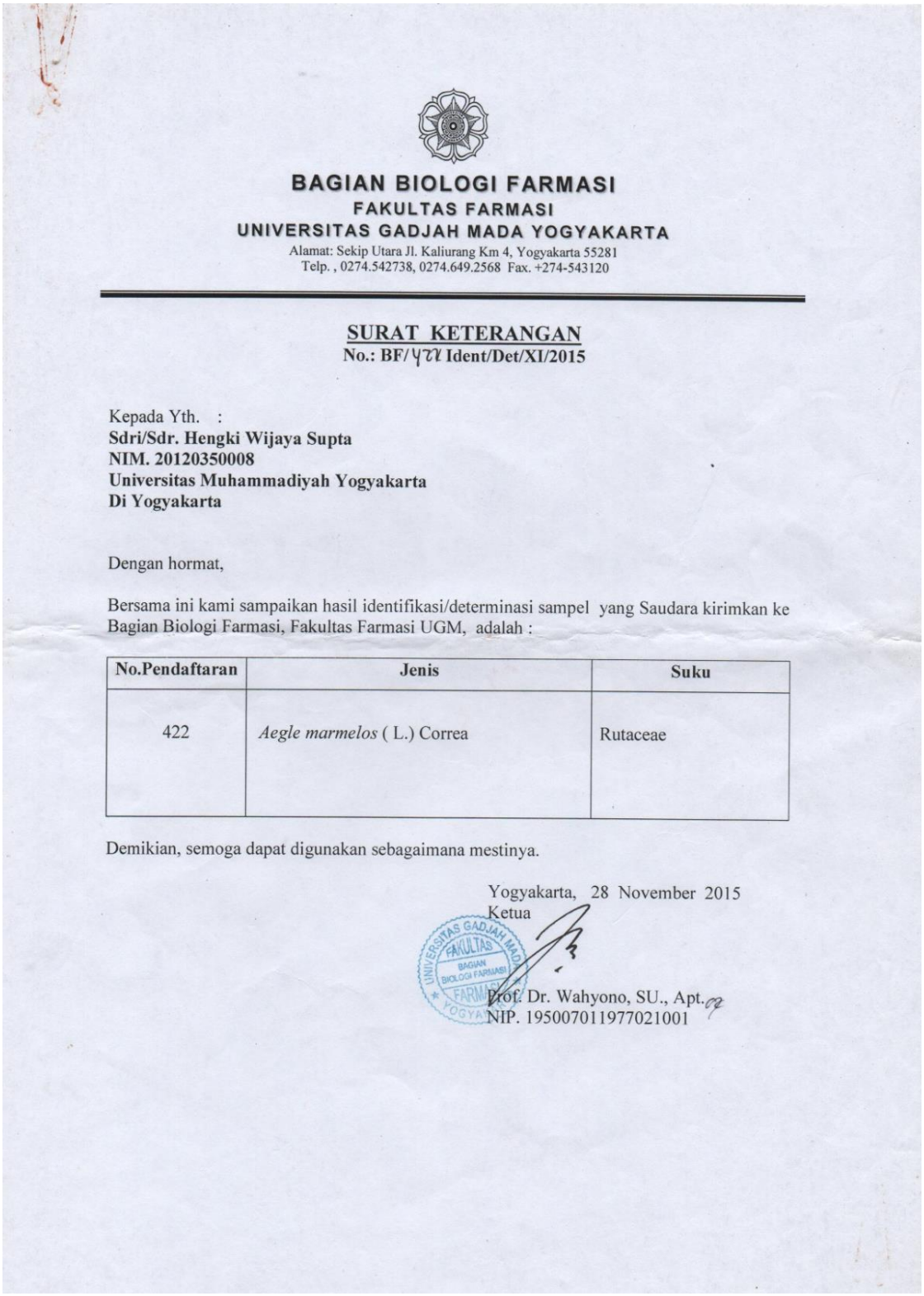
LAMPIRAN

Lampiran 1. Sertifikat hasil determinasi *Aegle marmelos* Correa



BAGIAN BIOLOGI FARMASI
FAKULTAS FARMASI
UNIVERSITAS GADJAH MADA YOGYAKARTA
Alamat: Sekip Utara Jl. Kaliurang Km 4, Yogyakarta 55281
Telp. , 0274.542738, 0274.649.2568 Fax. +274-543120

SURAT KETERANGAN
No.: BF/477 Ident/Det/XI/2015

Kepada Yth. :
Sdri/Sdr. Hengki Wijaya Supta
NIM. 20120350008
Universitas Muhammadiyah Yogyakarta
Di Yogyakarta

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi/determinasi sampel yang Saudara kirimkan ke Bagian Biologi Farmasi, Fakultas Farmasi UGM, adalah :

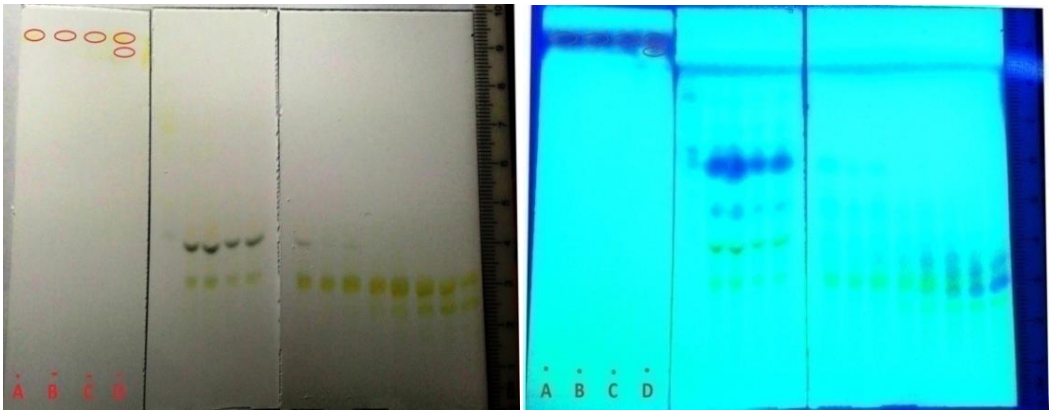
No.Pendaftaran	Jenis	Suku
422	*Aegle marmelos* (L.) Correa	Rutaceae

Demikian, semoga dapat digunakan sebagaimana mestinya.

Yogyakarta, 28 November 2015
Ketua

Prof. Dr. Wahyono, SU., Apt.
NIP. 195007011977021001

Lampiran 2. Hasil KLT fraksi B



Lampiran 3. Perhitungan nilai Rf fraksi B

$$Rf = \frac{jarak\ titik\ noda\ dari\ batas\ bawah}{jarak\ batas\ eluen\ pada\ batas\ atas}$$

- Sampel A Rf = $\frac{\mathbf{8,0}}{\mathbf{8,0}}$= 1,0
- Sampel B Rf = $\frac{\mathbf{8,0}}{\mathbf{8,0}}$= 1,0
- Sampel C Rf = $\frac{\mathbf{8,0}}{\mathbf{8,0}}$= 1,0
- Sampel D2 Rf = $\frac{\mathbf{7,6}}{\mathbf{8,0}}$= 0,95
- Sampel D1 Rf = $\frac{\mathbf{8}}{\mathbf{8}}$= 1,0

Lampiran 4. Perhitungan Berat Molekul (BM) 9-*octadecenamide* (C18H35NO)

Diketahui: *Atom Relative* (AR) C = 12
Atom Relative (AR) H = 1
Atom Relative (AR) N = 14
Atom Relative (AR) O = 16

Ditanya: *Molecul Relative* (MR) C18H35NO ?

Jawab = (18.AR C) + (35.AR H) + (1. AR N) + (1. AR O)
= (18x12) + (35x1) + (1x14) + (1x16)
= 216 + 35 + 14 + 16
= **281 gram/mol^{-1}**

Lampiran 5. Perhitungan Berat Molekul (BM) lupeol (C30H50O)

Diketahui: *Atom Relative* (AR) C = 12
Atom Relative (AR) H = 1
Atom Relative (AR) O = 16

Ditanya: *Molecul Relative* (MR) C30H50O ?

Jawab = (30.AR C) + (50.AR H) + (1. AR O)
= (30x12) + (50x1) + (1x16)
= 360 + 50 + 16
= **426 gram/mol^{-1}**

Lampiran 6. Instrumen penelitian




Lampiran 7. Kondisi *GC-MS*

C:¥GCMSsolution¥Data¥Project1¥Agustus 2014¥Hengky Wijaya Supta u.qgd

Lab Kimia Organik FMIPA - UGM

GCMS-QP2010S SHIMADZU
Kolom :AGILENT HP 1MS
Panjang : 30 meter
ID : 0,25 mm
Film : 0,25 um
Gas pembawa : Helium
Pengionan : EI
70 Ev

Method

[Comment]

===== Analytical Line 1 =====

[GC-2010]

Column Oven Temp.	:70.0 °C	
Injection Temp.	:310.00 °C	
Injection Mode	:Split	
Flow Control Mode	:Pressure	
Pressure	:13.7 kPa	
Total Flow	:20.0 mL/min	
Column Flow	:0.50 mL/min	
Linear Velocity	:25.9 cm/sec	
Purge Flow	:3.0 mL/min	
Split Ratio	:33.0	
High Pressure Injection	:OFF	
Carrier Gas Saver	:OFF	
Splitter Hold	:OFF	
Oven Temp. Program		
Rate	Temperature(°C)	Hold Time(min)
-	70.0	5.00
5.00	300.0	39.00

< Ready Check Heat Unit >
Column Oven : Yes
SPL1 : Yes
MS : Yes
< Ready Check Detector(FID) >
< Ready Check Baseline Drift >
< Ready Check Injection Flow >
SPL1 Carrier : Yes
SPL1 Purge : Yes
< Ready Check APC Flow >
< Ready Check Detector APC Flow >
External Wait :No
Equilibrium Time :3.0 min

[GC Program]

[GCMS-QP2010]

IonSourceTemp	:250.00 °C
Interface Temp.	:305.00 °C
Solvent Cut Time	:5.00 min
Detector Gain Mode	:Relative
Detector Gain	:-0.33 kV
Threshold	:0

[MS Table]
--Group 1 - Event 1--

Start Time	:5.20min
End Time	:90.00min
ACQ Mode	:Scan
Event Time	:0.50sec
Scan Speed	:1250
Start m/z	:28.00
End m/z	:600.00
Sample Inlet Unit	:GC

[MS Program]
Use MS Program :OFF

Lampiran 8. Kromatogram *Gas Cromatography*

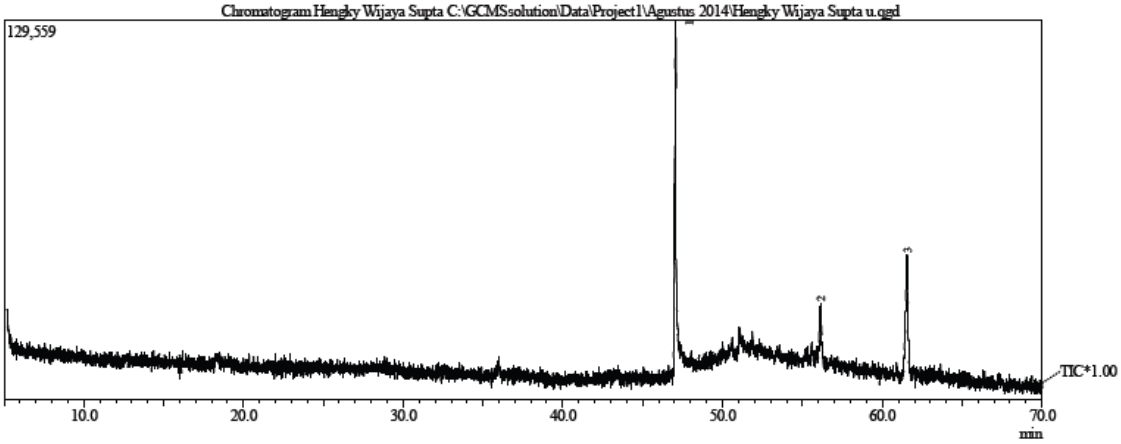
C:¥GCMSsolution¥Data¥Project1¥Agustus 2014¥Hengky Wijaya Supta u.qgd

Lab.Kimia Organik FMIPA - UGM

Sample Information

Analyzed by	: Admin
Sample Name	: Hengky Wijaya Supta
Sample ID	: 5.16.21.1
Data File	: C:\GCMSsolution\Data\Project1\Agustus 2014\Hengky Wijaya Supta u.qgd
Method File	: C:\GCMSsolution\Data\Project1\Agustus 2014\organik baru.qgm
Tuning File	: C:\GCMSsolution\System\Tune1\September 15 2015.qgt

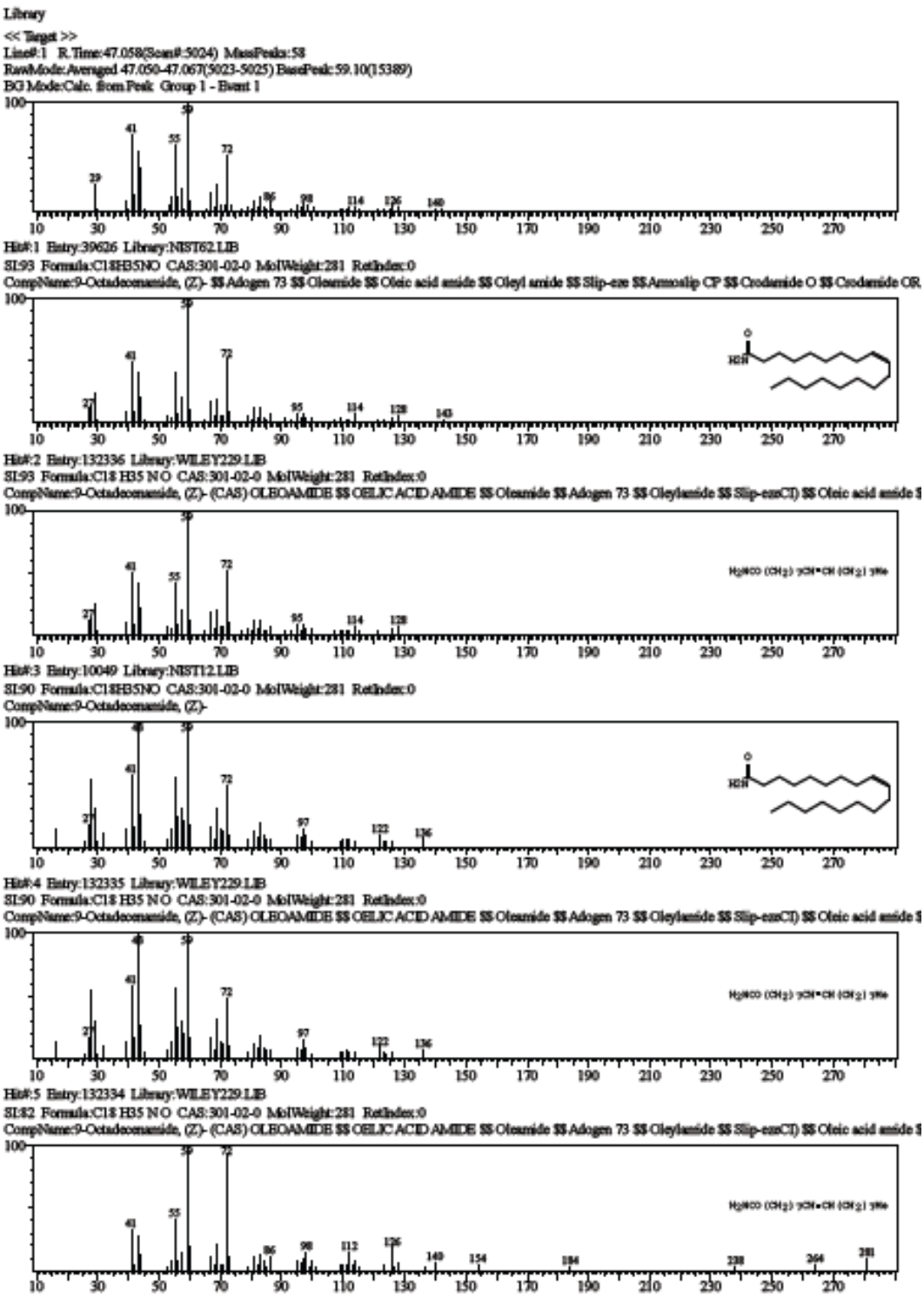
Chromatogram Hengky Wijaya Supta C:\GCMSsolution\Data\Project1\Agustus 2014\Hengky Wijaya Supta u.qgd



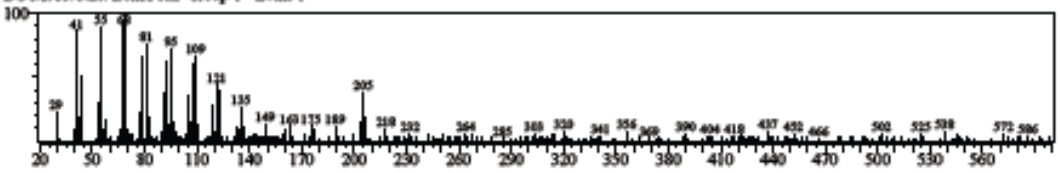
Peak Report TIC

Peak#	R.Time	I.Time	F.Time	Area	Area%	Height	Name
1	47.058	46.917	47.183	688174	60.51	113775	
2	56.137	56.000	56.225	121011	10.64	16689	
3	61.560	61.358	61.700	328197	28.86	37526	
				1137382	100.00	167990	

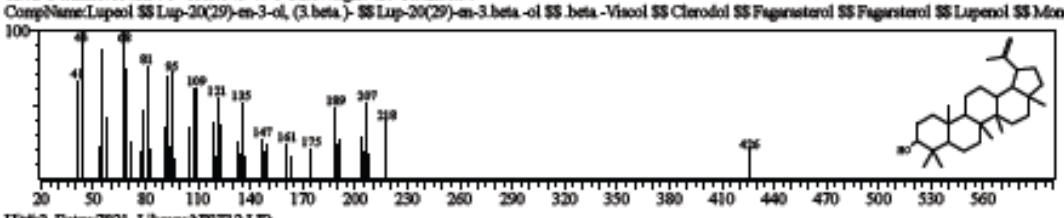
Lampiran 9. *Mass Cromatography* 3 senyawa fraksi korteks Maja



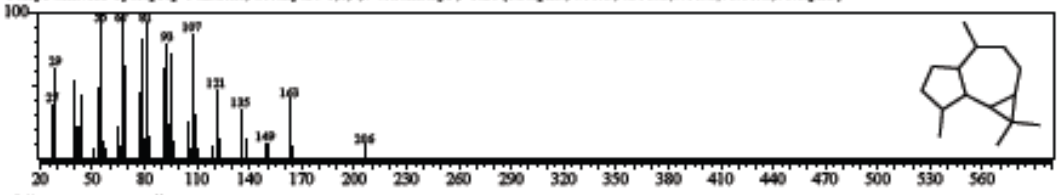
<< Target >>
Line#:2 R.Time:56.133(Scan#:6113) MassPeaks:277
RawMode:Averaged 56.125-56.142(6112-6114) BasePeak:68.10(834)
BG Mode:Calc. from Peak Group 1 - Event 1



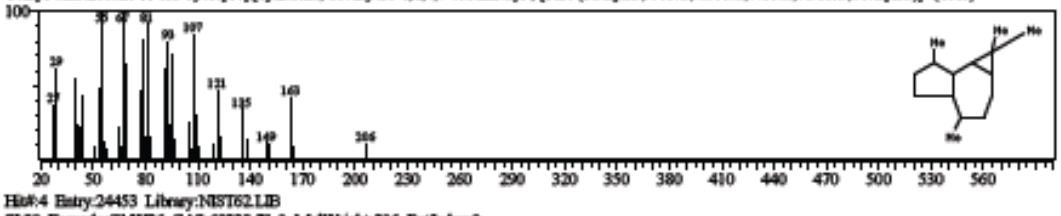
Hit#:1 Entry:55724 Library:NIST62.LIB
SI:82 Formula:C30H50O CAS:545-47-1 MolWeight:426 RetIndex:0
CompName:Lupeol $$ Lup-20(29)-en-3-ol, (3.beta.)- $$ Lup-20(29)-en-3.beta.-ol $$ .beta.-Viscol $$ Clerodol $$ Fagarasterol $$ Fagarsterol $$ Lupenol $$ Monogyno



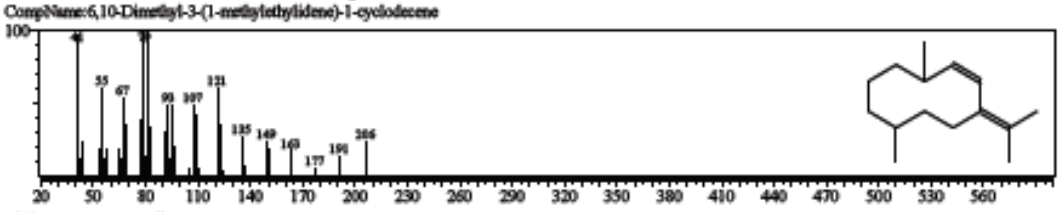
Hit#:2 Entry:7821 Library:NIST12.LIB
SI:82 Formula:C15H26 CAS:28580-43-0 MolWeight:206 RetIndex:0
CompName:1H-Cycloprop e azulene, decahydro-1,1,4,7-tetramethyl-, 1aR-(1a.alpha.,4.beta.,4a.beta.,7.beta.,7a.beta.,7b.alpha.)-



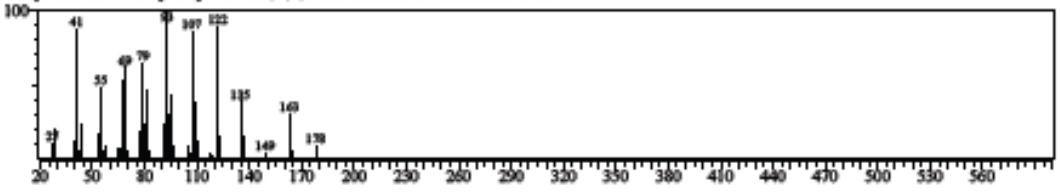
Hit#:3 Entry:73100 Library:WILEY229.LIB
SI:82 Formula:C15 H26 CAS:28580-43-0 MolWeight:206 RetIndex:0
CompName:Ledane $$ 1H-Cycloprop[e]azulene, decahydro-1,1,4,7-tetramethyl-, [1aR-(1a.alpha.,4.beta.,4a.beta.,7.beta.,7a.beta.,7b.alpha.)]- (CAS)



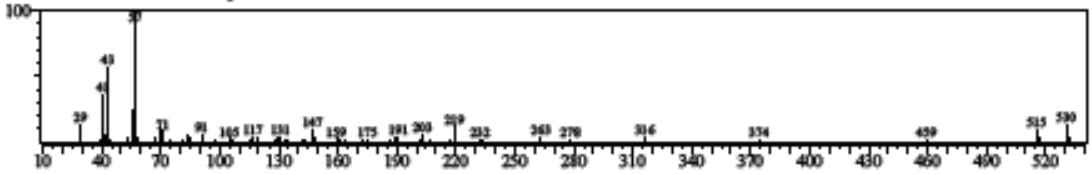
Hit#:4 Entry:24453 Library:NIST62.LIB
SI:80 Formula:C15H26 CAS:69239-71-0 MolWeight:206 RetIndex:0
CompName:6,10-Dimethyl-3-(1-methylethylidene)-1-cyclodecene



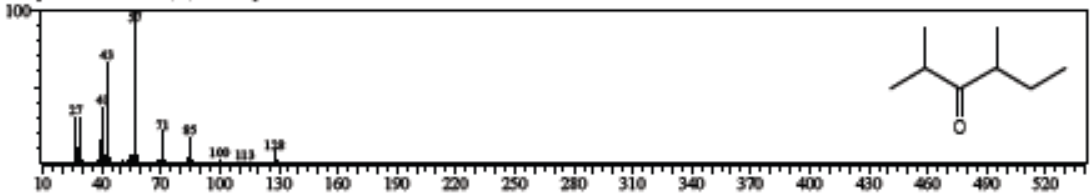
Hit#:5 Entry:49560 Library:WILEY229.LIB
SI:79 Formula:C13 H22 CAS:0-00-0 MolWeight:178 RetIndex:0
CompName:BICYCLO[5.2.0]NONANE, 4,8,8-TRIMETHYL-2-METHYLENE- $$



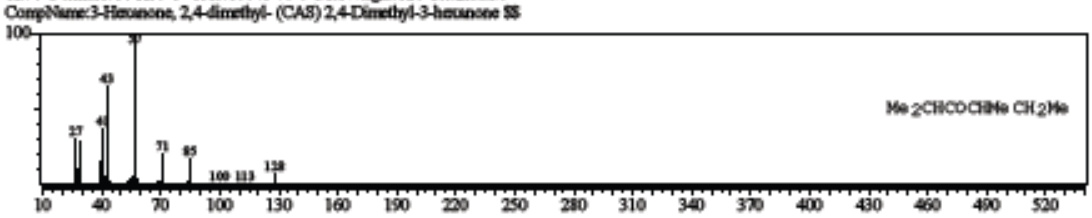
<< Target >>
Line#:3 R.Time:61.558(Scan#:6764) MassPeaks:61
RawMode:Averaged 61.550-61.567(6763-6765) BasePeak:57.15(7843)
BG Mode:Calc. from Peak Group 1 - Event 1



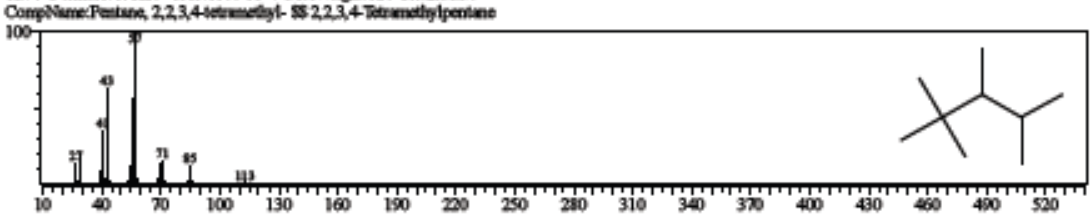
Hit#:1 Entry:2818 Library:NIST12.LIB
SI:76 Formula:C8H16O CAS:18641-70-8 MolWeight:128 RetIndex:0
CompName:3-Hexanone, 2,4-dimethyl-



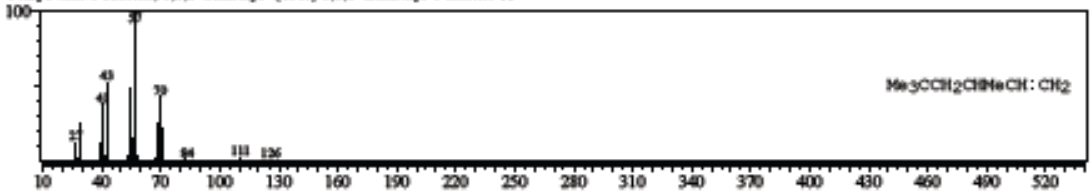
Hit#:2 Entry:15236 Library:WILEY229.LIB
SI:76 Formula:C8 H16 O CAS:18641-70-8 MolWeight:128 RetIndex:0
CompName:3-Hexanone, 2,4-dimethyl- (CAS) 2,4-Dimethyl-3-hexanone $$



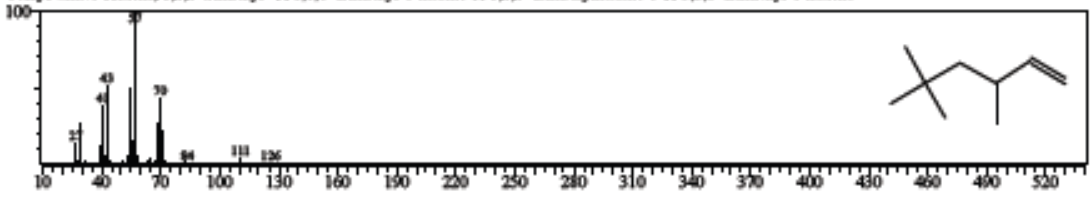
Hit#:3 Entry:5164 Library:NIST62.LIB
SI:76 Formula:C9H20 CAS:1186-53-4 MolWeight:128 RetIndex:0
CompName:Pentane, 2,2,3,4-tetramethyl- $$ 2,2,3,4-Tetramethylpentane



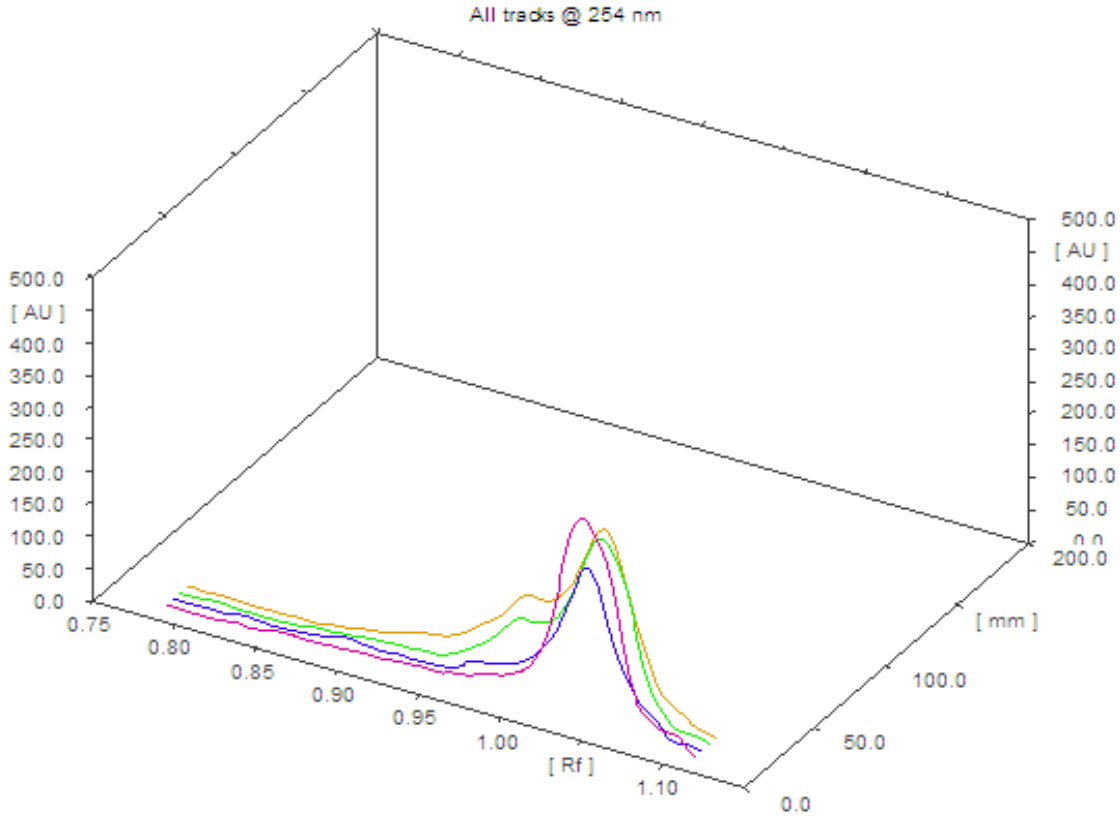
Hit#:4 Entry:14234 Library:WILEY229.LIB
SI:75 Formula:C9 H18 CAS:4316-65-8 MolWeight:126 RetIndex:0
CompName:1-Hexene, 3,5,5-trimethyl- (CAS) 3,5,5-Trimethyl-1-hexene $$



Hit#:5 Entry:4684 Library:NIST62.LIB
SI:75 Formula:C9H18 CAS:4316-65-8 MolWeight:126 RetIndex:0
CompName:1-Hexene, 3,5,5-trimethyl- $$ 3,5,5-Trimethyl-1-hexene $$ 3,5,5-Trimethylhexene-1 $$ 3,3,5-Trimethyl-1-hexene



Lampiran 10. Hasil analisis *TLC Scanner*



Track	Peak	Start Position	Start Height	Max Position	Max Height	Max %	End Position	End Height	Area	Area %	Assigned substance
1	1	0.95 Rf	17.8 AU	1.04 Rf	318.1 AU	100.00 %	1.09 Rf	27.5 AU	13072.3 AU	100.00 %	unknown *
2	1	0.95 Rf	14.6 AU	1.04 Rf	231.2 AU	100.00 %	1.10 Rf	2.0 AU	9818.4 AU	100.00 %	unknown *
3	1	0.94 Rf	19.2 AU	1.04 Rf	269.1 AU	100.00 %	1.10 Rf	9.0 AU	13968.8 AU	100.00 %	unknown *
4	1	0.90 Rf	14.3 AU	1.00 Rf	138.7 AU	33.66 %	1.00 Rf	37.0 AU	5467.6 AU	33.51 %	unknown *
4	2	1.01 Rf	137.4 AU	1.04 Rf	273.5 AU	66.34 %	1.11 Rf	5.1 AU	10850.3 AU	66.49 %	unknown *

Lampiran 11. Hasil cek turnitin skripsi

Skripsi Hengki Wijaya Supta

ORIGINALITY REPORT

15%	14%	1%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.siafif.com Internet Source	2%
2	s1farmasi.blogspot.com Internet Source	2%
3	eprints.uns.ac.id Internet Source	2%
4	www.klikbbm.blogspot.com Internet Source	1%
5	etheses.uin-malang.ac.id Internet Source	1%
6	yanceanascommunity.blogspot.com Internet Source	1%
7	Submitted to Universitas Negeri Jakarta Student Paper	1%
8	publikasi.umy.ac.id Internet Source	1%
9	maydesember.blogspot.com Internet Source	1%
10	mystoryexperienceadress.blogspot.com Internet Source	1%
11	www.ijcpr.com Internet Source	1%
12	scholar.unand.ac.id Internet Source	1%
13	www.docstoc.com Internet Source	1%