



DEPARTEMEN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS DIPONEGORO
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

Tembalang Telpun 474754 Semarang Selatan

Lampiran 1

SURAT KETERANGAN IDENTIFIKASI

Kepala Laboratorium Ekologi Jurusan Biologi FMIPA Undip dengan ini menerangkan bahwa material tanaman yang dibawa oleh :

Nama : Any Kurnia

Nim : J301910602

Mahasiswa Jurusan Kimia FMIPA Undip ke Laboratorium Ekologi pada tanggal 2 Juli 1997, berdasarkan buku "Flora" karangan Dr CGGJ Van Steenis (1975) halaman 247 - 249 dan buku "Flora of Java" karangan C.A. Backer dan R.C Bakhuizen Van den Brink volume 2 (1965) halaman 107 - 109 klasifikasinya adalah :

Divisi : Spermatophyta
Sub Divisi : Angiospermae
Kelas : Dicotyledoneae
Ordo : Rutales
Famili : Rutaceae
Genus : Citrus
Species : Citrus Nobilis L.

Demikian surat ini dibuat untuk dapat digunakan seperlunya.

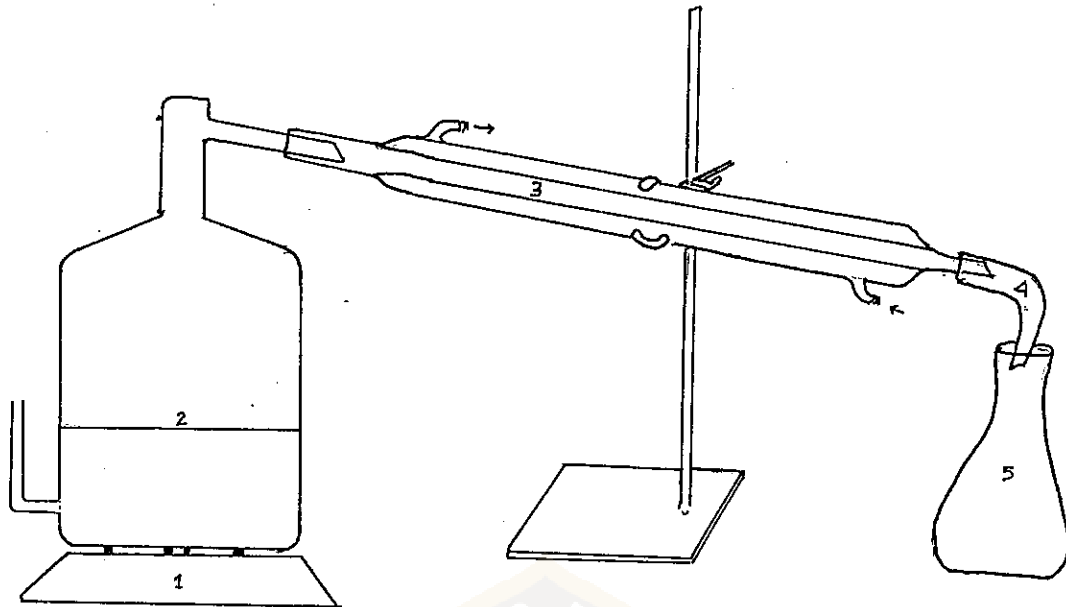
Semarang, 2 Juli 1997

Kepala Laboratorium Ekologi
Jurusan Biologi FMIPA Undip

Drs. Hendarko Sugondo, SU

NIP. 130 240 735

Gambar 4. Rangkaian Alat Distilasi Uap

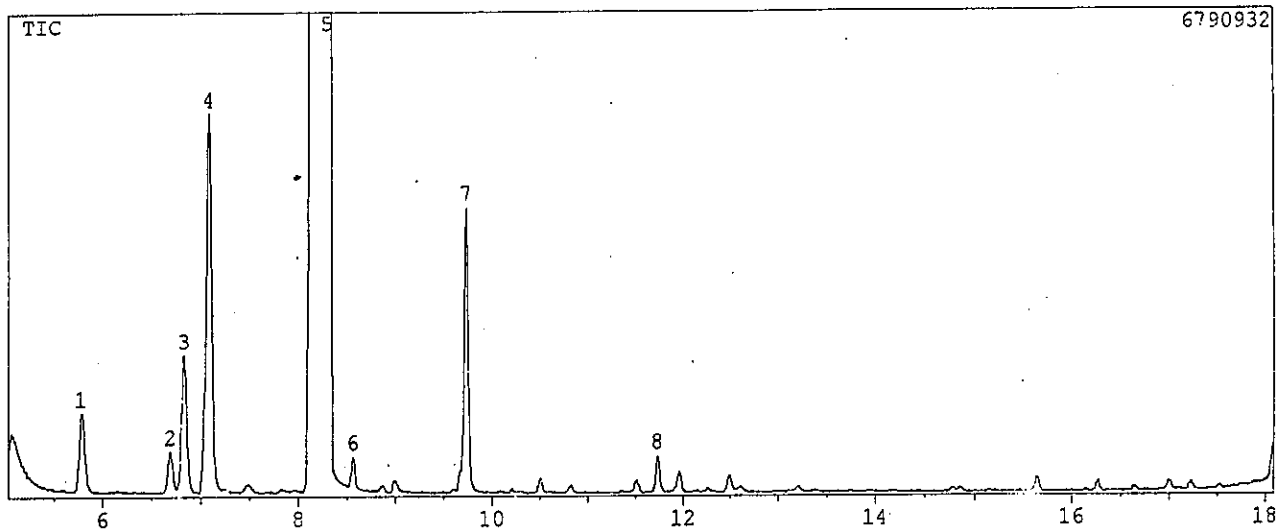


Keterangan :

1. pemanas
2. Sarangan
3. Kondenser
4. Adapter
5. Penampung distilat.



Data : ANY.D01 97/09/08 11:21:03
Sample : Minyak Kulit Jeruk, Any
Operator : Domo
Method File Name : ANY.MET



Data : ANY.D01 97/09/08 11:21:03
Sample : Minyak Kulit Jeruk, Any
Operator : Domo
Method File Name : ANY.MET

**** Peak Report ****

PKNO	R.Time	I.Time	F.Time	Area	Height	A/H(sec)	MK %Total	Name
1	5.783	5.717	5.883	4257380	1089034	3.909	0.41	
2	6.693	6.642	6.767	1803914	537054	3.359	0.17	
3	6.830	6.767	6.933	6826587	1877990	3.635	0.66	
4	7.089	6.992	7.200	20801608	5274710	3.944	2.02	
5	8.301	8.050	8.400	983613188	109274567	9.001	95.36	
6	8.566	8.525	8.625	1074713	414954	2.590	0.10	
7	9.736	9.642	9.825	11758689	3943829	2.982	1.14	
8	11.735	11.692	11.800	1348781	481336	2.802	0.13	

Total 1031484859 100.00



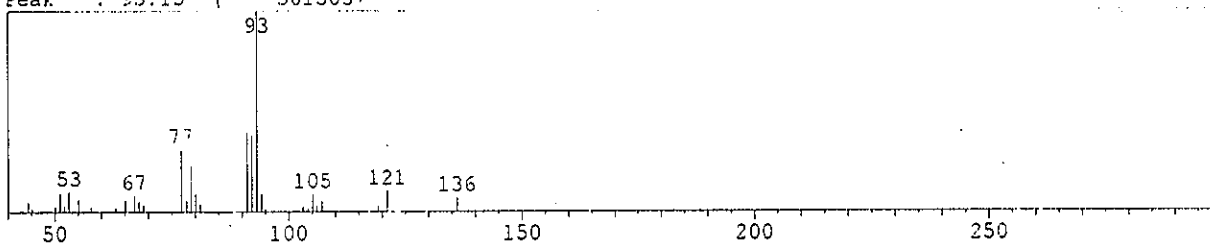
<Unknown Spectrum>

Data : ANY.D01

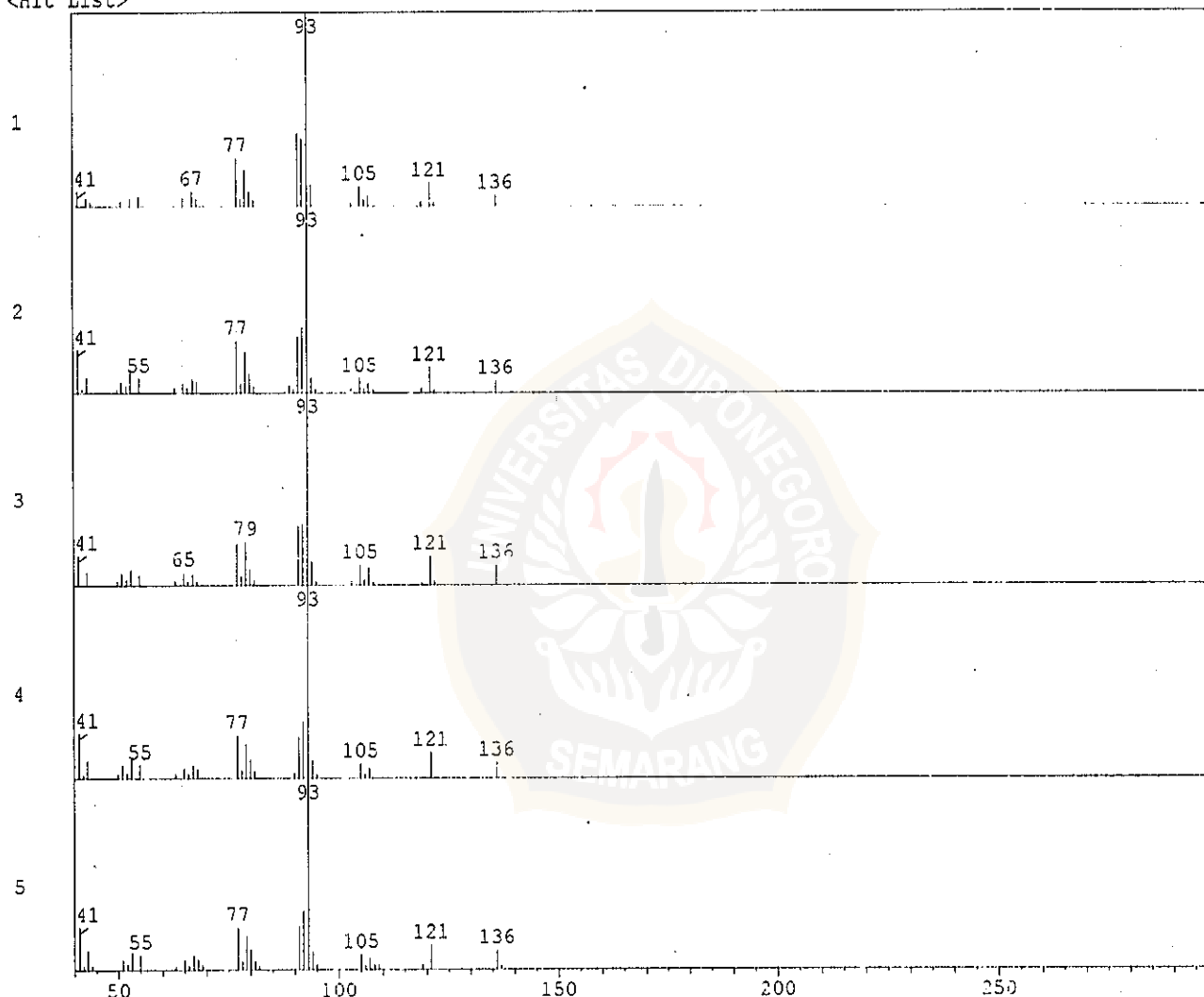
Mass Peak # : 31 Ret. Time : 5.783

Scan # : 95 B.G. Scan # : 164

Base Peak : 93.15 (301503)



<Hit List>



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	95	136	C ₁₀ H ₁₆ .alpha.-Pinene	80-56-8	3573	2
2	94	136	C ₁₀ H ₁₆ .alpha.-Pinene	80-56-8	3574	2
3	93	136	C ₁₀ H ₁₆ Tricyclo 2.2.1.0 ^{2,6} heptane, 1,3,3-trimethyl-	488-97-1	3509	2
4	93	136	C ₁₀ H ₁₆ .alpha.-Pinene \$\$ Bicyclo 3.1.1 hept-2-ene, 2,6,6-trimethyl- \$\$ 2-Pinene \$\$ Pinene \$	80-56-8	6680	1
5	93	136	C ₁₀ H ₁₆ .alpha.-Pinene	80-56-8	3572	2

Library Name

(1) NIST62.LIB (2) NIST12.LIB

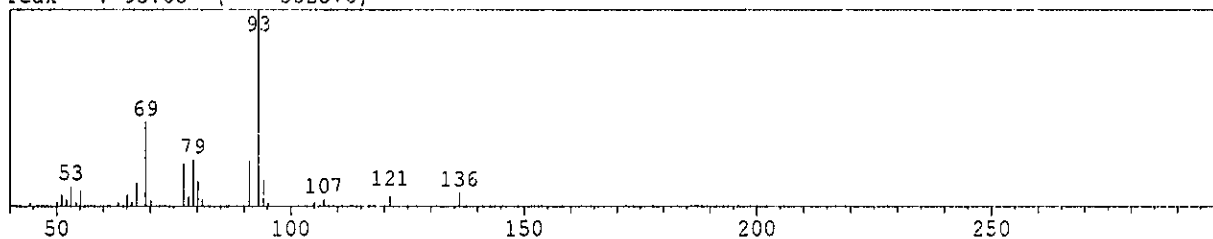
<Unknown Spectrum>

Data : ANY.D01

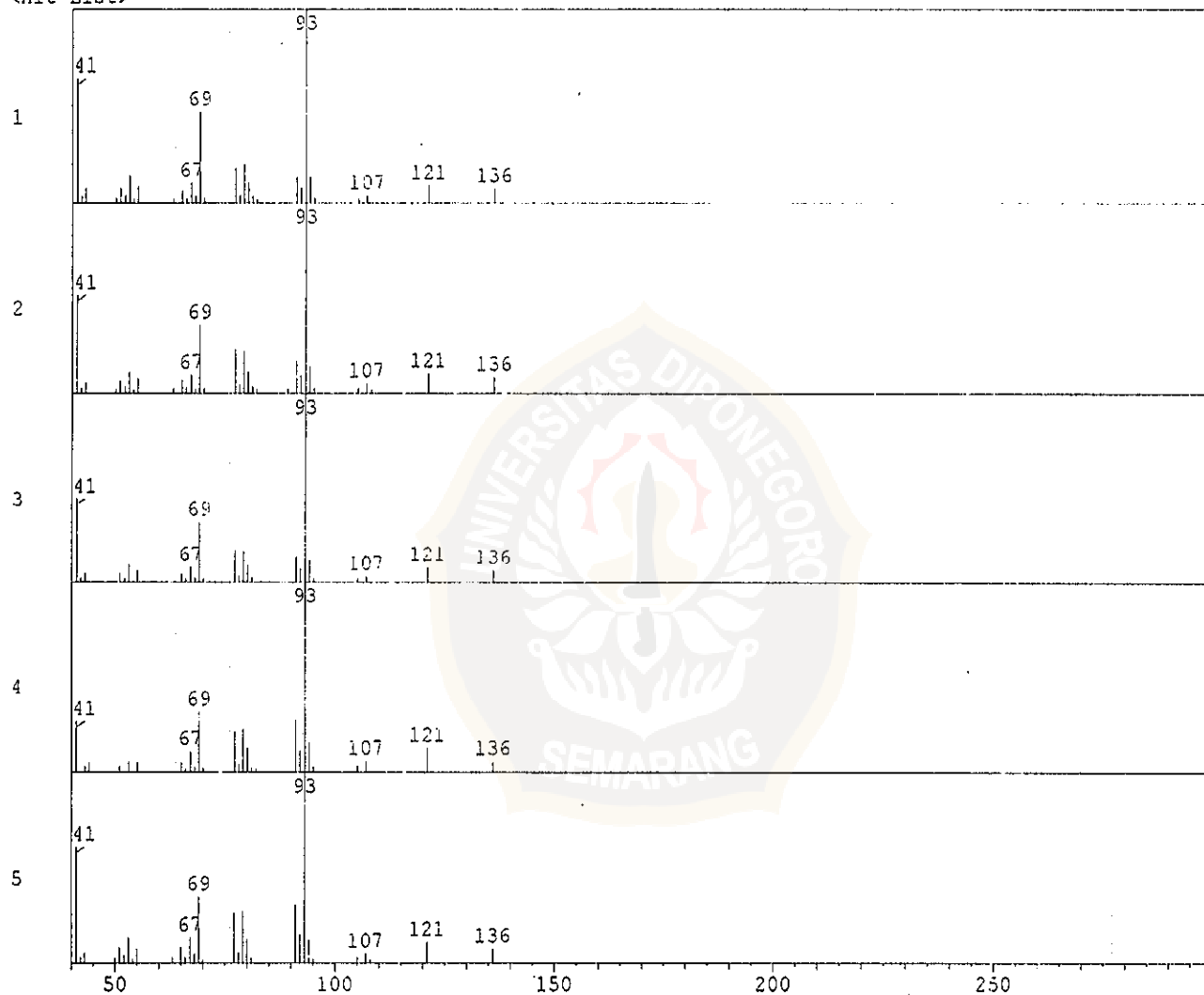
Mass Peak # : 26 Ret. Time : 6.833

Scan # : 221 B.G. Scan # : 344

Base Peak : 93.05 (582376)



<Hit List>



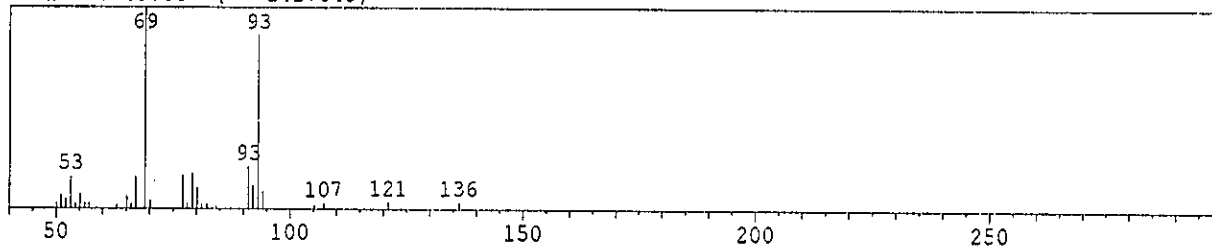
No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	94	136	C10H16 .beta.-Pinene	127-91-3	3568	2
2	93	136	C10H16 .beta.-Pinene	127-91-3	3567	2
3	93	136	C10H16 .beta.-Pinene	127-91-3	3570	2
4	93	136	C10H16 .beta.-Pinene	127-91-3	3569	2
5	92	136	C10H16 .beta.-Pinene \$\$ Bicyclo 3.1.1 heptane, 6,6-dimethyl-2-methylene- \$\$ 2(10)-Pinene \$\$	127-91-3	6669	1

Library Name

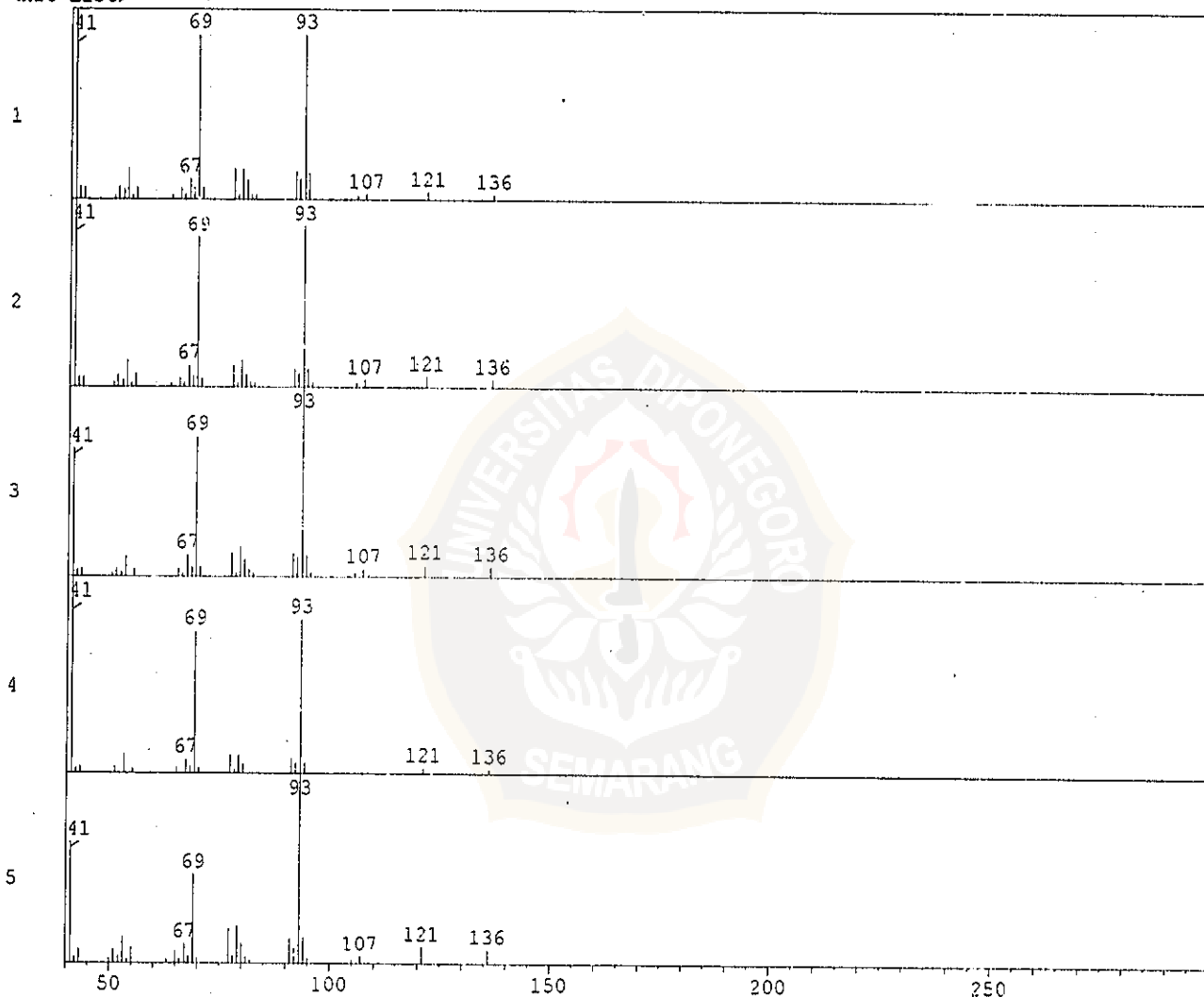
(1) NIST62.LIB (2) NIST12.LIB

<Unknown Spectrum>

Data : ANY.D01
 Mass Peak # : 29 Ret. Time : 7.092
 Scan # : 252 B.G. Scan # : 330
 Base Peak : 69.05 (1417048)



<Hit List>



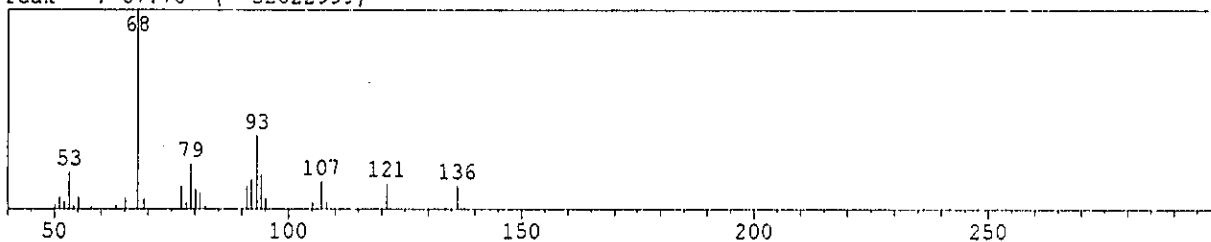
No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	95	136	C10H16	123-35-3	6690	1
2	93	136	.beta.-Myrcene \$\$ 1,6-Octadiene, 7-methyl-3-methylene- \$\$ Myrcene \$\$ 7-Methyl-3-met!	123-35-3	3575	2
3	91	136	.beta.-Myrcene	123-35-3	3576	2
4	90	136	.beta.-Myrcene	123-35-3	3578	2
5	89	136	.beta.-Pinene	127-91-3	3568	2

Library Name

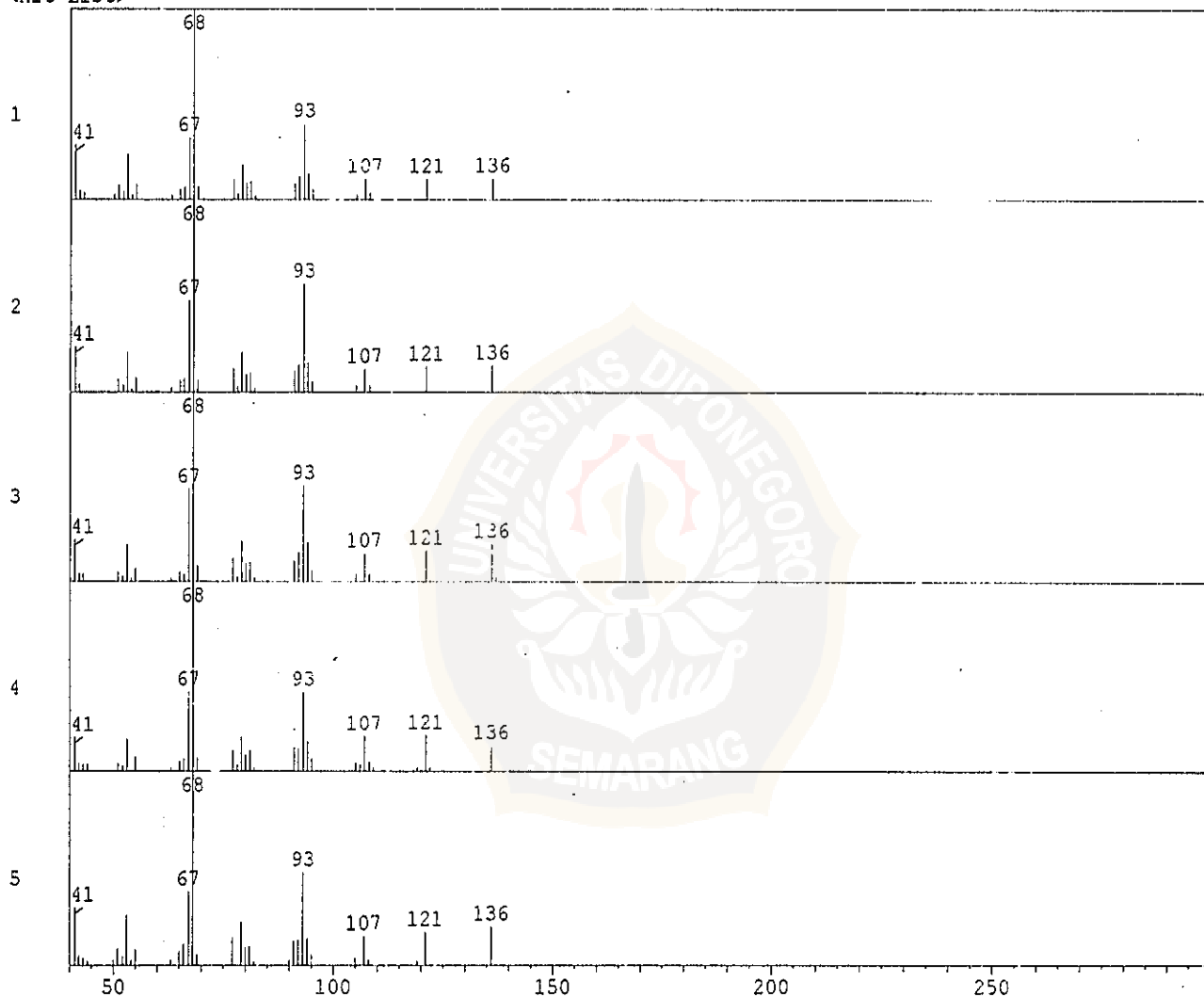
(1) NIST62.LIB (2) NIST12.LIB

<Unknown Spectrum>

Data : ANY.D01
 Mass Peak # : 27 Ret. Time : 8.308
 Scan # : 398 B.G. Scan # : 517
 Base Peak : 67.70 (3202299s)



<Hit List>



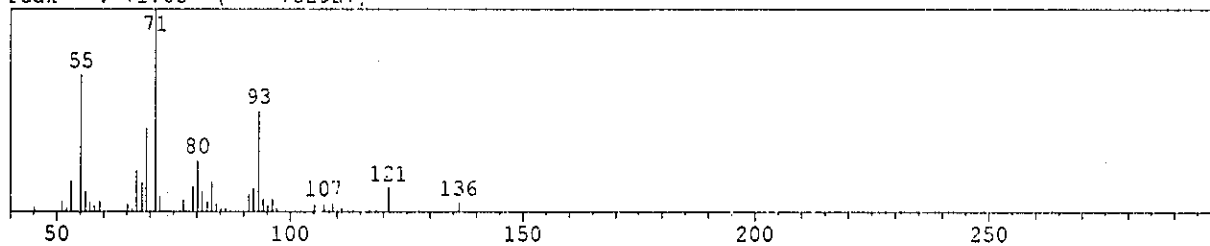
No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	91	136	C10H16 Limonene	138-86-3	3540	2
2	89	136	C10H16 Limonene	138-86-3	3542	2
3	89	136	C10H16 D-Limonene	5989-27-5	6664	1
4	89	136	C10H16 Cyclohexene 4-ethenyl-1,4-dimethyl-	1743-61-9	6605	1
5	89	136	C10H16 D-Limonene	5989-27-5	3554	2

Library Name

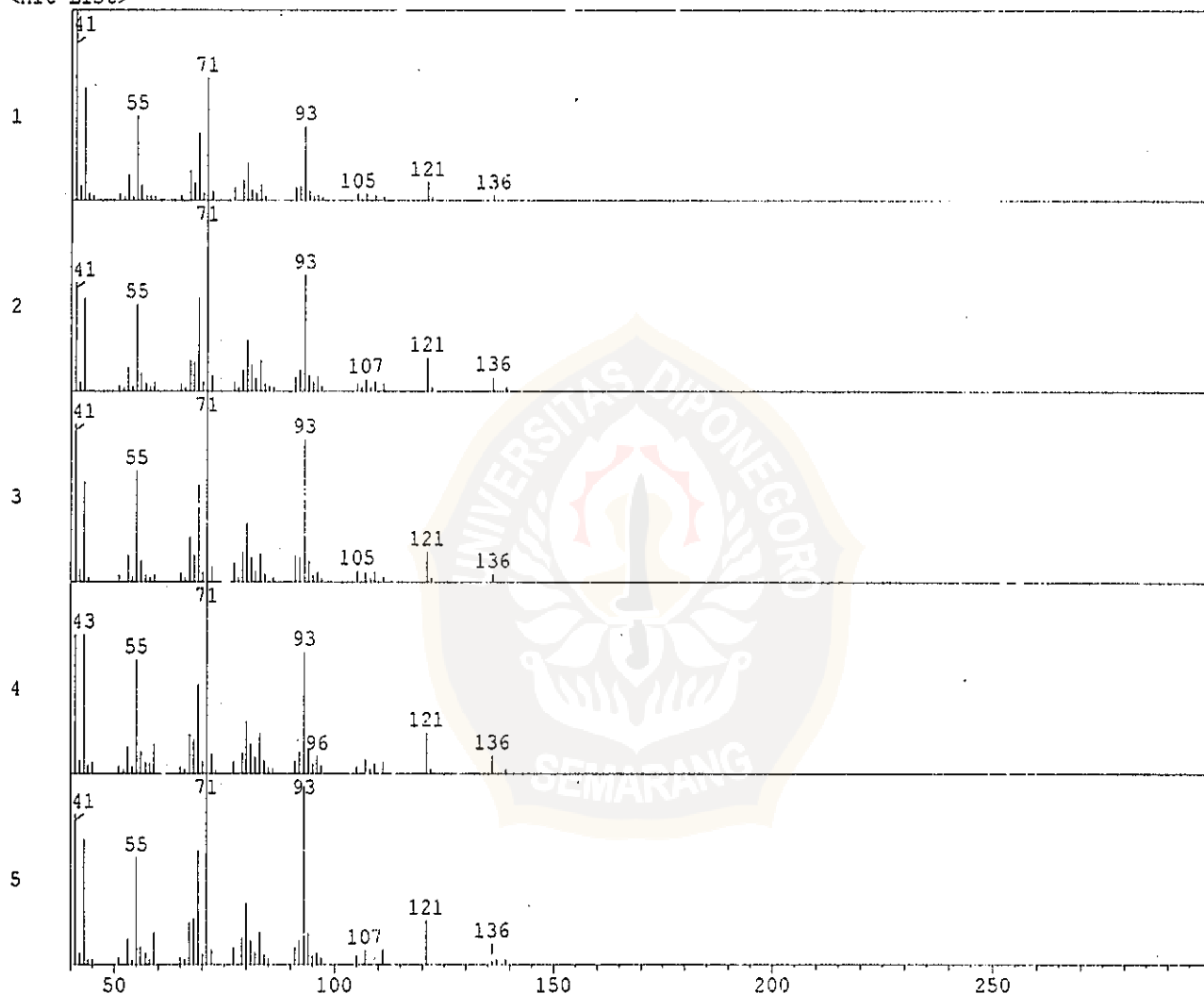
(1) NIST62.LIB (2) NIST12.LIB

<Unknown Spectrum>

Data : ANY.D01
 Mass Peak # : 39 Ret. Time : 9.742
 Scan # : 570 B.G. Scan # : 531
 Base Peak : 71.05 (782927)



<Hit List>

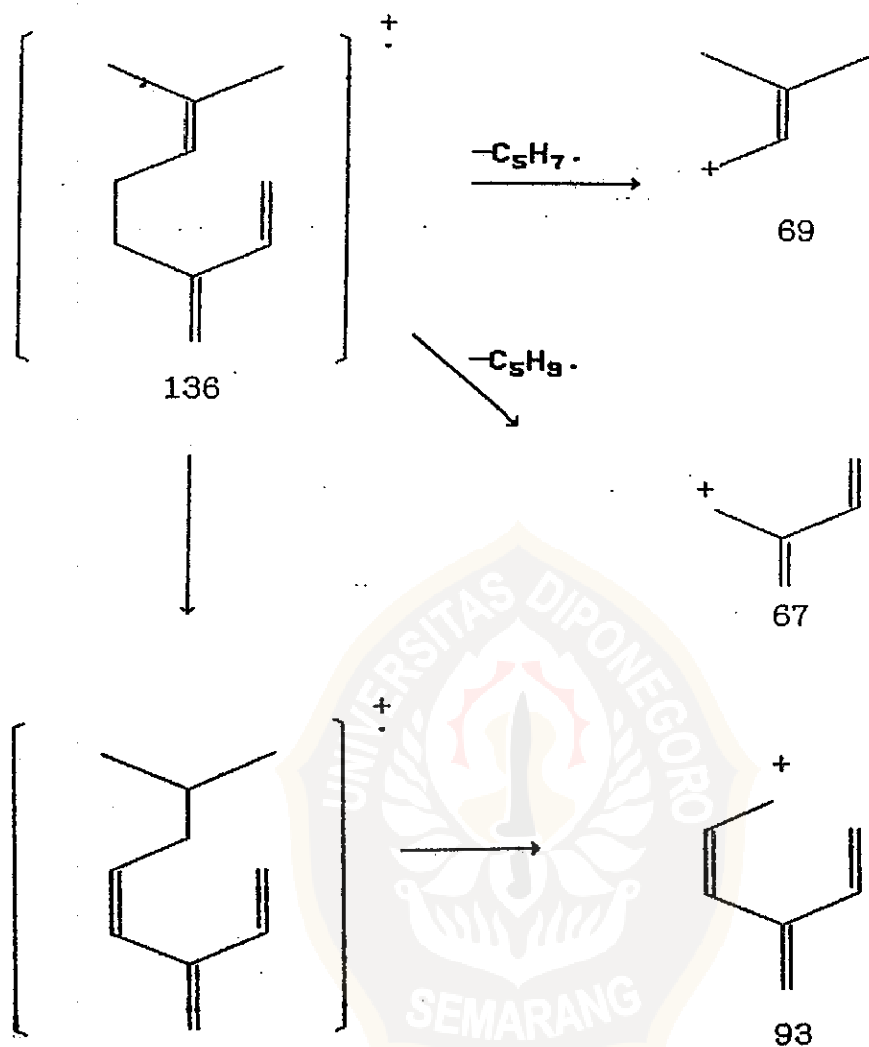


No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	95	154	C10H18O 1,6-Octadien-3-ol, 3,7-dimethyl-, (+/-)-	22564-99-4	10950	1
2	94	154	C10H18O 1,6-Octadien-3-ol, 3,7-dimethyl-	78-70-6	4897	2
3	94	154	C10H18O 1,6-Octadien-3-ol, 3,7-dimethyl- \$.beta.-Linalool	78-70-6	10941	1
4	93	154	C10H18O 1,6-Octadien-3-ol, 3,7-dimethyl-	78-70-6	4894	2
5	91	154	C10H18O 1,6-Octadien-3-ol, 3,7-dimethyl-	78-70-6	4996	2

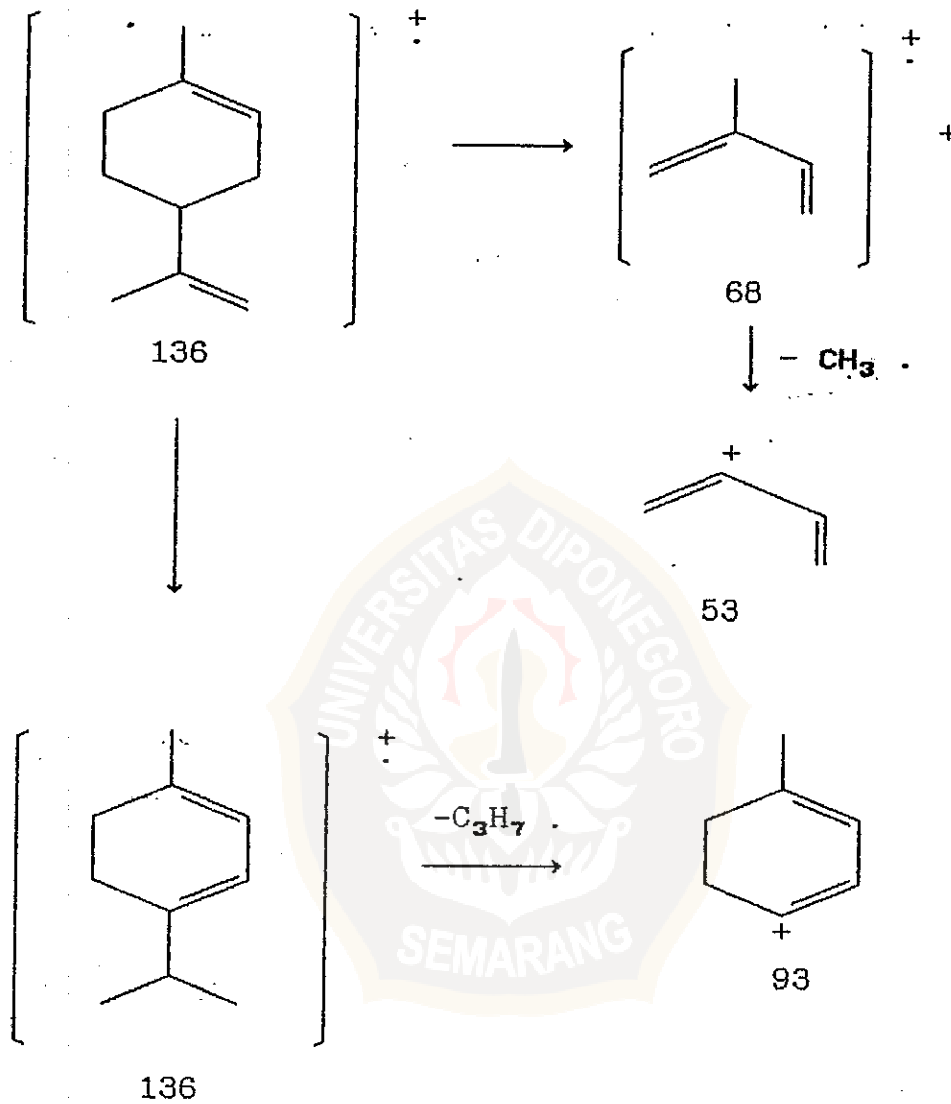
Library Name

(1) NIST62.LIB (2) NIST12.LIB

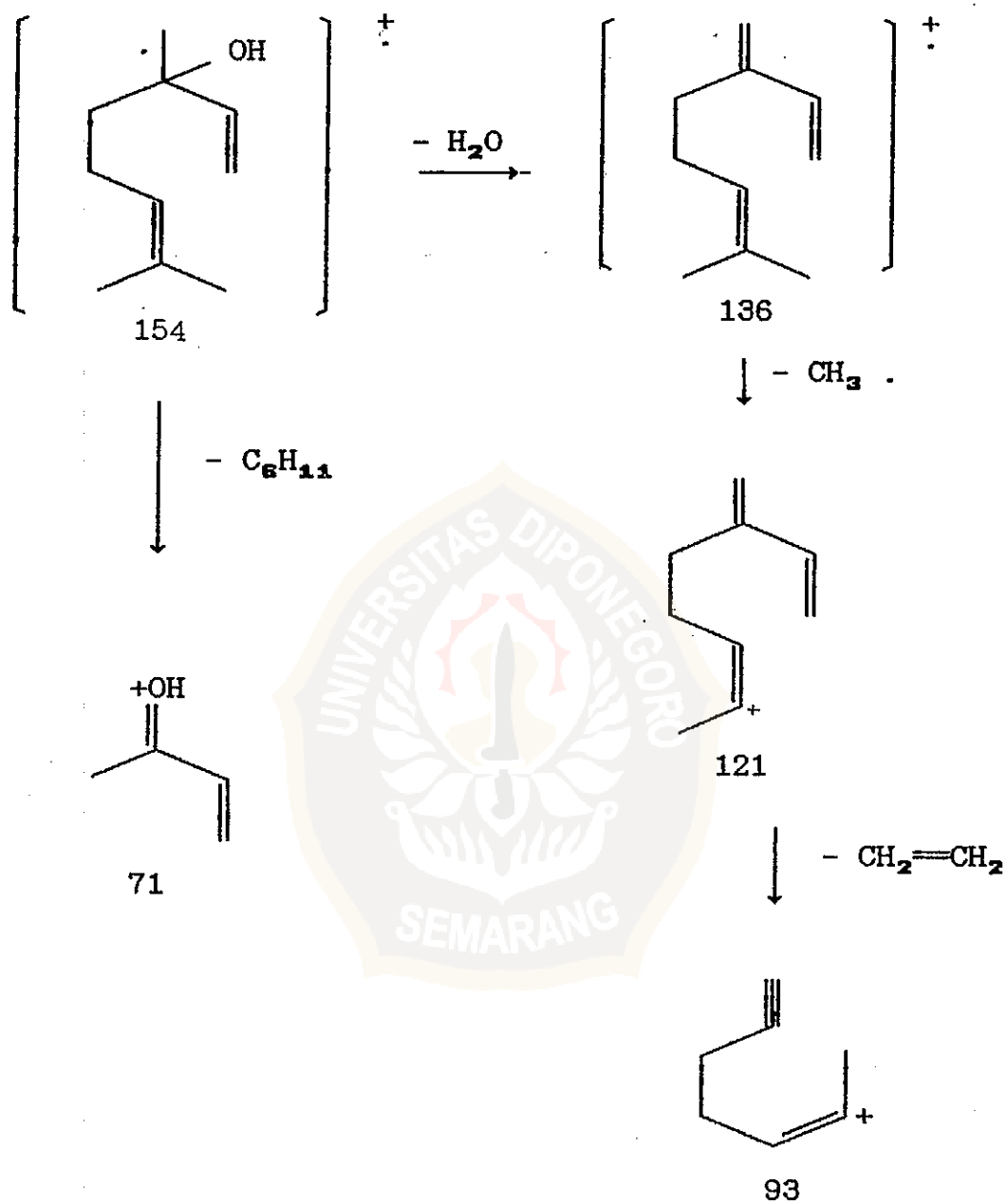
Kemungkinan Pola Fragmentasi Mirsena

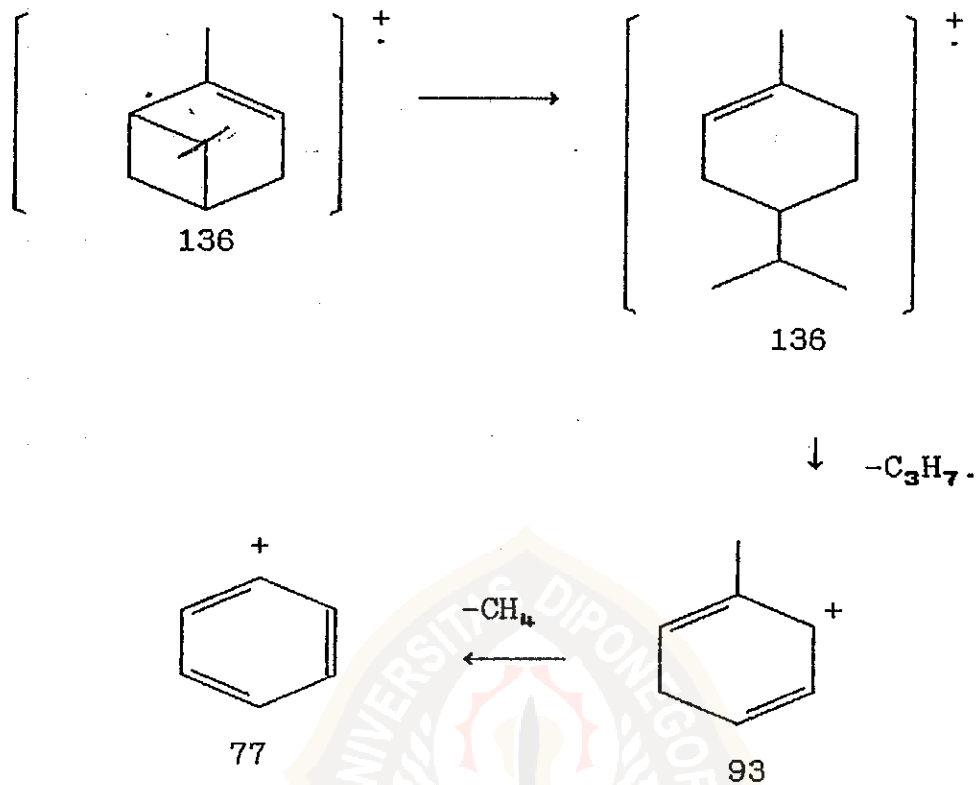


Kemungkinan Pola Fragmentasi Limonena



Kemungkinan Pola Fragmentasi Linalool



Kemungkinan Pola Fragmentasi α -Pinena

Kemungkinan Pola Fragmentasi β -Pinena