BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Berdasarkan hasil pengamatan dapat disimpulkan bahwa :

Pertama, salep minyak buaya muara dengan empat macam basis memiliki homogenitas yang baik selama penyimpanan 4 minggu, sedangkan kemampuan daya lekat dan daya sebar menunjukkan perbedaan yang signifikan. Kemampuan daya lekat tertinggi ditunjukkan oleh basis hidrokarbon, sedangkan daya sebar tertinggi ditunjukkan oleh basis salep larut air.

Kedua , dukungan aktivitas antibakteri tertinggi ditunjukkan oleh basis PEG.

Ketiga, konsentrasi minyak buaya muara dalam basis yang paling efektif sebagai antibakteri yaitu 6 %.

B. Saran

Perlu dilakukan pengujian aktivitas antibakteri dengan metode yang berbeda pada masing-masing basis.

DAFTAR PUSTAKA

[Anonim], 2008.*Ensiklopedia Indonesia, (Online)* http://id.wikipedia.org/wiki/Buaya) diakses tanggal 17 Oktober 2011).

[Anonim]. 1979. *Farmakope Indonesia*, Edisi Ketiga. Departemen Kesehatan RI: Jakarta. Hal 33-37;353-360

[Anonim]. 1995. *Farmakope Indonesia*, Edisi Keempat. Departemen Kesehatan RI: Jakarta. Hal 92;102;135

Ansel, C. Howard. 1989. *Penganta Bentuk Sediaan Farmasi*. UI-Press; Jakarta. Hal 85

Aulton, M. E. 1988. *Pharmaceutics The Science of Dosage Form Design.* Churchill Living Stones; New York. Hal 54-60

Banker, G. S and Rhodes C.T. 1996. *Modem Pharmaceutics, Third Edition*. Revised and Expanded, Marcel Dekker; New York. Hal 121

Black, J. G. 1999. *Microbiology; Principle and Explorations*.New Jersey; Hall International Inc. Hal 98-124

Bonang G., Koeswardono E.S. 1982. *Mikrobiologi Kedokteran Untuk Laboratorium dan Klinik edisi 1*. PT. Gramedia Jakarta. Hal 56-57

Djide, M.N., Sartini dan Kadir,S. 2003.*Mikrobiologi Farmasi Terapan.* Laboratorium Mikrobiologi dan Bioteknologi Farmasi. Fakultas MIPA. Universitas Hasanuddin: Makassar. Hal 45-56;72-82

Djide, M.N., Sartini. 2005. *Analisis Mikrobiologi Farmasi,* Laboratorium Mikrobiologi dan Bioteknologi. Fakultas MIPA. Universitas Hasanuddin: Makassar. Hal 27-40

Ganiswarna, G.S. 2007.*Farmakologi dan Terapi*. Edisi 5. Bagian Farmakologi Fakultas Kedokteran. Universitas Indonesia: Jakarta. 586.

Garrity, G, M., Bell, J, A., and Lilburn, T, G.2004. *Taxonomic Outline of The Prokaryotes Bergey's Manual of Systematic Bacteriologi.* 2th Edition. Springer. New York Berlin Hendelberg. United States of America. Hal 157

Gennaro, R. Alfonso. 1990. *Remington's Pharmaceutical Sciences.* Marck Publishing Company, Easton: Pennsylvania. Hal 135

Harminta , 2004. *Analisis Hayati*. Universitas Indonesia press, Jakarta. Hal 45
Hoeve, Van. 1980. *Ensiklopedia Indonesia*. Penerbit Ichtiar Baru. Jakarta. Hal 24

Iskamto B. 2009. *Bakteriologi Kesehatan*. UNS Press. Surakarta. Hal 39

Jenkins G. L, Francke D. E, Brecht E.A, Sperandio G.L. 1957. *The Art of Compounding, Nirth Edition*.McGraw Hill Book Co. Inc New York, Toronto, London. Hal 67-78

Jewetz, E. Melnick, J.C. 2005.*Mikrobiologi Kedokteran, Edisi Pertama, diterjemahkan oleh bagian Mikrobiologi*. Kedokteran Universias Airlangga. Hal 192-205

Jawetz E, Van den Brink, R.C.B., Melnick, J.L., Andeiberg, E.A. 1986. *Mikrobiologi untuk profesi kesehatan Edisi 16*, Terjemahan Bonang, CU EGC Penerbit Buku Kedokteran. Jakarta. Hal 173-174, 239-262, 303-323

Kibbe, H. Arthur. 2000. *Handbook of Pharmaceutical Excipient, Third Edition*. American Pharmaceutical Press; USA. Hal 124-139

Lachman, Leon. 1994. *Teorydan Praktik FarmasiIndustri*. UI-Press: Jakarta. Hal 89-103

Musdalifah.2009. *Aktivitas Antimikroba Minyak BuayaMuara (Crocodylus porosus) Secara Difusi Agar*.Skripsi tidak diterbitkan. Fakultas Farmasi. Universitas Muslim Indonesia.Makassar.

Parrot, L. Eugene. 1971. *Pharmaceutical Technology*, The Third Revision. Burges Pupblishing Company: Minneapois. Hal 67

Pelczar, M.J and Chan, E.C.S. 1986. *Dasar-dasar Mikrobiologi1*, diterjemahkan oleh Ratna hadioetomo UI press. Jakarta. Hal 49-198

Prihatmoko, J., (prima_gemahripah@yahoo.com), 17 Oktober 2011, *Kecantikan Kulit dengan Minyak Buaya*.

Qirwan.2004. *Sejarah Kebun Binatang Jakarta 140 Tahun Dalam 140 (Online). (*http://kbi.gemari.or.id/beritadetail.php?id=2429, diaskes 17 Oktober 2011).

Rakatama, Ari. 2005. *Buaya Muara (Crocodylus porosus): Pemanfaatan vs Pelestarian, (Online)*, (http://arirakatama.multiply.com/journal/item/5, diaskes 17 Oktober 2011).

Sprowls J.B. 1970. *Prescription Pharmacy, Second Edition.* J. B. Liponcott Company Monteral, Philadelphia. Hal 147-176

Suriawiria, U. 1986. *Pengantar Mikrobiologi Umum*. Penerbit Angkasa. Bandung. Hal 60-61, 57-58

Voigt, R.C. 1994. *Buku Pelajaran Teknologi Farmasi Edisi IV*. Gajah Mada University Press. Yogyakarta. Hal 559-565, 572-573

Waluyo L. 2008. *Teknik dan Metode Dasar dalam Mikrobiologi*. Universitas Muhammadiyah Malang. Hal 77

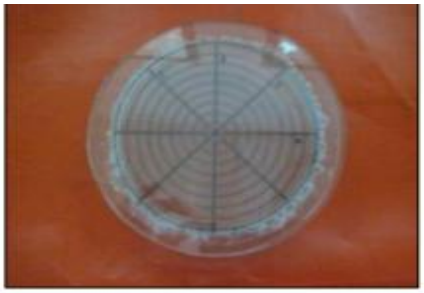
Lampiran 1.Fotobuaya muara (*Crocodilus porosus*)danminyak buaya muara *(Crocodylus porosus)*

Buaya muara (*Crocodilus porosus*)

Minyak buaya muara *(Crocodylus porosus)*

Lampiran2.Gambaralatujidanhasilsalep

Alatujidayalekat



Alatujidayasebar

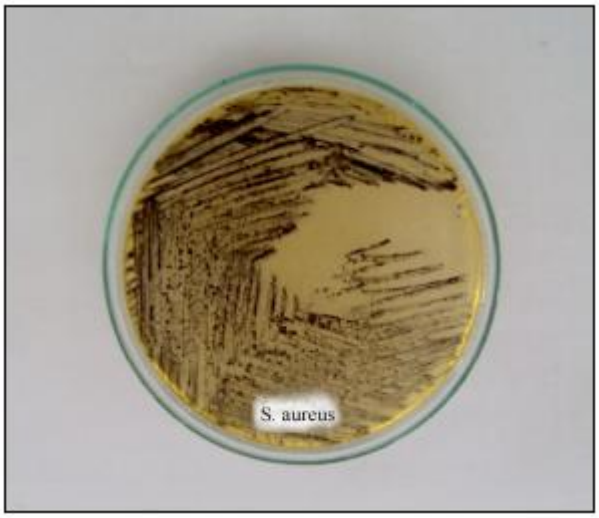
Timbanganelektrik

Alatujiviskositas

Lampairan 3.Hasilujitipekrim

Ujitipekrim

Lampiran4.Hasilidentifikasi*Staphylococcus aureus*ATCC 25923

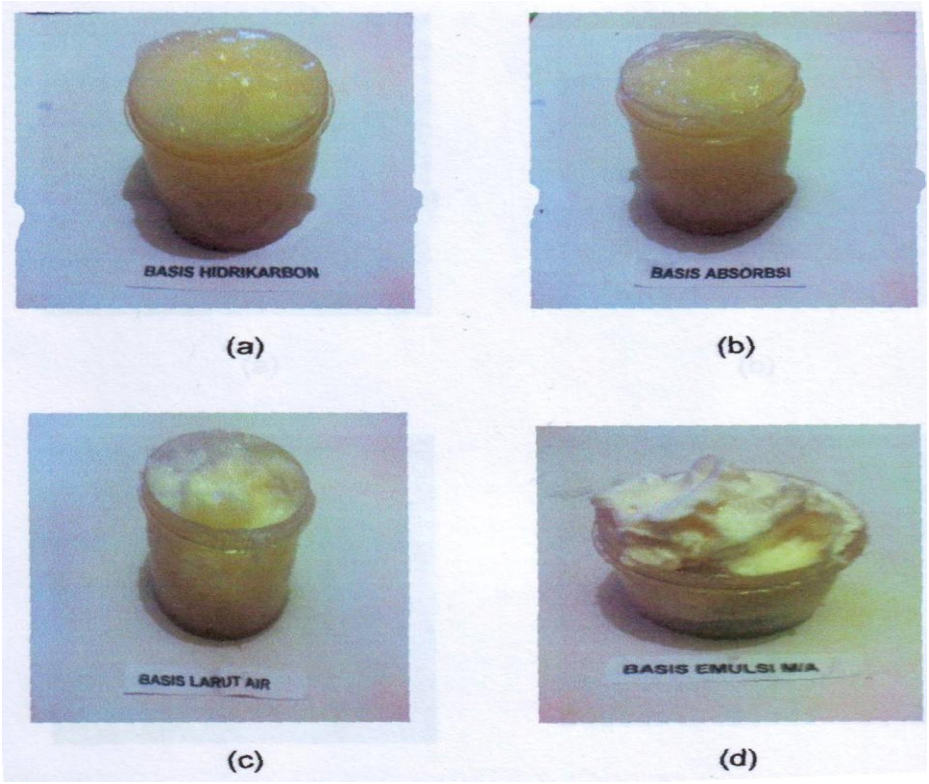


Koloni *Staphylococcus aureus*ATCC 25923pada media VJA

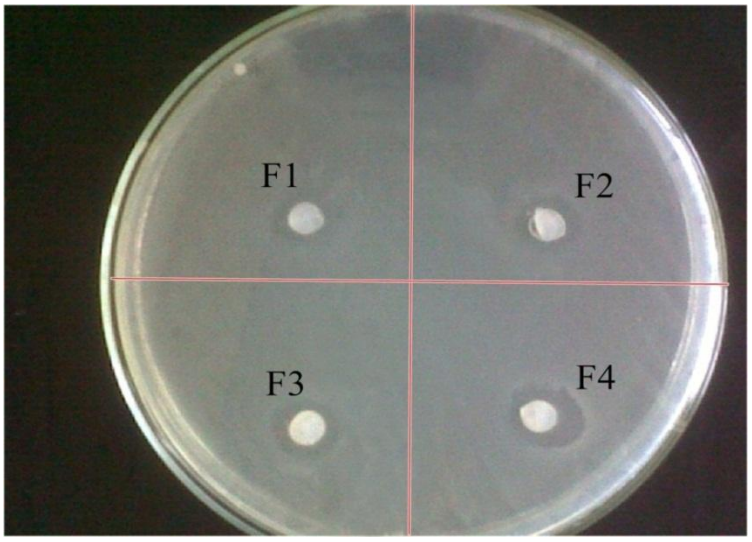
Hasilujikatalase *Staphylococcus aureus*ATCC 25923

Hasilujikoagulasi *Staphylococcus aureus*ATCC 25923

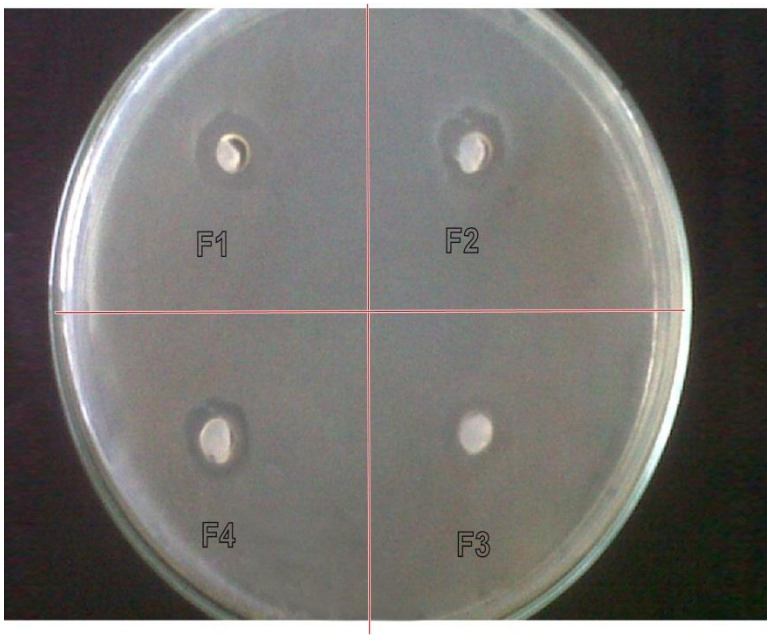
Lampiran 5.FotoSediaan salep



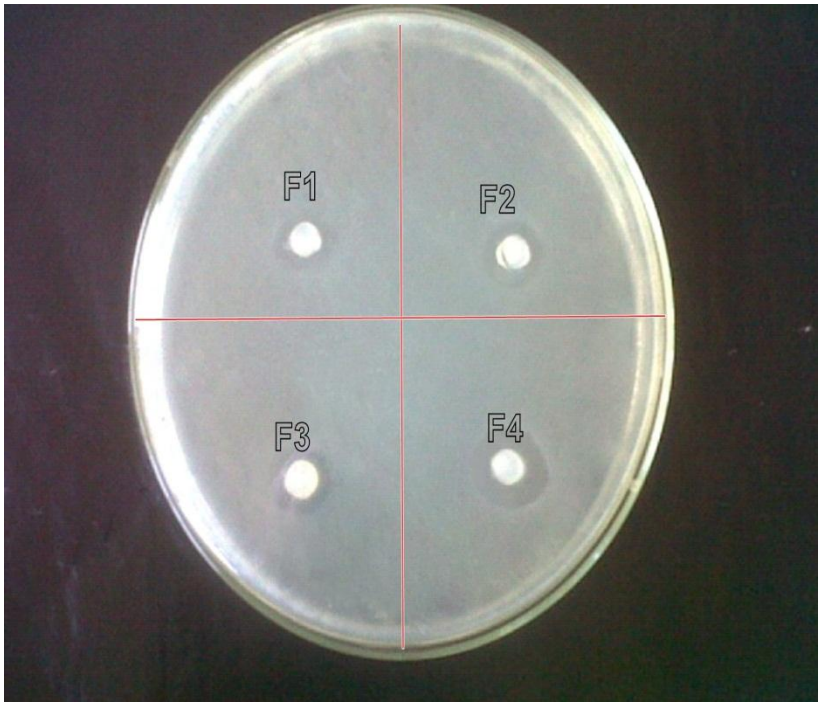
Lampiran 6.Fotohasilujidayahambat anti bakterisalepminyakbuaya *(Crocodylus porosus)*



Replikasi 1

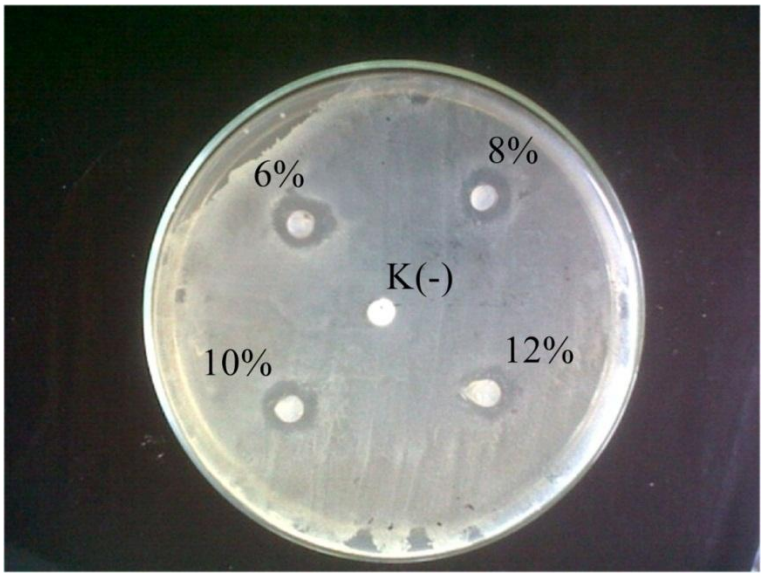


Replikasi 2

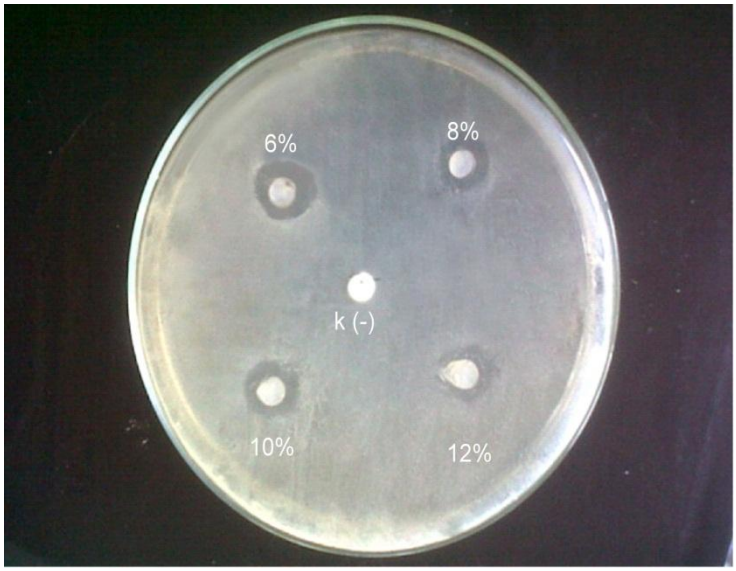


Replikasi 3

Foto hasil uji aktivitas antibakteri pada beberapa konsentrasi



Replikasi 1



Replikasi 2

Lampiran 7. Data hasilujihomogenitas, dayasebar, dayalekat, danuji viskositas

1. Ujihomogenitas

		F I	F II	F III	F IV
minggu	**0**	homogen	homogen	homogen	homogen
minggu	**1**	homogen	homogen	homogen	homogen
minggu	**2**	homogen	homogen	homogen	homogen
minggu	**3**	homogen	homogen	homogen	homogen
minggu	**4**	homogen	homogen	homogen	homogen

2. Ujidayasebar (mingguke – 0)

Formula	Beban (g)	Diameter penyebaran (cm)		
		1	2	3
F I	49,414	3,1	3,3	3,3
	99,414	3,5	3,6	3,6
	149,414	3,9	4,0	4,0
	249,414	4,8	4,9	5,0
	299,414	5,0	5,0	5,1
F II	49,414	3,3	3,3	3,3
	99,414	3,7	3,9	3,9
	149,414	3,9	3,9	4,0
	249,414	4,2	4,2	4,2
	299,414	5,0	5,2	5,1
F III	49,414	3,4	3,4	3,4
	99,414	3,5	3,6	3,6
	149,414	3,9	3,9	4,0
	249,414	4,1	4,1	4,1
	299,414	5,2	5,2	5,2
F IV	49,414	4,3	4,4	4,4
	99,414	3,4	3,4	3,4
	149,414	4,9	5,0	5,1
	249,414	5,3	5,3	5,3
	299,414	5,4	5,3	5,5

Data Pengujianmingguke – 1

Formula	Beban (g)	Diameter penyebaran (cm)		
		1	2	3
F I	49,414	3,2	3,1	3,1
	99,414	4,0	4,1	4,1
	149,414	4,3	4,3	4,3
	249,414	4,8	4,8	4,9
	299,414	5,0	5,0	5,0
F II	49,414	3,0	3,0	3,0
	99,414	3,5	3,6	3,7
	149,414	3,9	4,0	4,0
	249,414	4,2	4,2	4,2
	299,414	4,6	4,6	4,6
F III	49,414	3,2	3,2	3,2
	99,414	3,5	3,6	3,6
	149,414	3,8	3,8	3,8
	249,414	4,0	4,1	4,1
	299,414	4,9	5,0	5,0
F IV	49,414	3,2	3,2	3,3
	99,414	3,5	3,5	3,5
	149,414	3,8	3,8	3,9
	249,414	4,1	4,2	4,2
	299,414	4,9	4,9	5,0

Data Pengujianmingguke – 2

Formula	Beban (g)	Diameter penyebaran (cm)		
		1	2	3
F I	49,414	2,6	2,6	2,7
	99,414	2,9	2,9	2,9
	149,414	3,4	3,6	3,6
	249,414	3,8	3,8	3,8
	299,414	4,2	4,6	4,6
F II	49,414	2,5	2,5	2,5
	99,414	2,6	2,7	2,7
	149,414	3,0	3,2	3,3
	249,414	3,3	3,4	3,5
	299,414	4,0	4,0	4,0
F III	49,414	3,0	3,0	3,0
	99,414	3,4	3,4	3,5
	149,414	3,6	3,7	3,8
	249,414	4,0	4,0	4,0
	299,414	4,6	4,7	4,8
F IV	49,414	3,0	3,1	3,1
	99,414	3,4	3,4	3,4
	149,414	3,6	3,6	3,7
	249,414	3,9	4,0	4,0
	299,414	4,5	4,6	4,6

Data Pengujianmingguke – 3

Formula	Beban (g)	Diameter penyebaran (cm)		
		1	2	3
F I	49,414	2,6	2,6	2,6
	99,414	2,7	2,8	2,8
	149,414	3,0	3,1	3,1
	249,414	3,4	3,4	3,4
	299,414	4,0	4,0	4,0
F II	49,414	2,3	2,3	2,4
	99,414	2,5	2,6	2,6
	149,414	2,7	2,8	2,9
	249,414	3,0	3,2	3,2
	299,414	3,4	3,5	3,6
F III	49,414	2,8	2,9	3,0
	99,414	3,1	3,2	3,2
	149,414	3,4	3,5	3,5
	249,414	3,9	3,9	4,0
	299,414	4,3	4,4	4,5
F IV	49,414	2,7	2,8	2,9
	99,414	3,1	3,1	3,1
	149,414	3,3	3,4	3,5
	249,414	3,8	3,8	3,9
	299,414	4,2	4,2	4,2

Data Pengujianmingguke – 4

Formula	Beban (g)	Diameter penyebaran (cm)		
		1	2	3
F I	49,414	2,3	2,4	2,4
	99,414	2,5	2,5	2,5
	149,414	2,8	2,9	2,9
	249,414	3,0	3,0	3,1
	299,414	3,2	3,2	3,3
F II	49,414	2,2	2,2	2,2
	99,414	2,4	2,4	2,5
	149,414	2,6	2,6	2,7
	249,414	2,9	2,9	3,0
	299,414	3,0	3,1	3,1
F III	49,414	2,5	2,6	2,8
	99,414	3,0	3,0	3,1
	149,414	3,2	3,3	3,3
	249,414	3,5	3,5	3,5
	299,414	3,9	4,1	4,1
F IV	49,414	2,5	2,5	2,6
	99,414	3,0	3,1	3,2
	149,414	3,2	3,3	3,3
	249,414	3,5	3,4	3,5
	299,414	3,9	3,9	4,0

Data rata-rata ± SD ujidayasebarsalep

Formula	Beban (g)	Luaspenyebaran			
		minggu I	minggu II	minggu III	minggu IV
F I	49,414	3,1 ± 0,06	2,7 ± 0,06	2,6 ± 0	2,4 ± 0,06
	99,414	4,1 ± 0,06	2,9 ± 0	2,8 ± 0,06	2,5 ± 0
	149,414	4,3 ± 0	3,5 ± 0,16	3,1 ± 0,06	2,9 ± 0,06
	249,414	4,8 ± 0,06	3,8 ± 0	3,4 ± 0	3,0 ± 0,06
	299,414	5,0 ± 0	4,5 ± 0,23	4,0 ± 0,00	3,2 ± 0,06
F II	49,414	3,2 ± 0,11	2,5 ± 0	2,3 ± 0,06	2,2 ± 0
	99,414	3,7 ± 0,06	2,7 ± 0,06	2,6 ± 0,06	2,4 ± 0,06
	149,414	3,9 ± 0,06	3,2 ± 0,15	2,8 ± 0,10	2,9 ± 0,06
	249,414	4,9 ± 0,10	3,4 ± 0,10	3,1 ± 0,11	2,9 ± 0,06
	299,414	5,0 ± 0,06	4,0 ± 0	3,5 ± 0,11	3,1 ± 0,06
F III	49,414	3,2 ± 0	3,0 ± 0	2,9 ± 0,10	2,6 ± 0,15
	99,414	3,6 ± 0	3,4 ± 0,06	3,2 ± 0,06	3,0 ± 0,06
	149,414	3,8 ± 0	3,7 ± 0,10	3,5 ± 0,06	3,3 ± 0,06
	249,414	4,1 ± 0	4,0 ± 0	3,9 ± 0,06	3,5 ± 0
	299,414	5,0 ± 0,06	4,7 ± 0,10	4,4 ± 0,10	4,0 ± 0,11
F IV	49,414	3,2 ± 0,06	3,1 ± 0,00	2,8 ± 0,10	2,5 ± 0,06
	99,414	3,5 ± 0	3,4 ± 0,06	3,1 ± 0	3,0 ± 0,10
	149,414	3,8 ± 0,06	3,6 ± 0,10	3,4 ± 0,10	3,3 ± 0
	249,414	4,2 ± 0,06	4,0 ± 0,00	3,8 ± 0,06	3,5 ± 0,06
	299,414	5,0 ± 0,06	4,6 ± 0,10	4,2 ± 0	4,0 ± 0,10

3. Ujidayalekat

Mingguke	F I			F II			F III			F IV		
	a	b	c	a	b	c	a	b	c	a	b	c
0	2.47	5.24	1.45	3.20	5.48	1.45	3.00	2.14	1.10	1.42	2.10	2.15
1	2.49	3.05	4.25	2.11	2.58	4.25	1.08	1.20	1.48	1.54	2.15	2.05
2	2.38	0.08	1.28	0.21	0.08	0.20	0.02	0.06	0.08	1.13	0.36	1.45
3	1.15	1.20	1.15	1.10	1.20	1.14	2.25	2.20	2.20	1.20	1.20	1.23
4	1.29	1.15	1.28	1.12	1.15	1.18	2.27	2.20	2.21	1.22	1.15	1.23

Rata-rata pengujiandayalekat

WaktuPemeriksaan	F I	F II	F III	F IV
Mingguke 1	3,00	3,31	2,10	2,00
Mingguke 2	3,20	2,70	1,30	1,90
Mingguke 3	1,25	0,22	2,55	1,25
Mingguke 4	1,20	0,15	4,40	1,15

Data ujiviskositas

	Viskositas (dpas)											
Mingguke	Formula I			Formula II			Formula III			Formula IV		
	a	b	c	a	b	c	a	b	c	a	b	c
1	150	160	130	250	250	260	200	210	210	130	140	120
2	200	190	210	280	270	270	200	220	210	200	190	190
3	210	200	210	270	280	280	230	210	220	190	190	200
4	160	170	160	280	285	280	220	210	220	150	160	170

Rata-rata ± SD danujiviskositas

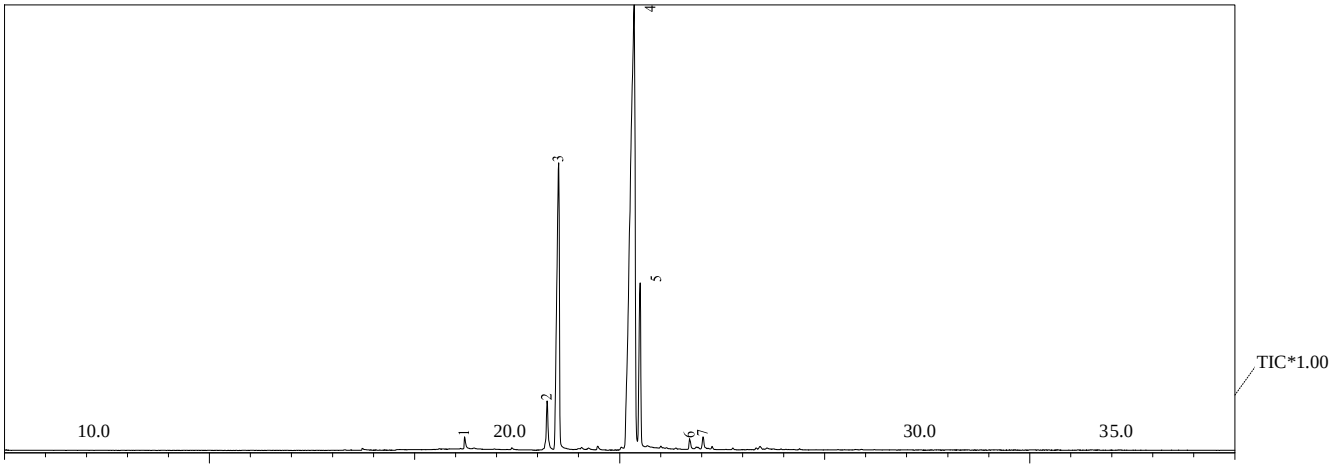
	Viskositas (dpas)			
Mingguke	Formula I	Formula II	Formula III	Formula IV
1	146 ± 66 ± 15,28	253,33 ± 5,77	206,66 ± 5,77	130,00 ± 15,81
2	200,00 ± 10,00	273,33 ± 5,76	210,00 ± 12,25	193,33 ± 5,77
3	206,66 ± 5,77	276,66 ± 5,77	220,00± 10,00	193,33 ± 5,77
4	163,33 ± 5,77	281,66 ± 2,88	216,66 ± 5,77	160,00 ± 10,00

Lampiran 8.Hasilidentifikasiuji GCMS

Lab.KimiaOrganikFMIPA- UGM

Sample Information

Analyzedby : Admin
SampleName : MINYAKBUAYAMUARA, DEWISHINTA
SampleID : 746.12
DataFile : D:\MARET2012\DEWI SHINTA30712.QGD
MethodFile : D:\MARET2012\ESTER3IKAN.qgm
TuningFile : C:\GCMSsolution\System\Tune1\FEBRUARI12.qgt



PeakReportTIC

Peak#	R.Time	I.Time	F.Time	Area	Area%	Height	Name
1	16.220	16.192	16.300	6403590.52	263749		
2	18.234	18.150	18.350	34442972.81	1063265		
3	18.513	18.392	18.642	274755222.35	6372892		
4	20.356	20.108	20.433	8063054865.67	9768990		
5	20.498	20.442	20.583	93106807.58	3566513		
6	21.710	21.667	21.783	5644140.46	225258		
7	22.037	21.983	22.100	7428690.61	253679		
				122780719	100.00	21514346	

GCMS-QP2010SSHIMADZU
Kolom:RastekRXi-5MS
Panjang:30meter
ID:0,25mm Gaspembawa:Helium Pengionan:EI
70Ev

Method

[Comment]
=====AnalyticalLine1=====
[GC-2010]
ColumnOvenTemp.:80.0 °C
InjectionTemp. :310.00°C
InjectionMode :SplitFlow
ControlMode :Pressure
Pressure :16.5kPa
Total Flow :80.0mL/min
ColumnFlow :0.50mL/min
LinearVelocity :26.1cm/sec
PurgeFlow :3.0mL/min
SplitRatio :153.0
HighPressure Injection :OFF
Carrier GasSaver :OFF
SplitterHold :OFF
OvenTemp. Program

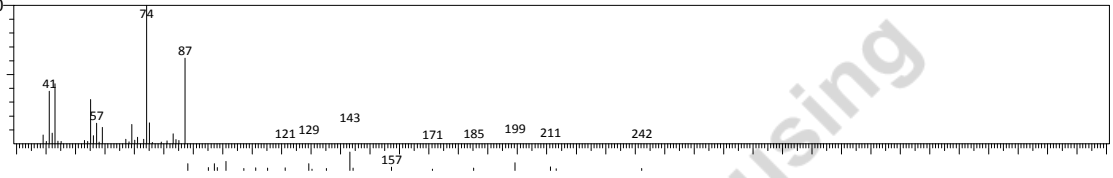
Rate	Temperature(°C)	HoldTime(min)
-	80.0	5.00
10.00	300.0	15.00

<ReadyCheckHeatUnit>
ColumnOven :Yes
SPL1 :Yes
MS : No
<ReadyCheckDetector(FTD)>
<ReadyCheckBaselineDrift >
<ReadyCheckInjectionFlow>
SPL1Carrier :Yes
SPL1Purge :Yes
<ReadyCheckAPCFlow>

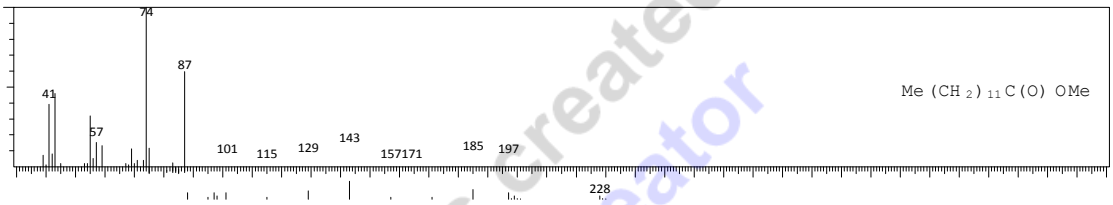
<ReadyCheckDetectorAPCFlow>
External Wait :No
EquilibriumTime :1.0min
[GCProgram]
[GCMS-QP2010]
IonSourceTemp :250.00°C
InterfaceTemp. :305.00°C
SolventCutTime :4.80min
Detector GainMode :Relative
DetectorGain :0.00kV
Threshold :0
[MSTable]
--Group1 - Event1--
Start Time :5.00min
EndTime :42.00min
ACQMode :Scan
Event Time :0.50sec
ScanSpeed :1250
Startm/z :28.00
Endm/z :600.00
SampleInletUnit :GC
[MSProgram]
Use MS Programe : OFF

Library

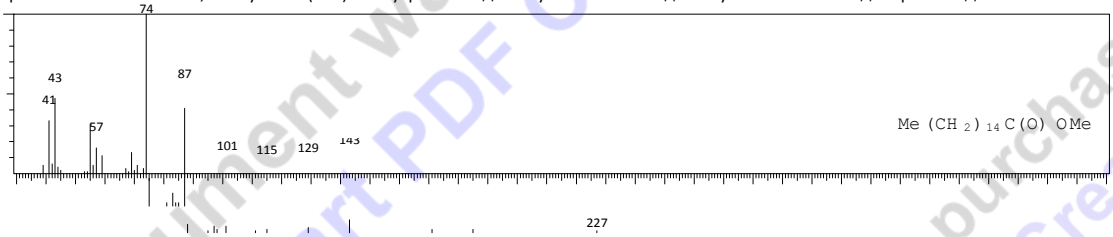
<<Target>>
Line#:1R.Time:16.217(Scan#:1347)
MassPeaks:50RawMode:Single16.217(1347)BasePeak:
74.05(53860) BGMode:PeakStart16.192(1344)
100



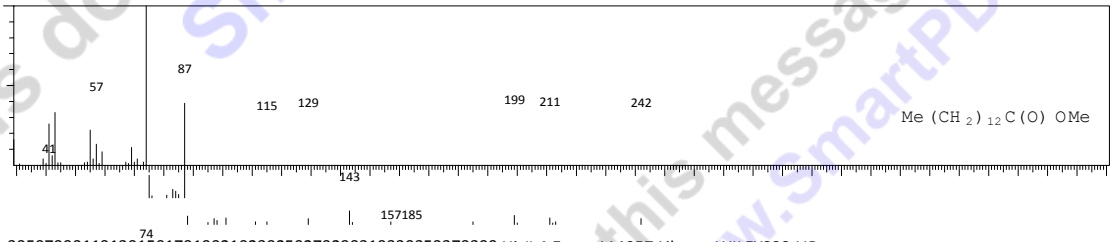
30507090110130150170190210230250270290310330350370390 Hit#:1 Entry:91675 Library:WILEY229.LIB
SI:95Formula:C14 H28 O2CAS:1731-88-0MolWeight:228RetIndex:0
CompName:Tridecanoicacid, methyl ester(CAS) Methyltridecanoate$$METHYLN-TRIDECANOATE$$Tridecanoicacidmethylester $$Methyl este100



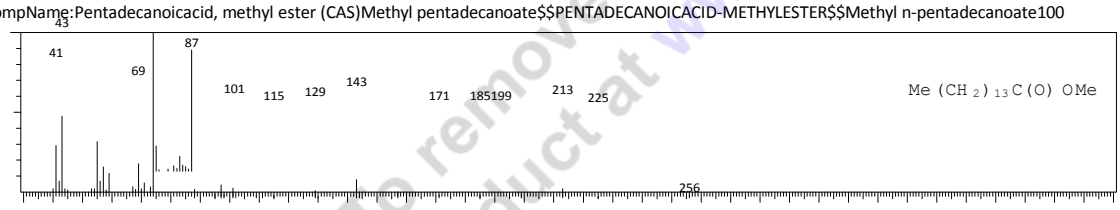
30507090110130150170190210230250270290310330350370390 Hit#:2 Entry:124637 Library:WILEY229.LIB
SI:95Formula:C17 H34 O2CAS:112-39-0MolWeight:270RetIndex:0
CompName:Hexadecanoicacid, methyl ester (CAS) Methyl palmitate$$Methylhexadecanoate$$Methyln-hexadecanoate$$UniphatA60$$Metholene2 100



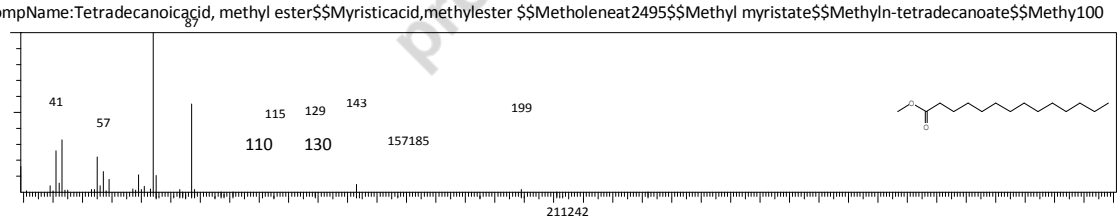
30507090110130150170190210230250270290310330350370390 Hit#:3 Entry:103147 Library:WILEY229.LIB
SI:95Formula:C15 H30O2CAS:124-10-7MolWeight:242RetIndex:0
CompName:Tetradecanoicacid, methyl ester(CAS) Methylmyristate$$Methyltetradecanoate$$Methyl n-tetradecanoate$$Myristicacidmethylester $$ 100



30507090110130150170190210230250270290310330350370390 Hit#:4 Entry:114057 Library:WILEY229.LIB
SI:95Formula:C16 H32 O2CAS:7132-64-1MolWeight:256RetIndex:0
CompName:Pentadecanoicacid, methyl ester (CAS)Methyl pentadecanoate$$PENTADECANOICACID-METHYLESTER$$Methyl n-pentadecanoate100



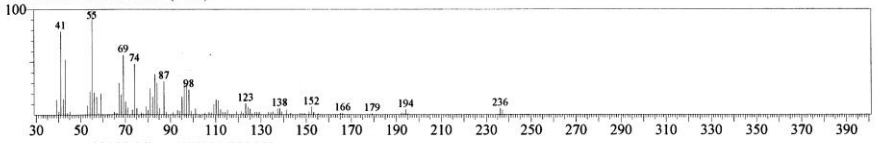
30507090110130150170190210230250270290310330350370390 Hit#:5Entry:32399Library:NIST62.LIB
SI:94Formula:C15H30O2CAS:124-10-7MolWeight:242RetIndex:0
CompName:Tetradecanoicacid, methyl ester$$Myristicacid,methylester $$Metholeneat2495$$Methyl myristate$$Methyln-tetradecanoate$$Methy100



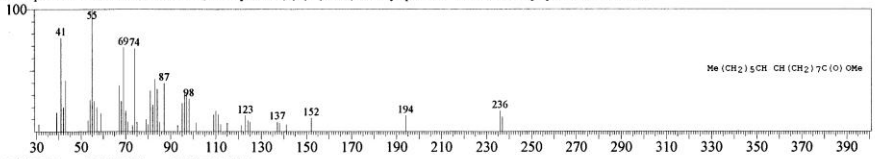
210230250270290310330350370390

D:\MARET 2012\DEWI SHINTA 30712.QGD 7/31/2012

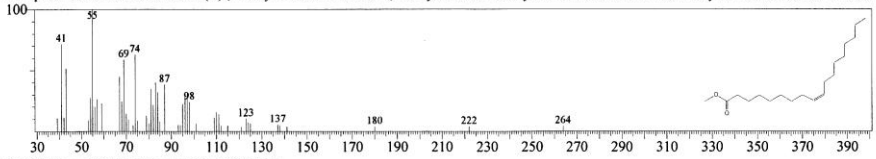
<< Target >>
Line#:2 R.Time:18.233(Scan#:1589) MassPeaks:89
RawMode:Single 18.233(1589) BasePeak:55.10(99036)
BG Mode:Peak Start 18.150(1579)



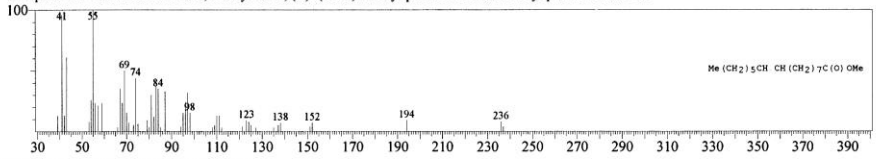
Hit#:1 Entry:123057 Library:WILEY229.LIB
SI:95 Formula:C17 H32 O2 CAS:1120-25-8 MolWeight:268 RetIndex:0
CompName:9-Hexadecenoic acid, methyl ester, (Z)- (CAS) Methyl palmitoleate $$ Methyl palmitoleinate $$



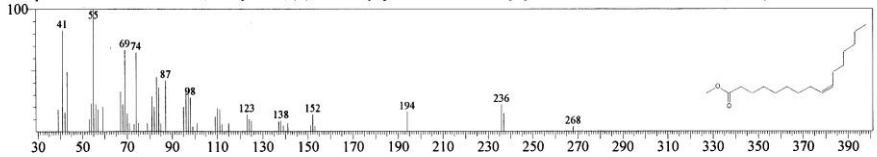
Hit#:2 Entry:42154 Library:NIST62.LIB
SI:95 Formula:C19H36O2 CAS:112-62-9 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid (Z)-, methyl ester $$ Oleic acid, methyl ester $$ Emery oleic acid ester 2301 $$ Methyl cis-9-octadecenoate $$ M



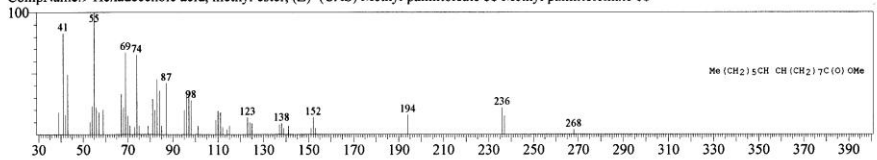
Hit#:3 Entry:123055 Library:WILEY229.LIB
SI:95 Formula:C17 H32 O2 CAS:1120-25-8 MolWeight:268 RetIndex:0
CompName:9-Hexadecenoic acid, methyl ester, (Z)- (CAS) Methyl palmitoleate $$ Methyl palmitoleinate $$



Hit#:4 Entry:37404 Library:NIST62.LIB
SI:94 Formula:C17H32O2 CAS:1120-25-8 MolWeight:268 RetIndex:0
CompName:9-Hexadecenoic acid, methyl ester, (Z)- $$ Methyl palmitoleate $$ Methyl palmitoleinate $$ Palmitoleic acid, methyl ester

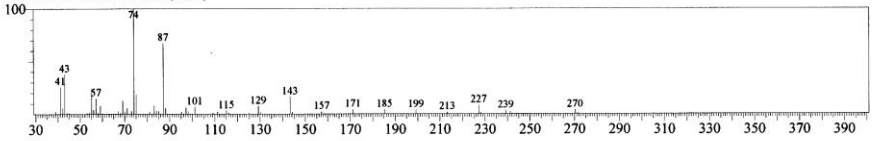


Hit#:5 Entry:123056 Library:WILEY229.LIB
SI:94 Formula:C17 H32 O2 CAS:1120-25-8 MolWeight:268 RetIndex:0
CompName:9-Hexadecenoic acid, methyl ester, (Z)- (CAS) Methyl palmitoleate $$ Methyl palmitoleinate $$

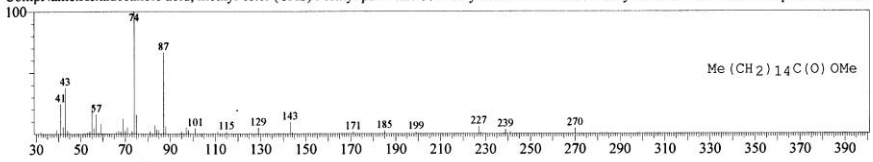


D:\MARET 2012\DEWI SHINTA 30712.QGD 7/31/2012

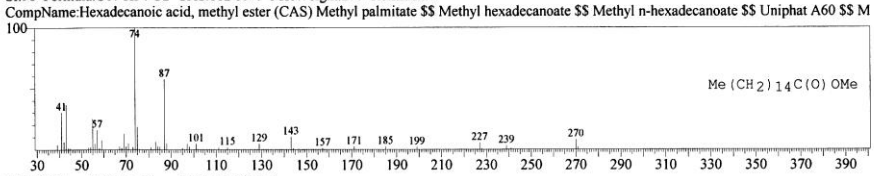
<< Target >>
Line#:3 R.Time:18.517(Scan#:1623) MassPeaks:51
RawMode:Single 18.517(1623) BasePeak:74.05(1299960)
BG Mode:Peak Start 18.392(1608)



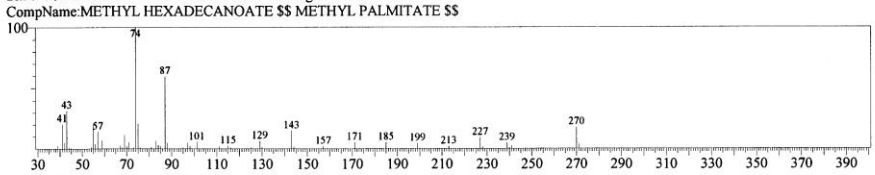
Hit#:1 Entry:124618 Library:WILEY229.LIB
SI:97 Formula:C17 H34 O2 CAS:112-39-0 MolWeight:270 RetIndex:0
CompName:Hexadecanoic acid, methyl ester (CAS) Methyl palmitate $$ Methyl hexadecanoate $$ Methyl n-hexadecanoate $$ Uniphat A60 $$ M



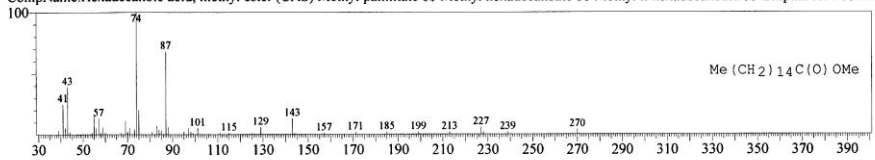
Hit#:2 Entry:124619 Library:WILEY229.LIB
SI:96 Formula:C17 H34 O2 CAS:112-39-0 MolWeight:270 RetIndex:0
CompName:Hexadecanoic acid, methyl ester (CAS) Methyl palmitate $$ Methyl hexadecanoate $$ Methyl n-hexadecanoate $$ Uniphat A60 $$ M



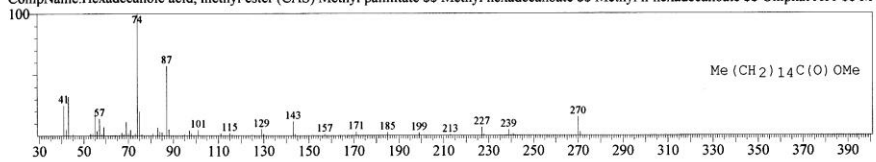
Hit#:3 Entry:124679 Library:WILEY229.LIB
SI:96 Formula:C17 H34 O2 CAS:0-00-0 MolWeight:270 RetIndex:0
CompName:METHYL HEXADECANOATE $$ METHYL PALMITATE $$



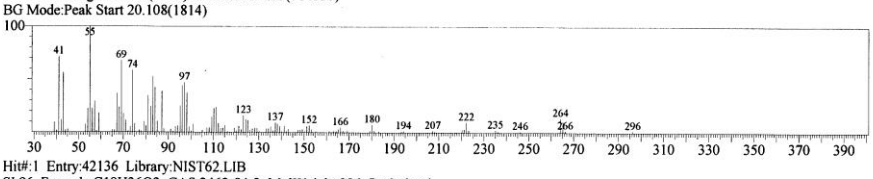
Hit#:4 Entry:124633 Library:WILEY229.LIB
SI:96 Formula:C17 H34 O2 CAS:112-39-0 MolWeight:270 RetIndex:0
CompName:Hexadecanoic acid, methyl ester (CAS) Methyl palmitate $$ Methyl hexadecanoate $$ Methyl n-hexadecanoate $$ Uniphat A60 $$ M



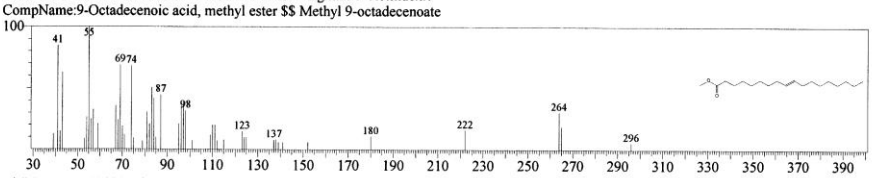
Hit#:5 Entry:124622 Library:WILEY229.LIB
SI:96 Formula:C17 H34 O2 CAS:112-39-0 MolWeight:270 RetIndex:0
CompName:Hexadecanoic acid, methyl ester (CAS) Methyl palmitate $$ Methyl hexadecanoate $$ Methyl n-hexadecanoate $$ Uniphat A60 $$ M



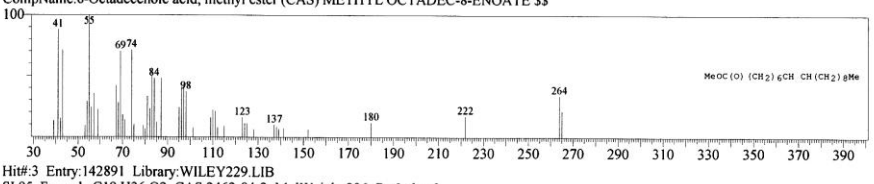
<< Target >>
Line#:4 R.Time:20.358(Scan#:1844) MassPeaks:115
RawMode:Single 20.358(1844) BasePeak:55.05(714630)
BG Mode:Peak Start 20.108(1814)



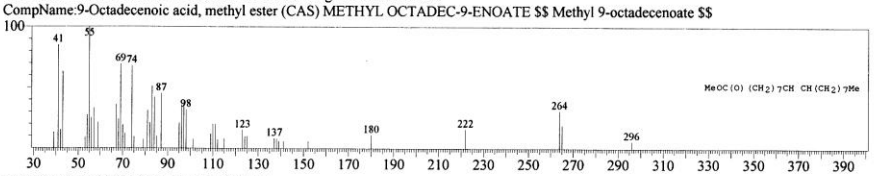
Hit#:1 Entry:42136 Library:NIST62.LIB
SI:96 Formula:C19H36O2 CAS:2462-84-2 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid, methyl ester $$ Methyl 9-octadecenoate



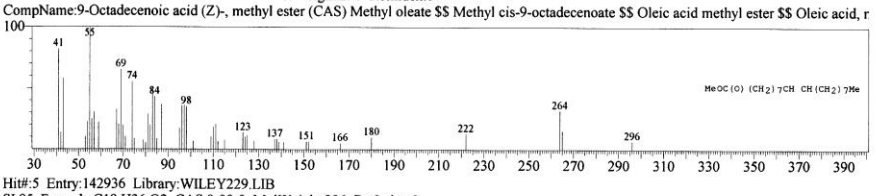
Hit#:2 Entry:142883 Library:WILEY229.LIB
SI:96 Formula:C19 H36 O2 CAS:2345-29-1 MolWeight:296 RetIndex:0
CompName:8-Octadecenoic acid, methyl ester (CAS) METHYL OCTADEC-8-ENOATE $$



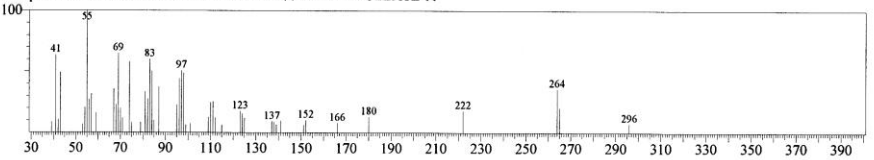
Hit#:3 Entry:142891 Library:WILEY229.LIB
SI:95 Formula:C19 H36 O2 CAS:2462-84-2 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid, methyl ester (CAS) METHYL OCTADEC-9-ENOATE $$ Methyl 9-octadecenoate $$



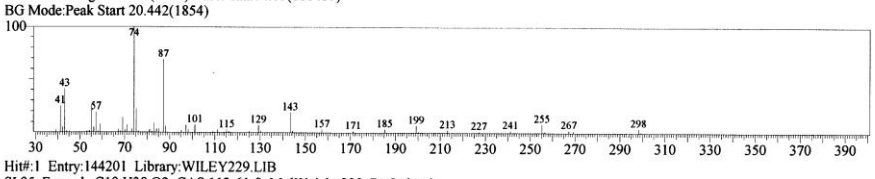
Hit#:4 Entry:142894 Library:WILEY229.LIB
SI:95 Formula:C19 H36 O2 CAS:112-62-9 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid (Z)-, methyl ester (CAS) Methyl oleate $$ Methyl cis-9-octadecenoate $$ Oleic acid methyl ester $$ Oleic acid, r



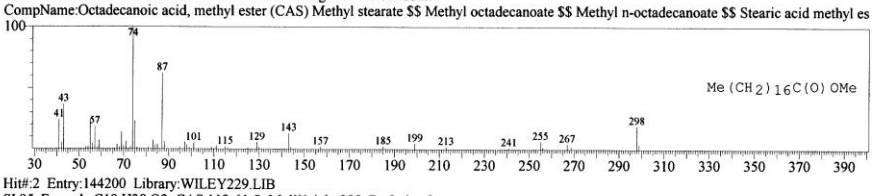
Hit#:5 Entry:142936 Library:WILEY229.LIB
SI:95 Formula:C19 H36 O2 CAS:0-00-0 MolWeight:296 RetIndex:0
CompName:METHYL 9-OCTADECENOATE $$ METHYL OLEATE $$



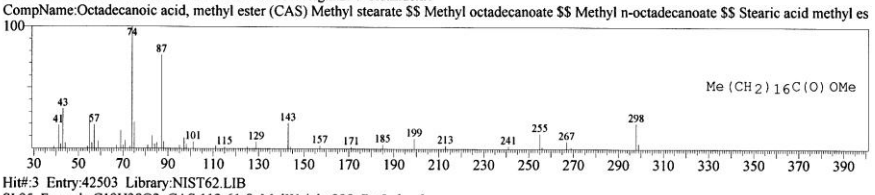
<< Target >>
Line#:5 R.Time:20.500(Scan#:1861) MassPeaks:56
RawMode:Single 20.500(1861) BasePeak:74.05(680467)
BG Mode:Peak Start 20.442(1854)



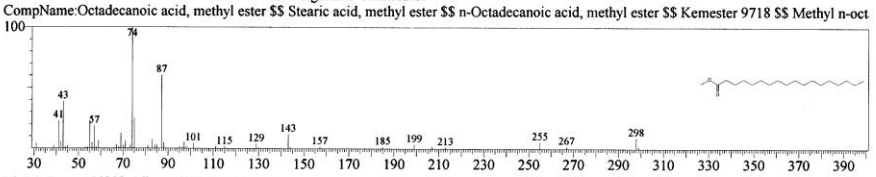
Hit#:1 Entry:144201 Library:WILEY229.LIB
SI:95 Formula:C19 H38 O2 CAS:112-61-8 MolWeight:298 RetIndex:0
CompName:Octadecanoic acid, methyl ester (CAS) Methyl stearate $$ Methyl octadecanoate $$ Methyl n-octadecanoate $$ Stearic acid methyl es



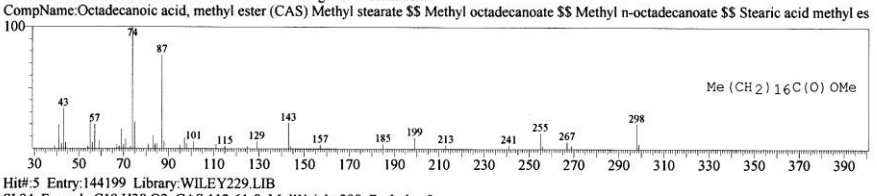
Hit#:2 Entry:144200 Library:WILEY229.LIB
SI:95 Formula:C19 H38 O2 CAS:112-61-8 MolWeight:298 RetIndex:0
CompName:Octadecanoic acid, methyl ester (CAS) Methyl stearate $$ Methyl octadecanoate $$ Methyl n-octadecanoate $$ Stearic acid methyl es



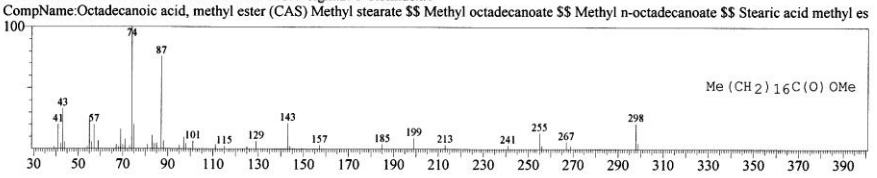
Hit#:3 Entry:42503 Library:NIST62.LIB
SI:95 Formula:C19H38O2 CAS:112-61-8 MolWeight:298 RetIndex:0
CompName:Octadecanoic acid, methyl ester $$ Stearic acid, methyl ester $$ n-Octadecanoic acid, methyl ester $$ Kemester 9718 $$ Methyl n-oct



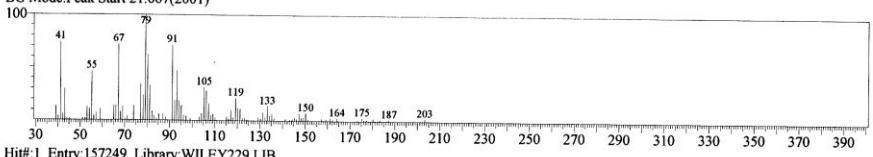
Hit#:4 Entry:144202 Library:WILEY229.LIB
SI:95 Formula:C19 H38 O2 CAS:112-61-8 MolWeight:298 RetIndex:0
CompName:Octadecanoic acid, methyl ester (CAS) Methyl stearate $$ Methyl octadecanoate $$ Methyl n-octadecanoate $$ Stearic acid methyl es



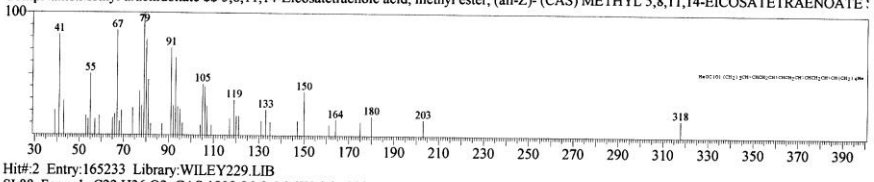
Hit#:5 Entry:144199 Library:WILEY229.LIB
SI:94 Formula:C19 H38 O2 CAS:112-61-8 MolWeight:298 RetIndex:0
CompName:Octadecanoic acid, methyl ester (CAS) Methyl stearate $$ Methyl octadecanoate $$ Methyl n-octadecanoate $$ Stearic acid methyl es



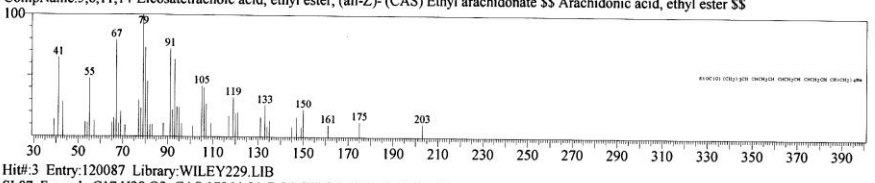
<< Target >>
Line#:6 R.Time:21.708(Scan#:2006) MassPeaks:92
RawMode:Single 21.708(2006) BasePeak:79.10(19757)
BG Mode:Peak Start 21.667(2001)



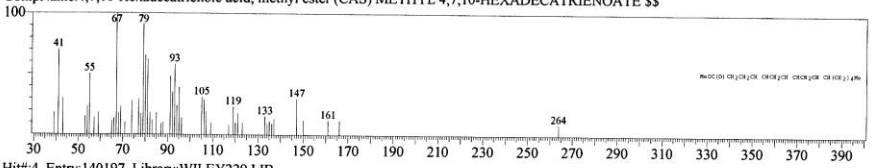
Hit#:1 Entry:157249 Library:WILEY229.LIB
SI:89 Formula:C21 H34 O2 CAS:2566-89-4 MolWeight:318 RetIndex:0
CompName:Methyl arachidonate $$ 5,8,11,14-Eicosatetraenoic acid, methyl ester, (all-Z)- (CAS) METHYL 5,8,11,14-EICOSATETRAENOATE $



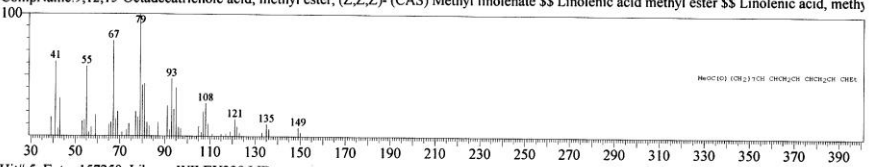
Hit#:2 Entry:165233 Library:WILEY229.LIB
SI:88 Formula:C22 H36 O2 CAS:1808-26-0 MolWeight:332 RetIndex:0
CompName:5,8,11,14-Eicosatetraenoic acid, ethyl ester, (all-Z)- (CAS) Ethyl arachidonate $$ Arachidonic acid, ethyl ester $$



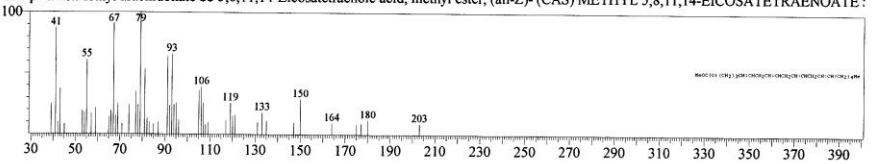
Hit#:3 Entry:120087 Library:WILEY229.LIB
SI:87 Formula:C17 H28 O2 CAS:17364-31-7 MolWeight:264 RetIndex:0
CompName:4,7,10-Hexadecatrienoic acid, methyl ester (CAS) METHYL 4,7,10-HEXADECATRIENOATE $$



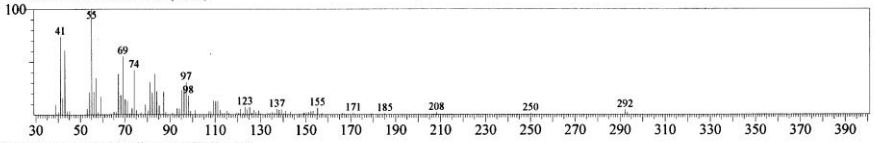
Hit#:4 Entry:140197 Library:WILEY229.LIB
SI:87 Formula:C19 H32 O2 CAS:301-00-8 MolWeight:292 RetIndex:0
CompName:9,12,15-Octadecatrienoic acid, methyl ester, (Z,Z,Z)- (CAS) Methyl linolenate $$ Linolenic acid methyl ester $$ Linolenic acid, methy



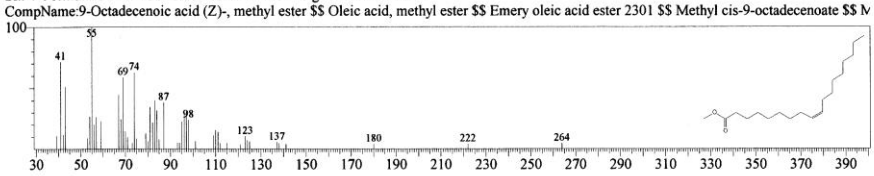
Hit#:5 Entry:157250 Library:WILEY229.LIB
SI:86 Formula:C21 H34 O2 CAS:2566-89-4 MolWeight:318 RetIndex:0
CompName:Methyl arachidonate $$ 5,8,11,14-Eicosatetraenoic acid, methyl ester, (all-Z)- (CAS) METHYL 5,8,11,14-EICOSATETRAENOATE $



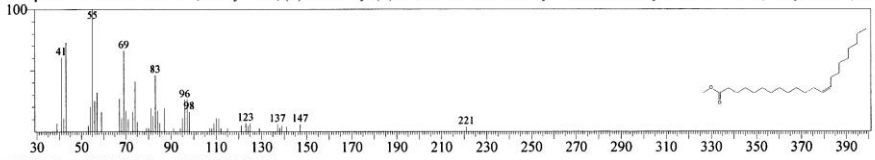
<< Target >>
Line#:7 R.Time:22.033(Scan#:2045) MassPeaks:93
RawMode:Single 22.033(2045) BasePeak:55.10(23789)
BG Mode:Peak Start 21.983(2039)



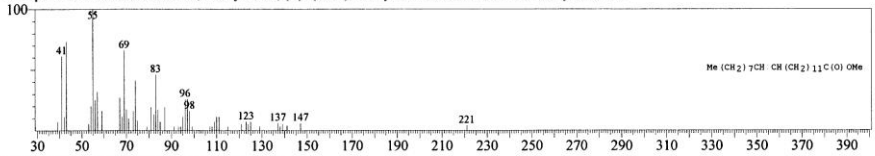
Hit#:1 Entry:42154 Library:NIST62.LIB
SI:94 Formula:C19H36O2 CAS:112-62-9 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid (Z)-, methyl ester $$ Oleic acid, methyl ester $$ Emery oleic acid ester 2301 $$ Methyl cis-9-octadecenoate $$ M



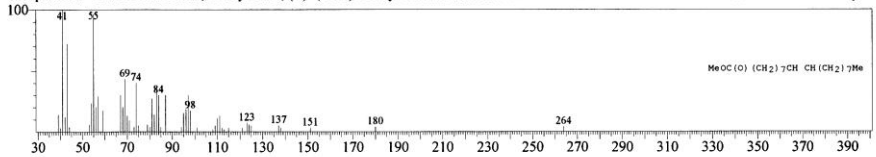
Hit#:2 Entry:49548 Library:NIST62.LIB
SI:92 Formula:C23H44O2 CAS:1120-34-9 MolWeight:352 RetIndex:0
CompName:13-Docosenoic acid, methyl ester, (Z)- $$ Methyl (Z)-13 docosenoate $$ Methyl erucate $$ Methyl 13-docosenoate(methyl erucate) $$



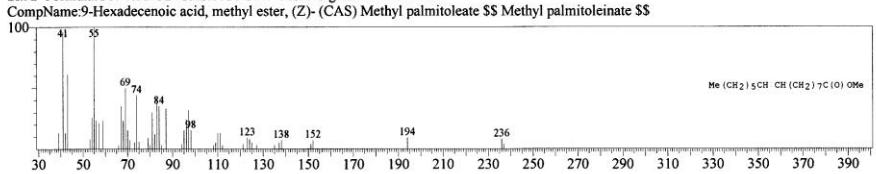
Hit#:3 Entry:175148 Library:WILEY229.LIB
SI:92 Formula:C23 H44 O2 CAS:1120-34-9 MolWeight:352 RetIndex:0
CompName:13-Docosenoic acid, methyl ester, (Z)- (CAS) Methyl erucate $$ Erucic acid methyl ester $$



Hit#:4 Entry:142902 Library:WILEY229.LIB
SI:92 Formula:C19 H36 O2 CAS:1937-62-8 MolWeight:296 RetIndex:0
CompName:9-Octadecenoic acid, methyl ester, (E)- (CAS) Methyl elaidate $$ METHYL-TRANS 9-OCTADECENOATE $$ Elaidic acid methyl e



Hit#:5 Entry:123055 Library:WILEY229.LIB
SI:92 Formula:C17 H32 O2 CAS:1120-25-8 MolWeight:268 RetIndex:0
CompName:9-Hexadecenoic acid, methyl ester, (Z)- (CAS) Methyl palmitoleate $$ Methyl palmitoleinate $$



Lampiran 9. Hasilanalisis data statistikujidayasebar, dayalekat, danviskositas

One-Sample Kolmogorov-Smirnov Test

		Diameter penyebaran (cm) mingguke 0	Diameter penyebaran (cm) mingguke 1	Diameter penyebaran (cm) mingguke 2	Diameter penyebaran (cm) mingguke 3	Diameter penyebaran (cm) mingguke 4
N		60	60	60	60	60
Normal Parameters[a,b]	Mean	4.2367	3.9983	3.5267	3.2683	3.0017
	Std. Deviation	.73114	.62585	.63135	.56942	.49420
Most Extreme Differences	Absolute	.152	.100	.081	.100	.108
	Positive	.127	.082	.081	.100	.108
	Negative	-.152	-.100	-.072	-.083	-.065
Kolmogorov-Smirnov Z		1.176	.774	.629	.771	.840
Asymp. Sig. (2-tailed)		.126	.587	.823	.591	.480

a. Test distribution is Normal.
b. Calculated from data.

Descriptives

			N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
							Lower Bound	Upper Bound			
Diameter penyebaran (cm) mingguke 0	1.00		15	4.1400	.74335	.19193	3.7283	4.5517	3.10	5.10	
	2.00		15	4.0733	.61466	.15871	3.7329	4.4137	3.30	5.20	
	3.00		15	4.0400	.65444	.16897	3.6776	4.4024	3.40	5.20	
	4.00		15	4.6933	.76855	.19844	4.2677	5.1189	3.40	5.50	
	Total		60	4.2367	.73114	.09439	4.0478	4.4255	3.10	5.50	
	Model	Fixed Effects			.69809	.09012	4.0561	4.4172			
		Random Effects				.15363	3.7477	4.7256			.06193
Diameter penyebaran (cm) mingguke 1	1.00		15	4.2667	.68522	.17692	3.8872	4.6461	3.10	5.00	
	2.00		15	3.8733	.56501	.14589	3.5604	4.1862	3.00	4.60	
	3.00		15	3.9200	.61783	.15952	3.5779	4.2621	3.20	5.00	
	4.00		15	3.9333	.61257	.15816	3.5941	4.2726	3.20	5.00	
	Total		60	3.9983	.62585	.08080	3.8367	4.1600	3.00	5.00	
	Model	Fixed Effects			.62163	.08025	3.8376	4.1591			
		Random Effects				.09036	3.7108	4.2859			.00690
Diameter penyebaran (cm) mingguke 2	1.00		15	3.4667	.68313	.17638	3.0884	3.8450	2.60	4.60	
	2.00		15	3.1467	.56044	.14471	2.8363	3.4570	2.50	4.00	
	3.00		15	3.7667	.59362	.15327	3.4379	4.0954	3.00	4.80	
	4.00		15	3.7267	.53247	.13748	3.4318	4.0215	3.00	4.60	
	Total		60	3.5267	.63135	.08151	3.3636	3.6898	2.50	4.80	
	Model	Fixed Effects			.59512	.07683	3.3728	3.6806			
		Random Effects				.14306	3.0714	3.9820			.05826

Diameter penyebaran (cm) mingguke 3	1.00		15	3.1667	.51640	.13333	2.8807	3.4526	2.60	4.00	
	2.00		15	2.8667	.43370	.11198	2.6265	3.1068	2.30	3.60	
	3.00		15	3.5733	.55993	.14457	3.2633	3.8834	2.80	4.50	
	4.00		15	3.4667	.52190	.13475	3.1776	3.7557	2.70	4.20	
	Total		60	3.2683	.56942	.07351	3.1212	3.4154	2.30	4.50	
	Model	Fixed Effects			.51007	.06585	3.1364	3.4002			
		Random Effects				.15917	2.7618	3.7749			.08400
Diameter penyebaran (cm) mingguke 4	1.00		15	2.8000	.33806	.08729	2.6128	2.9872	2.30	3.30	
	2.00		15	2.6533	.33138	.08556	2.4698	2.8368	2.20	3.10	
	3.00		15	3.2933	.49058	.12667	3.0217	3.5650	2.50	4.10	
	4.00		15	3.2600	.47779	.12337	2.9954	3.5246	2.50	4.00	
	Total		60	3.0017	.49420	.06380	2.8740	3.1293	2.20	4.10	
	Model	Fixed Effects			.41625	.05374	2.8940	3.1093			
		Random Effects				.16171	2.4870	3.5163			.09305

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Diameter penyebaran (cm) mingguke 0	1.199	3	56	.318
Diameter penyebaran (cm) mingguke 1	.119	3	56	.949
Diameter penyebaran (cm) mingguke 2	.519	3	56	.671
Diameter penyebaran (cm) mingguke 3	.519	3	56	.671
Diameter penyebaran (cm) mingguke 4	.650	3	56	.586

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Diameter penyebaran (cm) mingguke 0	Between Groups	4.249	3	1.416	2.906	.043
	Within Groups	27.291	56	.487		
	Total	31.539	59			
Diameter penyebaran (cm) mingguke 1	Between Groups	1.470	3	.490	1.268	.294
	Within Groups	21.640	56	.386		
	Total	23.110	59			
Diameter penyebaran (cm) mingguke 2	Between Groups	3.684	3	1.228	3.467	.022
	Within Groups	19.833	56	.354		
	Total	23.517	59			
Diameter penyebaran (cm) mingguke 3	Between Groups	4.561	3	1.520	5.843	.002
	Within Groups	14.569	56	.260		
	Total	19.130	59			
Diameter penyebaran (cm) mingguke 4	Between Groups	4.707	3	1.569	9.056	.000
	Within Groups	9.703	56	.173		
	Total	14.410	59			

Post Hoc Tests

Multiple Comparisons

Dependent Variable		(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Diameter penyebaran (cm) mingguke 0	LSD	1.00	2.00	.06667	.25491	.795	-.4440	.5773
			3.00	.10000	.25491	.696	-.4106	.6106
			4.00	-.55333*	.25491	.034	-1.0640	-.0427
		2.00	1.00	-.06667	.25491	.795	-.5773	.4440
			3.00	.03333	.25491	.896	-.4773	.5440
			4.00	-.62000*	.25491	.018	-1.1306	-.1094
		3.00	1.00	-.10000	.25491	.696	-.6106	.4106
			2.00	-.03333	.25491	.896	-.5440	.4773
			4.00	-.65333*	.25491	.013	-1.1640	-.1427
		4.00	1.00	.55333*	.25491	.034	.0427	1.0640
			2.00	.62000*	.25491	.018	.1094	1.1306
			3.00	.65333*	.25491	.013	.1427	1.1640
Diameter penyebaran (cm) mingguke 1	LSD	1.00	2.00	.39333	.22699	.089	-.0614	.8480
			3.00	.34667	.22699	.132	-.1080	.8014
			4.00	.33333	.22699	.148	-.1214	.7880
		2.00	1.00	-.39333	.22699	.089	-.8480	.0614
			3.00	-.04667	.22699	.838	-.5014	.4080
			4.00	-.06000	.22699	.792	-.5147	.3947
		3.00	1.00	-.34667	.22699	.132	-.8014	.1080
			2.00	.04667	.22699	.838	-.4080	.5014
			4.00	-.01333	.22699	.953	-.4680	.4414
		4.00	1.00	-.33333	.22699	.148	-.7880	.1214
			2.00	.06000	.22699	.792	-.3947	.5147
			3.00	.01333	.22699	.953	-.4414	.4680
Diameter penyebaran (cm) mingguke 2	LSD	1.00	2.00	.32000	.21731	.146	-.1153	.7553
			3.00	-.30000	.21731	.173	-.7353	.1353
			4.00	-.26000	.21731	.237	-.6953	.1753
		2.00	1.00	-.32000	.21731	.146	-.7553	.1153
			3.00	-.62000*	.21731	.006	-1.0553	-.1847
			4.00	-.58000*	.21731	.010	-1.0153	-.1447
		3.00	1.00	.30000	.21731	.173	-.1353	.7353
			2.00	.62000*	.21731	.006	.1847	1.0553
			4.00	.04000	.21731	.855	-.3953	.4753
		4.00	1.00	.26000	.21731	.237	-.1753	.6953
			2.00	.58000*	.21731	.010	.1447	1.0153
			3.00	-.04000	.21731	.855	-.4753	.3953
Diameter penyebaran (cm) mingguke 3	LSD	1.00	2.00	.30000	.18625	.113	-.0731	.6731
			3.00	-.40667*	.18625	.033	-.7798	-.0336
			4.00	-.30000	.18625	.113	-.6731	.0731
		2.00	1.00	-.30000	.18625	.113	-.6731	.0731
			3.00	-.70667*	.18625	.000	-1.0798	-.3336
			4.00	-.60000*	.18625	.002	-.9731	-.2269
		3.00	1.00	.40667*	.18625	.033	.0336	.7798
			2.00	.70667*	.18625	.000	.3336	1.0798
			4.00	.10667	.18625	.569	-.2664	.4798
		4.00	1.00	.30000	.18625	.113	-.0731	.6731
			2.00	.60000*	.18625	.002	.2269	.9731
			3.00	-.10667	.18625	.569	-.4798	.2664
Diameter penyebaran (cm)	LSD	1.00	2.00	.14667	.15199	.339	-.1578	.4511
			3.00	-.49333*	.15199	.002	-.7978	-.1889

mingguke 4		4.00	-.46000*	.15199	.004	-.7645	-.1555
	2.00	1.00	-.14667	.15199	.339	-.4511	.1578
		3.00	-.64000*	.15199	.000	-.9445	-.3355
		4.00	-.60667*	.15199	.000	-.9111	-.3022
	3.00	1.00	.49333*	.15199	.002	.1889	.7978
		2.00	.64000*	.15199	.000	.3355	.9445
		4.00	.03333	.15199	.827	-.2711	.3378
	4.00	1.00	.46000*	.15199	.004	.1555	.7645
		2.00	.60667*	.15199	.000	.3022	.9111
		3.00	-.03333	.15199	.827	-.3378	.2711

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Diameter penyebaran (cm) mingguke 0

			Subset for alpha = 0.05	
	Formula	N	1	2
Duncan[a]	3.00	15	4.0400	
	2.00	15	4.0733	
	1.00	15	4.1400	
	4.00	15		4.6933
	Sig.		.715	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 15.000.

Diameter penyebaran (cm) mingguke 1

			Subset for alpha = 0.05
	Formula	N	1
Duncan[a]	2.00	15	3.8733
	3.00	15	3.9200
	4.00	15	3.9333
	1.00	15	4.2667
	Sig.		.119

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 15.000.

Diameter penyebaran (cm) mingguke 2

			Subset for alpha = 0.05	
	Formula	N	1	2
Duncan[a]	2.00	15	3.1467	
	1.00	15	3.4667	3.4667
	4.00	15		3.7267
	3.00	15		3.7667
	Sig.		.146	.199

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 15.000.

Diameter penyebaran (cm) mingguke 3

	Formula	N	Subset for alpha = 0.05		
			1	2	3
Duncan[a]	2.00	15	2.8667		
	1.00	15	3.1667	3.1667	
	4.00	15		3.4667	3.4667
	3.00	15			3.5733
	Sig.		.113	.113	.569

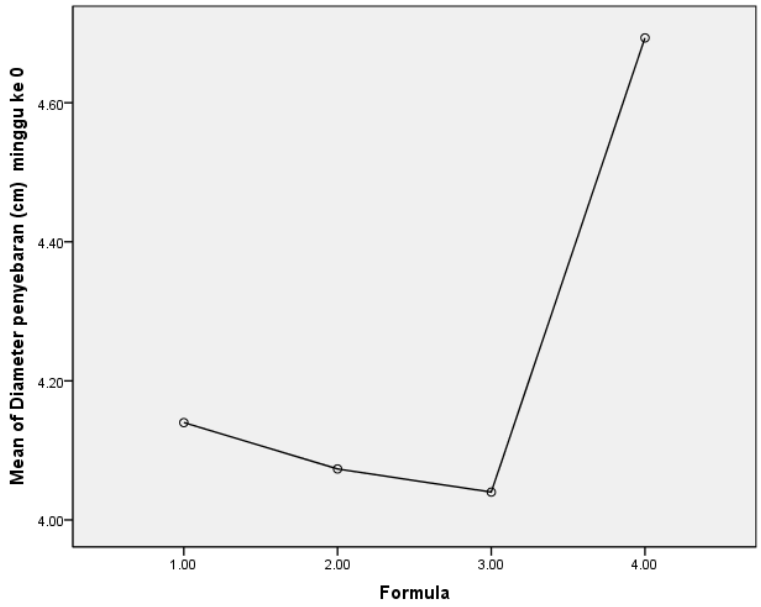
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 15.000.

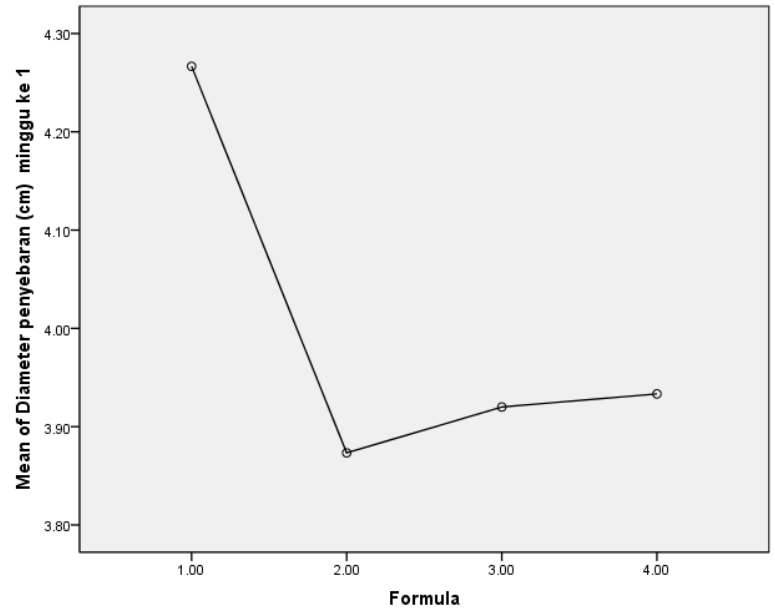
Diameter penyebaran (cm) mingguke 4

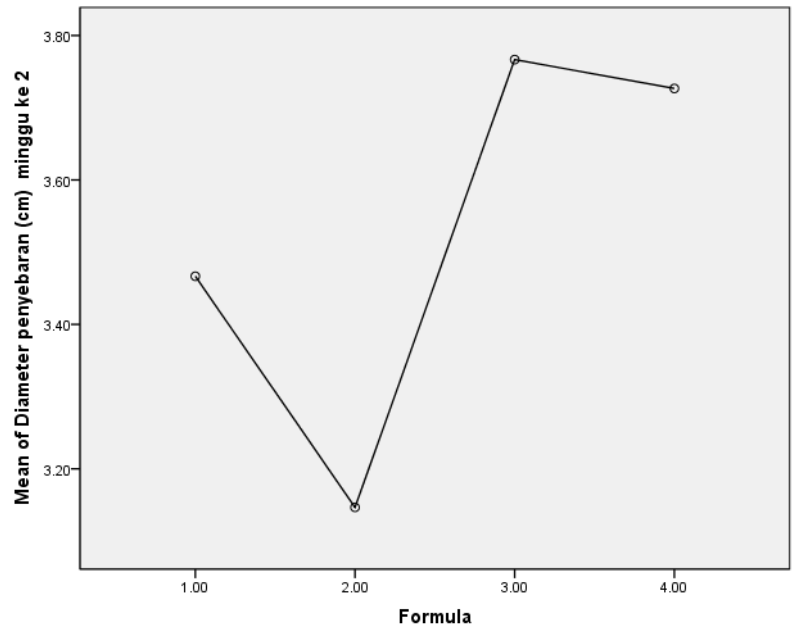
	Formula	N	Subset for alpha = 0.05	
			1	2
Duncan[a]	2.00	15	2.6533	
	1.00	15	2.8000	
	4.00	15		3.2600
	3.00	15		3.2933
	Sig.		.339	.827

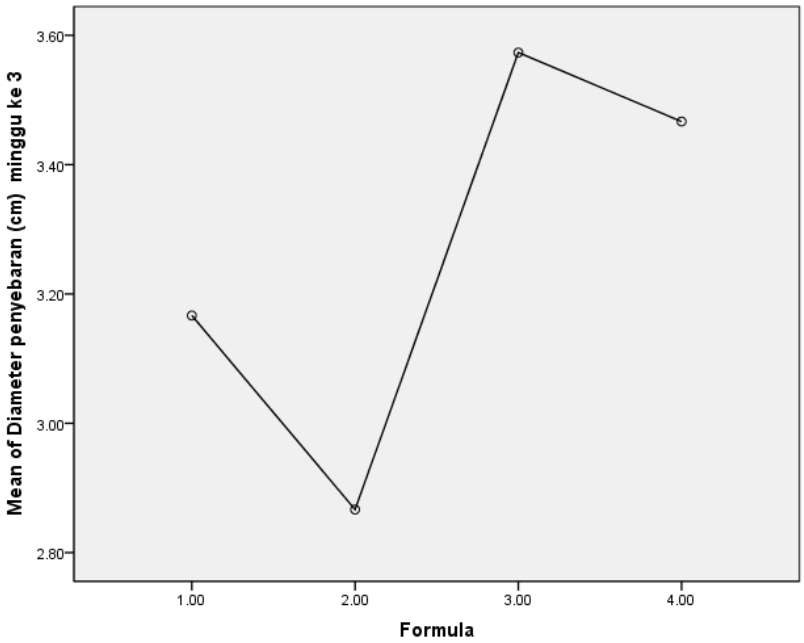
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 15.000.

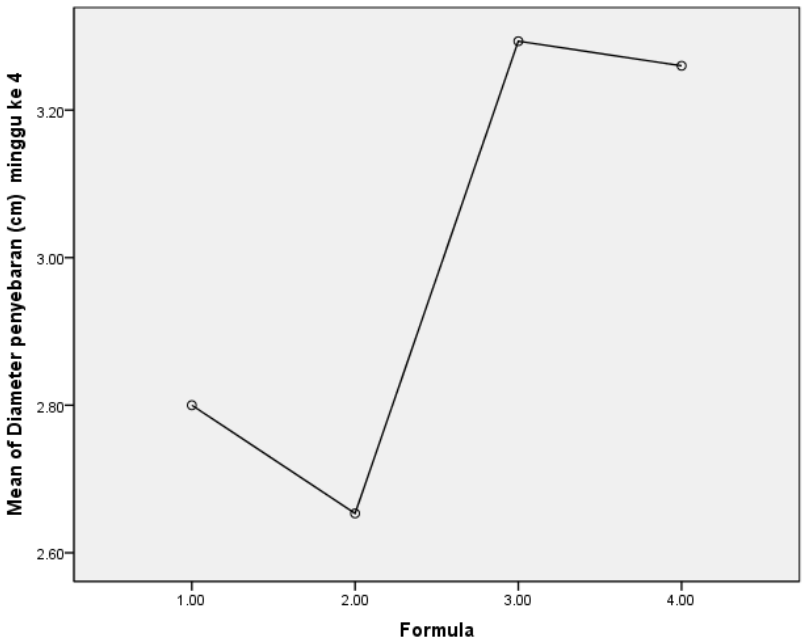
Means Plots




Mean of Diameter penyebaran (cm) minggu ke 1
4.30
4.20
4.10
4.00
3.90
3.80
1.00
2.00
3.00
4.00
Formula


Mean of Diameter penyebaran (cm) minggu ke 2
3.80
3.60
3.40
3.20
1.00
2.00
3.00
4.00
Formula


Mean of Diameter penyebaran (cm) minggu ke 3
3.60
3.40
3.20
3.00
2.80
1.00
2.00
3.00
4.00
Formula


Mean of Diameter penyebaran (cm) minggu ke 4
3.20
3.00
2.80
2.60
1.00
2.00
3.00
4.00
Formula

One-Sample Kolmogorov-Smirnov Test

		dayalekatMingguKe 0	dayalekatMingguKe 1	dayalekatMingguKe 2	dayalekatMingguKe 3	dayalekatMingguKe 4
N		12	12	12	12	12
Normal Parameters[a,b]	Mean	2.6000	2.3525	.6108	1.4350	1.4617
	Std. Deviation	1.43819	1.05823	.76525	.47283	.46442
Most Extreme Differences	Absolute	.206	.165	.295	.418	.394
	Positive	.206	.165	.295	.418	.394
	Negative	-.148	-.130	-.220	-.239	-.231
Kolmogorov-Smirnov Z		.714	.571	1.022	1.447	1.365
Asymp. Sig. (2-tailed)		.688	.900	.247	.130	.055

a. Test distribution is Normal.
b. Calculated from data.

Oneway

Descriptives

			N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
							Lower Bound	Upper Bound			
dayalekatMingguKe 0	1.00		3	3.0533	1.96118	1.13229	-1.8185	7.9252	1.45	5.24	
	2.00		3	3.3767	2.02080	1.16671	-1.6433	8.3966	1.45	5.48	
	3.00		3	2.0800	.95142	.54930	-.2835	4.4435	1.10	3.00	
	4.00		3	1.8900	.40780	.23544	.8770	2.9030	1.42	2.15	
	Total		12	2.6000	1.43819	.41517	1.6862	3.5138	1.10	5.48	
	Model	Fixed Effects			1.50011	.43305	1.6014	3.5986			
		Random Effects				.43305[a]	1.2219[a]	3.9781[a]			-.22237
dayalekatMingguKe 1	1.00		3	3.2633	.89918	.51914	1.0296	5.4970	2.49	4.25	
	2.00		3	2.9800	1.12468	.64933	.1861	5.7739	2.11	4.25	
	3.00		3	1.2533	.20526	.11851	.7434	1.7632	1.08	1.48	
	4.00		3	1.9133	.32716	.18889	1.1006	2.7260	1.54	2.15	
	Total		12	2.3525	1.05823	.30549	1.6801	3.0249	1.08	4.25	
	Model	Fixed Effects			.74542	.21518	1.8563	2.8487			
		Random Effects				.46765	.8642	3.8408			.68959
dayalekatMingguKe 2	1.00		3	1.2467	1.15036	.66416	-1.6110	4.1043	.08	2.38	
	2.00		3	.1633	.07234	.04177	-.0164	.3430	.08	.21	
	3.00		3	.0533	.03055	.01764	-.0226	.1292	.02	.08	
	4.00		3	.9800	.56027	.32347	-.4118	2.3718	.36	1.45	
	Total		12	.6108	.76525	.22091	.1246	1.0971	.02	2.38	
	Model	Fixed Effects			.64098	.18503	.1841	1.0375			
		Random Effects				.29603	-.3313	1.5529			.21359
dayalekatMingguKe 3	1.00		3	1.1667	.02887	.01667	1.0950	1.2384	1.15	1.20	

gguKe 3	2.00		3	1.1467	.05033	.02906	1.0216	1.2717	1.10	1.20	
	3.00		3	2.2167	.02887	.01667	2.1450	2.2884	2.20	2.25	
	4.00		3	1.2100	.01732	.01000	1.1670	1.2530	1.20	1.23	
	Total		12	1.4350	.47283	.13650	1.1346	1.7354	1.10	2.25	
	Model	Fixed Effects			.03354	.00968	1.4127	1.4573			
		Random Effects				.26089	.6047	2.2653			.27188
dayalekatMinggguKe 4	1.00		3	1.2400	.07810	.04509	1.0460	1.4340	1.15	1.29	
	2.00		3	1.1500	.03000	.01732	1.0755	1.2245	1.12	1.18	
	3.00		3	2.2267	.03786	.02186	2.1326	2.3207	2.20	2.27	
	4.00		3	1.2300	.01000	.00577	1.2052	1.2548	1.22	1.24	
	Total		12	1.4617	.46442	.13407	1.1666	1.7567	1.12	2.27	
	Model	Fixed Effects			.04619	.01333	1.4309	1.4924			
		Random Effects				.25579	.6476	2.2757			.26101

a. Warning: Between-component variance is negative. It was replaced by 0.0 in computing this random effects measure.

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
dayalekatMinggguKe 0	1.840	3	8	.218
dayalekatMinggguKe 1	3.530	3	8	.068
dayalekatMinggguKe 2	3.178	3	8	.085
dayalekatMinggguKe 3	1.177	3	8	.377
dayalekatMinggguKe 4	5.073	3	8	.029

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
dayalekatMinggguKe 0	Between Groups	4.750	3	1.583	.704	.576
	Within Groups	18.003	8	2.250		
	Total	22.752	11			
dayalekatMinggguKe 1	Between Groups	7.873	3	2.624	4.723	.035
	Within Groups	4.445	8	.556		
	Total	12.318	11			
dayalekatMinggguKe 2	Between Groups	3.155	3	1.052	2.560	.128
	Within Groups	3.287	8	.411		
	Total	6.442	11			
dayalekatMinggguKe 3	Between Groups	2.450	3	.817	726.015	.000
	Within Groups	.009	8	.001		
	Total	2.459	11			
dayalekatMinggguKe 4	Between Groups	2.356	3	.785	368.047	.000
	Within Groups	.017	8	.002		
	Total	2.373	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable	(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
dayalekatMin gguKe 0 LSD	1.00	2.00	-.32333	1.22484	.798	-3.1478	2.5011
		3.00	.97333	1.22484	.450	-1.8511	3.7978
		4.00	1.16333	1.22484	.370	-1.6611	3.9878
	2.00	1.00	.32333	1.22484	.798	-2.5011	3.1478
		3.00	1.29667	1.22484	.321	-1.5278	4.1211
		4.00	1.48667	1.22484	.259	-1.3378	4.3111
	3.00	1.00	-.97333	1.22484	.450	-3.7978	1.8511
		2.00	-1.29667	1.22484	.321	-4.1211	1.5278
		4.00	.19000	1.22484	.881	-2.6345	3.0145
	4.00	1.00	-1.16333	1.22484	.370	-3.9878	1.6611
		2.00	-1.48667	1.22484	.259	-4.3111	1.3378
		3.00	-.19000	1.22484	.881	-3.0145	2.6345
dayalekatMin gguKe 1 LSD	1.00	2.00	.28333	.60863	.654	-1.1202	1.6868
		3.00	2.01000*	.60863	.011	.6065	3.4135
		4.00	1.35000	.60863	.057	-.0535	2.7535
	2.00	1.00	-.28333	.60863	.654	-1.6868	1.1202
		3.00	1.72667*	.60863	.022	.3232	3.1302
		4.00	1.06667	.60863	.118	-.3368	2.4702
	3.00	1.00	-2.01000*	.60863	.011	-3.4135	-.6065
		2.00	-1.72667*	.60863	.022	-3.1302	-.3232
		4.00	-.66000	.60863	.310	-2.0635	.7435
	4.00	1.00	-1.35000	.60863	.057	-2.7535	.0535
		2.00	-1.06667	.60863	.118	-2.4702	.3368
		3.00	.66000	.60863	.310	-.7435	2.0635
dayalekatMin gguKe 2 LSD	1.00	2.00	1.08333	.52335	.072	-.1235	2.2902
		3.00	1.19333	.52335	.052	-.0135	2.4002
		4.00	.26667	.52335	.624	-.9402	1.4735
	2.00	1.00	-1.08333	.52335	.072	-2.2902	.1235
		3.00	.11000	.52335	.839	-1.0969	1.3169
		4.00	-.81667	.52335	.157	-2.0235	.3902
	3.00	1.00	-1.19333	.52335	.052	-2.4002	.0135
		2.00	-.11000	.52335	.839	-1.3169	1.0969
		4.00	-.92667	.52335	.115	-2.1335	.2802
	4.00	1.00	-.26667	.52335	.624	-1.4735	.9402
		2.00	.81667	.52335	.157	-.3902	2.0235
		3.00	.92667	.52335	.115	-.2802	2.1335
dayalekatMin gguKe 3 LSD	1.00	2.00	.02000	.02739	.486	-.0432	.0832
		3.00	-1.05000*	.02739	.000	-1.1132	-.9868
		4.00	-.04333	.02739	.152	-.1065	.0198
	2.00	1.00	-.02000	.02739	.486	-.0832	.0432
		3.00	-1.07000*	.02739	.000	-1.1332	-1.0068
		4.00	-.06333*	.02739	.049	-.1265	-.0002
	3.00	1.00	1.05000*	.02739	.000	.9868	1.1132
		2.00	1.07000*	.02739	.000	1.0068	1.1332
		4.00	1.00667*	.02739	.000	.9435	1.0698
	4.00	1.00	.04333	.02739	.152	-.0198	.1065
		2.00	.06333*	.02739	.049	.0002	.1265
		3.00	-1.00667*	.02739	.000	-1.0698	-.9435
dayalekatMin gguKe 4 LSD	1.00	2.00	.09000*	.03771	.044	.0030	.1770
		3.00	-.98667*	.03771	.000	-1.0736	-.8997
		4.00	.01000	.03771	.798	-.0770	.0970
	2.00	1.00	-.09000*	.03771	.044	-.1770	-.0030

		3.00	-1.07667*	.03771	.000	-1.1636	-.9897
		4.00	-.08000	.03771	.067	-.1670	.0070
	3.00	1.00	.98667*	.03771	.000	.8997	1.0736
		2.00	1.07667*	.03771	.000	.9897	1.1636
		4.00	.99667*	.03771	.000	.9097	1.0836
	4.00	1.00	-.01000	.03771	.798	-.0970	.0770
		2.00	.08000	.03771	.067	-.0070	.1670
		3.00	-.99667*	.03771	.000	-1.0836	-.9097

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

dayalekatMingguKe 0

			Subset for alpha = 0.05
	Formula	N	1
Duncan[a]	4.00	3	1.8900
	3.00	3	2.0800
	1.00	3	3.0533
	2.00	3	3.3767
	Sig.		.286

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

dayalekatMingguKe 1

			Subset for alpha = 0.05	
	Formula	N	1	2
Duncan[a]	3.00	3	1.2533	
	4.00	3	1.9133	1.9133
	2.00	3		2.9800
	1.00	3		3.2633
	Sig.		.310	.066

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

dayalekatMingguKe 2

			Subset for alpha = 0.05
	Formula	N	1
Duncan[a]	3.00	3	.0533
	2.00	3	.1633
	4.00	3	.9800
	1.00	3	1.2467
	Sig.		.065

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

dayalekatMingguKe 3

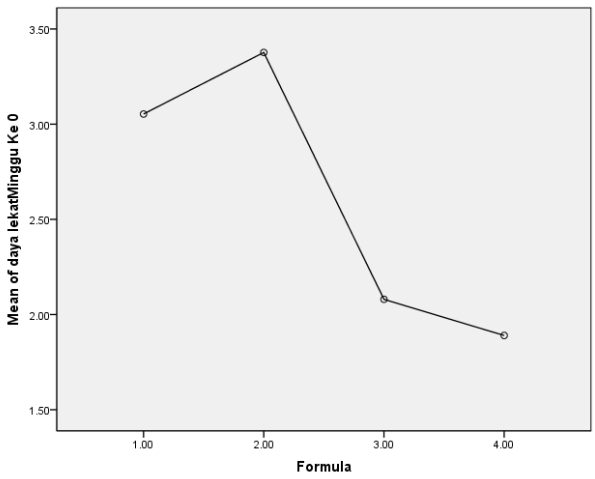
	Formula	N	Subset for alpha = 0.05	
			1	2
Duncan[a]	2.00	3	1.1467	
	1.00	3	1.1667	
	4.00	3	1.2100	
	3.00	3		2.2167
	Sig.		.057	1.000

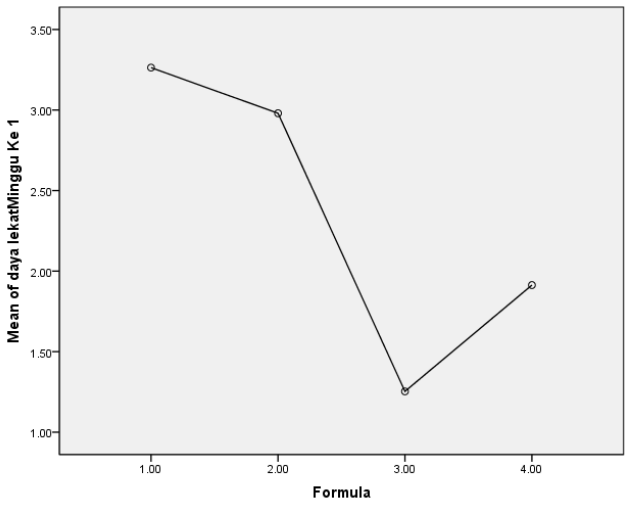
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

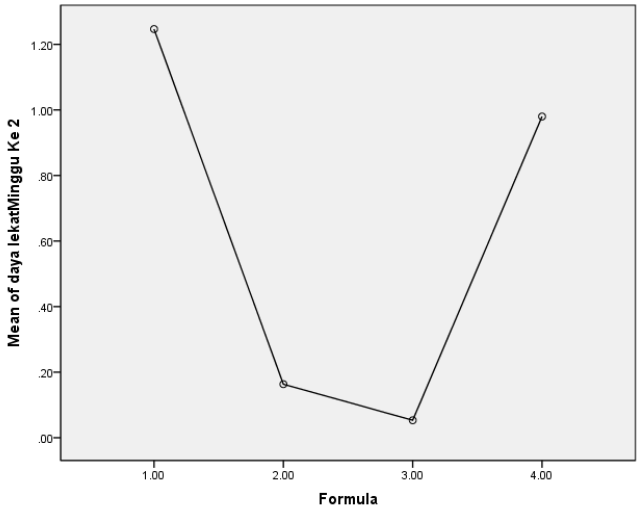
dayalekatMingguKe 4

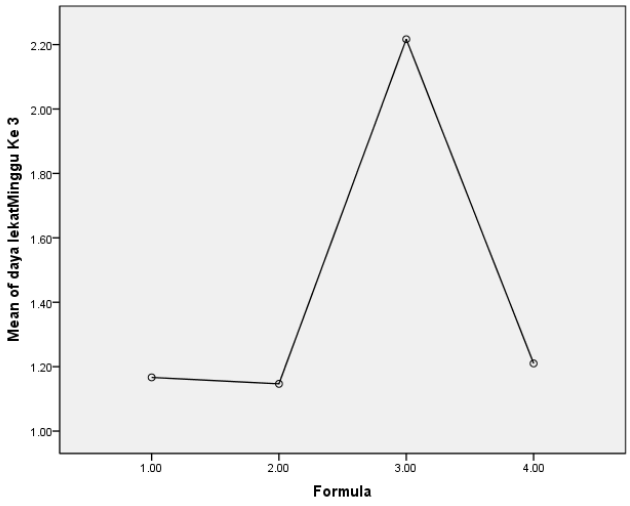
	Formula	N	Subset for alpha = 0.05	
			1	2
Duncan[a]	2.00	3	1.1500	
	4.00	3	1.2300	
	1.00	3	1.2400	
	3.00	3		2.2267
	Sig.		.051	1.000

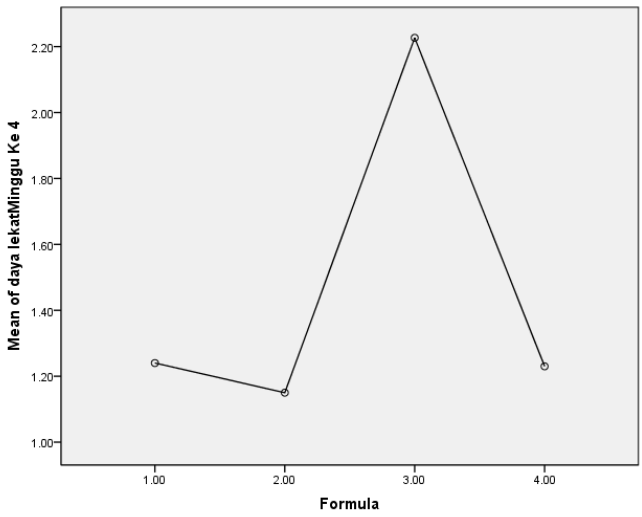
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.




Mean of daya lekatMinggu Ke 1
3.50
3.00
2.50
2.00
1.50
1.00
1.00
2.00
3.00
4.00
Formula


Mean of daya lekatMinggu Ke 2
1.20
1.00
.80
.60
.40
.20
.00
1.00
2.00
3.00
4.00
Formula


Mean of daya lekatMinggu Ke 3
2.20
2.00
1.80
1.60
1.40
1.20
1.00
1.00
2.00
3.00
4.00
Formula



One-Sample Kolmogorov-Smirnov Test

		ViskositasMingguke 1	ViskositasMingguke 2	ViskositasMingguke 3	ViskositasMingguke 4
N		12	12	12	12
Normal Parameters[a,b]	Mean	184.1667	219.1667	224.1667	207.9167
	Std. Deviation	51.95423	33.96745	33.69875	49.70176
Most Extreme Differences	Absolute	.179	.273	.246	.213
	Positive	.179	.273	.246	.213
	Negative	-.147	-.195	-.163	-.177
Kolmogorov-Smirnov Z		.620	.946	.853	.737
Asymp. Sig. (2-tailed)		.836	.333	.461	.649

a. Test distribution is Normal.
b. Calculated from data.

Oneway

Descriptives

			N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
							Lower Bound	Upper Bound			
ViskositasMingguke 1	1.00		3	146.6667	15.27525	8.81917	108.7208	184.6125	130.00	160.00	
	2.00		3	253.3333	5.77350	3.33333	238.9912	267.6755	250.00	260.00	
	3.00		3	206.6667	5.77350	3.33333	192.3245	221.0088	200.00	210.00	
	4.00		3	130.0000	10.00000	5.77350	105.1586	154.8414	120.00	140.00	
	Total		12	184.1667	51.95423	14.99790	151.1565	217.1768	120.00	260.00	
	Model	Fixed Effects			10.00000	2.88675	177.5098	190.8235			
		Random Effects				28.32925	94.0104	274.3230			3176.85185
ViskositasMingguke 2	1.00		3	200.0000	10.00000	5.77350	175.1586	224.8414	190.00	210.00	
	2.00		3	273.3333	5.77350	3.33333	258.9912	287.6755	270.00	280.00	
	3.00		3	210.0000	10.00000	5.77350	185.1586	234.8414	200.00	220.00	
	4.00		3	193.3333	5.77350	3.33333	178.9912	207.6755	190.00	200.00	
	Total		12	219.1667	33.96745	9.80556	197.5848	240.7486	190.00	280.00	
	Model	Fixed Effects			8.16497	2.35702	213.7314	224.6020			
		Random Effects				18.37747	160.6813	277.6520			1328.70370

ViskositasMingguke 3	1.00		3	206.6667	5.77350	3.33333	192.3245	221.0088	200.00	210.00	
	2.00		3	276.6667	5.77350	3.33333	262.3245	291.0088	270.00	280.00	
	3.00		3	220.0000	10.00000	5.77350	195.1586	244.8414	210.00	230.00	
	4.00		3	193.3333	5.77350	3.33333	178.9912	207.6755	190.00	200.00	
	Total		12	224.1667	33.69875	9.72799	202.7555	245.5778	190.00	280.00	
	Model	Fixed Effects			7.07107	2.04124	219.4596	228.8738			
		Random Effects				18.32702	165.8419	282.4914			1326.85185
ViskositasMingguke 4	1.00		3	163.3333	5.77350	3.33333	148.9912	177.6755	160.00	170.00	
	2.00		3	281.6667	2.88675	1.66667	274.4956	288.8378	280.00	285.00	
	3.00		3	216.6667	5.77350	3.33333	202.3245	231.0088	210.00	220.00	
	4.00		3	170.0000	10.00000	5.77350	145.1586	194.8414	160.00	180.00	
	Total		12	207.9167	49.70176	14.34766	176.3377	239.4957	160.00	285.00	
	Model	Fixed Effects			6.61438	1.90941	203.5136	212.3198			
		Random Effects				27.29617	121.0481	294.7853			2965.74074

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
ViskositasMingguke 1	1.333	3	8	.330
ViskositasMingguke 2	.267	3	8	.848
ViskositasMingguke 3	.333	3	8	.802
ViskositasMingguke 4	.948	3	8	.462

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
ViskositasMingguke 1	Between Groups	28891.667	3	9630.556	96.306	.000
	Within Groups	800.000	8	100.000		
	Total	29691.667	11			
ViskositasMingguke 2	Between Groups	12158.333	3	4052.778	60.792	.000
	Within Groups	533.333	8	66.667		
	Total	12691.667	11			
ViskositasMingguke 3	Between Groups	12091.667	3	4030.556	80.611	.000
	Within Groups	400.000	8	50.000		
	Total	12491.667	11			
ViskositasMingguke 4	Between Groups	26822.917	3	8940.972	204.365	.000
	Within Groups	350.000	8	43.750		
	Total	27172.917	11			

Post Hoc Tests

Multiple Comparisons

Dependent Variable		(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Viskositas Minggu ke 1	LSD	1.00	2.00	-106.66667*	8.16497	.000	-125.4951	-87.8382
			3.00	-60.00000*	8.16497	.000	-78.8284	-41.1716
			4.00	16.66667	8.16497	.076	-2.1618	35.4951
		2.00	1.00	106.66667*	8.16497	.000	87.8382	125.4951
			3.00	46.66667*	8.16497	.000	27.8382	65.4951
			4.00	123.33333*	8.16497	.000	104.5049	142.1618
		3.00	1.00	60.00000*	8.16497	.000	41.1716	78.8284
			2.00	-46.66667*	8.16497	.000	-65.4951	-27.8382
			4.00	76.66667*	8.16497	.000	57.8382	95.4951
		4.00	1.00	-16.66667	8.16497	.076	-35.4951	2.1618
			2.00	-123.33333*	8.16497	.000	-142.1618	-104.5049
			3.00	-76.66667*	8.16497	.000	-95.4951	-57.8382
Viskositas Mingguke 2	LSD	1.00	2.00	-73.33333*	6.66667	.000	-88.7067	-57.9600
			3.00	-10.00000	6.66667	.172	-25.3734	5.3734
			4.00	6.66667	6.66667	.347	-8.7067	22.0400
		2.00	1.00	73.33333*	6.66667	.000	57.9600	88.7067
			3.00	63.33333*	6.66667	.000	47.9600	78.7067
			4.00	80.00000*	6.66667	.000	64.6266	95.3734
		3.00	1.00	10.00000	6.66667	.172	-5.3734	25.3734
			2.00	-63.33333*	6.66667	.000	-78.7067	-47.9600
			4.00	16.66667*	6.66667	.037	1.2933	32.0400
		4.00	1.00	-6.66667	6.66667	.347	-22.0400	8.7067
			2.00	-80.00000*	6.66667	.000	-95.3734	-64.6266
			3.00	-16.66667*	6.66667	.037	-32.0400	-1.2933
Viskositas Mingguke 3	LSD	1.00	2.00	-70.00000*	5.77350	.000	-83.3137	-56.6863
			3.00	-13.33333*	5.77350	.050	-26.6471	-.0196
			4.00	13.33333*	5.77350	.050	.0196	26.6471
		2.00	1.00	70.00000*	5.77350	.000	56.6863	83.3137
			3.00	56.66667*	5.77350	.000	43.3529	69.9804
			4.00	83.33333*	5.77350	.000	70.0196	96.6471
		3.00	1.00	13.33333*	5.77350	.050	.0196	26.6471
			2.00	-56.66667*	5.77350	.000	-69.9804	-43.3529
			4.00	26.66667*	5.77350	.002	13.3529	39.9804
		4.00	1.00	-13.33333*	5.77350	.050	-26.6471	-.0196
			2.00	-83.33333*	5.77350	.000	-96.6471	-70.0196
			3.00	-26.66667*	5.77350	.002	-39.9804	-13.3529
Viskositas Mingguke 4	LSD	1.00	2.00	-118.33333*	5.40062	.000	-130.7872	-105.8795
			3.00	-53.33333*	5.40062	.000	-65.7872	-40.8795
			4.00	-6.66667	5.40062	.252	-19.1205	5.7872
		2.00	1.00	118.33333*	5.40062	.000	105.8795	130.7872
			3.00	65.00000*	5.40062	.000	52.5462	77.4538
			4.00	111.66667*	5.40062	.000	99.2128	124.1205
		3.00	1.00	53.33333*	5.40062	.000	40.8795	65.7872
			2.00	-65.00000*	5.40062	.000	-77.4538	-52.5462
			4.00	46.66667*	5.40062	.000	34.2128	59.1205
		4.00	1.00	6.66667	5.40062	.252	-5.7872	19.1205
			2.00	-111.66667*	5.40062	.000	-124.1205	-99.2128
			3.00	-46.66667*	5.40062	.000	-59.1205	-34.2128

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

ViskositasMingguke 1

			Subset for alpha = 0.05		
	Formula	N	1	2	3
Duncan[a]	4.00	3	130.0000		
	1.00	3	146.6667		
	3.00	3		206.6667	
	2.00	3			253.3333
	Sig.		.076	1.000	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

ViskositasMingguke 2

			Subset for alpha = 0.05		
	Formula	N	1	2	3
Duncan[a]	4.00	3	193.3333		
	1.00	3	200.0000	200.0000	
	3.00	3		210.0000	
	2.00	3			273.3333
	Sig.		.347	.172	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

ViskositasMingguke 3

			Subset for alpha = 0.05			
	Formula	N	1	2	3	4
Duncan[a]	4.00	3	193.3333			
	1.00	3		206.6667		
	3.00	3			220.0000	
	2.00	3				276.6667
	Sig.		1.000	1.000	1.000	1.000

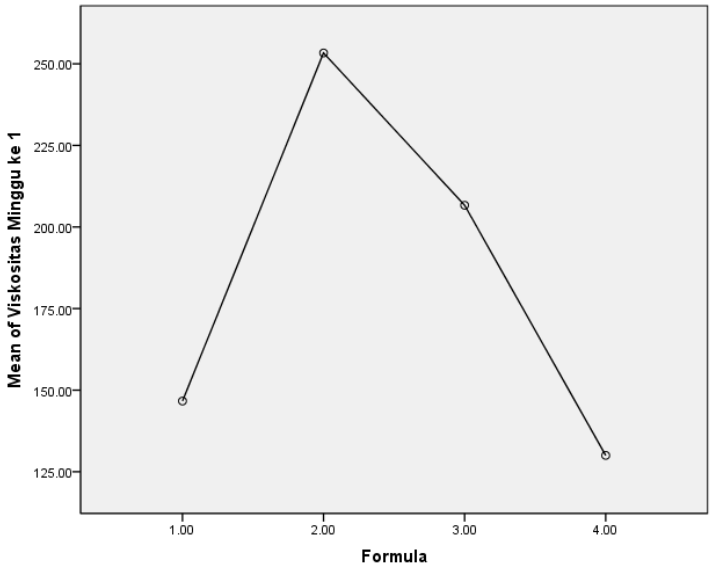
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

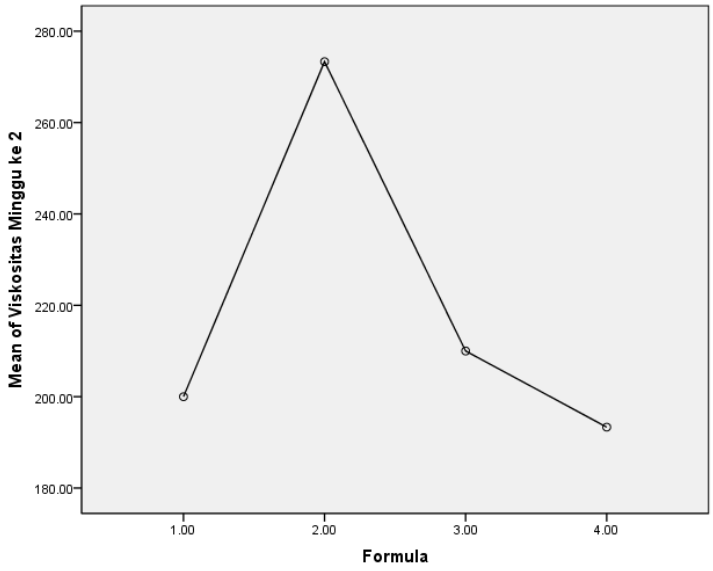
ViskositasMingguke 4

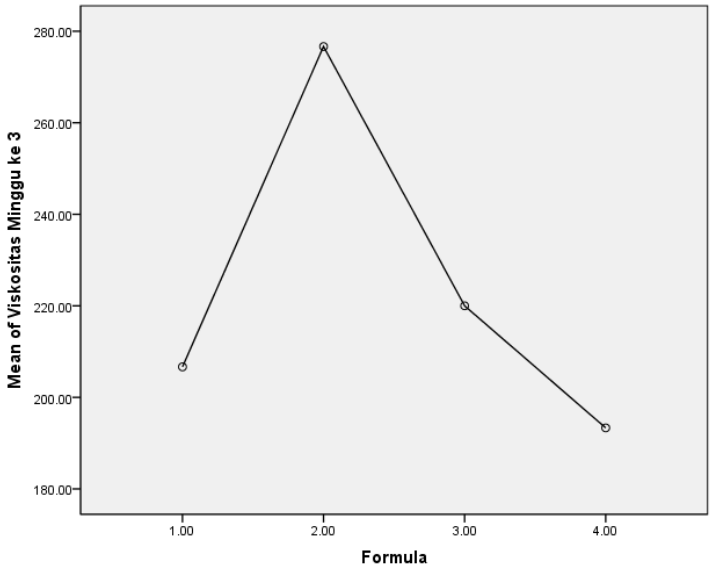
			Subset for alpha = 0.05		
	Formula	N	1	2	3
Duncan[a]	1.00	3	163.3333		
	4.00	3	170.0000		
	3.00	3		216.6667	
	2.00	3			281.6667
	Sig.		.252	1.000	1.000

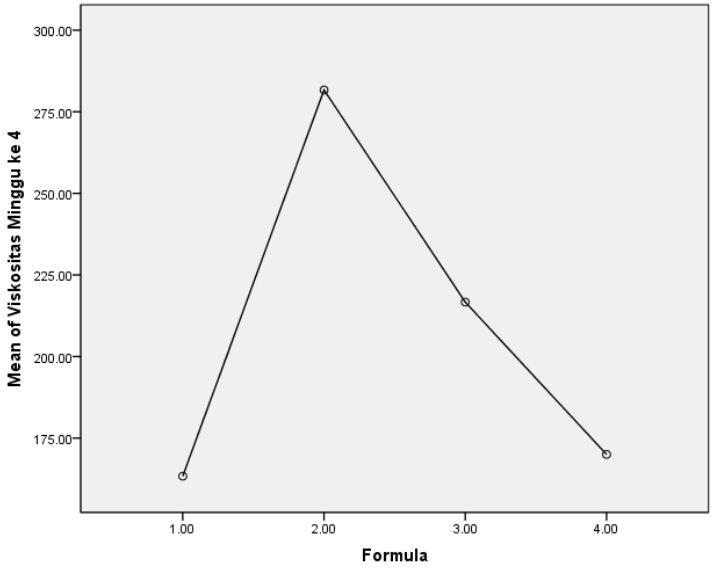
Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 3.000.

Means Plots


Mean of Viskositas Minggu ke 1
250.00
225.00
200.00
175.00
150.00
125.00
1.00
2.00
3.00
4.00
Formula


Mean of Viskositas Minggu ke 2
280.00
260.00
240.00
220.00
200.00
180.00
1.00
2.00
3.00
4.00
Formula


Mean of Viskositas Minggu ke 3
280.00
260.00
240.00
220.00
200.00
180.00
1.00
2.00
3.00
4.00
Formula


Mean of Viskositas Minggu ke 4
300.00
275.00
250.00
225.00
200.00
175.00
1.00
2.00
3.00
4.00
Formula