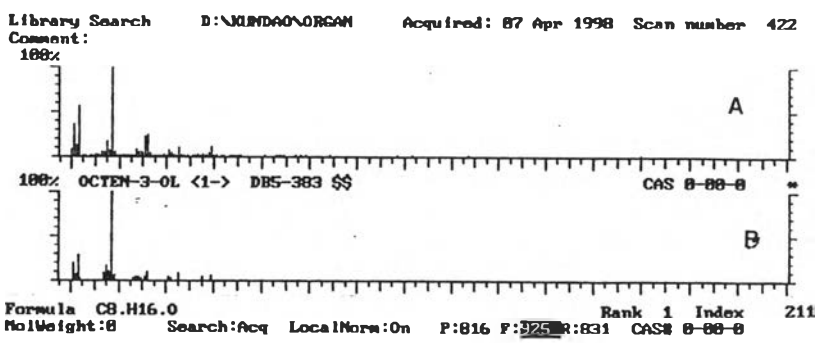


Figure 159 Mass spectra of octen-3-ol <1-> (A) and authentic octen-3-ol <1-> (B) by GC-MS

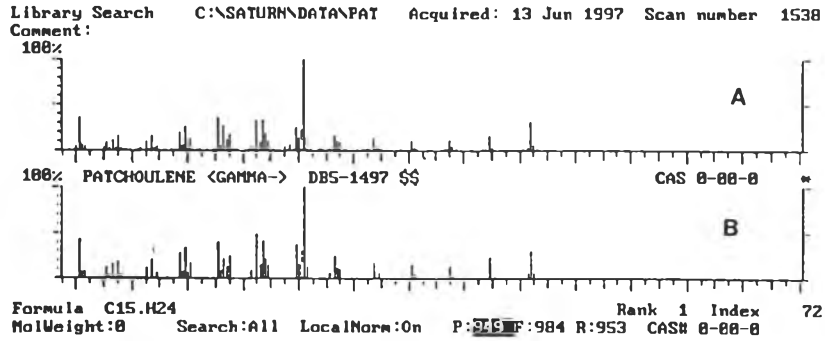


Figure 160 Mass spectra of patchoulene <γ-> (A)and authentic patchoulene <γ-> (B) by GC-MS

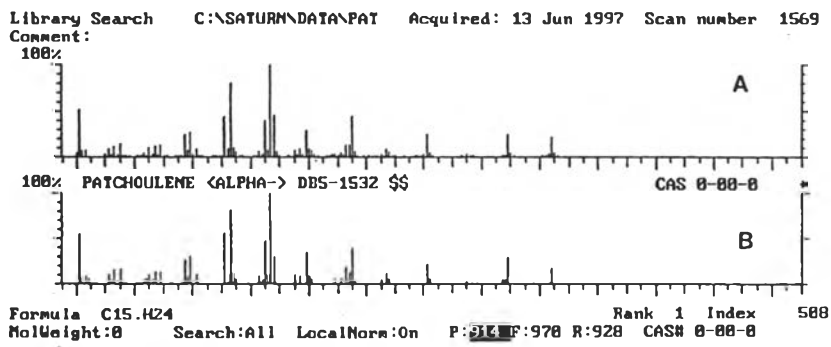


Figure 161 Mass spectra of patchoulene <α-> (A) and authentic patchoulene <α-> (B) by GC-MS

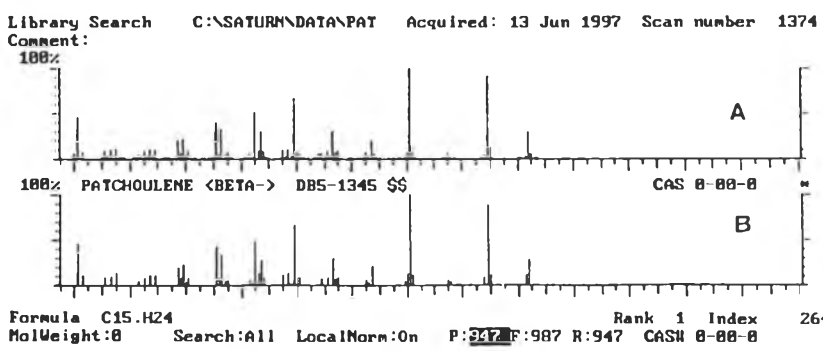


Figure 162 Mass spectra of patchoulene <β-> (A) and authentic patchoulene <β-> (B) by GC-MS

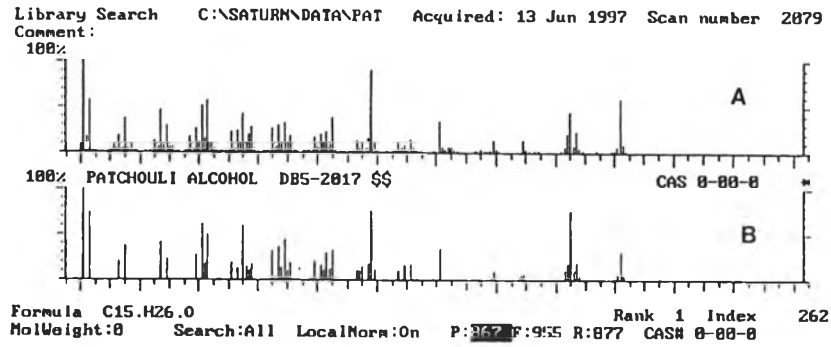


Figure 163 Mass spectra of patchouli alcohol (A) and authentic patchouli alcohol (B) by GC-MS

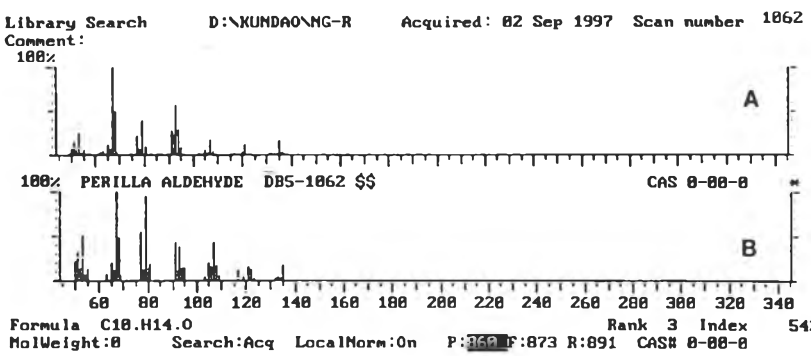


Figure 164 Mass spectra of perilla aldehyde (A) and authentic perilla aldehyde (B) by GC-MS

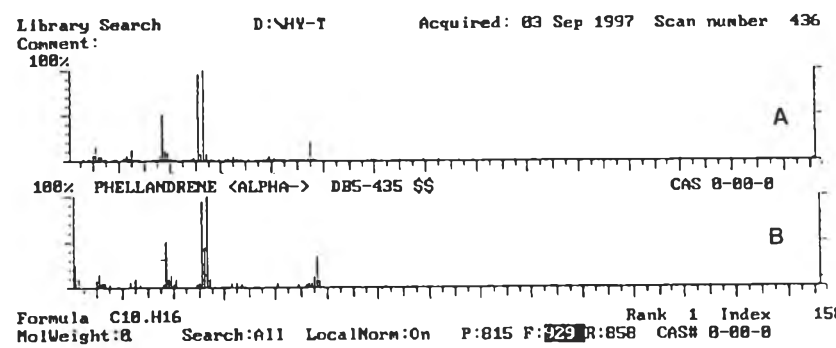


Figure 165 Mass spectra of phellandrene <α-> (A) and authentic phellandrene <α-> (B) by GC-MS

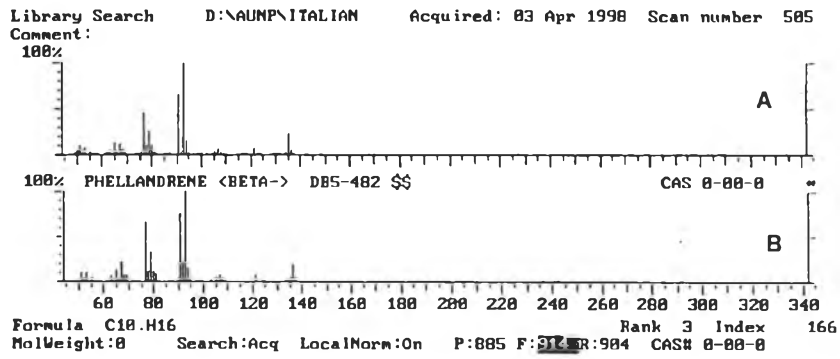


Figure 166 Mass spectra of phellandrene <β-> (A) and authentic phellandrene <β-> (B) by GC-MS

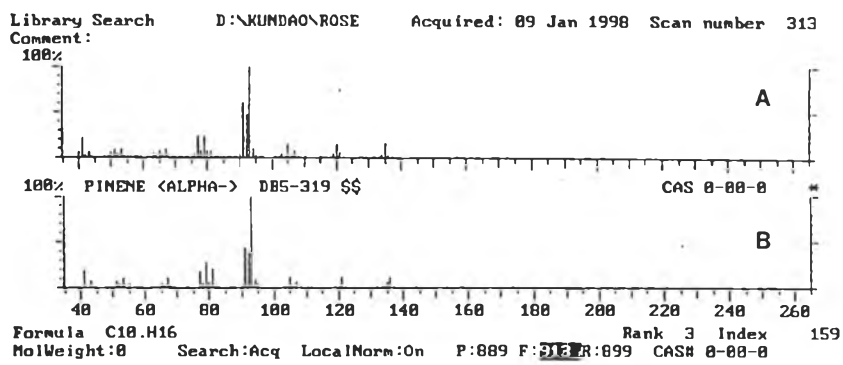


Figure 167 Mass spectra of pinene <α-> (A) and authentic pinene <α-> (B) by GC-MS

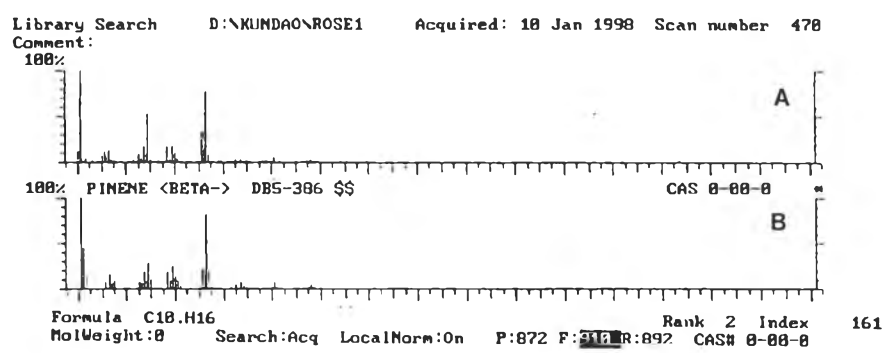


Figure 168 Mass spectra of pinene <β-> (A) and authentic pinene <β-> (B) by GC-MS

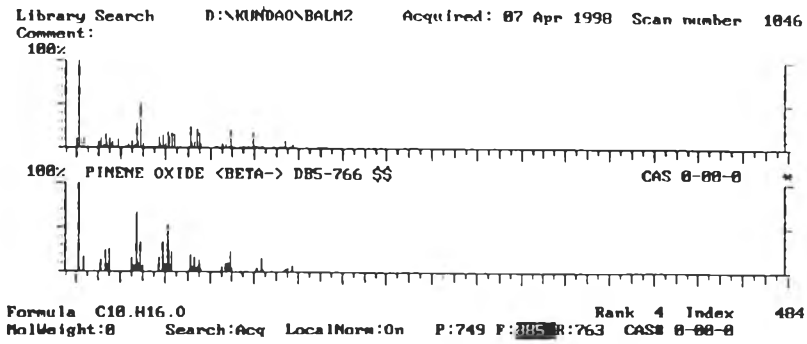


Figure 169 Mass spectra of pinene oxide <*β*-> (A) and authentic pinene oxide <*β*-> (B) by GC-MS

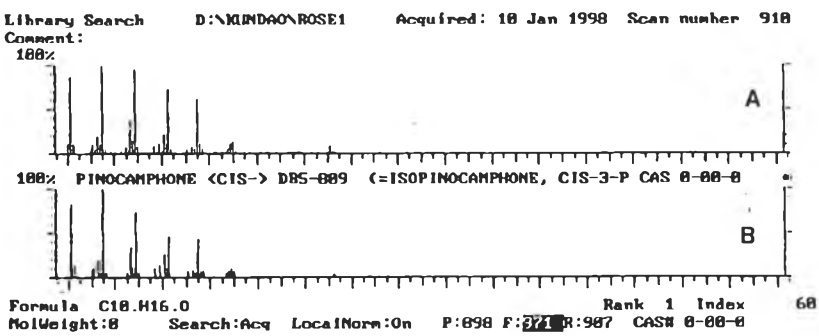


Figure 170 Mass spectra of pinocamphone <*cis*-> (A) and authentic pinocamphone <*cis*-> (B) by GC-MS

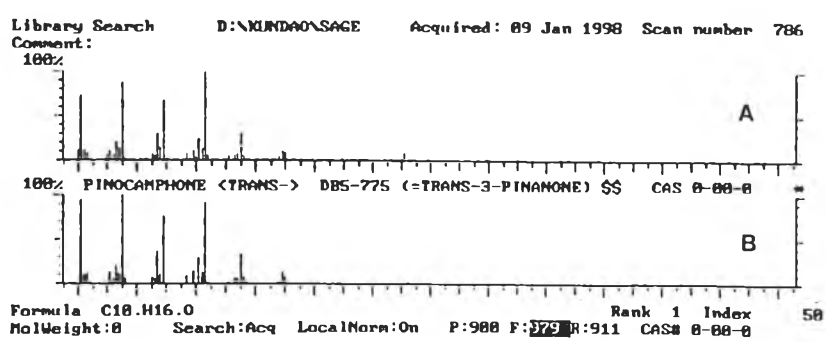


Figure 171 Mass spectra of pinocamphone <*trans*-> (A) and authentic pinocamphone <*trans*-> (B) by GC-MS

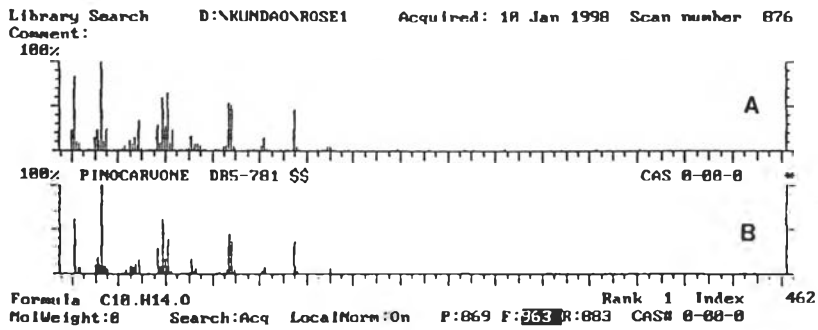


Figure 172 Mass spectra of pinocarvone (A) and authentic pinocarvone (B) by GC-MS

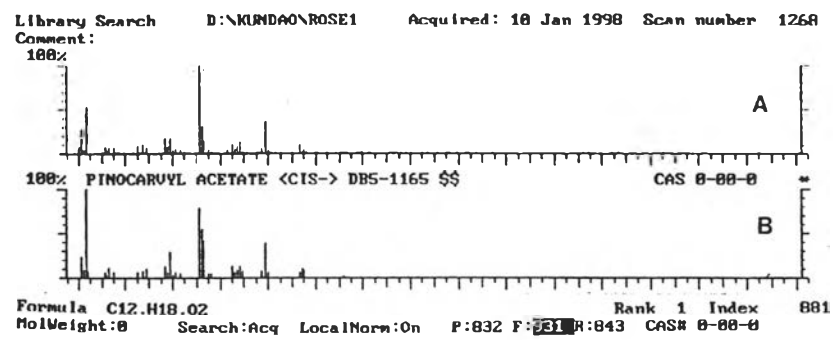


Figure 173 Mass spectra of pinocarvyl acetate <*cis*-> (A) and authentic pinocarvyl acetate <*cis*-> (B) by GC-MS

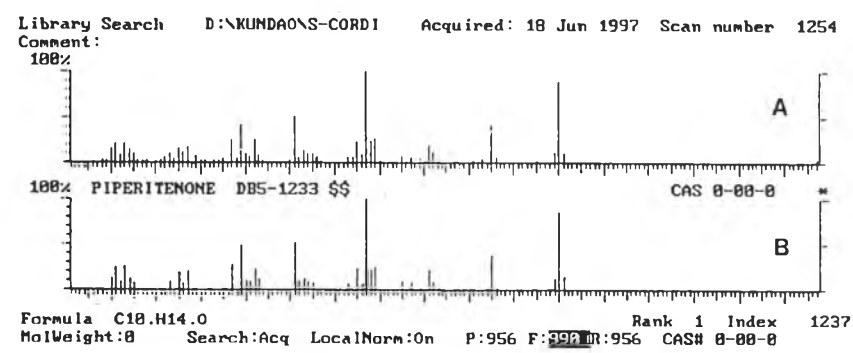


Figure 174 Mass spectra of piperitenone (A) and authentic piperitenone (B) by GC-MS (B) by GC-MS

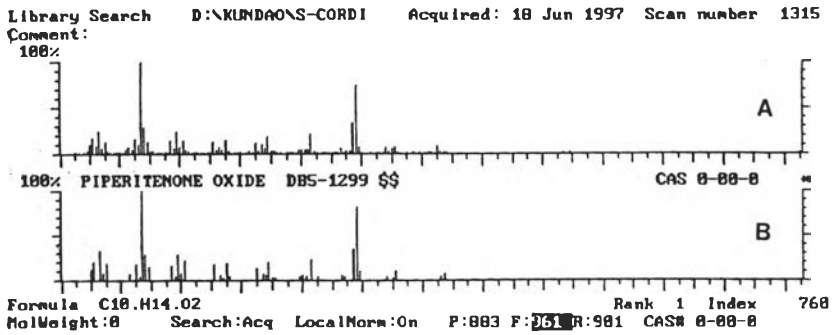


Figure 175 Mass spectra of piperitenone oxide (A) and authentic piperitenone oxide (B) by GC-MS

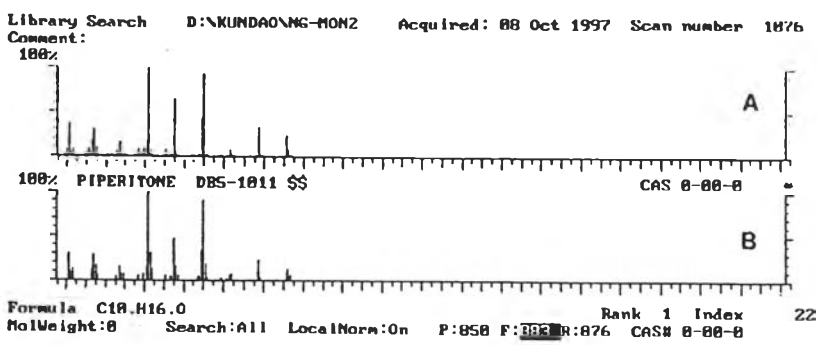


Figure 176 Mass spectra of piperitone (A) and authentic piperitone (B) by GC-MS

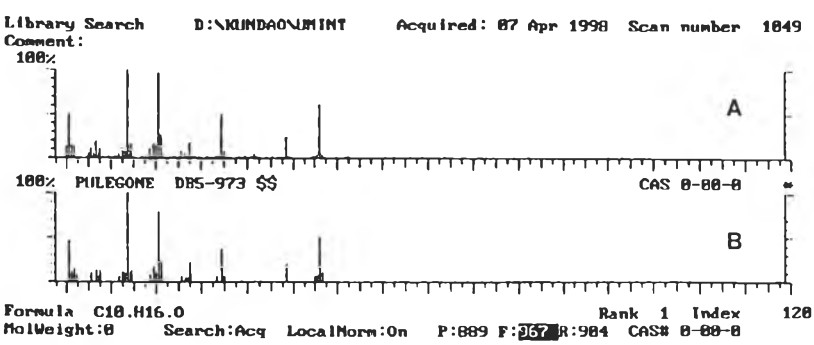


Figure 177 Mass spectra of pulegone (A) and authentic pulegone (B) by GC-MS

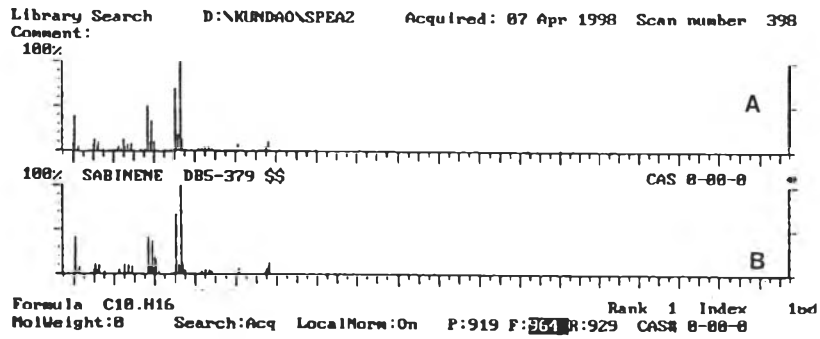


Figure 178 Mass spectra of sabinene (A) and authentic sabinene (B) by GC-MS

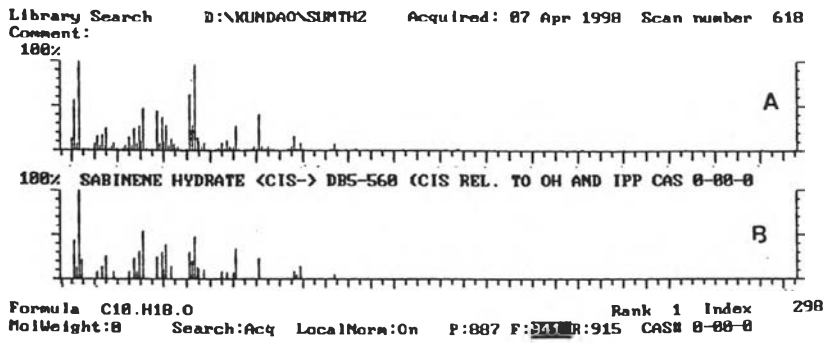


Figure 179 Mass spectra of sabinene hydrate <*cis*-> (A) and authentic sabinene hydrate <*cis*-> (B) by GC-MS

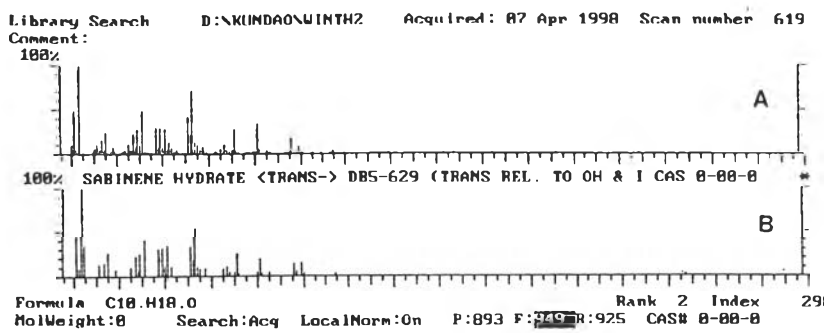


Figure 180 Mass spectra of sabinene hydrate <*trans*-> (A) and authentic sabinene hydrate <*trans*-> (B) by GC-MS

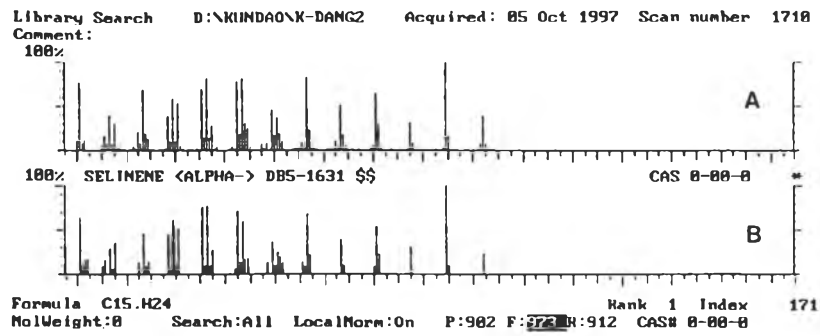


Figure 181 Mass spectra of selinene <α–> (A) and authentic selinene <α–> (B) by GC-MS

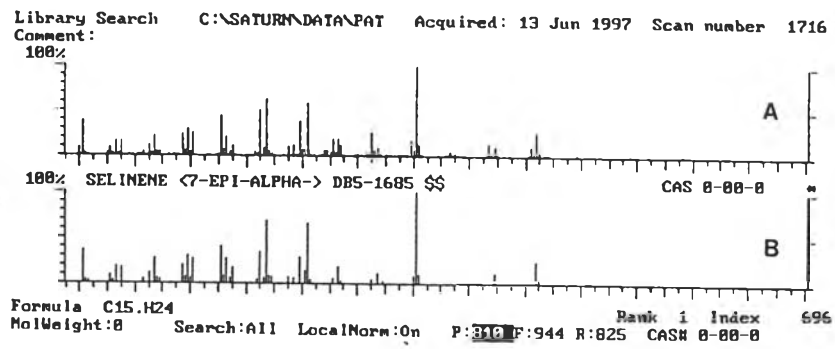


Figure 182 Mass spectra of selinene <*7-epi-*α-> (A) and authentic selinene <*7-epi-*α-> (B) by GC-MS

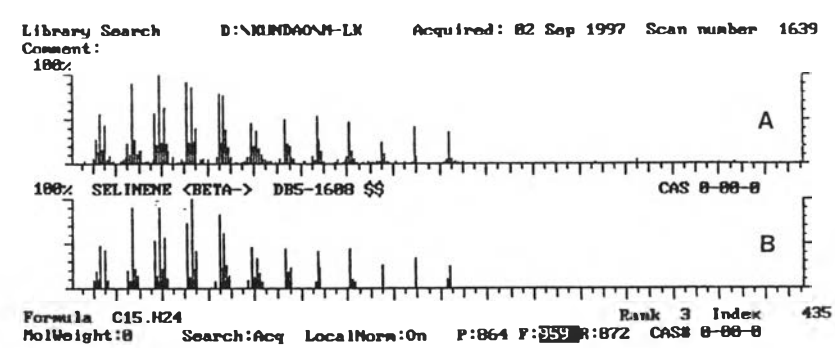


Figure 183 Mass spectra of selinene <β-> (A) and authentic selinene <β-> (B) by GC-MS

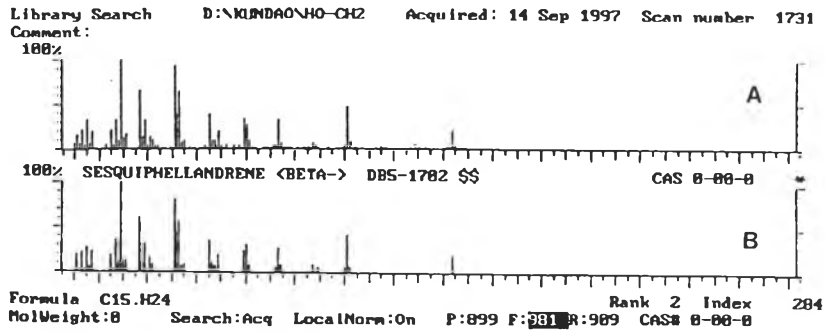


Figure 184 Mass spectra of sesquiphellandrene <β-> (A) and authentic sesquiphellandrene <β-> (B) by GC-MS

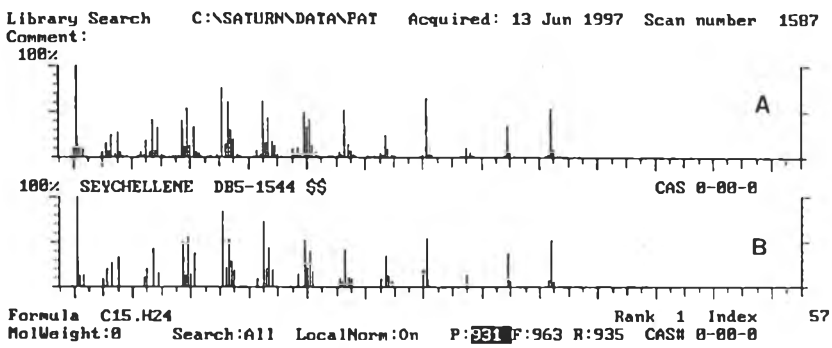


Figure 185 Mass spectra of seychellene (A) and authentic seychellene (B) by GC-MS

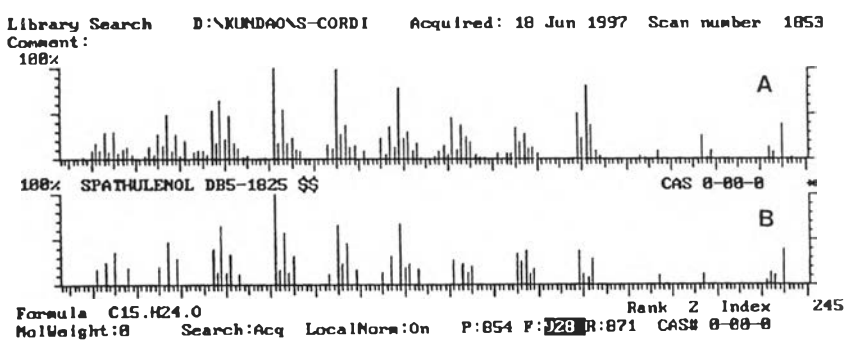


Figure 186 Mass spectra of spathulenol (A) and authentic spathulenol (B) by GC-MS

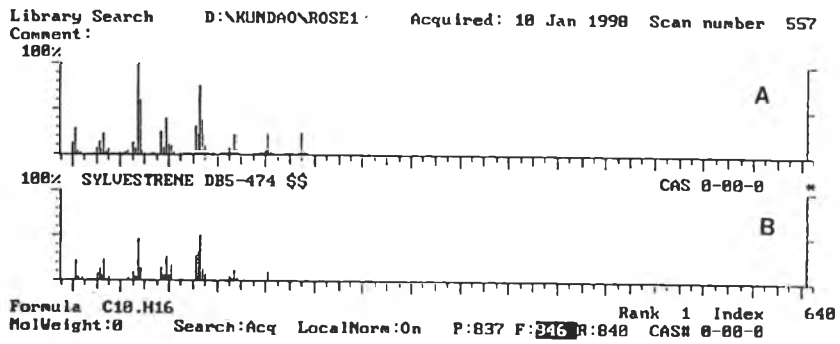


Figure 187 Mass spectra of sylvestrene (A) and authentic sylvestrene (B) by GC-MS

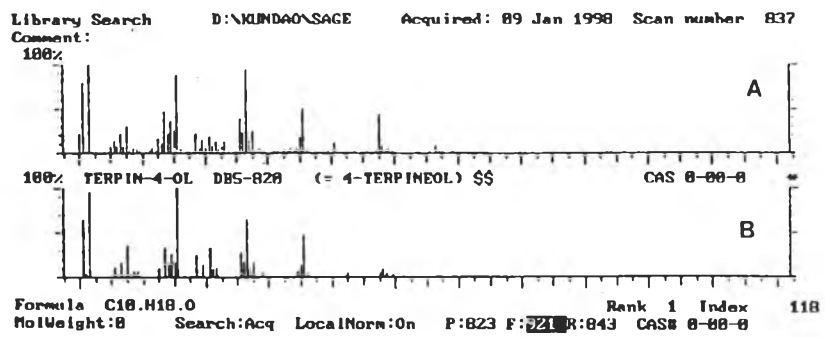


Figure 188 Mass spectra of terpin-4-ol (A) and authentic terpin-4-ol (B) by GC-MS

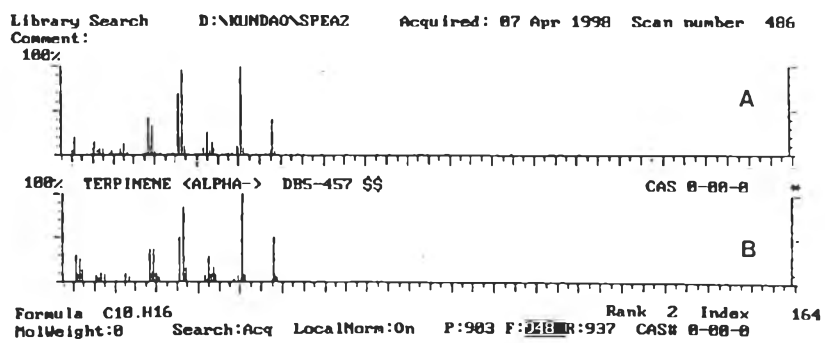


Figure 189 Mass spectra of terpinene <α-> (A) and authentic terpinene <α-> (B) by GC-MS

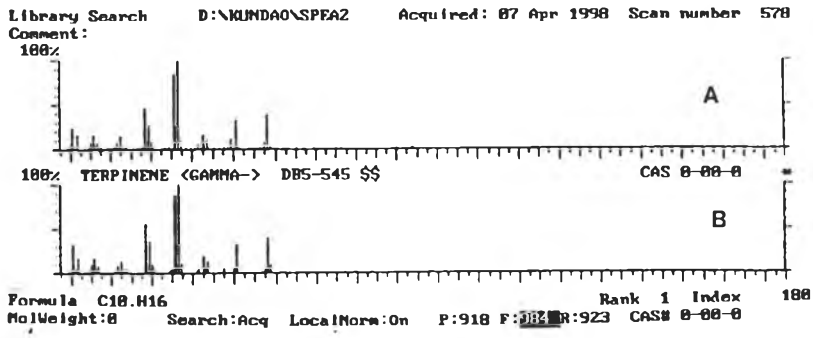


Figure 190 Mass spectra of terpinene <γ-> (A) and of authentic terpinene <γ-> (B) by GC-MS

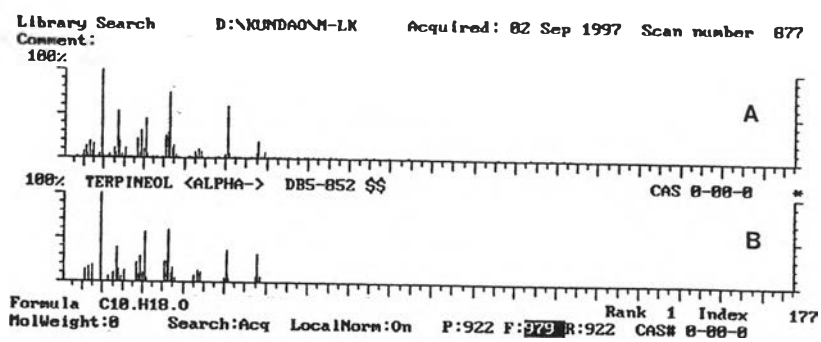


Figure 191 Mass spectra of terpineol <α-> (A) and of authentic terpineol <α-> (B) by GC-MS

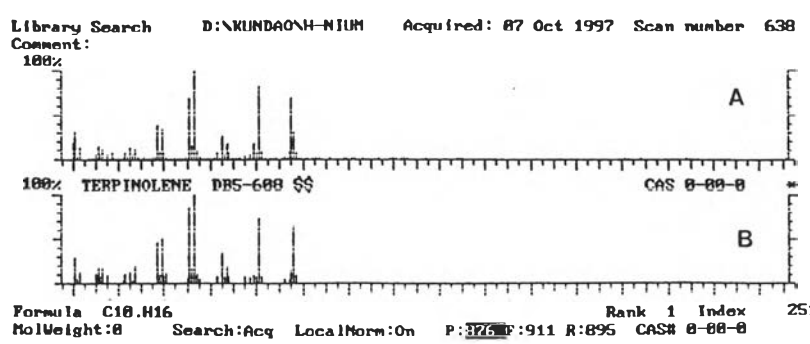


Figure 192 Mass spectra of terpinolene (A) and authentic terpinolene (B) by GC-MS

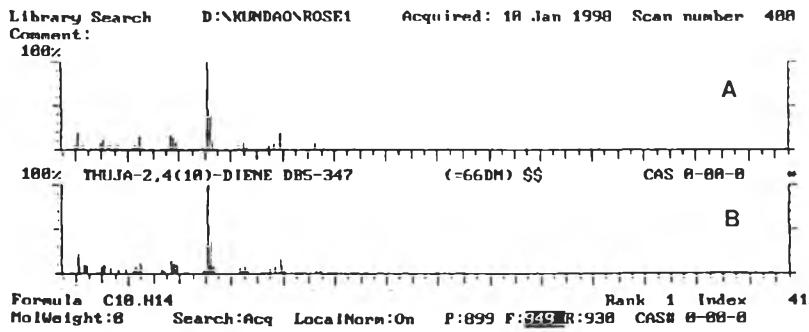


Figure 193 Mass spectra of thuja 2,4 (10) - diene (A) and authentic thuja 2,4 (10)-diene (B) by GC-MS

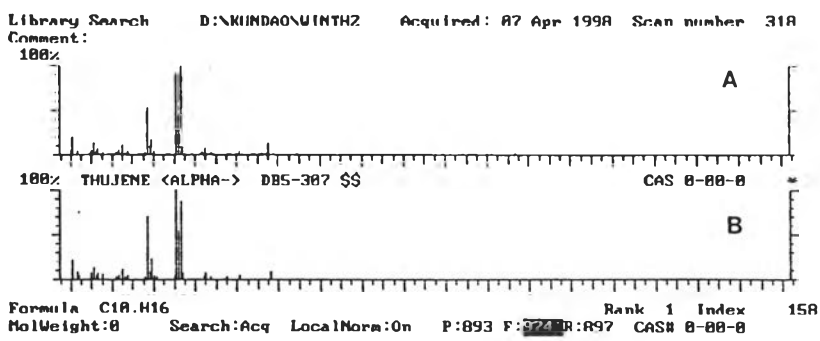


Figure 194 Mass spectra of thujene <α-> (A) and authentic thujene <α-> (B) by GC-MS

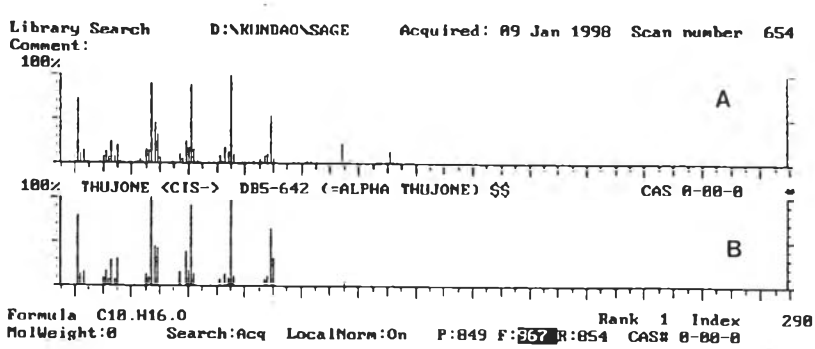


Figure 195 Mass spectra of thujone <*cis*-> (A) and of authentic thujone <*cis*-> (B) by GC-MS

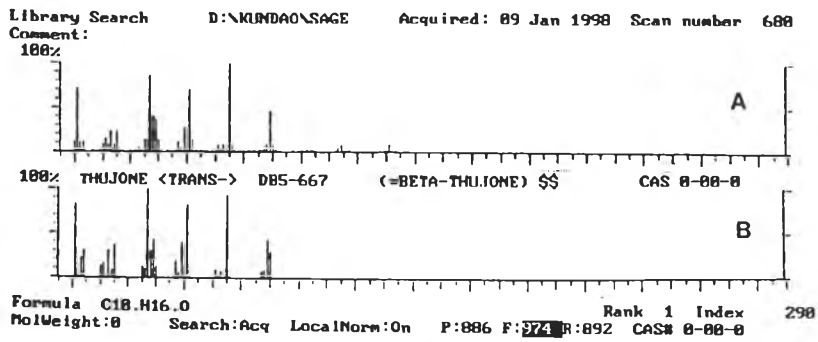


Figure 196 Mass spectra of thujone <*trans*-> (A) and authentic thujone <*trans*-> (B) by GC-MS

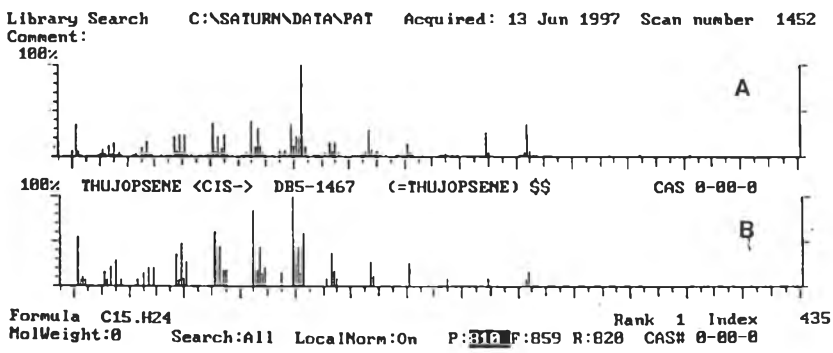


Figure 197 Mass spectra of thujopsene <*cis*-> (A) and authentic thujopsene <*cis*-> (B) by GC-MS

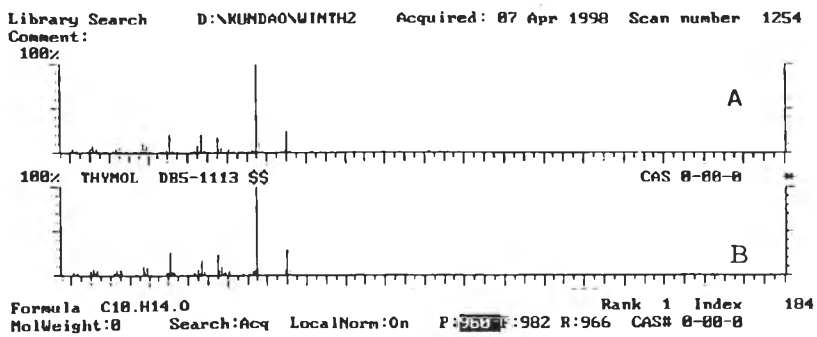


Figure 198 Mass spectra of thymol (A) and authentic thymol (B) by GC-MS

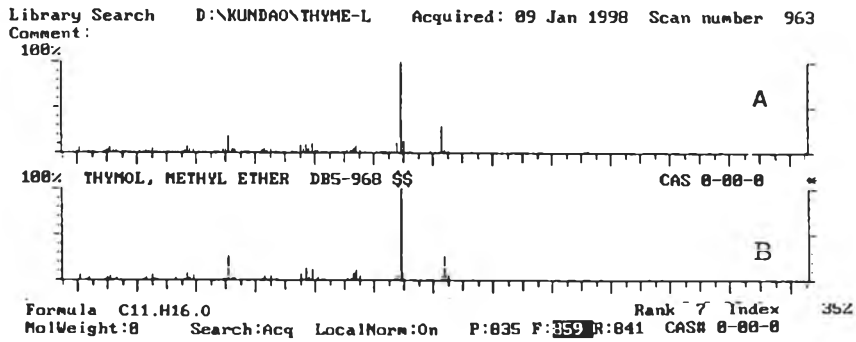


Figure 199 Mass spectra of thymol, methyl ether (A) and authentic thymol, methyl ether (B) by GC-MS

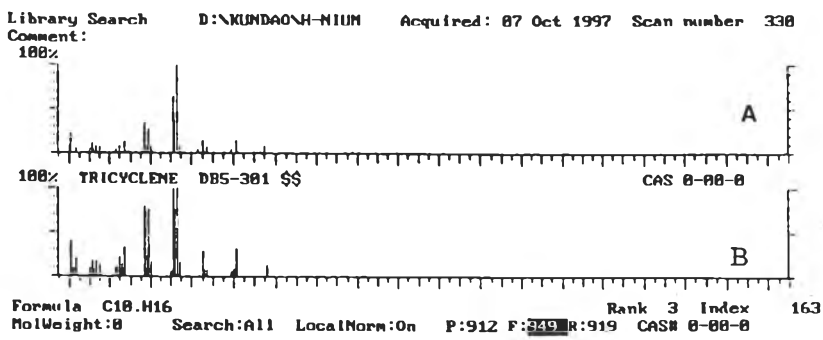


Figure 200 Mass spectra of tricyclene (A) and authentic tricyclene (B) by GC-MS

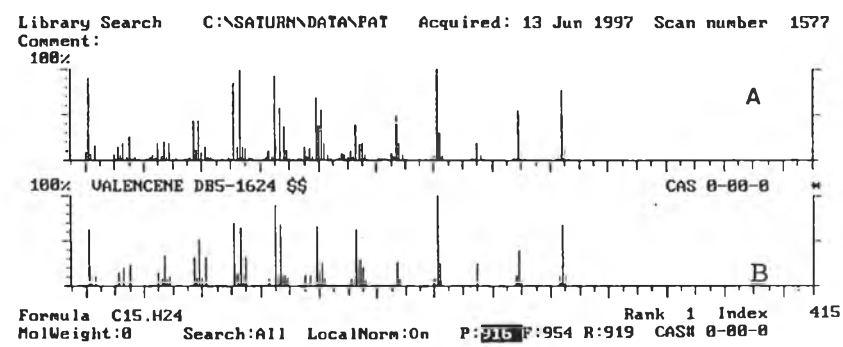


Figure 211 Mass spectra of valencene (A) and authentic valencene (B) by GC-MS

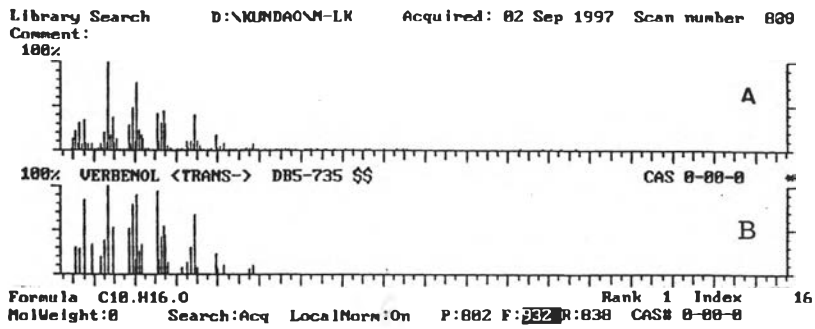


Figure 202 Mass spectra of verbenol <*trans*-> (A) and authentic verbenol <*trans*-> (B) by GC-MS

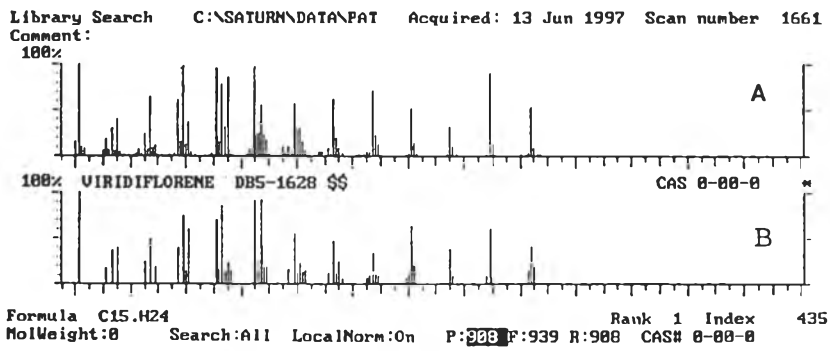


Figure 203 Mass spectra of viridiflorene (A) and authentic viridiflorene (B) by GC-MS

VITA

Miss Daojan Choochoat was born in August 7,1972 in Chanthaburi,Thailand. She received her Bachelor of Science in Pharmacy in 1994 from Rangsit University, Pathum Thani, Thailand. At present, she is a faculty member of the Department of Pharmacognosy, Faculty of Pharmacy, Rangsit University, Pathum Thani, Thailand.