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Lampiran 1. Certificate of Analysis (CoA)



PT. Darjeeling Sembrani Aroma

Wisma Monex Lt 9, Jl. Asia Afrika No. 133-137
Bandung, 40112
Tel. 022-4235600

Certificate of Analysis

Product name: Sunflower seed oil, virgin CAS No: 8001-21-6
Lot number: DA/00168S Botanical name: Helianthus annuus
Mfg. Date: 15/02/2020 Origin: India
Best before: 15/02/2022

Storage conditions: Store in a cool, dry place in tightly sealed containers.

Parameter	Specification	Result	Method
Colour	Yellow liquid	Yellow liquid	Visual
Specific gravity at 25°C	0.909 - 0.925	0.911	FCC
Refractive index at 20°C	1.467 - 1.471	1.469	FCC

Fatty Acid Composition (FAME Test)

Linoleic acid	19.21%
Oleic acid	67.00%
Palmitic acid	5.35%
Stearic acid	4.12%

Important disclaimer:


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Approved by
Manager - QA

Lampiran 2. Surat *Ethical Clearance*

1/29/2021

KEPK-RSDM

 HEALTH RESEARCH ETHICS COMMITTEE
KOMISI ETIK PENELITIAN KESEHATAN

Dr. Moewardi General Hospital
RSUD Dr. Moewardi

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 31 / 1 / HREC / 2021

The Health Research Ethics Committee Dr. Moewardi
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :
Bahwa usulan penelitian dengan judul


Uji Aktivitas Emulgel Minyak Biji Bunga Matahari (*Helianthus Annus L.*) Terhadap Penyembuhan Luka Sayat Kelinci *New Zealand*

Principal investigator : Kuraimah Dyangguni
Peneliti Utama
23175062A

Location of research : Laboratorium Farmasi Universitas Setia Budi
Lokasi Tempat Penelitian

Is ethically approved
Dinyatakan layak etik

Issued on : 29 Januari 2021

Chairman
Ketua

Dr. Wahyu Dwi Atmoko, Sp.F.
19770224 201001 1 004

<https://komisi-etik-rsmdrwardi.com/keetik/ethicalclearance/23175062A-0054>

Lampiran 3. Surat keterangan Hewan uji

"ABIMANYU FARM"

Mencit putih jantan Tikus Wistar Swiss Webster Cacing
Mencit Balb/C Kelinci New Zealand
Ngampon RT 04 / RW 04, Mojosongo Kec. Jebres Surakarta. Phone 085 629 994 33 / Lab USB Ska

Yang bertanda tangan di bawah ini:

Nama : Sigit Pramono

Selaku pengelola Abimanyu Farm, menerangkan bahwa hewan uji yang digunakan untuk penelitian, oleh:

Nama : Kuraimah Dyangguni
Nim : 23175062A
Institusi : Universitas Setia Budi Surakarta

Merupakan hewan uji dengan spesifikasi sebagai berikut:

Jenis hewan : Kelinci New Zealand
Umur : 2-3 bulan
Jenis kelamin : Jantan
Jumlah : 5 ekor
Keterangan : Sehat
Asal-usul : Unit Pengembangan Hewan Percobaan Boyolali

Yang pengembangan dan pengelolaannya disesuaikan standar baku penelitian. Demikian surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Surakarta, 13 Juni 2021

Hormat kami



Sigit Pramono
"ABIMANYU FARM"

Lampiran 4. Hasil Karakterisasi Minyak Biji Bunga Matahari (*Helianthus annuus* L.)

a. Organoleptik

Warna = kuning transparan

Bau = khas minyak biji bunga matahari

Konsistensi = cair



b. Kelarutan dalam etanol

Sukar larut dalam etanol 90%.

1 ml minyak, dalam 1 ml etanol 90% (tidak larut)

1 ml minyak, dalam 2 ml etanol 90% (tidak larut)

1 ml minyak, dalam 3 ml etanol 90% (tidak larut)

1 ml minyak, dalam 4 ml etanol 90% (tidak larut)

1 ml minyak, dalam 5 ml etanol 90% (tidak larut)

1 ml minyak, dalam 6 ml etanol 90% (tidak larut)

1 ml minyak, dalam 7 ml etanol 90% (tidak larut)

1 ml minyak, dalam 8 ml etanol 90% (tidak larut)

1 ml minyak, dalam 9 ml etanol 90% (tidak larut)

1 ml minyak, dalam 10 ml etanol 90% (tidak larut)



c. Penetapan bobot jenis (BJ)

Pikno kosong (g)	Pikno + air (g)	Pikno + minyak (g)	Air (g)	Minyak (g)	BJ
27,2110	81,5231	76,5672	54,3121	49,3562	0,909

Bobot piknometer kosong = 27, 2110 g

Bobot piknometer + air = 81,5231 g

Bobot piknometer + minyak = 76,5672 g

Bobot air = 54,3121 g

Bobot minyak = 49,3562 g

BJ minyak = $49,3562/54,3121 = 0,909$

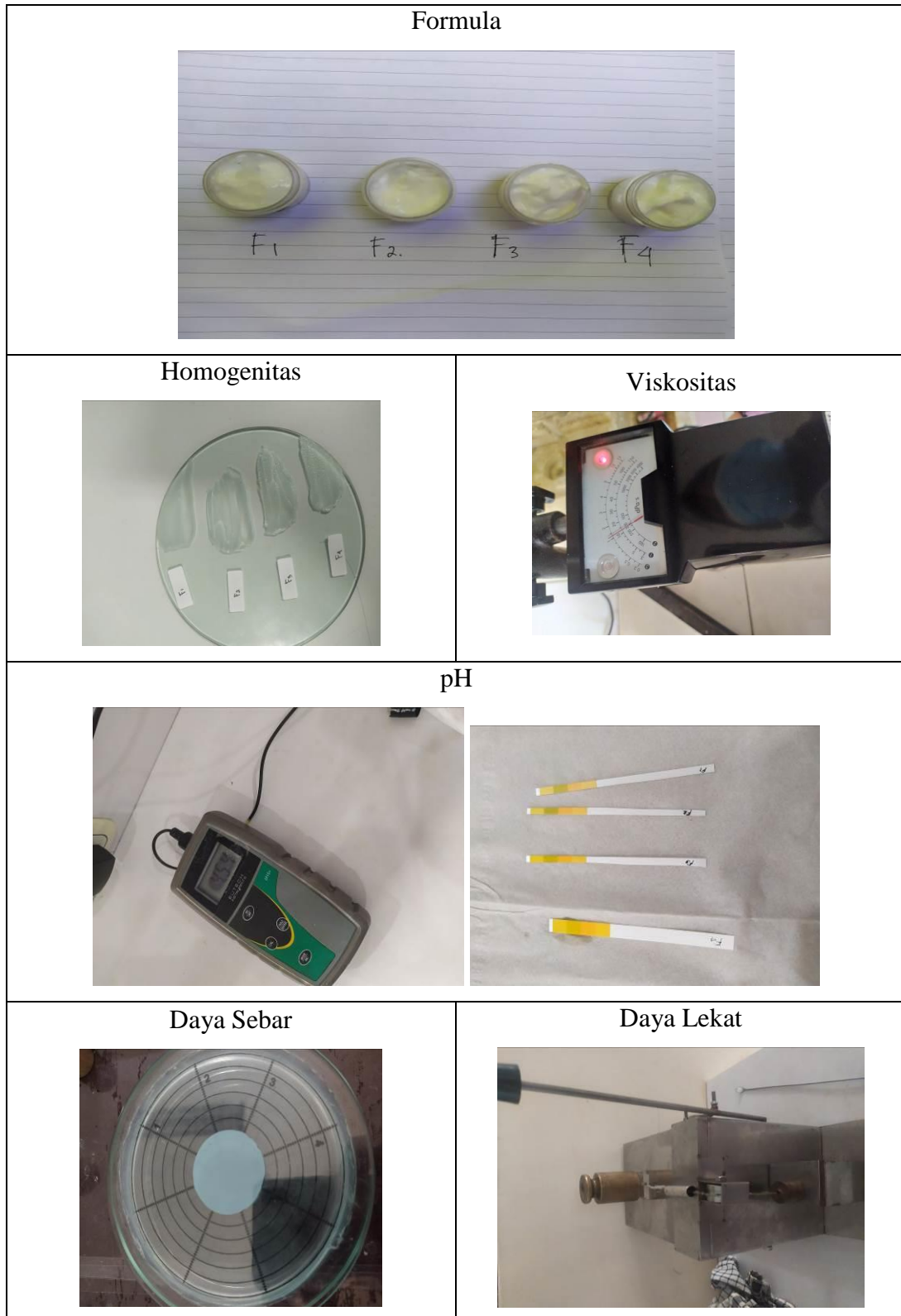


d. Indeks bias

Indeks bias dengan refraktrometer 1,471



Lampiran 5. Gambar pengujian mutu fisik emulgel minyak biji bunga matahari (*Helianthus annuus* L.)



Stabilitas

Sebelum



Sesudah



Stabilitas

Lampiran 6. Hasil uji aktivitas penyembuhan luka sayat

Pembuatan luka

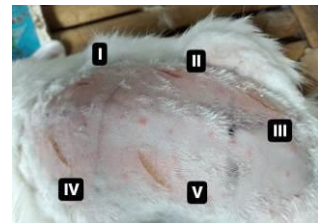


Luka hari ke-3

Kelinci A



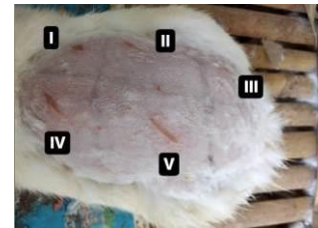
Kelinci B



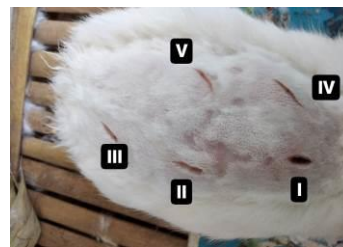
Kelinci C



Kelinci D

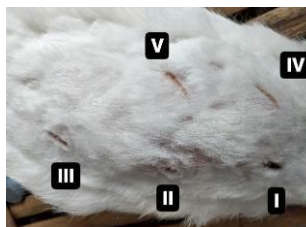


Kelinci E

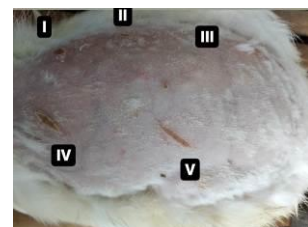


Luka hari ke-7

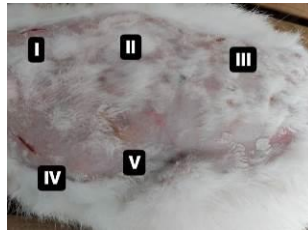
Kelinci A



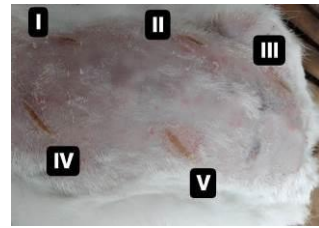
Kelinci B



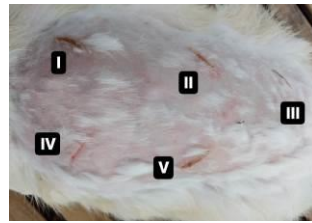
Kelinci C



Kelinci D

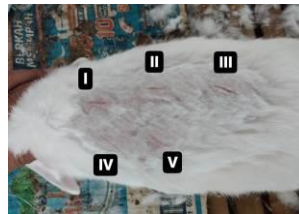


Kelinci E

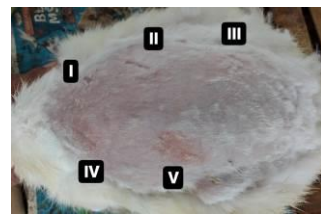


Luka hari ke - 14

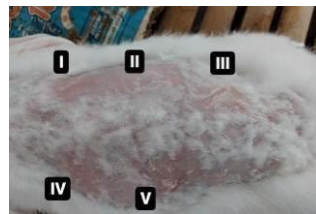
Kelinci A



Kelinci B



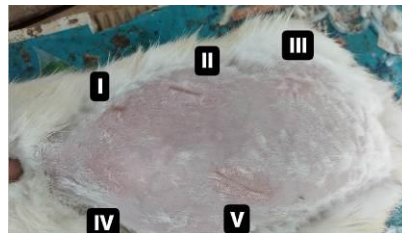
Kelinci C

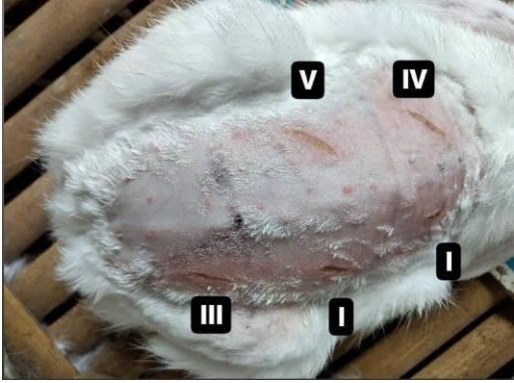

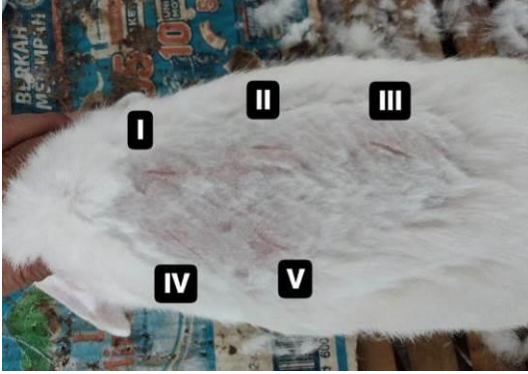


Kelinci D



Kelinci E



No	Hari	Hasil
1	Luka ke - 3	
2	Luka ke - 7	
3	Luka ke - 14	

Keterangan :

- I : dioleskan krim betason (kontrol prositif)
- II : dioleskan emugel minyak biji bunga matahari 5%
- III : dioleskan emugel minyak biji bunga matahari 10%
- IV : dioleskan emugel minyak biji bunga matahari 15%
- V : dioleskan basis emugel (kontrol negatif)

**Lampiran 7. Hasil Uji Mutu Fisik Krim Minyak Biji Bunga Matahari
(*Helianthus annuus* L.)**

Viskositas hari ke 1 – 21

VISKOSITAS HARI 1-21										
	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	240	250	240	243,33	5,77	240	240	240	240,00	0,00
F2	190	200	190	193,33	5,77	190	180	190	186,67	5,77
F3	210	200	210	206,67	5,77	210	210	210	210,00	0,00
F4	230	220	210	220,00	10,00	220	220	220	220,00	0,00

	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	240	230	220	230,00	10,00	230	230	220	226,67	5,77
F2	190	190	180	186,67	5,77	190	190	180	186,67	5,77
F3	200	200	210	203,33	5,77	190	200	190	193,33	5,77
F4	220	210	220	216,67	5,77	210	210	210	210,00	0,00

pH hari ke 1 – 21

pH hari ke 1 - 21

	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	5,23	5,2	5,19	5,21	0,02	5,2	5,21	5,20	5,20	0,01
F2	5	5,02	5,08	5,03	0,04	5,02	5,05	5,00	5,02	0,03
F3	4,9	4,92	4,95	4,92	0,03	4,96	4,99	4,98	4,98	0,02
F4	4,89	4,87	4,85	4,87	0,02	4,88	4,86	4,89	4,88	0,02

	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	5,2	5,17	5,15	5,17333	0,03	5,25	5,27	5,19	5,24	0,04
F2	5,11	4,99	5,02	5,04	0,06	5	5,04	5,02	5,02	0,02
F3	4,97	5,02	5	4,99667	0,03	5	4,87	4,99	4,95	0,07
F4	4,92	4,96	4,98	4,95333	0,03	4,97	4,95	4,99	4,97	0,02

Daya sebar formula 1 hari ke 1 – 21

daya sebar formula 1 (basis) hari 1-21

Beban	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	2,29	2,31	2,25	2,28	0,03	2,57	2,50	2,51	2,53	0,04
50 g	2,67	2,70	2,58	2,65	0,06	3,05	3,00	3,07	3,04	0,04
100 g	2,98	2,93	2,89	2,93	0,05	3,25	3,21	3,19	3,22	0,03
150 g	3,28	3,30	3,33	3,30	0,03	3,47	3,46	3,44	3,46	0,02

Beban	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	3,05	2,96	3,02	3,01	0,05	3,05	2,96	3,02	3,01	0,05
50 g	3,1	3,15	3,25	3,17	0,08	3,15	3,18	3,25	3,19	0,05
100 g	3,3	3,28	3,3	3,29	0,01	3,3	3,3	3,28	3,29	0,01
150 g	3,45	3,6	3,6	3,55	0,09	3,58	3,56	3,58	3,57	0,01

Daya sebar formula 2 (5%) hari ke 1 – 21

Beban	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	2,70	2,75	2,75	2,73	0,03	2,9	2,89	2,93	2,91	0,02
50 g	3	3,35	3,3	3,22	0,19	3,27	3,2	3,23	3,23	0,04
100 g	3,20	3,24	3,27	3,24	0,04	3,3	3,3	3,27	3,29	0,02
150 g	3,66	3,68	3,66	3,67	0,01	3,77	3,75	3,77	3,76	0,01

Beban	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	2,88	2,9	2,92	2,90	0,02	2,92	2,89	2,9	2,90333	0,02
50 g	3,25	3,22	3,22	3,23	0,02	3,5	3,52	3,55	3,52333	0,03
100 g	3,48	3,48	3,4	3,45	0,05	3,8	3,87	3,88	3,85	0,04
150 g	3,76	3,79	3,79	3,78	0,02	4,03	4,06	4,1	4,06333	0,04

Daya sebar formula 3 (10%) hari ke 1 – 21

Beban	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	2,77	2,75	2,75	2,76	0,01	3	3,05	3,1	3,05	0,05
50 g	2,89	2,96	2,99	2,95	0,05	3,2	3,27	3,27	3,25	0,04
100 g	3,25	3,23	3,25	3,24	0,01	3,50	3,55	3,6	3,55	0,05
150 g	3,48	3,55	3,50	3,51	0,04	3,68	3,68	3,63	3,66	0,03

Beban	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	3,15	3,15	3,1	3,13	0,03	3,5	3,58	3,55	3,54	0,04
50 g	3,36	3,34	3,3	3,33	0,03	3,75	3,77	3,75	3,76	0,01
100 g	3,6	3,62	3,6	3,61	0,01	3,98	3,95	3,93	3,95	0,03
150 g	3,66	3,66	3,65	3,66	0,01	4,07	4,05	4,07	4,06	0,01

Daya sebar formula 4 (15%) hari ke 1 – 21

Beban	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	3,1	3,15	3,2	3,15	0,05	2,90	2,97	2,99	2,95	0,05
50 g	3,35	3,33	3,33	3,34	0,01	3,3	3,37	3,4	3,36	0,05
100 g	3,55	3,6	3,65	3,60	0,05	3,58	3,55	3,55	3,56	0,02
150 g	3,68	3,68	3,65	3,67	0,02	3,66	3,6	3,64	3,63	0,03

Beban	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
Kaca atas	2,95	2,95	2,9	2,93	0,03	3,04	3,2	3,05	3,10	0,09
50 g	3,4	3,44	3,35	3,39	0,05	3,32	3,37	3,36	3,35	0,03
100 g	3,6	3,58	3,5	3,56	0,05	3,76	3,76	3,7	3,74	0,03
150 g	3,66	3,66	3,6	3,64	0,03	3,8	3,86	3,81	3,82	0,03

Daya lekat hari ke 1 – 21

Daya lekat hari ke 1 – 21

	Waktu lekat (detik)									
	Hari ke 1					Hari ke 7				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	1,55	1,50	1,4	1,48	0,08	1,52	1,5	1,55	1,52	0,03
F2	1,9	2,00	1,99	1,96	0,06	1,8	1,82	1,86	1,83	0,03
F3	2,18	2,17	2,15	2,17	0,02	1,9	1,94	1,96	1,93	0,03
F4	2,3	2,33	2,35	2,33	0,03	2,36	2,37	2,35	2,36	0,01

	Waktu lekat (detik)									
	Hari ke 14					Hari ke 21				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	1,5	1,53	1,56	1,53	0,03	1,48	1,47	1,45	1,47	0,02
F2	1,92	1,95	1,93	1,93	0,02	1,9	1,88	1,89	1,89	0,01
F3	2,11	2,14	2,1	2,12	0,02	2,12	2,09	2,11	2,11	0,02
F4	2,25	2,23	2,26	2,25	0,02	2,25	2,23	2,24	2,24	0,01

Satbilas cycling test

	Viskositas (dPas)									
	Sebelum					Sesudah				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
F1	240	250	240	243,33	5,77	240	230	230	233,33	5,77
F2	190	200	190	193,33	5,77	190	190	180	186,67	5,77
F3	210	200	210	206,67	5,77	200	190	190	193,33	5,77
F4	230	220	210	220,00	10,00	220	210	220	216,67	5,77

	pH									
	Sebelum					Sesudah				
	1	2	3	Rata-rata	SD	1	2	3	Rata-rata	SD
	5,23	5,2	5,19	5,21	0,02	5,2	5,18	5,17	5,18	0,02
	5	5,02	5,08	5,03	0,04	3,66	3,69	3,67	3,67	0,02
	4,9	4,92	4,95	4,92	0,03	3,43	3,42	3,46	3,44	0,02
	4,89	4,87	4,85	4,87	0,02	3,37	3,39	3,41	3,39	0,02

Lampiran 8. Uji luka sayat

Kontrol Negatif

Kontrol Negatif

No	Waktu Penyembuhan														Lama Hari Penyembuhan
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	4	4	3	3	3	3	3	2	2	2	2	1	0	0	12
2	4	4	3	3	3	3	3	3	2	2	1	0	0	0	11
3	4	4	3	3	3	3	2	2	2	2	2	2	1	0	13
4	4	4	3	3	3	3	3	2	2	2	1	0	0	0	11
5	4	4	3	3	3	3	2	2	2	2	2	1	0	0	12
	Jumlah														59
	Rata-rata														11,8

Konsentrasi 5%

Konsentrasi 5%

No	Waktu Penyembuhan														Lama Hari Penyembuhan
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	4	4	3	3	2	2	2	2	1	0	0	0	0	0	9
2	4	4	3	3	3	2	2	2	2	1	0	0	0	0	10
3	4	4	3	3	2	2	2	2	2	1	0	0	0	0	10
4	4	4	3	3	2	2	2	2	1	0	0	0	0	0	9
5	4	4	3	3	3	2	2	1	0	0	0	0	0	0	8
	Jumlah														46
	Rata-rata														9,2

Konsentrasi 10%

No	Waktu Penyembuhan														Lama Hari Penyembuhan
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	4	4	3	3	2	2	1	0	0	0	0	0	0	0	7
2	4	4	3	3	3	2	2	1	0	0	0	0	0	0	8
3	4	4	3	3	3	2	2	2	1	0	0	0	0	0	9
4	4	4	3	3	3	2	2	1	0	0	0	0	0	0	8
5	4	4	3	3	3	2	2	1	0	0	0	0	0	0	8
Jumlah															40
Rata-rata															8

Konsentrasi 15%

No	Waktu Penyembuhan														Lama Hari Penyembuhan
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	4	3	2	2	2	2	2	1	0	0	0	0	0	0	8
2	4	3	2	2	2	1	0	0	0	0	0	0	0	0	6
3	4	3	2	2	2	2	2	1	0	0	0	0	0	0	8
4	4	4	3	3	2	2	2	2	1	0	0	0	0	0	9
5	4	4	3	3	2	2	2	1	0	0	0	0	0	0	8
Jumlah															39
Rata-rata															7,8

Kontrol Positif

No	Waktu Penyembuhan														Lama Hari Penyembuhan
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	4	4	3	3	2	2	2	1	0	0	0	0	0	0	8
2	4	4	3	3	3	2	2	2	1	0	0	0	0	0	9
3	4	3	3	3	2	2	2	2	2	1	0	0	0	0	10
4	4	3	3	3	2	2	2	2	1	0	0	0	0	0	9
5	4	4	3	3	3	2	2	2	2	1	0	0	0	0	10
Jumlah															46
Rata-rata															9,2

Lampiran 9. Uji statistik mutu fisik emulgel minyak biji bunga matahari (*Helianthus annuus* L.)

Statistik one way anova viskositas hari ke-1

1.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
viskositas_1	.197	12	.200*	.928	12	.355

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Nilai sig 0,355 (> 0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
viskositas_1	Based on Mean	.143	3	8	.931
	Based on Median	.250	3	8	.859
	Based on Median and with adjusted df	.250	3	8.000	.859
	Based on trimmed mean	.150	3	8	.927

Nilai sig > 0,05 data terdistribusi homogen

ANOVA

viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4033,333	3	1344,444	40,333	,000
Within Groups	266,667	8	33,333		
Total	4300,000	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

viskositas_1

Tukey HSD^a

formula	N	Subset for alpha = 0.05	
		1	2
F2	3	200.00	
F3	3	200.00	
F4	3	220.00	220.00
F1	3		243.33
Sig.		.104	.055

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Statistik one way anova viskositas hari ke – 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
viskositas_21	.218	12	.122	.910	12	.213

a. Lilliefors Significance Correction

Nilai sig 0,615 (> 0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
viskositas_21	Based on Mean	5.333	3	8	.026
	Based on Median	.333	3	8	.802
	Based on Median and with adjusted df	.333	3	6.000	.802
	Based on trimmed mean	4.201	3	8	.046

Nilai sig (> 0,05) data terdistribusi homogen

ANOVA

viskositas_21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2891.667	3	963.889	38.556	.000
Within Groups	200.000	8	25.000		
Total	3091.667	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

viskositas_21

Tukey HSD^a

formula	N	Subset for alpha = 0.05		
		1	2	3
F2	3	186.67		
F3	3	193.33		
F4	3		210.00	
F1	3			226.67
Sig.		.414	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

SPSS Paired t test viskositas hari ke 1 dan 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
viskositas_1	.197	12	.200*	.928	12	.355
viskositas_21	.218	12	.122	.910	12	.213

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 viskositas_1	215.83	12	20.207	5.833
viskositas_21	204.17	12	16.765	4.840

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	viskositas_1 & viskositas_21	12	.780	.003

Paired Samples Test

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	viskositas_1 - viskositas_21	11.667	12.673	3.658	3.615	19.719	3.189	11	.009

Nilai sig 0,009 ($> 0,05$) sehingga tidak terdapat perbedaan yang signifikan pada hari 1 dan 21 (stabil)

Statistic one way anova pH hari ke 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pH	,165	12	,200*	,890	12	,117

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Nilai sig 0,117 ($> 0,05$) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
pH	Based on Mean	1,188	3	8	,374
	Based on Median	,312	3	8	,817
	Based on Median and with adjusted df	,312	3	4,713	,817
	Based on trimmed mean	1,103	3	8	,403

Nilai sig ($> 0,05$) data terdistribusi homogen

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,199	3	,066	82,903	,000
Within Groups	,006	8	,001		
Total	,205	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

pH

Tukey HSD^a

formula	N	Subset for alpha = 0.05		
		1	2	3
F4	3	4,8700		
F3	3	4,9233		
F2	3		5,0333	
F1	3			5,2067
Sig.		,175	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Statistic one way anova pH hari ke 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ph_21	,266	12	,019	,856	12	,043

a. Lilliefors Significance Correction

Nilai sig 0,43 (> 0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
ph_21	Based on Mean	4,163	3	8	,047
	Based on Median	,432	3	8	,736
	Based on Median and with adjusted df	,432	3	3,087	,745
	Based on trimmed mean	3,587	3	8	,066

Nilai sig (> 0,05) data terdistribusi homogen

ANOVA

ph_21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,154	3	,051	26,466	,000
Within Groups	,016	8	,002		
Total	,170	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

ph_21

Tukey HSD^a

formula	N	Subset for alpha = 0.05	
		1	2
F3	3	4,9533	
F4	3	4,9700	
F2	3	5,0200	
F1	3		5,2367
Sig.		,318	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

SPSS *paired t test* pH ke 1 dan 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pH	,165	12	,200*	,890	12	,117
pH_21	,266	12	,019	,856	12	,043

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 pH	5,0083	12	,13664	,03944
pH_21	5,0450	12	,12421	,03586

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	pH & pH_21	12	,885	,000

Paired Samples Test

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	pH - pH_21	-,03667	,06358	,01835	-,07706	,00373	-1,998	11	,071

Nilai sig 0,71 ($> 0,05$) sehingga tidak terdapat perbedaan yang signifikan pada hari 1 dan 21 (stabil)

Statistic one way anova daya sebar hari ke 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_sebar	,262	12	,022	,819	12	,015

a. Lilliefors Significance Correction

Nilai sig 0,015 ($> 0,05$) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
daya_sebar	Based on Mean	1.569	3	8	,271
	Based on Median	,504	3	8	,690
	Based on Median and with adjusted df	,504	3	6.000	,693
	Based on trimmed mean	1.463	3	8	,296

Nilai sig ($> 0,05$) data tersitribusi homogen

ANOVA

daya_sebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,269	3	,090	151.826	,000
Within Groups	,005	8	,001		
Total	,274	11			

Nilai sig 0,000 $< 0,05$ terdapat perbedaan masing-masing formula

daya_sebar

Tukey HSD^a

formula	N	Subset for alpha = 0.05		
		1	2	3
F1	3	3.3033		
F3	3		3.5100	
F2	3			3.6667
F4	3			3.6700
Sig.		1.000	1.000	.998

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Statistic one way anova daya sebar hari ke 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_sebar_21	.258	12	.026	.827	12	.019

a. Lilliefors Significance Correction

Nilai sig 0,019 > 0,005 data terdistribusi normal

sTest of Homogeneity of Variances

		Levene	df1	df2	Sig.
		Statistic			
daya_sebar_21	Based on Mean	1.922	3	8	.205
	Based on Median	.659	3	8	.600
	Based on Median and with adjusted df	.659	3	5.495	.609
	Based on trimmed mean	1.805	3	8	.224

Nilai sig 0,205 > 0,05 data homogen

ANOVA

daya_sebar_21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.493	3	.164	259.697	.000
Within Groups	.005	8	.001		
Total	.498	11			

Nilai sig 0,000 < 0,05 terdapat perbedaan antar masing- masing formula

daya_sebar_21

Tukey HSD^a

formula	N	Subset for alpha = 0.05		
		1	2	3
F1	3	3.5733		
F4	3		3.8233	
F2	3			4.0633
F3	3			4.0633
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

SPSS *paired t test* daya sebar hari ke 1 dan 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_sebar	.262	12	.022	.819	12	.015
daya_sebar_21	.258	12	.026	.827	12	.019

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 daya_sebar	3.5375	12	.15789	.04558
daya_sebar_21	3.8808	12	.21288	.06145

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 daya_sebar & daya_sebar_21	12	.671	.017

Paired Samples Test

		Paired Differences			t	df	Sig. (2-tailed)
Mean	Std. Deviation	Mean	Std. Error	95% Confidence Interval of the Difference			
				Lower	Upper		

Pair	daya_sebar -	-	.15865	.04580	-.44413	-.24253	-	11	.000
1	daya_sebar_21	.34333						7.497	

Nilai sig 0,000 < 0,05 terdapat perbedaan antar masing_masing formula

Statistic one way anova daya lekat hari ke 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_lekat	,189	12	,200*	,875	12	,075

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Nilai sig 0,75 (> 0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
daya_lekat	Based on Mean	1,878	3	8	,212
	Based on Median	,523	3	8	,678
	Based on Median and with adjusted df	,523	3	4,095	,689
	Based on trimmed mean	1,750	3	8	,234

Nilai sig (> 0,05) data terdistribusi homogen

ANOVA

daya_lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,166	3	,389	224,212	,000
Within Groups	,014	8	,002		
Total	1,180	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

daya_lekat

Tukey HSD^a

formula	N	Subset for alpha = 0.05			
		1	2	3	4
F1	3	1,4967			
F2	3		1,9633		
F3	3			2,1667	
F4	3				2,3267
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Statistic one way anova daya lekat hari ke 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
daya_lekat_21	,204	12	,180	,846	12	,032

a. Lilliefors Significance Correction

Nilai sig 0,032 (> 0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
daya_lekat_21	Based on Mean	,485	3	8	,702
	Based on Median	,167	3	8	,916
	Based on Median and with adjusted df	,167	3	6,400	,915
	Based on trimmed mean	,460	3	8	,718

Nilai sig (> 0,05) data terdistribusi homogen

ANOVA

daya_lekat_21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,031	3	,344	2061,117	,000
Within Groups	,001	8	,000		
Total	1,032	11			

Nilai sig < 0,05 yang berarti terdapat perbedaan yang signifikan dari masing-masing formula

daya_lekat_21

Tukey HSD^a

formula	N	Subset for alpha = 0.05			
		1	2	3	4
F1	3	1,4667			
F2	3		1,8900		
F3	3			2,1067	
F4	3				2,2400
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

SPSS *paired t test* viskositas sebelum dan sesudah *cycling test*

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
viskositas_sebelum	.197	12	.200 [*]	.928	12	.355
viskositas_sesudah	.225	12	.094	.908	12	.199

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 viskositas_sebelum	215.83	12	20.207	5.833
viskositas_sesudah	207.50	12	20.057	5.790

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 viskositas_sebelum & viskositas_sesudah	12	.914	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	viskositas_sebelum - viskositas_sesudah	8.333	8.348	2.410	3.029	13.638	3.458	11	.005

Nilai sig 0,05 ($>0,05$) yang berarti ada perbedaan yang signifikan antara sebelum dan sesudah (tidak stabil)

SPSS *paired t test* daya lekat hari ke 1 dan 21

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_lekat	,189	12	,200*	,875	12	,075
daya_lekat_21	,204	12	,180	,846	12	,032

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 daya_lekat	1,9883	12	,32749	,09454
daya_lekat_21	1,9258	12	,30628	,08842

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	daya_lekat - daya_lekat_21	,06250	,04224	,01219	,03566	,08934	5,126	11	,000

Nilai sig 0,000 ($< 0,05$) sehingga terdapat perbedaan yang signifikan pada hari 1 dan 21 (tidak stabil)

SPSS paired t test ph sebelum dan sesudah uji cycling test

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ph	.165	12	.200*	.890	12	.117
ph_sesudah	.166	12	.200*	.910	12	.210

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Data terdistribusi normal

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 ph	5.0083	12	.13664	.03944
ph_sesudah	4.8508	12	.23165	.06687

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 ph & ph_sesudah	12	.963	.000

Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Paired Differences				
Pair 1 ph - ph_sesudah	.15750	.10670	.03080	.08971	.22529	5.114	11	.000

Nilai sig 0,000 (<0,05) yang berarti ada perbedaan yang signifikan antara sebelum dan sesudah (tidak stabil)

Lampiran 10. Uji statistik aktivitas penyembuhan luka sayat dengan *one way anova*

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Lama_Penyembuhan	,188	25	,023	,936	25	,118

a. Lilliefors Significance Correction

Nilai sig 0,118 (>0,05) data terdistribusi normal

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Lama_Penyembuhan	Based on Mean	,260	4	20	,900
	Based on Median	,100	4	20	,981
	Based on Median and with adjusted df	,100	4	16,000	,981
	Based on trimmed mean	,243	4	20	,911

Nilai sig >0,05 data terdistribusi homogen

ANOVA

Lama_Penyembuhan					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50,800	4	12,700	16,711	,000
Within Groups	15,200	20	,760		
Total	66,000	24			

Nilai sig 0,000 (<0,05) yang berarti terdapat perbedaan antar masing-masing perlakuan

Multiple Comparisons

Dependent Variable: Lama_Penyembuhan

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
kontrol negatif	konsentrasi 5%	2,600*	,551	,001	,95	4,25
	konsentrasi 10%	3,800*	,551	,000	2,15	5,45
	konsentrasi 15%	4,000*	,551	,000	2,35	5,65
	Kontrol positif	2,600*	,551	,001	,95	4,25
konsentrasi 5%	kontrol negatif	-2,600*	,551	,001	-4,25	-,95
	konsentrasi 10%	1,200	,551	,229	-,45	2,85
	konsentrasi 15%	1,400	,551	,121	-,25	3,05
	Kontrol positif	,000	,551	1,000	-1,65	1,65
konsentrasi 10%	kontrol negatif	-3,800*	,551	,000	-5,45	-2,15
	konsentrasi 5%	-1,200	,551	,229	-2,85	,45
	konsentrasi 15%	,200	,551	,996	-1,45	1,85
	Kontrol positif	-1,200	,551	,229	-2,85	,45
konsentrasi 15%	kontrol negatif	-4,000*	,551	,000	-5,65	-2,35
	konsentrasi 5%	-1,400	,551	,121	-3,05	,25
	konsentrasi 10%	-,200	,551	,996	-1,85	1,45
	Kontrol positif	-1,400	,551	,121	-3,05	,25
Kontrol positif	kontrol negatif	-2,600*	,551	,001	-4,25	-,95
	konsentrasi 5%	,000	,551	1,000	-1,65	1,65
	konsentrasi 10%	1,200	,551	,229	-,45	2,85
	konsentrasi 15%	1,400	,551	,121	-,25	3,05

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

Lama_Penyembuhan

Tukey HSD^a

Formula	N	Subset for alpha = 0.05	
		1	2
konsentrasi 15%	5	7,80	
konsentrasi 10%	5	8,00	
konsentrasi 5%	5	9,20	
Kontrol positif	5	9,20	
kontrol negatif	5		11,80
Sig.		,121	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.