

BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Kesimpulan yang didapat dari penelitian yang telah dilakukan yaitu sebagai berikut:

Pertama, krim ekstrak daun ubi jalar ungu dapat dibuat sediaan krim dengan mutu fisik dan stabilitas yang baik.

Kedua, sediaan krim ekstrak daun ubi jalar ungu memberikan efek *anti-aging* pada hewan uji yang diinduksi sinar UV-A dengan meningkatkan secara signifikan parameter persen kolagen, persen kelembaban, persen elastisitas dan luas pori yang diukur menggunakan alat *Skin Analyzer* bila ditinjau dari perubahan nilai parameter yang diukur sebelum dan sesudah dioles krim.

Ketiga, sediaan krim ekstrak daun ubi jalar ungu dengan konsentrasi 10% memberikan efek *anti-aging* paling efektif dibandingkan krim dengan konsentrasi 5% dan 7,5% pada hewan uji yang diinduksi sinar UV-A.

Keempat, krim ekstrak daun ubi jalar ungu memiliki IIPR (indeks iritasi primer) sebesar $1,33 \leq 8,00$ (krim sedikit mengiritasi) dan IIO (indeks iritasi okuler) sebesar $0,00 \leq 8,00$ (krim tidak mengiritasi) sehingga krim ekstrak daun ubi jalar ungu aman digunakan sebagai produk kosmetik.

B. Saran

Saran yang dapat disusun berdasarkan penelitian yang telah dilakukan adalah sebagai berikut:

Pertama, diharapkan untuk peneliti selanjutnya agar meneliti tentang ekstrak daun ubi jalar ungu yang dibuat kedalam sediaan lainnya dengan standarisasi pengujian lainnya.

Kedua, diharapkan untuk peneliti selanjutnya agar meneliti dengan menggunakan parameter yang lainnya.

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Lampiran 1. Hasil Izin kode etik kehewananan

	HEALTH RESEARCH ETHICS COMMITTEE KOMISI ETIK PENELITIAN KESEHATAN <u>Dr. Moewardi General Hospital</u> RSUD Dr. Moewardi
<u>ETHICAL CLEARANCE</u> KELAIKAN ETIK	
Nomor : 383 / II / HREC / 2020	
<u>The Health Research Ethics Committee Dr. Moewardi</u> Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi <u>after reviewing the proposal design, herewith to certify</u> setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan <u>That the research proposal with topic :</u> Bahwa usulan penelitian dengan judul UJI AKTIVITAS ANTI AGING KRIM EKSTRAK ETANOL DAUN UBI JALAR UNGU (Ipomoea batatas L.,) PADA KULIT PUNGGUNG KELINCI NEW ZEALAND YANG DIPAPAR SINAR UV-A <u>Principal investigator</u> : Melisa apriliani Peneliti Utama 22164709A <u>Location of research</u> : Universitas setia budi Lokasi Tempat Penelitian <u>Is ethically approved</u> Dinyatakan layak etik	
Issued on : 05 Maret 2020  Chairman Ketua Dr. Wahyu Dwi Atmoko., Sp.F 19770224 201001 1 004	

Lampiran 2. Surat Keterangan Determinasi Tumbuhan


**UNIVERSITAS
SETIA BUDI**

UPT-LABORATORIUM

Nomor : 21/DET/UPT-LAB/4.03.2020
Hal : Hasil determinasi tumbuhan
Lamp. : -

Nama Pemesan : Melisa Apriliani
NIM : 22164709A
Alamat : Program Studi S-1 Farmasi, Universitas Setia Budi, Surakarta

HASIL DETERMINASI TUMBUHAN

Nama sampel : Ubi Jalar Ungu (*Ipomoea batatas* Lamk.)
Familia : Convolvulaceae.

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :
1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 14a – 15a. Golongan 8. 109b –
119b – 120a – 121a – 122b – 123b. Familia 107. Convolvulaceae. 1b. *Ipomoea*. *Ipomoea*
batatas Lamk.

Deskripsi:

Habitus : Semak, menjalar atau membelit.
Akar : Terdapat umbi menggembung, ungu.
Batang : Bulat, bergetah, pada buku membentuk akar, gundul sampai berambut, hijau,
panjang sampai 5 m.
Daun : Tunggal, bulat telur sampai membulat dengan pangkal berbentuk jantung atau
terpancung, rata atau bersudut sampai berlekuk, kadang-kadang berbagi

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menjari 3 – 5 berbagi menjari 5 dalam, tangkai daun panjang, herbaceus, hijau.
Tangkai daun 4 – 20 cm.

Bunga : Karangan bunga di ketiak, bentuk payung. Daun pelindung kecil, rontok. Daun kelopak memanjang bulat telur, runcing, yang terluar paling kecil. Daun kelopak memanjang bulat telur, runcing, panjang lk 1 cm, yang terluar paling kecil. Mahkota bentuk lonceng sampai bentuk terompet, ungu muda. Benangsari tertanam dalam, tidak sama panjangnya. Tangkai putik bentuk benang. Kepala putik bentuk bola rangkap. Tonjolan dasar bunga bentuk cawan.

Kepala UPT-LAB
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 4 Maret 2020

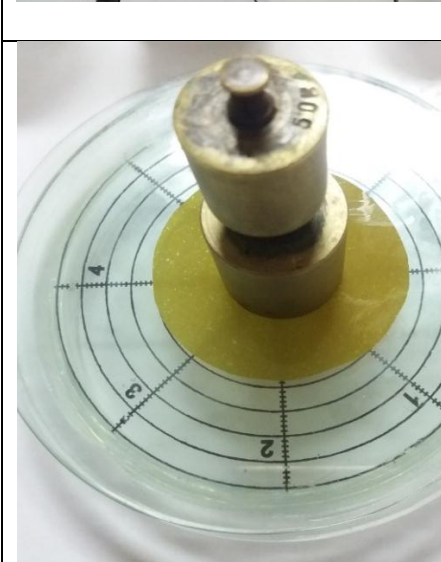
Penanggung jawab

Determinasi Tumbuhan

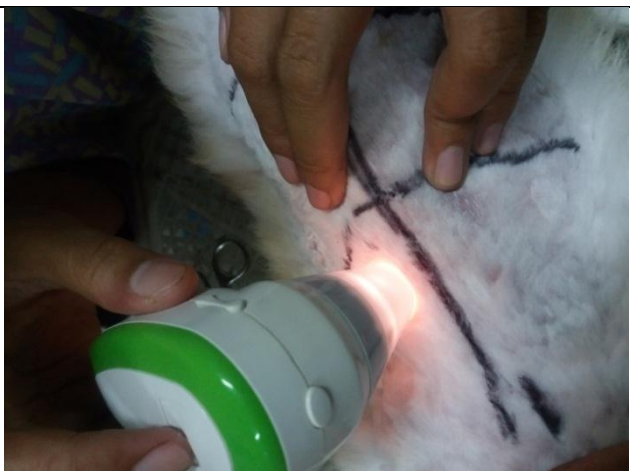
Dra. Dewi Sulistyawati. M.Sc.

Lampiran 4. Gambar penelitian**A. Gambar Alat, Bahan, dan Proses Penelitian**

	Daun ubi jalar ungu
	maserasi
	Evaporator

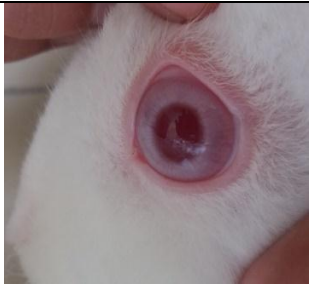
		Moisture balance
		Vicometer brookfield
		Alat daya sebar

	pH meter
	Krim ekstrak daun ubi jalar ungu
	Kontrol positif (Krim <i>anti-aging</i> Batrisya)
	Gambar alat <i>Skin Analyzer</i> EH900U

 A photograph showing two white rabbits inside a wire mesh cage. Two bright, circular UV-A lamps are positioned above the cage, illuminating the rabbits. The rabbits are facing each other, and their ears are visible.	Gambar proses induksi kerutan menggunakan sinar UV-A pada hewan uji kelinci
 A close-up photograph of a person's hands using a pair of scissors to trim the white fur of a rabbit. The rabbit is lying down, and the person is carefully cutting the fur on its back.	Gambar proses mencukur bulu kelinci
 A close-up photograph of a person's hands using a Skin Analyzer device on the skin of a rabbit. The device is a small, green and white handheld unit with a red light emitting from it. The person is holding the device against the rabbit's skin, which has some dark markings on it.	Gambar proses pengukuran parameter kerutan menggunakan alat <i>Skin Analyzer</i>

B. Gambar Uji Keamanan

Kelinci	Uji iritasi primer		
	24	48	72
Kontrol Negatif			
Formula 1			
Formula 2			
Formula 3			

Kelinci	Uji iritasi okuler		
	24	48	72
Kontro l Negatif			
Formul a 1			
Formul a 2			
Formul a 3			

C. Uji tabung ekstrak daun ubi jalar ungu

Gambar	Keterangan
	Senyawa flavonoid : + Terbentuk warna kuning pada lapisan amil alkohol
	Senyawa tanin : + Terbentuk warna hijau kehitaman
	Senyawa saponin : + Terbentuk buih yang tidak hilang

Lampiran 5. Perhitungan rendemen berat daun ubi jalar ungu menjadi serbuk daun ubi jalar ungu

Hasil presentase rendemen berat kering daun ubi jalar ungu terhadap berat basah daun ubi jalar ungu

Berat Basah	Berat kering
10000 gram	2000 gram

$$\begin{aligned}
 \text{Rendemen} &= \frac{\text{berat kering (gram)}}{\text{berat basah (gram)}} \times 100\% \\
 &= \frac{2000 \text{ (gram)}}{10000 \text{ (gram)}} \times 100\% \\
 &= 20 \%
 \end{aligned}$$

Hasil presentase rendemen berat serbuk terhadap berat kering daun ubi jalar ungu

Berat serbuk	Berat kering
1564 gram	2000 (gram)

$$\begin{aligned}
 \text{Rendemen} &= \frac{\text{berat serbuk (gram)}}{\text{berat kering}} \times 100\% \\
 &= \frac{1564 \text{ (gram)}}{2000 \text{ (gram)}} \times 100\% \\
 &= 78,2\%
 \end{aligned}$$

Lampiran 6. Perhitungan rendemen ekstrak

Hasil presentase rendemen ekstrak daun ubi jalar ungu

Berat serbuk	Berat wadah kosong	Berat wadah + ekstrak	Berat ekstrak kental
1000 (gram)	556 (gram)	801,5 (gram)	245,5 (gram)

$$\begin{aligned}
 \text{Rendemen} &= \frac{\text{berat ekstrak}}{\text{berat serbuk}} \times 100\% \\
 &= \frac{245,5 \text{ (gram)}}{1000 \text{ (gram)}} \times 100\% \\
 &= 24,55\%
 \end{aligned}$$

Lampiran 7. Hasil penetapan susut pengeringan serbuk daun ubi jalar ungu

Pengujian	Berat serbuk	Kadar lembab (%)	Pustaka
Replikasi I	2,0 gram	8.10%	< 10%
Replikasi II	2,0 gram	8,3%	
Replikasi III	2,0 gram	7,7 %	
Rata – rata		8.03%	

Lampiran 8. Hasil uji mutu fisik krim

1. Organoleptis

Pemeriksaan	Hari ke	F1	F II	F III	F IV
Warna	1	Putih	HK	HK	HK
	7	Putih	HK	HK	HK
	14	Putih	HK	HK	HK
	21	Putih	HK	HK	HK
Bau	1	Khas	Khas ekstrak	Khas ekstrak	Khas ekstrak
	7	Khas	Khas ekstrak	Khas ekstrak	Khas ekstrak
	14	Khas	Khas ekstrak	Khas ekstrak	Khas ekstrak
	21	Khas	Khas ekstrak	Khas ekstrak	Khas ekstrak
Tekstur	1	SP	SP	SP	SP
	7	SP	SP	SP	SP
	14	SP	SP	SP	SP
	21	SP	SP	SP	SP

2. Homogenitas

Hari ke	FI	FII	FIII	FIV
1	Homogen	Homogen	Homogen	Homogen
7	Homogen	Homogen	Homogen	Homogen
14	Homogen	Homogen	Homogen	Homogen
21	Homogen	Homogen	Homogen	Homogen

3. pH

Waktu	Formula I	Formula II	Formula III	Formula IV
Hari ke 1	6,65	6,53	6,39	5,97
	6,58	6,46	6,44	6,01
	6,47	6,40	6,38	5,86
Hari ke 7	6,40	6,31	6,27	5,93
	6,38	6,30	6,19	5,82
	6,46	6,22	6,13	5,78
Hari ke 14	6,32	6,28	5,98	5,76
	6,30	6,26	6,23	5,53
	6,27	6,22	6,19	5,69
Hari ke 21	6,16	6,00	5,92	5,68
	6,13	6,12	5,78	5,23
	6,18	6,00	5,92	5,53

4. Viskositas

Waktu	Formula I	Formula II	Formula III	Formula IV
Hari ke 1	380	200	170	150
	370	210	160	140
	350	230	180	160
Hari ke 7	360	190	160	140
	340	200	155	120
	330	210	140	120
Hari ke 14	320	200	150	130
	330	180	140	110
	310	175	150	120
Hari ke 21	330	170	140	120
	310	150	120	110
	320	160	130	120

5. Daya lekat

Waktu	Formula I	Formula II	Formula III	formula IV
Hari ke 1	4,5	2,8	2,4	2,3
	3,8	2,75	2,3	2,1
	3,6	2,5	2,1	1,9
Hari ke 7	4,3	2,6	2,2	2,1
	3,7	2,4	2	1,8
	3,4	2,3	2,1	1,7
Hari ke 14	3,7	2,4	2	1,6
	3,2	2,1	1,7	1,6
	3,1	2,2	1,8	1,3
Hari ke 21	3,4	2,3	1,8	1,5
	3	2	1,5	1
	2,7	1,8	1,2	1,1

6. Daya sebar

Kelompok	Waktu	Beban	Daya Sebar			Rata-rata	SD
			Replikasi I	Replikasi II	Replikasi III		
Formula I	Hari ke-1	0	3,45	3,38	3,33	3,39	0,06
		50	4,45	4,38	4,41	4,41	0,04
		100	4,72	4,80	4,89	4,80	0,09
		150	5,25	5,32	5,19	5,25	0,07
		,				4,46	
	Hari ke-7	0	3,49	3,45	3,42	3,45	0,04
		50	4,59	4,44	4,55	4,53	0,08
		100	4,82	4,98	4,98	4,93	0,09
		150	5,49	5,47	5,35	5,44	0,08
						4,59	
	Hari ke-14	0	3,53	3,67	3,58	3,59	0,07
		50	4,67	4,58	4,75	4,67	0,09
		100	4,75	4,72	4,98	4,82	0,14
		150	5,67	5,72	5,41	5,60	0,17
		0				4,67	
	Hari ke-21	0	3,58	3,72	3,89	3,73	0,16
		50	4,91	4,76	4,89	4,85	0,08
		100	4,98	4,91	5,06	4,98	0,08
		150	5,72	5,98	5,67	5,79	0,17
		Rata- Rata				4,84	
Formula II	Hari ke-1	0	3,67	3,72	3,58	3,66	0,07
		50	4,62	4,53	4,62	4,59	0,05
		100	5	5,23	5,11	5,11	0,12
		150	5,32	5,53	5,41	5,42	0,11
		Rata- Rata				4,70	
	Hari ke-7	0	3,82	3,72	3,72	3,75	0,06
		50	4,72	4,67	4,62	4,67	0,05
		100	5,11	5,32	5,23	5,22	0,11
		150	5,42	5,62	5,48	5,51	0,10
		Rata- Rata				4,79	
	Hari-14	0	3,87	3,72	3,82	3,80	0,08
		50	4,89	4,78	4,91	4,86	0,07
		100	5,23	5,42	5,36	5,34	0,10
		150	5,53	5,62	5,67	5,61	0,07
		Rata- Rata				4,90	
	Hari ke-21	0	3,98	3,87	3,75	3,87	0,12
		50	4,91	4,98	4,87	4,92	0,06
		100	5,32	5,43	5,53	5,43	0,11
		150	5,67	5,87	5,47	5,67	0,20
		Rata- Rata				4,97	
Formula III	Hari ke-1	0	4	4,11	4,23	4,11	0,12
		50	4,72	4,67	4,80	4,73	0,07
		100	5,06	5,23	5,11	5,13	0,09
		150	5,41	5,67	5,52	5,53	0,13
		Rata- Rata				4,88	
	Hari ke-7	0	4,11	4,23	4,32	4,22	0,11
		50	4,89	4,91	4,74	4,85	0,09
		100	5,21	5,34	5,20	5,25	0,08
		150	5,56	5,67	5,55	5,59	0,07

Formula IV		Rata- Rata				4,9775	
		0	4,32	4,43	4,50	4,42	0,09
	Hari-14	50	4,97	5,11	5,06	5,05	0,07
		100	5,32	5,43	5,67	5,47	0,18
		150	5,67	5,72	5,89	5,76	0,12
		Rata- Rata				5,17	
		0	4,44	4,57	4,67	4,56	0,12
	Hari ke-21	50	5,11	5,23	5,34	5,23	0,12
		100	5,57	5,67	5,57	5,60	0,06
		150	5,72	5,81	5,89	5,81	0,09
		Rata- Rata				5,30	
		0	4,20	4,34	4,57	4,37	0,19
	Hari ke-1	50	4,82	4,98	5,06	4,95	0,12
		100	5,21	5,42	5,32	5,32	0,11
		150	5,57	5,72	5,66	5,65	0,08
		Rata- Rata				5,07	
		0	4,32	4,43	4,65	4,47	0,17
	Hari ke-7	50	4,91	4,98	5,11	5,00	0,10
		100	5,43	5,62	5,72	5,59	0,15
		150	5,72	5,81	5,87	5,80	0,08
		Rata- Rata				5,21	
		0	4,44	4,54	4,63	4,54	0,10
	Hari ke-14	50	5,06	5,21	5,34	5,20	0,14
		100	5,57	5,62	5,72	5,64	0,08
		150	5,81	5,89	5,98	5,89	0,09
		Rata- Rata				5,32	
		0	4,57	4,63	4,73	4,64	0,08
	Hari ke-21	50	5,23	5,43	5,50	5,39	0,14
		100	5,71	5,89	6,02	5,87	0,16
		150	5,98	6,11	6,20	6,10	0,11
		Rata- Rata				5,50	

Lampiran 9. Hasil stabilitas krim

1. Organoleptis

Siklus	Formula I	Formula II	Formula III	Formula IV
1	Stabil	Stabil	Stabil	Stabil
2	Stabil	Stabil	Stabil	Stabil
3	Stabil	Stabil	Stabil	Stabil
4	Stabil	Stabil	Stabil	Stabil
5	Stabil	Stabil	Stabil	Stabil
6	Stabil	Stabil	Stabil	Stabil

2. pH

	Siklus 1	Siklus 2	Siklus 3	Siklus 4	Siklus 5	Siklus 6
Formula 1	6.67	6.75	6.6	6.6	6.51	6.49
	6.52	6.55	6.57	6.53	6.45	6.43
	6.4	6.36	6.27	6.26	6.29	6.25
Rata-rata±SD	6.53±0.14	6.55±0.20	6.48±0.18	6.46±0.18	6.42±0.11	6.39±0.12
Formula 2	6.55	6.46	6.48	6.47	6.4	6.46
	6.4	6.41	6.32	6.4	6.35	6.32
	6.33	6.3	6.35	6.21	6.26	6.2
Rata-rata±SD	6.43±0.11	6.39±0.08	6.38±0.09	6.36±0.13	6.34±0.07	6.33±0.13
Formula 3	6.41	6.34	6.31	6.32	6.25	6.36
	6.38	6.46	6.42	6.35	6.3	6.11
	6.3	6.29	6.22	6.24	6.31	6.25
Rata-rata±SD	6.36±0.06	6.36±0.09	6.32±0.10	6.30±0.06	6.29±0.03	6.24±0.13
Formula 4	5.9	5.8	5.81	5.79	5.75	5.7
	6.05	6.04	5.97	5.89	5.82	5.73
	5.82	5.85	5.79	5.7	5.77	5.83
Rata-rata±SD	5.92±0.12	5.90±0.13	5.86±0.10	5.79±0.10	5.78±0.04	5.75±0.07

3. Viskositas

	Siklus 1	Siklus 2	Siklus 3	Siklus 4	Siklus 5	Siklus 6
Formula 1	370 365 355	370 360 350	370 360 345	360 355 355	360 360 345	355 355 345
Rata-rata±SD	363.33±7.64	360.00±10.00	358.33±12.58	356.67±2.89	355.00±8.66	351.67±5.77
Formula 2	190 215 225	190 210 220	180 200 220	170 195 210	170 200 205	165 200 200
Rata-rata±SD	210±18.03	206.67±15.28	200±20.00	191.67±20.21	191.67±18.93	188.33±20.21
Formula 3	160 155 175	150 150 175	150 145 170	140 150 165	140 145 160	135 145 155
Rata-rata±SD	163.33±10.41	158.33±14.43	155.00±13.23	151.67±12.58	148.33±10.41	145.00±10.00
Formula 4	140 135 165	140 130 160	140 130 155	130 140 150	130 145 140	135 140 140
Rata-rata±SD	146.67±16.07	143.33±15.28	141.67±12.58	140.00±10.00	138.33±7.64	138.33±2.89

Lampiran 10. Hasil uji SPSS pH formula krim

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for pH	.089	48	.200	.961	48	.112

Levene's Test of Equality of Error Variances^a

Dependent Variable:pH

F	df1	df2	Sig.
2.772	15	32	.008

Tests of Between-Subjects Effects

Dependent Variable:pH

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.077 ^a	15	.272	32.789	.000
Intercept	1800.750	1	1800.750	217230.460	.000
Kelompok	2.719	3	.906	109.343	.000
Waktu	1.321	3	.440	53.099	.000
Kelompok * Waktu	.037	9	.004	.501	.862
Error	.265	32	.008		
Total	1805.092	48			
Corrected Total	4.342	47			

Post Hoc Tests

Kelompok Homogeneous Subsets pH

Student-Newman-Keuls^{a,b}

Kelompok	N	Subset			
		1	2	3	4
formula 4	12	5.7325			
formula 3	12		6.1517		
formula 2	12			6.2583	
formula 1	12				6.3575
Sig.		1.000	1.000	1.000	1.000

Lampiran 11. Hasil uji SPSS viskositas krim

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Viskositas	.133	48	.034	.942	48	.019

Levene's Test of Equality of Error Variances^a

Dependent Variable: Viskositas

F	df1	df2	Sig.
.479	15	32	.934

Tests of Between-Subjects Effects

Dependent Variable: Viskositas

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	333908.333 ^a	15	22260.556	179.581	.000
Intercept	1944075.000	1	1944075.000	15683.294	.000
kelompok	320237.500	3	106745.833	861.143	.000
waktu	12412.500	3	4137.500	33.378	.000
kelompok * waktu	1258.333	9	139.815	1.128	.372
Error	3966.667	32	123.958		
Total	2281950.000	48			
Corrected Total	337875.000	47			

Kruskal-Wallis Tes

Ranks

	kelompok	N	Mean Rank
Viskositas	formula 1	12	42.50
	formula 2(5%)	12	29.33
	formula 3(7.5%)	12	17.33
	formula 4(10%)	12	8.83
	Total	48	

Test Statistics^{a,b}

	Viskositas
Chi-Square	39.632
df	3
Asymp. Sig.	.000

Kruskal-Wallis Test

Ranks

	waktu	N	Mean Rank
Viskositas	Hari ke 1	12	31.00
	Hari ke 7	12	25.67
	Hari ke 14	12	22.58
	Hari ke 21	12	18.75
	Total	48	

Test Statistics^{a,b}

	Viskositas
Chi-Square	4.943
df	3
Asymp. Sig.	.176

Lampiran 12. Hasil uji SPSS Daya sebar

1. Daya sebar tanpa beban

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for dayasebarTB	.092	48	.200	.982	48	.680

Levene's Test of Equality of Error Variances^a

Dependent Variable: dayasebarTB

F	df1	df2	Sig.
.871	15	32	.600

Tests of Between-Subjects Effects

Dependent Variable: dayasebarTB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.200 ^a	15	.547	47.023	.000
Intercept	781.741	1	781.741	67246.531	.000
Kelompok	7.441	3	2.480	213.367	.000
waktu	.688	3	.229	19.714	.000
Kelompok * waktu	.071	9	.008	.678	.723
Error	.372	32	.012		
Total	790.313	48			
Corrected Total	8.572	47			

Post Hoc Tests

Kelompok Homogeneous Subsets dayasebarTB

Student-Newman-Keuls^{a, b}

Kelompok	N	Subset			
		1	2	3	4
formula 1	12	3.5408			
formula 2(5%)	12		3.7700		
formula 3(7.5%)	12			4.3275	
formula 4(10%)	12				4.5042
Sig.		1.000	1.000	1.000	1.000

Post Hoc Tests

Waktu Homogeneous Subsets dayasebarTB

Student-Newman-Keuls^{a, D}

waktu	N	Subset			
		1	2	3	4
minggu ke 1	12	3.8817			
minggu ke 2	12		3.9733		
minggu ke 3	12			4.0875	
minggu ke 4	12				4.2000
Sig.		1.000	1.000	1.000	1.000

2. Daya sebar beban 50 gram

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for dayasebar50	.102	48	.200 [*]	.967	48	.199

Levene's Test of Equality of Error Variances^a

Dependent Variable: dayasebar50

F	df1	df2	Sig.
.864	15	32	.607

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + kelompok + waktu + kelompok * waktu

Tests of Between-Subjects Effects

Dependent Variable: dayasebar50

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3.208 ^a	15	.214	26.319	.000
Intercept	1137.632	1	1137.632	139980.370	.000
kelompok	1.876	3	.625	76.946	.000
waktu	1.297	3	.432	53.215	.000
kelompok * waktu	.035	9	.004	.477	.879
Error	.260	32	.008		
Total	1141.101	48			
Corrected Total	3.468	47			

a. R Squared = .925 (Adjusted R Squared = .890)

Post Hoc Test

kelompok Homogeneous Subsets dayasebar50

Student-Newman-Keuls^{a, D}

kelompok	N	Subset			
		1	2	3	4
formula 1	12	4.6150			
formula 2	12		4.7600		
formula 3	12			4.9625	
formula 4	12				5.1358
Sig.		1.000	1.000	1.000	1.000

Post Hoc Test

waktu Homogeneous Subsets dayasebar50

Student-Newman-Keuls^{a, D}

waktu	N	Subset			
		1	2	3	4
minggu ke 1	12	4.6717			
minggu ke 2	12		4.7608		
minggu ke 3	12			4.9442	
minggu ke 4	12				5.0967
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .008.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = .05.

3. Daya sebar beban 100 gram

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for dayasebar100	.090	48	.200 [*]	.973	48	.317

a. Lilliefors Significance Correction

^{*}. This is a lower bound of the true significance.

Levene's Test of Equality of Error Variances^a

Dependent Variable: dayasebar100

F	df1	df2	Sig.
.650	15	32	.811

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + kelompok + waktu + kelompok * waktu

Tests of Between-Subjects Effects

Dependent Variable: dayasebar100

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.356 ^a	15	.290	23.425	.000
Intercept	1338.903	1	1338.903	108012.303	.000
kelompok	3.244	3	1.081	87.236	.000
waktu	.895	3	.298	24.070	.000
kelompok * waktu	.216	9	.024	1.939	.082
Error	.397	32	.012		
Total	1343.655	48			
Corrected Total	4.752	47			

a. R Squared = .917 (Adjusted R Squared = .877)

Post Hoc Test

kelompok
Homogeneous Subsets

Dayasebar100Student-Newman-Keuls^{a, D}

kelompok	N	Subset			
		1	2	3	4
formula 1	12	4.8825			
formula 2	12		5.1742		
formula 3	12			5.3650	
formula 4	12				5.6042
Sig.		1.000	1.000	1.000	1.000

Post Hoc Test

waktu Homogeneous Subsets Dayasebar100

Student-Newman-Keuls^{a, b}

waktu	N	Subset			
		1	2	3	4
minggu ke 1	12	5.0917			
minggu ke 2	12		5.1467		
minggu ke 3	12			5.3158	
minggu ke 4	12				5.4717
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .008.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = .05.

4. Daya sebar 150 gram

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for dayasebar150	.086	48	.200 [*]	.981	48	.601

a. Lilliefors Significance Correction

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

Levene's Test of Equality of Error Variances^a

Dependent Variable: dayasebar150

F	df1	df2	Sig.
.900	15	32	.571

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + kelompok + waktu + kelompok * waktu

Tests of Between-Subjects Effects

Dependent Variable: dayasebar150

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.906 ^a	15	.127	9.922	.000
Intercept	1532.845	1	1532.845	119695.075	.000
kelompok	.856	3	.285	22.294	.000
waktu	.954	3	.318	24.834	.000
kelompok * waktu	.095	9	.011	.828	.595
Error	.410	32	.013		
Total	1535.161	48			
Corrected Total	2.316	47			

a. R Squared = .823 (Adjusted R Squared = .740)

Post Hoc Test

kelompok Homogeneous Subsets

Dayasebar150

Student-Newman-Keuls^{a, b}

kelompok	N	Subset			
		1	2	3	4
formula 1	12	5.4200			
formula 2	12		5.5508		
formula 3	12			5.6733	
formula 4	12				5.8600
Sig.		1.000	1.000	1.000	1.000

Post Hoc Test

waktu Homogeneous Subsets

dayasebar150

Student-Newman-Keuls^{a, b}

waktu	N	Subset			
		1	2	3	4
hari ke-1	12	5.4642			
hari ke-7	12		5.5842		
hari ke 14	12			5.7150	
hari ke 21	12				5.8408
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .013.

a. Uses Harmonic Mean Sample Size = 12.000.

b. Alpha = .05.

Lampiran 13. Hasil uji SPSS daya lekat

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Dayalekat	.104	48	.200 [*]	.973	48	.322

Levene's Test of Equality of Error Variances^a

Dependent Variable: Dayalekat

F	df1	df2	Sig.
1.436	15	32	.190

Tests of Between-Subjects Effects

Dependent Variable: Dayalekat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	29.331 ^a	15	1.955	27.789	.000
Intercept	269.090	1	269.090	3824.226	.000
Kelompok	24.559	3	8.186	116.343	.000
waktu	4.613	3	1.538	21.855	.000
Kelompok * waktu	.158	9	.018	.249	.983
Error	2.252	32	.070		
Total	300.672	48			
Corrected Total	31.582	47			

a. R Squared = .929 (Adjusted R Squared = .895)

Post Hoc Tests

Kelompok Homogeneous Subsets Dayalekat

Student-Newman-Keuls^{a, b}

Kelompok	N	Subset			
		1	2	3	4
Formula 4	12	1.667			
Formula 3	12		1.925		
Formula 2	12			2.346	
formula 1	12				3.533
Sig.		1.000	1.000	1.000	1.000

Post Hoc Tests

Waktu Homogeneous Subsets

Dayalekat

Student-Newman-Keuls^{a, D}

waktu	N	Subset		
		1	2	3
Hari ke 21	12	1.942		
Hari ke 14	12		2.225	
Hari ke 7	12			2.550
Hari ke 1	12			2.754
Sig.		1.000	1.000	.068

Lampiran 14. Hasil uji SPSS stabilitas krim

1. Data stabilitas pH krim formula 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.196	3	.	.996	3	.878
Standardized Residual for siklus2	.177	3	.	1.000	3	.972
Standardized Residual for siklus3	.356	3	.	.818	3	.157
Standardized Residual for siklus4	.311	3	.	.897	3	.375
Standardized Residual for siklus5	.282	3	.	.936	3	.510
Standardized Residual for siklus6	.292	3	.	.923	3	.463

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure:Ph

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
siklus Sphericity Assumed	.060	5	.012	5.415	.011
Greenhouse-Geisser	.060	1.993	.030	5.415	.073
Huynh-Feldt	.060	5.000	.012	5.415	.011
Lower-bound	.060	1.000	.060	5.415	.145
Error(siklus) Sphericity Assumed	.022	10	.002		
Greenhouse-Geisser	.022	3.987	.006		
Huynh-Feldt	.022	10.000	.002		
Lower-bound	.022	2.000	.011		

Pairwise Comparisons

Measure:Ph

(I) siklus	(J) siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.023	.035	1.000	-.625	.578
	3	.050	.053	1.000	-.864	.964
	4	.067	.043	1.000	-.682	.815
	5	.113	.026	.734	-.336	.563
	6	.140	.026	.509	-.317	.597
2	1	.023	.035	1.000	-.578	.625
	3	.073	.050	1.000	-.787	.933
	4	.090	.038	1.000	-.564	.744
	5	.137	.052	1.000	-.768	1.042
	6	.163	.048	1.000	-.673	1.000

3	1	-.050	.053	1.000	-.964	.864
	2	-.073	.050	1.000	-.933	.787
	4	.017	.012	1.000	-.191	.224
	5	.063	.043	1.000	-.672	.799
	6	.090	.036	1.000	-.533	.713
4	1	-.067	.043	1.000	-.815	.682
	2	-.090	.038	1.000	-.744	.564
	3	-.017	.012	1.000	-.224	.191
	5	.047	.038	1.000	-.618	.711
	6	.073	.032	1.000	-.476	.623
5	1	-.113	.026	.734	-.563	.336
	2	-.137	.052	1.000	-1.042	.768
	3	-.063	.043	1.000	-.799	.672
	4	-.047	.038	1.000	-.711	.618
	6	.027	.007	.858	-.089	.142
6	1	-.140	.026	.509	-.597	.317
	2	-.163	.048	1.000	-1.000	.673
	3	-.090	.036	1.000	-.713	.533
	4	-.073	.032	1.000	-.623	.476
	5	-.027	.007	.858	-.142	.089

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

2. Data stabilitas pH krim formula 2

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.260	3	.	.958	3	.605
Standardized Residual for siklus2	.263	3	.	.955	3	.593
Standardized Residual for siklus3	.319	3	.	.885	3	.339
Standardized Residual for siklus4	.284	3	.	.934	3	.503
Standardized Residual for siklus5	.241	3	.	.974	3	.688
Standardized Residual for siklus6	.187	3	.	.998	3	.915

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure:pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	.021	5	.004	2.165	.140
	Greenhouse-Geisser	.021	1.738	.012	2.165	.242
	Huynh-Feldt	.021	5.000	.004	2.165	.140
	Lower-bound	.021	1.000	.021	2.165	.279
Error(siklus)	Sphericity Assumed	.019	10	.002		
	Greenhouse-Geisser	.019	3.476	.005		
	Huynh-Feldt	.019	10.000	.002		
	Lower-bound	.019	2.000	.010		

Pairwise Comparisons

Measure:pH

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	.037	.029	1.000	-.465	.539
	3	.043	.032	1.000	-.506	.593
	4	.067	.035	1.000	-.543	.676
	5	.090	.031	1.000	-.438	.618
	6	.100	.015	.338	-.164	.364
2	1	-.037	.029	1.000	-.539	.465
	3	.007	.043	1.000	-.729	.742
	4	.030	.031	1.000	-.498	.558
	5	.053	.007	.229	-.062	.169
	6	.063	.032	1.000	-.486	.613
3	1	-.043	.032	1.000	-.593	.506
	2	-.007	.043	1.000	-.742	.729
	4	.023	.064	1.000	-1.080	1.127
	5	.047	.038	1.000	-.618	.711
	6	.057	.047	1.000	-.756	.869
4	1	-.067	.035	1.000	-.676	.543
	2	-.030	.031	1.000	-.558	.498
	3	-.023	.064	1.000	-1.127	1.080
	5	.023	.037	1.000	-.618	.665
	6	.033	.023	1.000	-.370	.436
5	1	-.090	.031	1.000	-.618	.438
	2	-.053	.007	.229	-.169	.062
	3	-.047	.038	1.000	-.711	.618
	4	-.023	.037	1.000	-.665	.618
	6	.010	.036	1.000	-.613	.633

6	1	-.100	.015	.338	-.364	.164
	2	-.063	.032	1.000	-.613	.486
	3	-.057	.047	1.000	-.869	.756
	4	-.033	.023	1.000	-.436	.370
	5	-.010	.036	1.000	-.633	.613

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

3. Data stabilitas pH krim formula 3

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.282	3	.	.936	3	.510
Standardized Residual for siklus2	.272	3	.	.947	3	.554
Standardized Residual for siklus3	.193	3	.	.997	3	.890
Standardized Residual for siklus4	.282	3	.	.936	3	.510
Standardized Residual for siklus5	.328	3	.	.871	3	.298
Standardized Residual for siklus6	.198	3	.	.995	3	.868

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: stabilitas pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	.034	5	.007	1.044	.444
	Greenhouse-Geisser	.034	1.356	.025	1.044	.423
	Huynh-Feldt	.034	3.209	.010	1.044	.440
	Lower-bound	.034	1.000	.034	1.044	.414
Error(siklus)	Sphericity Assumed	.064	10	.006		
	Greenhouse-Geisser	.064	2.712	.024		
	Huynh-Feldt	.064	6.418	.010		
	Lower-bound	.064	2.000	.032		

Pairwise Comparisons

Measure: stabilitaspH

(I)	(J) siklus siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	.000	.044	1.000	-.753	.753
	3	.047	.044	1.000	-.709	.802
	4	.060	.017	1.000	-.239	.359
	5	.077	.049	1.000	-.772	.925
	6	.123	.073	1.000	-1.144	1.390
2	1	.000	.044	1.000	-.753	.753
	3	.047	.012	.906	-.161	.254
	4	.060	.026	1.000	-.397	.517
	5	.077	.052	1.000	-.828	.982
	6	.123	.115	1.000	-1.857	2.104
3	1	-.047	.044	1.000	-.802	.709
	2	-.047	.012	.906	-.254	.161
	4	.013	.028	1.000	-.479	.505
	5	.030	.062	1.000	-1.049	1.109
	6	.077	.117	1.000	-1.941	2.095
4	1	-.060	.017	1.000	-.359	.239
	2	-.060	.026	1.000	-.517	.397
	3	-.013	.028	1.000	-.505	.479
	5	.017	.044	1.000	-.739	.772
	6	.063	.089	1.000	-1.470	1.597
5	1	-.077	.049	1.000	-.925	.772
	2	-.077	.052	1.000	-.982	.828
	3	-.030	.062	1.000	-1.109	1.049
	4	-.017	.044	1.000	-.772	.739
	6	.047	.087	1.000	-1.454	1.547
6	1	-.123	.073	1.000	-1.390	1.144
	2	-.123	.115	1.000	-2.104	1.857
	3	-.077	.117	1.000	-2.095	1.941
	4	-.063	.089	1.000	-1.597	1.470
	5	-.047	.087	1.000	-1.547	1.454

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

4. Data stabilitas pH krim formula 4

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.246	3	.	.970	3	.668
Standardized Residual for siklus2	.310	3	.	.898	3	.380
Standardized Residual for siklus3	.349	3	.	.832	3	.194
Standardized Residual for siklus4	.181	3	.	.999	3	.942
Standardized Residual for siklus5	.276	3	.	.942	3	.537
Standardized Residual for siklus6	.301	3	.	.912	3	.424

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure:stabilitaspH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	.070	5	.014	2.996	.066
	Greenhouse-Geisser	.070	1.369	.051	2.996	.198
	Huynh-Feldt	.070	3.344	.021	2.996	.106
	Lower-bound	.070	1.000	.070	2.996	.226
Error(siklus)	Sphericity Assumed	.047	10	.005		
	Greenhouse-Geisser	.047	2.739	.017		
	Huynh-Feldt	.047	6.687	.007		
	Lower-bound	.047	2.000	.024		

Pairwise Comparisons

Measure:stabilitaspH

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	.027	.038	1.000	-.638	.691
	3	.067	.019	1.000	-.254	.387
	4	.130	.015	.203	-.134	.394
	5	.143	.052	1.000	-.756	1.043
	6	.170	.096	1.000	-1.496	1.836
2	1	-.027	.038	1.000	-.691	.638
	3	.040	.025	1.000	-.395	.475
	4	.103	.047	1.000	-.703	.910
	5	.117	.052	1.000	-.788	1.022
	6	.143	.086	1.000	-1.351	1.637

3	1	-.067	.019	1.000	-.387	.254
	2	-.040	.025	1.000	-.475	.395
	4	.063	.022	1.000	-.314	.441
	5	.077	.038	1.000	-.588	.741
	6	.103	.081	1.000	-1.294	1.501
4	1	-.130	.015	.203	-.394	.134
	2	-.103	.047	1.000	-.910	.703
	3	-.063	.022	1.000	-.441	.314
	5	.013	.043	1.000	-.722	.749
	6	.040	.087	1.000	-1.469	1.549
5	1	-.143	.052	1.000	-1.043	.756
	2	-.117	.052	1.000	-1.022	.788
	3	-.077	.038	1.000	-.741	.588
	4	-.013	.043	1.000	-.749	.722
	6	.027	.045	1.000	-.748	.801
6	1	-.170	.096	1.000	-1.836	1.496
	2	-.143	.086	1.000	-1.637	1.351
	3	-.103	.081	1.000	-1.501	1.294
	4	-.040	.087	1.000	-1.549	1.469
	5	-.027	.045	1.000	-.801	.748

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Lampiran 15. Hasil uji SPSS stabilitas viskositas krim

1. Data viskositas formula 1

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.253	3	.	.964	3	.637
Standardized Residual for siklus2	.175	3	.	1.000	3	1.000
Standardized Residual for siklus3	.219	3	.	.987	3	.780
Standardized Residual for siklus4	.385	3	.	.750	3	.000
Standardized Residual for siklus5	.385	3	.	.750	3	.000
Standardized Residual for siklus6	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: stabilitasvisko

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Siklus Sphericity Assumed	245.833	5	49.167	2.950	.068
Greenhouse-Geisser	245.833	1.562	157.333	2.950	.188
Huynh-Feldt	245.833	5.000	49.167	2.950	.068
Lower-bound	245.833	1.000	245.833	2.950	.228
Error(Siklus) Sphericity Assumed	166.667	10	16.667		
Greenhouse-Geisser	166.667	3.125	53.333		
Huynh-Feldt	166.667	10.000	16.667		
Lower-bound	166.667	2.000	83.333		

Pairwise Comparisons

Measure: stabilitasvisko

(I) Siklus	(J) Siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	3.333	1.667	1.000	-25.462	32.129
	3	5.000	2.887	1.000	-44.875	54.875
	4	6.667	3.333	1.000	-50.924	64.257
	5	8.333	1.667	.566	-20.462	37.129
	6	11.667	1.667	.297	-17.129	40.462
2	1	-3.333	1.667	1.000	-32.129	25.462
	3	1.667	1.667	1.000	-27.129	30.462
	4	3.333	4.410	1.000	-72.852	79.519
	5	5.000	2.887	1.000	-44.875	54.875
	6	8.333	3.333	1.000	-49.257	65.924

3	1	-5.000	2.887	1.000	-54.875	44.875
	2	-1.667	1.667	1.000	-30.462	27.129
	4	1.667	6.009	1.000	-102.156	105.490
	5	3.333	3.333	1.000	-54.257	60.924
	6	6.667	4.410	1.000	-69.519	82.852
4	1	-6.667	3.333	1.000	-64.257	50.924
	2	-3.333	4.410	1.000	-79.519	72.852
	3	-1.667	6.009	1.000	-105.490	102.156
	5	1.667	4.410	1.000	-74.519	77.852
	6	5.000	2.887	1.000	-44.875	54.875
5	1	-8.333	1.667	.566	-37.129	20.462
	2	-5.000	2.887	1.000	-54.875	44.875
	3	-3.333	3.333	1.000	-60.924	54.257
	4	-1.667	4.410	1.000	-77.852	74.519
	6	3.333	1.667	1.000	-25.462	32.129
6	1	-11.667	1.667	.297	-40.462	17.129
	2	-8.333	3.333	1.000	-65.924	49.257
	3	-6.667	4.410	1.000	-82.852	69.519
	4	-5.000	2.887	1.000	-54.875	44.875
	5	-3.333	1.667	1.000	-32.129	25.462

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

2. Data viskositas formula 2

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.276	3	.	.942	3	.537
Standardized Residual for siklus2	.253	3	.	.964	3	.637
Standardized Residual for siklus3	.175	3	.	1.000	3	1.000
Standardized Residual for siklus4	.232	3	.	.980	3	.726
Standardized Residual for siklus5	.337	3	.	.855	3	.253
Standardized Residual for siklus6	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure:stabilitasvisko

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	1190.278	5	238.056	14.525	.000
	Greenhouse-Geisser	1190.278	1.428	833.297	14.525	.033
	Huynh-Feldt	1190.278	3.998	297.730	14.525	.001
	Lower-bound	1190.278	1.000	1190.278	14.525	.062
Error(siklus)	Sphericity Assumed	163.889	10	16.389		
	Greenhouse-Geisser	163.889	2.857	57.368		
	Huynh-Feldt	163.889	7.996	20.497		
	Lower-bound	163.889	2.000	81.944		

Pairwise Comparisons

Measure:stabilitasvisko

(I) (I) siklus	(J) siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	3.333	1.667	1.000	-25.462	32.129
	3	10.000	2.887	1.000	-39.875	59.875
	4	18.333	1.667	.122	-10.462	47.129
	5	18.333	1.667	.122	-10.462	47.129
	6	21.667	3.333	.343	-35.924	79.257
2	1	-3.333	1.667	1.000	-32.129	25.462
	3	6.667	3.333	1.000	-50.924	64.257
	4	15.000	2.887	.526	-34.875	64.875
	5	15.000	2.887	.526	-34.875	64.875
	6	18.333	4.410	.799	-57.852	94.519
3	1	-10.000	2.887	1.000	-59.875	39.875
	2	-6.667	3.333	1.000	-64.257	50.924
	4	8.333	1.667	.566	-20.462	37.129
	5	8.333	4.410	1.000	-67.852	84.519
	6	11.667	6.009	1.000	-92.156	115.490
4	1	-18.333	1.667	.122	-47.129	10.462
	2	-15.000	2.887	.526	-64.875	34.875
	3	-8.333	1.667	.566	-37.129	20.462
	5	.000	2.887	1.000	-49.875	49.875
	6	3.333	4.410	1.000	-72.852	79.519
5	1	-18.333	1.667	.122	-47.129	10.462
	2	-15.000	2.887	.526	-64.875	34.875
	3	-8.333	4.410	1.000	-84.519	67.852
	4	.000	2.887	1.000	-49.875	49.875
	6	3.333	1.667	1.000	-25.462	32.129

6	1	-21.667	3.333	.343	-79.257	35.924
	2	-18.333	4.410	.799	-94.519	57.852
	3	-11.667	6.009	1.000	-115.490	92.156
	4	-3.333	4.410	1.000	-79.519	72.852
	5	-3.333	1.667	1.000	-32.129	25.462

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

3. Data viskositas formula 3

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.292	3	.	.923	3	.463
Standardized Residual for siklus2	.385	3	.	.750	3	.000
Standardized Residual for siklus3	.314	3	.	.893	3	.363
Standardized Residual for siklus4	.219	3	.	.987	3	.780
Standardized Residual for siklus5	.292	3	.	.923	3	.463
Standardized Residual for siklus6	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: stabilitasvisko

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	673.611	5	134.722	8.220	.003
	Greenhouse-Geisser	673.611	1.472	457.653	8.220	.064
	Huynh-Feldt	673.611	4.574	147.268	8.220	.004
	Lower-bound	673.611	1.000	673.611	8.220	.103
Error(siklus)	Sphericity Assumed	163.889	10	16.389		
	Greenhouse-Geisser	163.889	2.944	55.673		
	Huynh-Feldt	163.889	9.148	17.915		
	Lower-bound	163.889	2.000	81.944		

Pairwise Comparisons

Measure: stabilitasvisko

(I)	(J) siklus siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	5.000	2.887	1.000	-44.875	54.875
	3	8.333	1.667	.566	-20.462	37.129
	4	11.667	4.410	1.000	-64.519	87.852
	5	15.000	2.887	.526	-34.875	64.875
	6	18.333	4.410	.799	-57.852	94.519
2	1	-5.000	2.887	1.000	-54.875	44.875
	3	3.333	1.667	1.000	-25.462	32.129
	4	6.667	3.333	1.000	-50.924	64.257
	5	10.000	2.887	1.000	-39.875	59.875
	6	13.333	4.410	1.000	-62.852	89.519
3	1	-8.333	1.667	.566	-37.129	20.462
	2	-3.333	1.667	1.000	-32.129	25.462
	4	3.333	4.410	1.000	-72.852	79.519
	5	6.667	3.333	1.000	-50.924	64.257
	6	10.000	5.000	1.000	-76.386	96.386
4	1	-11.667	4.410	1.000	-87.852	64.519
	2	-6.667	3.333	1.000	-64.257	50.924
	3	-3.333	4.410	1.000	-79.519	72.852
	5	3.333	1.667	1.000	-25.462	32.129
	6	6.667	1.667	.858	-22.129	35.462
5	1	-15.000	2.887	.526	-64.875	34.875
	2	-10.000	2.887	1.000	-59.875	39.875
	3	-6.667	3.333	1.000	-64.257	50.924
	4	-3.333	1.667	1.000	-32.129	25.462
	6	3.333	1.667	1.000	-25.462	32.129
6	1	-18.333	4.410	.799	-94.519	57.852
	2	-13.333	4.410	1.000	-89.519	62.852
	3	-10.000	5.000	1.000	-96.386	76.386
	4	-6.667	1.667	.858	-35.462	22.129
	5	-3.333	1.667	1.000	-32.129	25.462

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

4. Data viskositas formula 4

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	.328	3	.	.871	3	.298
Standardized Residual for siklus2	.253	3	.	.964	3	.637
Standardized Residual for siklus3	.219	3	.	.987	3	.780
Standardized Residual for siklus4	.175	3	.	1.000	3	1.000
Standardized Residual for siklus5	.253	3	.	.964	3	.637
Standardized Residual for siklus6	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: stabilitasvisko

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
siklus	Sphericity Assumed	156.944	5	31.389	.461	.797
	Greenhouse-Geisser	156.944	1.214	129.271	.461	.592
	Huynh-Feldt	156.944	2.090	75.110	.461	.667
	Lower-bound	156.944	1.000	156.944	.461	.567
Error(siklus)	Sphericity Assumed	680.556	10	68.056		
	Greenhouse-Geisser	680.556	2.428	280.278		
	Huynh-Feldt	680.556	4.179	162.849		
	Lower-bound	680.556	2.000	340.278		

Pairwise Comparisons

Measure: stabilitasvisko

(I)	(J) siklus	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	3.333	1.667	1.000	-25.462	32.129
	3	5.000	2.887	1.000	-44.875	54.875
	4	6.667	6.009	1.000	-97.156	110.490
	5	8.333	10.138	1.000	-166.822	183.488
	6	8.333	8.819	1.000	-144.037	160.704
2	1	-3.333	1.667	1.000	-32.129	25.462
	3	1.667	1.667	1.000	-27.129	30.462
	4	3.333	6.667	1.000	-111.848	118.515
	5	5.000	10.408	1.000	-174.827	184.827
	6	5.000	8.660	1.000	-144.625	154.625

3	1	-5.000	2.887	1.000	-54.875	44.875
	2	-1.667	1.667	1.000	-30.462	27.129
	4	1.667	6.009	1.000	-102.156	105.490
	5	3.333	9.280	1.000	-156.992	163.659
	6	3.333	7.265	1.000	-122.182	128.849
4	1	-6.667	6.009	1.000	-110.490	97.156
	2	-3.333	6.667	1.000	-118.515	111.848
	3	-1.667	6.009	1.000	-105.490	102.156
	5	1.667	4.410	1.000	-74.519	77.852
	6	1.667	4.410	1.000	-74.519	77.852
5	1	-8.333	10.138	1.000	-183.488	166.822
	2	-5.000	10.408	1.000	-184.827	174.827
	3	-3.333	9.280	1.000	-163.659	156.992
	4	-1.667	4.410	1.000	-77.852	74.519
	6	.000	2.887	1.000	-49.875	49.875
6	1	-8.333	8.819	1.000	-160.704	144.037
	2	-5.000	8.660	1.000	-154.625	144.625
	3	-3.333	7.265	1.000	-128.849	122.182
	4	-1.667	4.410	1.000	-77.852	74.519
	5	.000	2.887	1.000	-49.875	49.875

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Lampiran 15. Hasil uji Skin Analyzer hewan uji

1. Data persen kolagen

Nama		Sblm induksi	Ssd induksi	Hari ke-1	Hari ke-7	Hari ke-14	Hari ke-21
Kelinci 1	1	62	49	50	55	58	61
k-	2	64	53	57	62	63	65
	3	64	55	60	64	67	69
	4	57	46	51	59	62	66
	5	73	64	67	69	71	72
Rata-rata±SD		64±5,79	53,4±6,88	57±6,96	61,8±5,26	64,2±4,97	66,6±4,16
kelinci 2	1	64	49	56	65	70	71
k+	2	54	48	53	63	68	70
	3	72	62	67	68	73	76
	4	82	70	74	79	81	83
	5	67	53	60	66	74	79
Rata-rata±SD		67,8±10,31	56,4±9,40	62±8,51	68,2±6,30	73,2±4,97	75,8±5,45
Kelinci 3	1	67	56	62	66	69	70
Esktrak 5%	2	68	59	61	65	68	69
	3	62	53	57	69	72	74
	4	65	57	63	69	71	72
	5	67	54	62	67	69	70
rata-rata±SD		65,8±2,39	55,8±2,39	61±2,35	67,2±1,79	69,8±1,64	71±2,00
Kelinci 4	1	66	56	60	65	68	70
Ekstrak 7,5%	2	60	52	58	63	65	67
	3	57	50	60	66	70	72
	4	67	60	67	69	71	73
	5	83	69	76	78	79	81
rata-rata±SD		66,6±10,06	57,4±7,54	64,2±7,43	68,2±5,89	70,6±5,22	72,6±5,22
Kelinci 5	1	70	61	63	66	68	71
Ekstrak 10%	2	64	55	59	67	71	73
	3	64	58	62	66	68	70
	4	68	60	64	69	75	81
	5	71	64	68	72	73	75
rata-rata±SD		67,4±3,29	59,6±3,36	63,2±3,27	68±2,55	71±3,08	74±4,36

2. Data perhitungan AUC kolagen

Kelinci 1	AUC ¹ _n	AUC ⁷ ₁	AUC ¹⁴ ₇	AUC ²¹ ₁₄	AUC ²⁸ ₂₁	Jumlah
1	86,5	199	242,5	258	271,5	1057,5
2	90,5	224	274	282,5	290,5	1161,5
3	91,5	235	284	298,5	308,5	1217,5
4	80	199	257,5	276	293	1105,5
5	105	265	308,5	317,5	323	1319
rata-rata±SD						1172,2±101,64
Kelinci 2	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	88,5	217	283,5	310	318,5	1217,5
2	78	207	273,5	301	313	1172,5
3	103	263	305	323,5	339	1333,5
4	117	292	350,5	362,5	371,5	1493,5
5	93,5	233	291	325	350,5	1293
rata-rata±SD						1302±1241,5
PERSEN PENINGKATAN						9.97
Kelinci 3	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	95	242	293	307.5	314	1251.5
2	97.5	242	288.5	303	309.5	1240.5
3	88.5	224	298.5	321	331	1263
4	93.5	246	304.5	317.5	323	1284.5
5	94	240	296.5	308.5	314	1253
rata-rata±SD						1258.5±16.58
PERSEN PENINGKATAN						6.86
Kelinci 4	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	94	236	287.5	303	313	1233.5
2	86	226	278.5	290.5	299.5	1180.5
3	82	230	291	311	322	1236
4	97	261	308.5	317.5	326.5	1310.5
5	117.5	297	349	354.5	362.5	1480.5
rata-rata±SD						1288.2±117.04
PERSEN PENINGKATAN						9.00
Kelinci 5	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	100.5	250	294	304	316.5	1265
2	91.5	232	293.5	315.5	326.5	1259
3	93	244	293	304	313	1247
4	98	252	305.5	331.5	358.5	1345.5
5	103	268	320	327.5	335.5	1354
rata-rata±SD						1294.1±51.30
PERSEN PENINGKATAN						9.42

3. Data persen elastisitas

Nama		sblm	ssd	1	2	3	4
		0	1	7	14	21	28
Kelinci 1	1	66	52	56	58	61	62
K(-)	2	62	49	51	53	55	57
	3	57	43	49	54	56	57
	4	71	57	59	62	65	68
	5	60	49	53	59	61	62
rata-rata±SD		63.2±5.45	50±5.10	53.6±3.97	57.2±3.70	59.6±4.10	61.2±4.55
Kelinci 2	1	58	43	56	64	67	68
K(+)	2	62	46	52	67	68	69
	3	64	51	58	67	69	71
	4	60	49	56	62	69	70
	5	55	46	55	64	67	69
rata-rata±SD		59.8±3.49	47±3.08	55.4±2.19	64.8±2.17	68±1.00	69.4±1.14
Kelinci 3	1	59	51	56	60	63	65
Ektstrak 5%	2	55	48	50	57	59	61
	3	63	51	56	58	62	66
	4	63	50	59	65	69	71
	5	68	53	55	63	65	69
rata-rata±SD		61.6±4.88	50.6±1.82	55.2±3.27	60.6±3.36	63.6±3.71	66.4±3.85
Kelinci 4	1	62	42	57	57	62	66
Ekstrak 7,5%	2	59	49	53	66	70	72
	3	67	53	56	63	65	68
	4	71	57	59	63	66	68
	5	63	47	58	60	64	65
rata-rata±SD		64.4±4.67	49.6±5.73	56.6±2.30	61.8±3.42	65.4±2.97	67.8±2.68
Kelinci 5	1	65	55	62	64	67	70
Ekstrak 10%	2	60	49	55	64	65	67
	3	57	42	54	62	67	68
	4	59	44	60	63	67	70
	5	61	45	59	61	63	69
rata-rata±SD		60.4±2.97	47±5.15	58±3.39	62.8±1.30	65.8±1.79	68.8±1.30

AUC ELASTISITAS

Kelinci 1	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	92	220	259	271.5	278	1120.5
2	86.5	202	236.5	245.5	254.5	1025
3	78.5	190	238	250	255.5	1012
4	99.5	234	276	289.5	303	1202
5	84.5	208	259.5	272.5	278	1102.5
rata-rata±SD						1092.4±77.32
Kelinci 2	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	79.5	211	280	298.5	305	1174
2	85	202	286.5	305	309.5	1188
3	89.5	225	292.5	308.5	317.5	1233
4	84.5	217	273	303.5	314	1192
5	78	211	279	298.5	308.5	1175
rata-rata±SD						1192.4±24.03
PERSEN PENINGKATAN						8.39
Kelinci 3	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	84.5	219	266	280.5	290.5	1140.5
2	79	198	249.5	263.5	272.5	1062.5
3	88.5	219	259	275	293	1134.5
4	88	227	286.5	306.5	317.5	1225.5
5	94.5	218	275.5	290.5	306.5	1185
rata-rata±SD						1149.6±61.06
PERSEN PENINGKATAN						4.98
Kelinci 4	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	83	213	256.5	274	293	1119.5
2	83.5	208	284	311	322	1208.5
3	93.5	221	276.5	290.5	303	1184.5
4	99.5	234	279.5	294	304	1211
5	86.5	221	268	284	291.5	1151
rata-rata±SD						1174.9±39.26
PERSEN PENINGKATAN						7.02
Kelinci 5	titik 1	titik 2	titik 3	titik 4	titik 5	Jumlah
1	92.5	241	286	298.5	312	1230
2	84.5	214	279	291.5	299.5	1168.5
3	78	204	271	296.5	305	1154.5
4	81	224	280.5	297.5	312	1195
5	83.5	222	272.5	281.5	304.5	1164
rata-rata±SD						1182.4±30.56
PERSEN PENINGKATAN						7.61

KELEMBABAN

Nama		Sblm	ssd	1	2	3	4
kelinci 1		0	1	7	14	21	28
k-	1	14	6	8	10	12	13
	2	11	5	7	8	9	11
	3	17	6	7	9	10	12
	4	14	3	6	10	11	15
	5	15	7	8	10	14	17
Rata-rata±SD		12.4±2.17	4.8±1.52	7±0.84	9.2±0.89	10.8±1.92	12.8±2.41
Kelinci 2	1	13	7	13	15	16	19
K(+)	2	10	5	12	13	15	18
	3	11	6	11	13	17	22
	4	15	9	15	16	18	20
	5	12	8	13	15	16	18
Rata-rata±SD		16±1.92	9.4±1.58	13.2±1.48	15.8±1.34	16.4±1.14	19.4±1.67
Kelinci 3	1	14	7	9	11	14	16
Ekstrak 5%	2	11	6	8	12	15	17
	3	15	7	10	14	17	19
	4	16	8	10	12	14	18
	5	14	9	11	14	16	17
Rata-rata±SD		11.4±1.87	5.8±1.14	7.8±1.14	10.6±1.34	12.4±1.30	15.2±1.14
Kelinci 4	1	14	8	10	12	16	18
Ekstrak 7,5%	2	17	9	12	14	17	19
	3	18	9	11	13	18	21
	4	16	7	9	11	15	20
	5	14	6	10	12	15	18
Rata-rata±SD		11.8±1.79	5.8±1.30	8.4±1.14	11±1.14	13.8±1.30	16.2±1.30
Kelinci 5	1	14	6	8	11	16	20
Ekstrak 10%	2	11	4	8	12	15	19
	3	15	5	9	11	16	20
	4	11	9	14	17	19	22
	5	11	7	11	16	19	23
Rata-rata±SD		12.4±1.95	5.2±1.92	9.2±2.55	11.8±2.88	15±1.87	18.4±1.64

AUC KELEMBABAN

Kelinci 1	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	17	30	43	52	57.5	199.5
2	13.5	26	35	39.5	47.5	161.5
3	20	27	38.5	44	52	181.5
4	15.5	21	41	48.5	63.5	189.5
5	18.5	31	43	59	73.5	225
rata-rata±SD						191.4±23.40
Kelinci 2	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	16.5	46	65.5	71	82.5	281.5
2	12.5	41	57.5	65.5	78	254.5
3	14	39	56.5	72.5	94	276
4	19.5	54	71	79	88	311.5
5	16	47	65.5	71	79	278.5
rata-rata±SD						280.4±20.39
PERSEN PENINGKATAN						31.74
Kelinci 3	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	17.5	34	47.5	60	70	229
2	14	30	50	64.5	74.5	233
3	18.5	37	59	73.5	83.5	271.5
4	20	38	52	61	77	248
5	18.5	42	60	70	75.5	266
rata-rata±SD						249.5±19.05
PERSEN PENINGKATAN						23.29
Kelinci 4	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	18	38	52	68	79	255
2	21.5	45	61	73.5	83.5	284.5
3	22.5	42	56.5	76	91.5	288.5
4	19.5	34	47.5	63.5	85	249.5
5	17	36	52	64.5	78	247.5
rata-rata±SD						265±19.87
PERSEN PENINGKATAN						27.77
Kelinci 5	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	17	30	46.5	67	86	246.5
2	13	28	50	64.5	81.5	237
3	17.5	32	47.5	67	86	250
4	15.5	51	73.5	83.5	96	319.5
5	14.5	40	67	82.5	99.5	303.5
rata-rata±SD						271.3±37.43
PERSEN PENINGKATAN						29.45

Pori-pori

		Sblm	ssd	1	2	3	4
kelinci 1		0	1	7	14	21	28
k-	1	0.03	0.15	0.15	0.11	0.07	0.05
	2	0	0.14	0.11	0.08	0.02	0
	3	0.03	0.12	0.08	0.06	0.01	0
	4	0	0.13	0.16	0.14	0.1	0.05
	5	0.04	0.16	0.08	0.05	0.03	0.02
rata-rata±SD		0.02±0.02	0.140±0.016	0.116±0.038	0.088±0.037	0.046±0.038	0.024±0.025
Kelinci 2	1	0.02	0.15	0.11	0.05	0.02	0
K(+)	2	0	0.16	0.13	0.06	0.03	0.02
	3	0.03	0.13	0.08	0.04	0	0.01
	4	0	0.18	0.12	0.05	0.01	0
	5	0.02	0.14	0.12	0.07	0.02	0
rata-rata±SD		0.014±0.01	0.152±0.019	0.112±0.019	0.054±0.011	0.016±0.011	0.006±0.009
Kelinci 3	1	0.02	0.1	0.08	0.04	0.02	0
Ekstrak 5%	2	0.01	0.12	0.09	0.05	0.01	0
	3	0	0.18	0.13	0.11	0.05	0.02
	4	0.01	0.21	0.16	0.1	0.07	0.03
	5	0	0.13	0.1	0.07	0.05	0.01
rata-rata±SD		0.008±0.008	0.148±0.05	0.112±0.03	0.074±0.03	0.040±0.02	0.012±0.01
Kelinci 4	1	0.01	0.19	0.13	0.1	0.05	0.02
Ekstrak 7,5%	2	0	0.16	0.11	0.05	0.02	0
	3	0.02	0.18	0.12	0.06	0.03	0.01
	4	0	0.17	0.11	0.07	0.04	0
	5	0.03	0.14	0.1	0.05	0.03	0.01
rata-rata±SD		0.012±0.013	0.168±0.02	0.114±0.01	0.066±0.02	0.034±0.01	0.008±0.01
Kelinci 5	1	0.01	0.15	0.08	0.04	0.01	0
Ekstrak 10%	2	0.03	0.18	0.12	0.08	0.03	0.01
	3	0	0.14	0.1	0.06	0.01	0
	4	0.02	0.15	0.11	0.07	0.03	0
	5	0	0.2	0.14	0.09	0.05	0.02
rata-rata±SD		0.012±0.01	0.164±0.03	0.110±0.02	0.068±0.02	0.026±0.02	0.006±0.01

AUC PORI-PORI

Kelinci 1	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	0.105	0.6	0.535	0.355	0.245	1.84
2	0.07	0.47	0.39	0.15	0.02	1.1
3	0.09	0.36	0.29	0.095	0.01	0.845
4	0.065	0.61	0.65	0.49	0.275	2.09
5	0.12	0.4	0.255	0.155	0.1	1.03
rata-rata±SD						1.38±0.55
Kelinci 2	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	0.095	0.48	0.285	0.12	0.02	1
2	0.08	0.55	0.34	0.165	0.1	1.24
3	0.095	0.37	0.22	0.04	0.035	0.76
4	0.09	0.54	0.295	0.085	0.01	1.02
5	0.09	0.5	0.365	0.14	0.02	1.115
rata-rata±SD						1.03±0.18
% penurunan						25.70601
Kelinci 3	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	0.07	0.34	0.22	0.11	0.02	0.76
2	0.07	0.39	0.265	0.085	0.01	0.82
3	0.09	0.57	0.515	0.285	0.12	1.58
4	0.115	0.69	0.51	0.345	0.175	1.835
5	0.065	0.43	0.345	0.245	0.085	1.17
rata-rata±SD						1.233±0.47
% penurunan						10.71687
Kelinci 4	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	0.105	0.58	0.48	0.275	0.12	1.56
2	0.08	0.49	0.285	0.12	0.02	0.995
3	0.11	0.54	0.33	0.165	0.065	1.21
4	0.085	0.5	0.355	0.21	0.04	1.19
5	0.1	0.44	0.275	0.155	0.065	1.035
rata-rata±SD						1.198±0.22
% penurunan						13.25127
Kelinci 5	titik 1	titik 2	titik 3	titik 4	titik 5	jumlah
1	0.085	0.39	0.22	0.075	0.01	0.78
2	0.12	0.54	0.4	0.185	0.065	1.31
3	0.07	0.44	0.31	0.095	0.01	0.925
4	0.095	0.48	0.355	0.175	0.03	1.135
5	0.1	0.62	0.455	0.265	0.12	1.56
rata-rata±SD						1.142±0.31
% penurunan						17.3063

Lampiran 16. Rumus AUC

$$AUC_{1}^{7} = \frac{\text{sesudah induksi} + \text{pengukuran 1}}{2} * (7-1)$$

$$AUC_{7}^{14} = \frac{\text{pengukuran 1} + \text{pengukuran 2}}{2} * (14-7)$$

$$AUC_{14}^{21} = \frac{\text{pengukuran 2} + \text{pengukuran 3}}{2} * (21-14)$$

$$AUC_{21}^{28} = \frac{\text{pengukuran 3} + \text{pengukuran 4}}{2} * (28-21)$$

Lampiran 17. Hasil SPSS kolagen

1. Nilai AUC kolagen one way Anova

One-Sample Kolmogorov-Smirnov Test

		nilaiAUC
N		25
Normal Parameters ^{a,b}	Mean	1263.0000
	Std. Deviation	97.11205
Most Extreme Differences	Absolute	.132
	Positive	.132
	Negative	-.120
Kolmogorov-Smirnov Z		.659
Asymp. Sig. (2-tailed)		.778

Test of Homogeneity of Variances

nilaiAUC

Levene Statistic	df1	df2	Sig.
2.050	4	20	.126

ANOVA

nilaiAUC

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56940.700	4	14235.175	1.681	.019
Within Groups	169397.300	20	8469.865		
Total	226338.000	24			

Post Hoc Tests

Homogeneous Subsets

nilaiAUC (kolagen)

Student-Newman-Keuls^a

Krim	N	Subset for alpha = 0.05		
		1	2	3
kontrol negative	5	1172.2000		
krim ekstrak 5%	5		1458.5000	
krim ekstrak 7.5%	5			1644.4000
krim ekstrak 10%	5			1926.1000
kontrol positif	5			1994.0000
Sig.		.1000	.209	.214

2. Hasil Repeated Measures Anova Aktivitas kolagen

2.1 Kontrol negatif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.300	5	.161	.922	5	.545
Standardized Residual for sesudahUV	.208	5	.200 [*]	.951	5	.742
Standardized Residual for minggupertama	.206	5	.200 [*]	.935	5	.634
Standardized Residual for minggukedua	.138	5	.200 [*]	.997	5	.998
Standardized Residual for mingguketiga	.195	5	.200 [*]	.981	5	.942
Standardized Residual for minggukeempat	.157	5	.200 [*]	.990	5	.979

Tests of Within-Subjects Effects

Measure:kolagen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
waktu					
Sphericity Assumed	624.167	5	124.833	28.697	.000
Greenhouse-Geisser	624.167	1.560	400.141	28.697	.001
Huynh-Feldt	624.167	2.377	262.625	28.697	.000
Lower-bound	624.167	1.000	624.167	28.697	.006
Error(waktu)					
Sphericity Assumed	87.000	20	4.350		
Greenhouse-Geisser	87.000	6.239	13.943		
Huynh-Feldt	87.000	9.507	9.152		
Lower-bound	87.000	4.000	21.750		

Pairwise Comparisons

Measure:kolagen

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	10.600 [*]	.748	.002	5.920	15.280
	3	7.000	1.342	.097	-1.391	15.391
	4	2.200	1.562	1.000	-7.569	11.969
	5	-.200	1.655	1.000	-10.552	10.152
	6	-2.600	1.939	1.000	-14.727	9.527
2	1	-10.600 [*]	.748	.002	-15.280	-5.920
	3	-3.600	.748	.129	-8.280	1.080
	4	-8.400	1.400	.058	-17.156	.356
	5	-10.800 [*]	1.530	.032	-20.367	-1.233
	6	-13.200 [*]	1.960	.038	-25.455	-.945

3	1	-7.000	1.342	.097	-15.391	1.391
	2	3.600	.748	.129	-1.080	8.280
	4	-4.800	.970	.116	-10.864	1.264
	5	-7.200	1.158	.051	-14.440	.040
	6	-9.600	1.661	.067	-19.990	.790
4	1	-2.200	1.562	1.000	-11.969	7.569
	2	8.400	1.400	.058	-.356	17.156
	3	4.800	.970	.116	-1.264	10.864
	5	-2.400	.400	.058	-4.902	.102
	6	-4.800	.800	.058	-9.803	.203
5	1	.200	1.655	1.000	-10.152	10.552
	2	10.800 [*]	1.530	.032	1.233	20.367
	3	7.200	1.158	.051	-.040	14.440
	4	2.400	.400	.058	-.102	4.902
	6	-2.400	.510	.139	-5.589	.789
6	1	2.600	1.939	1.000	-9.527	14.727
	2	13.200 [*]	1.960	.038	.945	25.455
	3	9.600	1.661	.067	-.790	19.990
	4	4.800	.800	.058	-.203	9.803
	5	2.400	.510	.139	-.789	5.589

2.2 Kontrol positif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.156	5	.200 [*]	.993	5	.990
Standardized Residual for sesudahUV	.241	5	.200 [*]	.893	5	.372
Standardized Residual for minggupertama	.193	5	.200 [*]	.952	5	.749
Standardized Residual for minggukedua	.313	5	.124 [*]	.812	5	.102
Standardized Residual for mingguketiga	.236	5	.200 [*]	.934	5	.623
Standardized Residual for minggukeempat	.211	5	.200 [*]	.941	5	.671

Tests of Within-Subjects Effects

Measure: kolagen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
waktu					
Sphericity Assumed	1274.967	5	254.993	28.406	.000
Greenhouse-Geisser	1274.967	1.726	738.629	28.406	.001
Huynh-Feldt	1274.967	2.916	437.230	28.406	.000
Lower-bound	1274.967	1.000	1274.967	28.406	.006
Error (waktu)					
Sphericity Assumed	179.533	20	8.977		
Greenhouse-Geisser	179.533	6.905	26.002		
Huynh-Feldt	179.533	11.664	15.392		
Lower-bound	179.533	4.000	44.883		

Pairwise Comparisons

Measure: kolagen

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	11.400 [*]	1.600	.031	1.393	21.407
	3	5.800	1.319	.176	-2.450	14.050
	4	-.400	2.315	1.000	-14.879	14.079
	5	-5.400	2.619	1.000	-21.780	10.980
	6	-8.000	2.702	.623	-24.898	8.898
2	1	-11.400 [*]	1.600	.031	-21.407	-1.393
	3	-5.600 [*]	.600	.011	-9.352	-1.848
	4	-11.800 [*]	1.881	.049	-23.567	-.033
	5	-16.800 [*]	2.375	.032	-31.653	-1.947
	6	-19.400 [*]	2.522	.023	-35.172	-3.628
3	1	-5.800	1.319	.176	-14.050	2.450
	2	5.600 [*]	.600	.011	1.848	9.352
	4	-6.200	1.594	.265	-16.167	3.767
	5	-11.200	1.934	.066	-23.295	.895
	6	-13.800 [*]	2.059	.039	-26.678	-.922
4	1	.400	2.315	1.000	-14.079	14.879
	2	11.800 [*]	1.881	.049	.033	23.567
	3	6.200	1.594	.265	-3.767	16.167
	5	-5.000	.949	.093	-10.933	.933
	6	-7.600	1.503	.108	-17.002	1.802
5	1	5.400	2.619	1.000	-10.980	21.780
	2	16.800 [*]	2.375	.032	1.947	31.653
	3	11.200	1.934	.066	-.895	23.295
	4	5.000	.949	.093	-.933	10.933
	6	-2.600	.678	.278	-6.842	1.642
6	1	8.000	2.702	.623	-8.898	24.898
	2	19.400 [*]	2.522	.023	3.628	35.172
	3	13.800 [*]	2.059	.039	.922	26.678
	4	7.600	1.503	.108	-1.802	17.002
	5	2.600	.678	.278	-1.642	6.842

2.3 Ekstrak 5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.292	5	.188	.877	5	.294
Standardized Residual for sesudahUV	.175	5	.200 [*]	.974	5	.899
Standardized Residual for minggupertama	.300	5	.161	.813	5	.103
Standardized Residual for minggukdua	.243	5	.200 [*]	.894	5	.377
Standardized Residual for mingguketiga	.287	5	.200 [*]	.914	5	.490
Standardized Residual for minggukeempat	.291	5	.191	.905	5	.440

Tests of Within-Subjects Effects

Measure:kolagen

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	825.500	5	165.100	33.809	.000
	Greenhouse-Geisser	825.500	1.423	579.999	33.809	.001
	Huynh-Feldt	825.500	1.986	415.739	33.809	.000
	Lower-bound	825.500	1.000	825.500	33.809	.004
Error (waktu)	Sphericity Assumed	97.667	20	4.883		
	Greenhouse-Geisser	97.667	5.693	17.155		
	Huynh-Feldt	97.667	7.942	12.297		
	Lower-bound	97.667	4.000	24.417		

Pairwise Comparisons

Measure:kolagen

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	10.000 [*]	.894	.005	4.406	15.594
	3	4.800	.800	.058	-.203	9.803
	4	-1.400	1.806	1.000	-12.692	9.892
	5	-4.000	1.789	1.000	-15.188	7.188
	6	-5.200	1.960	.852	-17.455	7.055
2	1	-10.000 [*]	.894	.005	-15.594	-4.406
	3	-5.200	1.020	.105	-11.578	1.178
	4	-11.400 [*]	1.661	.035	-21.790	-1.010
	5	-14.000 [*]	1.612	.015	-24.084	-3.916
	6	-15.200 [*]	1.772	.015	-26.282	-4.118
3	1	-4.800	.800	.058	-9.803	.203
	2	5.200	1.020	.105	-1.178	11.578
	4	-6.200	1.497	.215	-15.560	3.160
	5	-8.800	1.562	.073	-18.569	.969
	6	-10.000	1.761	.071	-21.011	1.011

4	1	1.400	1.806	1.000	-9.892	12.692
	2	11.400	1.661	.035	1.010	21.790
	3	6.200	1.497	.215	-3.160	15.560
	5	-2.600	.245	.007	-4.132	-1.068
	6	-3.800	.374	.008	-6.140	-1.460
5	1	4.000	1.789	1.000	-7.188	15.188
	2	14.000	1.612	.015	3.916	24.084
	3	8.800	1.562	.073	-.969	18.569
	4	2.600	.245	.007	1.068	4.132
	6	-1.200	.200	.058	-2.451	.051
6	1	5.200	1.960	.852	-7.055	17.455
	2	15.200	1.772	.015	4.118	26.282
	3	10.000	1.761	.071	-1.011	21.011
	4	3.800	.374	.008	1.460	6.140
	5	1.200	.200	.058	-.051	2.451

2.4 Ekstrak 7,5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.284	5	.200	.888	5	.348
Standardized Residual for sesudahUV	.174	5	.200	.933	5	.617
Standardized Residual for minggupertama	.314	5	.120	.844	5	.177
Standardized Residual for minggukedua	.246	5	.200	.861	5	.234
Standardized Residual for mingguketiga	.269	5	.200	.921	5	.537
Standardized Residual for minggukeempat	.269	5	.200	.921	5	.537

Tests of Within-Subjects Effects

Measure:kolagen

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	724.800	5	144.960	22.210	.000
	Greenhouse-Geisser	724.800	1.271	570.059	22.210	.004
	Huynh-Feldt	724.800	1.597	453.878	22.210	.002
	Lower-bound	724.800	1.000	724.800	22.210	.009
Error(waktu)	Sphericity Assumed	130.533	20	6.527		
	Greenhouse-Geisser	130.533	5.086	25.666		
	Huynh-Feldt	130.533	6.388	20.435		
	Lower-bound	130.533	4.000	32.633		

Pairwise Comparisons

Measure: kolagen

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	9.200 [*]	1.319	.033	.950	17.450
	3	2.400	1.860	1.000	-9.233	14.033
	4	-1.600	2.315	1.000	-16.079	12.879
	5	-4.000	2.739	1.000	-21.127	13.127
	6	-6.000	2.739	1.000	-23.127	11.127
2	1	-9.200 [*]	1.319	.033	-17.450	-.950
	3	-6.800 [*]	.970	.033	-12.864	-.736
	4	-10.800 [*]	1.356	.020	-19.283	-2.317
	5	-13.200 [*]	1.772	.026	-24.282	-2.118
	6	-15.200 [*]	1.772	.015	-26.282	-4.118
3	1	-2.400	1.860	1.000	-14.033	9.233
	2	6.800 [*]	.970	.033	.736	12.864
	4	-4.000	.837	.132	-9.233	1.233
	5	-6.400	1.288	.115	-14.458	1.658
	6	-8.400 [*]	1.288	.043	-16.458	-.342
4	1	1.600	2.315	1.000	-12.879	16.079
	2	10.800 [*]	1.356	.020	2.317	19.283
	3	4.000	.837	.132	-1.233	9.233
	5	-2.400	.510	.139	-5.589	.789
	6	-4.400 [*]	.510	.015	-7.589	-1.211
5	1	4.000	2.739	1.000	-13.127	21.127
	2	13.200 [*]	1.772	.026	2.118	24.282
	3	6.400	1.288	.115	-1.658	14.458
	4	2.400	.510	.139	-.789	5.589
	6	-2.000	.000	.	-2.000	-2.000
6	1	6.000	2.739	1.000	-11.127	23.127
	2	15.200 [*]	1.772	.015	4.118	26.282
	3	8.400 [*]	1.288	.043	.342	16.458
	4	4.400 [*]	.510	.015	1.211	7.589
	5	2.000	.000	.	2.000	2.000

2.5 Ekstrak 10%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.250	5	.200 [*]	.862	5	.234
Standardized Residual for sesudahUV	.147	5	.200 [*]	.995	5	.994
Standardized Residual for minggupertama	.203	5	.200 [*]	.976	5	.914
Standardized Residual for minggukedua	.253	5	.200 [*]	.854	5	.207
Standardized Residual for mingguketiga	.235	5	.200 [*]	.903	5	.429
Standardized Residual for minggukeempat	.209	5	.200 [*]	.901	5	.417

Tests of Within-Subjects Effects

Measure:kolagen

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	675.600	5	135.120	27.279	.000
	Greenhouse-Geisser	675.600	1.484	455.361	27.279	.001
	Huynh-Feldt	675.600	2.153	313.760	27.279	.000
	Lower-bound	675.600	1.000	675.600	27.279	.006
Error(waktu)	Sphericity Assumed	99.067	20	4.953		
	Greenhouse-Geisser	99.067	5.935	16.693		
	Huynh-Feldt	99.067	8.613	11.502		
	Lower-bound	99.067	4.000	24.767		

Pairwise Comparisons

Measure:kolagen

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	7.800 [*]	.583	.003	4.153	11.447
	3	4.200	.860	.122	-1.180	9.580
	4	-.600	1.208	1.000	-8.157	6.957
	5	-3.600	1.691	1.000	-14.177	6.977
	6	-6.600	2.064	.495	-19.508	6.308
2	1	-7.800 [*]	.583	.003	-11.447	-4.153
	3	-3.600 [*]	.400	.013	-6.102	-1.098
	4	-8.400 [*]	1.122	.026	-15.420	-1.380
	5	-11.400 [*]	1.749	.043	-22.340	-.460
	6	-14.400 [*]	2.159	.039	-27.901	-.899
3	1	-4.200	.860	.122	-9.580	1.180
	2	3.600 [*]	.400	.013	1.098	6.102
	4	-4.800	.860	.076	-10.180	.580
	5	-7.800	1.530	.105	-17.367	1.767
	6	-10.800	1.985	.083	-23.214	1.614

4	1	.600	1.208	1.000	-6.957	8.157
	2	8.400	1.122	.026	1.380	15.420
	3	4.800	.860	.076	-.580	10.180
	5	-3.000	.894	.427	-8.594	2.594
	6	-6.000	1.581	.288	-15.889	3.889
5	1	3.600	1.691	1.000	-6.977	14.177
	2	11.400	1.749	.043	.460	22.340
	3	7.800	1.530	.105	-1.767	17.367
	4	3.000	.894	.427	-2.594	8.594
	6	-3.000	.775	.269	-7.844	1.844
6	1	6.600	2.064	.495	-6.308	19.508
	2	14.400	2.159	.039	.899	27.901
	3	10.800	1.985	.083	-1.614	23.214
	4	6.000	1.581	.288	-3.889	15.889
	5	3.000	.775	.269	-1.844	7.844

Lampiran 16. Hasil SPSS Elastisitas

1. Elastisitas one way annova

One-Sample Kolmogorov-Smirnov Test

		nilaiAUC
N		25
Normal Parameters ^{a,d}	Mean	1158.3400
	Std. Deviation	58.88508
Most Extreme Differences	Absolute	.138
	Positive	.102
	Negative	-.138
Kolmogorov-Smirnov Z		.691
Asymp. Sig. (2-tailed)		.725

Test of Homogeneity of Variances

nilaiAUC

Levene Statistic	df1	df2	Sig.
2.005	4	20	.133

ANOVA

nilaiAUC

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32188.360	4	8047.090	3.154	.037
Within Groups	51030.500	20	2551.525		
Total	83218.860	24			

Post Hoc Tests

Homogeneous Subsets

nilaiAUC

Student-Newman-Keuls^a

krim	N	Subset for alpha = 0.05		
		1	2	3
krim kontrol negatif	5	1092.4000	1149.6000	1274.9000
krim ekstrak 5%	5			
krim ekstrak 7.5%	5			
krim ekstrak 10%	5			
krim kontrol positif	5			1292.4000
Sig.		1.000	.108	.119

2. Hasil *Repeated Measures Anova* Elastisitas

2.1 kontrol negatif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.187	5	.200 [*]	.973	5	.896
Standardized Residual for sesudahUV	.222	5	.200 [*]	.967	5	.857
Standardized Residual for minggupertama	.160	5	.200 [*]	.976	5	.911
Standardized Residual for minggukedua	.206	5	.200 [*]	.943	5	.687
Standardized Residual for mingguketiga	.234	5	.200 [*]	.918	5	.516
Standardized Residual for minggukeempat	.230	5	.200 [*]	.876	5	.293

Tests of Within-Subjects Effects

Measure:elastisitas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	610.667	5	122.133	47.277	.000
	Greenhouse-Geisser	610.667	1.289	473.593	47.277	.001
	Huynh-Feldt	610.667	1.641	372.203	47.277	.000
	Lower-bound	610.667	1.000	610.667	47.277	.002
Error (waktu)	Sphericity Assumed	51.667	20	2.583		
	Greenhouse-Geisser	51.667	5.158	10.017		
	Huynh-Feldt	51.667	6.563	7.873		
	Lower-bound	51.667	4.000	12.917		

Pairwise Comparisons

Measure:elastisitas

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	13.200 [*]	.583	.000	9.553	16.847
	3	9.600 [*]	.927	.007	3.800	15.400
	4	6.000	1.673	.346	-4.465	16.465
	5	3.600	1.536	1.000	-6.008	13.208
	6	2.000	1.304	1.000	-6.154	10.154
2	1	-13.200 [*]	.583	.000	-16.847	-9.553
	3	-3.600	.748	.129	-8.280	1.080
	4	-7.200	1.393	.100	-15.911	1.511
	5	-9.600 [*]	1.288	.026	-17.658	-1.542
	6	-11.200 [*]	1.068	.007	-17.878	-4.522

3	1	-9.600 [*]	.927	.007	-15.400	-3.800
	2	3.600	.748	.129	-1.080	8.280
	4	-3.600	.812	.171	-8.681	1.481
	5	-6.000 [*]	.707	.016	-10.422	-1.578
	6	-7.600 [*]	.678	.005	-11.842	-3.358
4	1	-6.000	1.673	.346	-16.465	4.465
	2	7.200	1.393	.100	-1.511	15.911
	3	3.600	.812	.171	-1.481	8.681
	5	-2.400 [*]	.245	.009	-3.932	-.868
	6	-4.000 [*]	.548	.028	-7.425	-.575
5	1	-3.600	1.536	1.000	-13.208	6.008
	2	9.600 [*]	1.288	.026	1.542	17.658
	3	6.000 [*]	.707	.016	1.578	10.422
	4	2.400 [*]	.245	.009	.868	3.932
	6	-1.600	.400	.242	-4.102	.902
6	1	-2.000	1.304	1.000	-10.154	6.154
	2	11.200 [*]	1.068	.007	4.522	17.878
	3	7.600 [*]	.678	.005	3.358	11.842
	4	4.000 [*]	.548	.028	.575	7.425
	5	1.600	.400	.242	-.902	4.102

2.2 kontrol positif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.136	5	.200 [*]	.989	5	.976
Standardized Residual for sesudahUV	.227	5	.200 [*]	.960	5	.811
Standardized Residual for minggupertama	.228	5	.200 [*]	.932	5	.607
Standardized Residual for minggukedua	.245	5	.200 [*]	.871	5	.272
Standardized Residual for mingguketiga	.241	5	.200 [*]	.821	5	.119
Standardized Residual for minggukeempat	.237	5	.200 [*]	.961	5	.814

Tests of Within-Subjects Effects

Measure:elastisitas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	1811.867	5	362.373	104.330	.000
	Greenhouse-Geisser	1811.867	2.763	655.675	104.330	.000
	Huynh-Feldt	1811.867	5.000	362.373	104.330	.000
	Lower-bound	1811.867	1.000	1811.867	104.330	.001
Error (waktu)	Sphericity Assumed	69.467	20	3.473		
	Greenhouse-Geisser	69.467	11.053	6.285		
	Huynh-Feldt	69.467	20.000	3.473		
	Lower-bound	69.467	4.000	17.367		

Pairwise Comparisons

Measure:elastisitas

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	12.800 [*]	1.281	.008	4.791	20.809
	3	4.400	1.720	.942	-6.360	15.160
	4	-5.000	1.225	.226	-12.660	2.660
	5	-8.200 [*]	1.241	.041	-15.961	-.439
	6	-9.600 [*]	1.288	.026	-17.658	-1.542
2	1	-12.800 [*]	1.281	.008	-20.809	-4.791
	3	-8.400 [*]	1.249	.038	-16.211	-.589
	4	-17.800 [*]	1.530	.005	-27.367	-8.233
	5	-21.000 [*]	1.000	.000	-27.254	-14.746
	6	-22.400 [*]	.872	.000	-27.852	-16.948
3	1	-4.400	1.720	.942	-15.160	6.360
	2	8.400 [*]	1.249	.038	.589	16.211
	4	-9.400	1.503	.050	-18.802	.002
	5	-12.600 [*]	.927	.003	-18.400	-6.800
	6	-14.000 [*]	.837	.001	-19.233	-8.767
4	1	5.000	1.225	.226	-2.660	12.660
	2	17.800 [*]	1.530	.005	8.233	27.367
	3	9.400	1.503	.050	-.002	18.802
	5	-3.200	1.020	.524	-9.578	3.178
	6	-4.600	.980	.140	-10.728	1.528
5	1	8.200 [*]	1.241	.041	.439	15.961
	2	21.000 [*]	1.000	.000	14.746	27.254
	3	12.600 [*]	.927	.003	6.800	18.400
	4	3.200	1.020	.524	-3.178	9.578
	6	-1.400	.245	.070	-2.932	.132
6	1	9.600 [*]	1.288	.026	1.542	17.658
	2	22.400 [*]	.872	.000	16.948	27.852
	3	14.000 [*]	.837	.001	8.767	19.233
	4	4.600	.980	.140	-1.528	10.728
	5	1.400	.245	.070	-.132	2.932

2.3 Ekstrak 5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.213	5	.200 [*]	.969	5	.870
Standardized Residual for sesudahUV	.213	5	.200 [*]	.963	5	.826
Standardized Residual for minggupertama	.276	5	.200 [*]	.905	5	.437
Standardized Residual for minggukedua	.180	5	.200 [*]	.942	5	.677
Standardized Residual for mingguketiga	.164	5	.200 [*]	.984	5	.955
Standardized Residual for minggukeempat	.158	5	.200 [*]	.979	5	.928

Tests of Within-Subjects Effects

Measure:elastisitas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	837.867	5	167.573	42.352	.000
	Greenhouse-Geisser	837.867	2.429	344.965	42.352	.000
	Huynh-Feldt	837.867	5.000	167.573	42.352	.000
	Lower-bound	837.867	1.000	837.867	42.352	.003
Error(waktu)	Sphericity Assumed	79.133	20	3.957		
	Greenhouse-Geisser	79.133	9.715	8.145		
	Huynh-Feldt	79.133	20.000	3.957		
	Lower-bound	79.133	4.000	19.783		

Pairwise Comparisons

Measure:elastisitas

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	11.000 [*]	1.517	.029	1.515	20.485
	3	6.400	1.778	.341	-4.717	17.517
	4	1.000	1.643	1.000	-9.276	11.276
	5	-2.000	1.703	1.000	-12.650	8.650
	6	-4.800	1.241	.270	-12.561	2.961
2	1	-11.000 [*]	1.517	.029	-20.485	-1.515
	3	-4.600	1.288	.351	-12.658	3.458
	4	-10.000 [*]	1.342	.026	-18.391	-1.609
	5	-13.000 [*]	1.517	.015	-22.485	-3.515
	6	-15.800 [*]	1.393	.005	-24.511	-7.089
3	1	-6.400	1.778	.341	-17.517	4.717
	2	4.600	1.288	.351	-3.458	12.658
	4	-5.400	1.077	.111	-12.136	1.336
	5	-8.400 [*]	.812	.007	-13.481	-3.319
	6	-11.200 [*]	.860	.003	-16.580	-5.820

4	1	-1.000	1.643	1.000	-11.276	9.276
	2	10.000 ⁺	1.342	.026	1.609	18.391
	3	5.400	1.077	.111	-1.336	12.136
	5	-3.000 ⁺	.447	.039	-5.797	-.203
	6	-5.800 ⁺	.663	.014	-9.948	-1.652
5	1	2.000	1.703	1.000	-8.650	12.650
	2	13.000 ⁺	1.517	.015	3.515	22.485
	3	8.400 ⁺	.812	.007	3.319	13.481
	4	3.000 ⁺	.447	.039	.203	5.797
	6	-2.800	.490	.070	-5.864	.264
6	1	4.800	1.241	.270	-2.961	12.561
	2	15.800 ⁺	1.393	.005	7.089	24.511
	3	11.200 ⁺	.860	.003	5.820	16.580
	4	5.800 ⁺	.663	.014	1.652	9.948
	5	2.800	.490	.070	-.264	5.864

2.4 Ekkstrak 7,5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.218	5	.200 ⁺	.967	5	.855
Standardized Residual for sesudahUV	.142	5	.200 ⁺	.994	5	.991
Standardized Residual for minggupertama	.197	5	.200 ⁺	.943	5	.685
Standardized Residual for minggukedua	.237	5	.200 ⁺	.961	5	.814
Standardized Residual for mingguketiga	.220	5	.200 ⁺	.956	5	.777
Standardized Residual for minggukeempat	.270	5	.200 ⁺	.916	5	.502

Tests of Within-Subjects Effects

Measure:elastisitas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	1135.467	5	227.093	21.745	.000
	Greenhouse-Geisser	1135.467	1.906	595.610	21.745	.001
	Huynh-Feldt	1135.467	3.598	315.618	21.745	.000
	Lower-bound	1135.467	1.000	1135.467	21.745	.010
Error (waktu)	Sphericity Assumed	208.867	20	10.443		
	Greenhouse-Geisser	208.867	7.626	27.390		
	Huynh-Feldt	208.867	14.390	14.514		
	Lower-bound	208.867	4.000	52.217		

Pairwise Comparisons

Measure:elastisitas

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	14.800 [*]	1.625	.012	4.638	24.962
	3	7.800	1.530	.105	-1.767	17.367
	4	2.600	2.542	1.000	-13.296	18.496
	5	-1.000	2.702	1.000	-17.898	15.898
	6	-3.400	2.657	1.000	-20.017	13.217
2	1	-14.800 [*]	1.625	.012	-24.962	-4.638
	3	-7.000	2.550	.774	-22.945	8.945
	4	-12.200 [*]	1.934	.048	-24.295	-.105
	5	-15.800 [*]	2.311	.036	-30.252	-1.348
	6	-18.200 [*]	2.437	.026	-33.442	-2.958
3	1	-7.800	1.530	.105	-17.367	1.767
	2	7.000	2.550	.774	-8.945	22.945
	4	-5.200	2.267	1.000	-19.379	8.979
	5	-8.800	2.154	.225	-22.272	4.672
	6	-11.200	2.107	.090	-24.378	1.978
4	1	-2.600	2.542	1.000	-18.496	13.296
	2	12.200 [*]	1.934	.048	.105	24.295
	3	5.200	2.267	1.000	-8.979	19.379
	5	-3.600 [*]	.510	.032	-6.789	-.411
	6	-6.000 [*]	.775	.022	-10.844	-1.156
5	1	1.000	2.702	1.000	-15.898	17.898
	2	15.800 [*]	2.311	.036	1.348	30.252
	3	8.800	2.154	.225	-4.672	22.272
	4	3.600 [*]	.510	.032	.411	6.789
	6	-2.400	.510	.139	-5.589	.789
6	1	3.400	2.657	1.000	-13.217	20.017
	2	18.200 [*]	2.437	.026	2.958	33.442
	3	11.200	2.107	.090	-1.978	24.378
	4	6.000 [*]	.775	.022	1.156	10.844
	5	2.400	.510	.139	-.789	5.589

2.5 Ekstrak 10%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.220	5	.200 [*]	.956	5	.777
Standardized Residual for sesudahUV	.251	5	.200 [*]	.915	5	.497
Standardized Residual for minggupertama	.216	5	.200 [*]	.925	5	.564
Standardized Residual for minggukedua	.221	5	.200 [*]	.902	5	.421
Standardized Residual for mingguketiga	.349	5	.046	.771	5	.046
Standardized Residual for minggukeempat	.221	5	.200 [*]	.902	5	.421

a. Lilliefors Significance Correction

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

Tests of Within-Subjects Effects

Measure:elastisitas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	1453.867	5	290.773	51.404	.000
	Greenhouse-Geisser	1453.867	1.898	766.021	51.404	.000
	Huynh-Feldt	1453.867	3.563	408.039	51.404	.000
	Lower-bound	1453.867	1.000	1453.867	51.404	.002
Error (waktu)	Sphericity Assumed	113.133	20	5.657		
	Greenhouse-Geisser	113.133	7.592	14.902		
	Huynh-Feldt	113.133	14.252	7.938		
	Lower-bound	113.133	4.000	28.283		

Pairwise Comparisons

Measure:elastisitas

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	13.400 [*]	1.208	.006	5.843	20.957
	3	2.400	.980	1.000	-3.728	8.528
	4	-2.400	1.208	1.000	-9.957	5.157
	5	-5.400	1.600	.419	-15.407	4.607
	6	-8.400 [*]	1.166	.030	-15.693	-1.107
2	1	-13.400 [*]	1.208	.006	-20.957	-5.843
	3	-11.000	1.949	.043	-23.191	1.191
	4	-15.800 [*]	1.934	.018	-27.895	-3.705
	5	-18.800 [*]	2.354	.020	-33.520	-4.080
	6	-21.800 [*]	2.245	.009	-35.840	-7.760

3	1	-2.400	.980	1.000	-8.528	3.728
	2	11.000	1.949	.043	-1.191	23.191
	4	-4.800	1.530	.524	-14.367	4.767
	5	-7.800	1.655	.138	-18.152	2.552
	6	-10.800*	1.020	.007	-17.178	-4.422
4	1	2.400	1.208	1.000	-5.157	9.957
	2	15.800*	1.934	.018	3.705	27.895
	3	4.800	1.530	.524	-4.767	14.367
	5	-3.000	.707	.199	-7.422	1.422
	6	-6.000*	.837	.030	-11.233	-.767
5	1	5.400	1.600	.419	-4.607	15.407
	2	18.800*	2.354	.020	4.080	33.520
	3	7.800	1.655	.138	-2.552	18.152
	4	3.000	.707	.199	-1.422	7.422
	6	-3.000	.837	.346	-8.233	2.233
6	1	8.400*	1.166	.030	1.107	15.693
	2	21.800*	2.245	.009	7.760	35.840
	3	10.800*	1.020	.007	4.422	17.178
	4	6.000*	.837	.030	.767	11.233
	5	3.000	.837	.346	-2.233	8.233

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

Lampiran 17. Hasil SPSS KELEMBABAN

1. Kelembaban One way Anova

One-Sample Kolmogorov-Smirnov Test

		nilaiAUC
N		25
Normal Parameters ^{a,d}	Mean	247.7200
	Std. Deviation	42.19007
Most Extreme Differences	Absolute	.111
	Positive	.078
	Negative	-.111
Kolmogorov-Smirnov Z		.555
Asymp. Sig. (2-tailed)		.917

ANOVA

nilaiAUC

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28681.540	4	7170.385	10.215	.000
Within Groups	14038.500	20	701.925		
Total	42720.040	24			

Test of Homogeneity of Variances

nilaiAUC

Levene Statistic	df1	df2	Sig.
1.863	4	20	.156

Post Hoc Tests

Homogeneous Subsets

nilaiAUC

Student-Newman-Keuls^a

krim	N	Subset for alpha = 0.05		
		1	2	3
krim kontrol negatif	5	189.6000		
krim ekstrak 5%	5		236.5000	
krim ekstrak 7.5%	5			252.4000
krim ekstrak 10%	5			272.3000
krim kontrol positif	5			287.8000
Sig.		1.000	.108	.113

2. Hasil *Repeated Measures Anova* Kelembaban

2.1 Kontrol negatif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.147	5	.200 [*]	.995	5	.994
Standardized Residual for sesudahUV	.254	5	.200 [*]	.914	5	.492
Standardized Residual for minggupertama	.231	5	.200 [*]	.881	5	.314
Standardized Residual for minggukedua	.349	5	.046	.771	5	.046
Standardized Residual for mingguketiga	.141	5	.200 [*]	.979	5	.928
Standardized Residual for minggukeempat	.198	5	.200 [*]	.957	5	.787

Tests of Within-Subjects Effects

Measure: kelembaban

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	247.067	5	49.413	15.220	.000
	Greenhouse-Geisser	247.067	1.374	179.820	15.220	.008
	Huynh-Feldt	247.067	1.854	133.230	15.220	.003
	Lower-bound	247.067	1.000	247.067	15.220	.018
Error (waktu)	Sphericity Assumed	64.933	20	3.247		
	Greenhouse-Geisser	64.933	5.496	11.815		
	Huynh-Feldt	64.933	7.418	8.754		
	Lower-bound	64.933	4.000	16.233		

Pairwise Comparisons

Measure: kelembaban

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	7.000	1.140	.054	-.131	14.131
	3	5.200	1.356	.278	-3.283	13.683
	4	3.000	1.612	1.000	-7.084	13.084
	5	1.200	1.772	1.000	-9.882	12.282
	6	-1.200	2.154	1.000	-14.672	12.272
2	1	-7.000	1.140	.054	-14.131	.131
	3	-1.800	.374	.129	-4.140	.540
	4	-4.000	.775	.100	-8.844	.844
	5	-5.800 [*]	.800	.029	-10.803	-.797
	6	-8.200 [*]	1.200	.036	-15.705	-.695

3	1	-5.200	1.356	.278	-13.683	3.283
	2	1.800	.374	.129	-.540	4.140
	4	-2.200	.490	.163	-5.264	.864
	5	-4.000	.707	.072	-8.422	.422
	6	-6.400	1.077	.060	-13.136	.336
4	1	-3.000	1.612	1.000	-13.084	7.084
	2	4.000	.775	.100	-.844	8.844
	3	2.200	.490	.163	-.864	5.264
	5	-1.800	.583	.550	-5.447	1.847
	6	-4.200	.800	.094	-9.203	.803
5	1	-1.200	1.772	1.000	-12.282	9.882
	2	5.800	.800	.029	.797	10.803
	3	4.000	.707	.072	-.422	8.422
	4	1.800	.583	.550	-1.847	5.447
	6	-2.400	.510	.139	-5.589	.789
6	1	1.200	2.154	1.000	-12.272	14.672
	2	8.200	1.200	.036	.695	15.705
	3	6.400	1.077	.060	-.336	13.136
	4	4.200	.800	.094	-.803	9.203
	5	2.400	.510	.139	-.789	5.589

2.2 Kontrol positif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.251	5	.200 [*]	.848	5	.190
Standardized Residual for sesudahUV	.159	5	.200 [*]	.990	5	.980
Standardized Residual for minggupertama	.246	5	.200 [*]	.956	5	.777
Standardized Residual for minggukedua	.273	5	.200 [*]	.852	5	.201
Standardized Residual for mingguketiga	.237	5	.200 [*]	.961	5	.814
Standardized Residual for minggukeempat	.201	5	.200 [*]	.881	5	.314

Tests of Within-Subjects Effects

Measure: kelembaban

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	441.100	5	88.220	77.613	.000
	Greenhouse-Geisser	441.100	1.389	317.625	77.613	.000
	Huynh-Feldt	441.100	1.893	232.987	77.613	.000
	Lower-bound	441.100	1.000	441.100	77.613	.001
Error(waktu)	Sphericity Assumed	22.733	20	1.137		
	Greenhouse-Geisser	22.733	5.555	4.092		
	Huynh-Feldt	22.733	7.573	3.002		
	Lower-bound	22.733	4.000	5.683		

Pairwise Comparisons

Measure:kelembaban

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	5.200 [*]	.374	.002	2.860	7.540
	3	-.600	.400	1.000	-3.102	1.902
	4	-2.200	.374	.063	-4.540	.140
	5	-4.200 [*]	.583	.030	-7.847	-.553
	6	-7.200 [*]	1.068	.038	-13.878	-.522
2	1	-5.200 [*]	.374	.002	-7.540	-2.860
	3	-5.800 [*]	.374	.002	-8.140	-3.460
	4	-7.400 [*]	.245	.000	-8.932	-5.868
	5	-9.400 [*]	.510	.001	-12.589	-6.211
	6	-12.400 [*]	1.030	.004	-18.839	-5.961
3	1	.600	.400	1.000	-1.902	3.102
	2	5.800 [*]	.374	.002	3.460	8.140
	4	-1.600 [*]	.245	.043	-3.132	-.068
	5	-3.600	.600	.058	-7.352	.152
	6	-6.600	1.122	.063	-13.620	.420
4	1	2.200	.374	.063	-.140	4.540
	2	7.400 [*]	.245	.000	5.868	8.932
	3	1.600 [*]	.245	.043	.068	3.132
	5	-2.000	.548	.326	-5.425	1.425
	6	-5.000	1.049	.133	-11.559	1.559
5	1	4.200 [*]	.583	.030	.553	7.847
	2	9.400 [*]	.510	.001	6.211	12.589
	3	3.600	.600	.058	-.152	7.352
	4	2.000	.548	.326	-1.425	5.425
	6	-3.000	.548	.081	-6.425	.425
6	1	7.200 [*]	1.068	.038	.522	13.878
	2	12.400 [*]	1.030	.004	5.961	18.839
	3	6.600	1.122	.063	-.420	13.620
	4	5.000	1.049	.133	-1.559	11.559
	5	3.000	.548	.081	-.425	6.425

2.3 Ekstrak 5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.300	5	.161	.908	5	.453
Standardized Residual for sesudahUV	.237	5	.200 [*]	.961	5	.814
Standardized Residual for minggupertama	.237	5	.200 [*]	.961	5	.814
Standardized Residual for minggukedua	.273	5	.200 [*]	.852	5	.201
Standardized Residual for mingguketiga	.221	5	.200 [*]	.902	5	.421
Standardized Residual for minggukeempat	.237	5	.200 [*]	.961	5	.814

Tests of Within-Subjects Effects

Measure:kelembaban

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	338.700	5	67.740	66.195	.000
	Greenhouse-Geisser	338.700	1.971	171.810	66.195	.000
	Huynh-Feldt	338.700	3.873	87.452	66.195	.000
	Lower-bound	338.700	1.000	338.700	66.195	.001
Error (waktu)	Sphericity Assumed	20.467	20	1.023		
	Greenhouse-Geisser	20.467	7.885	2.595		
	Huynh-Feldt	20.467	15.492	1.321		
	Lower-bound	20.467	4.000	5.117		

Pairwise Comparisons

Measure:kelembaban

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	6.600 [*]	.678	.009	2.358	10.842
	3	4.400 [*]	.600	.028	.648	8.152
	4	1.400	.927	1.000	-4.400	7.200
	5	-1.200	1.020	1.000	-7.578	5.178
	6	-3.400	.748	.157	-8.080	1.280
2	1	-6.600 [*]	.678	.009	-10.842	-2.358
	3	-2.200 [*]	.200	.066	-3.451	-.949
	4	-5.200 [*]	.583	.013	-8.847	-1.553
	5	-7.800 [*]	.735	.007	-12.396	-3.204
	6	-10.000 [*]	.707	.002	-14.422	-5.578
3	1	-4.400 [*]	.600	.028	-8.152	-.648
	2	2.200 [*]	.200	.066	.949	3.451
	4	-3.000 [*]	.447	.039	-5.797	-.203
	5	-5.600 [*]	.600	.011	-9.352	-1.848
	6	-7.800 [*]	.583	.003	-11.447	-4.153

4	1	-1.400	.927	1.000	-7.200	4.400
	2	5.200	.583	.013	1.553	8.847
	3	3.000	.447	.039	.203	5.797
	5	-2.600	.245	.007	-4.132	-1.068
	6	-4.800	.490	.009	-7.864	-1.736
5	1	1.200	1.020	1.000	-5.178	7.578
	2	7.800	.735	.007	3.204	12.396
	3	5.600	.600	.011	1.848	9.352
	4	2.600	.245	.007	1.068	4.132
	6	-2.200	.490	.163	-5.264	.864
6	1	3.400	.748	.157	-1.280	8.080
	2	10.000	.707	.002	5.578	14.422
	3	7.800	.583	.003	4.153	11.447
	4	4.800	.490	.009	1.736	7.864
	5	2.200	.490	.163	-.864	5.264

2.4 Ekstrak 7,5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.243	5	.200	.894	5	.377
Standardized Residual for sesudahUV	.221	5	.200	.902	5	.421
Standardized Residual for minggupertama	.237	5	.200	.961	5	.814
Standardized Residual for minggukedua	.237	5	.200	.961	5	.814
Standardized Residual for mingguketiga	.221	5	.200	.902	5	.421
Standardized Residual for minggukeempat	.221	5	.200	.902	5	.421

Tests of Within-Subjects Effects

Measure:kelembaban

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	441.367	5	88.273	131.099	.000
	Greenhouse-Geisser	441.367	1.883	234.334	131.099	.000
	Huynh-Feldt	441.367	3.505	125.940	131.099	.000
	Lower-bound	441.367	1.000	441.367	131.099	.000
Error (waktu)	Sphericity Assumed	13.467	20	.673		
	Greenhouse-Geisser	13.467	7.534	1.787		
	Huynh-Feldt	13.467	14.018	.961		
	Lower-bound	13.467	4.000	3.367		

Pairwise Comparisons

Measure:kelembaban

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	8.000 [*]	.548	.002	4.575	11.425
	3	5.400 [*]	.678	.020	1.158	9.642
	4	3.400	.678	.111	-.842	7.642
	5	-.400	.510	1.000	-3.589	2.789
	6	-3.400 [*]	.400	.016	-5.902	-.898
2	1	-8.000 [*]	.548	.002	-11.425	-4.575
	3	-2.600 [*]	.400	.043	-5.102	-.098
	4	-4.600 [*]	.400	.005	-7.102	-2.098
	5	-8.400 [*]	.245	.000	-9.932	-6.868
	6	-11.400 [*]	.600	.001	-15.152	-7.648
3	1	-5.400 [*]	.678	.020	-9.642	-1.158
	2	2.600 [*]	.400	.043	.098	5.102
	4	-2.000	.000	.	-2.000	-2.000
	5	-5.800 [*]	.374	.002	-8.140	-3.460
	6	-8.800 [*]	.735	.004	-13.396	-4.204
4	1	-3.400	.678	.111	-7.642	.842
	2	4.600 [*]	.400	.005	2.098	7.102
	3	2.000	.000	.	2.000	2.000
	5	-3.800 [*]	.374	.008	-6.140	-1.460
	6	-6.800 [*]	.735	.011	-11.396	-2.204
5	1	.400	.510	1.000	-2.789	3.589
	2	8.400 [*]	.245	.000	6.868	9.932
	3	5.800 [*]	.374	.002	3.460	8.140
	4	3.800 [*]	.374	.008	1.460	6.140
	6	-3.000	.548	.081	-6.425	.425
6	1	3.400 [*]	.400	.016	.898	5.902
	2	11.400 [*]	.600	.001	7.648	15.152
	3	8.800 [*]	.735	.004	4.204	13.396
	4	6.800 [*]	.735	.011	2.204	11.396
	5	3.000	.548	.081	-.425	6.425

2.5 Ekstrak 10%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.251	5	.200 [*]	.868	5	.257
Standardized Residual for SesudahUV	.141	5	.200 [*]	.979	5	.928
Standardized Residual for minggupertama	.253	5	.200 [*]	.854	5	.207
Standardized Residual for minggukedua	.286	5	.200 [*]	.813	5	.103
Standardized Residual for mingguketiga	.304	5	.149	.817	5	.111
Standardized Residual for minggukeempat	.287	5	.200 [*]	.914	5	.490

Tests of Within-Subjects Effects

Measure:kelembaban

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	655.467	5	131.093	70.480	.000
	Greenhouse-Geisser	655.467	1.559	420.343	70.480	.000
	Huynh-Feldt	655.467	2.375	275.972	70.480	.000
	Lower-bound	655.467	1.000	655.467	70.480	.001
Error (waktu)	Sphericity Assumed	37.200	20	1.860		
	Greenhouse-Geisser	37.200	6.237	5.964		
	Huynh-Feldt	37.200	9.500	3.916		
	Lower-bound	37.200	4.000	9.300		

Pairwise Comparisons

Measure:kelembaban

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	7.200 [*]	.970	.026	1.136	13.264
	3	3.400 [*]	1.166	.652	-3.893	10.693
	4	.000 [*]	1.612	1.000	-10.084	10.084
	5	-3.600 [*]	1.208	.611	-11.157	3.957
	6	-7.400 [*]	1.249	.061	-15.211	.411
2	1	-7.200 [*]	.970	.026	-13.264	-1.136
	3	-3.800 [*]	.490	.022	-6.864	-.736
	4	-7.200 [*]	.735	.009	-11.796	-2.604
	5	-10.800 [*]	.374	.000	-13.140	-8.460
	6	-14.600 [*]	.510	.000	-17.789	-11.411
3	1	-3.400 [*]	1.166	.652	-10.693	3.893
	2	3.800 [*]	.490	.022	.736	6.864
	4	-3.400 [*]	.510	.039	-6.589	-.211
	5	-7.000 [*]	.548	.003	-10.425	-3.575
	6	-10.800 [*]	.735	.002	-15.396	-6.204

4	1	.000	1.612	1.000	-10.084	10.084
	2	7.200 ⁺	.735	.009	2.604	11.796
	3	3.400 ⁺	.510	.039	.211	6.589
	5	-3.600	.600	.058	-7.352	.152
	6	-7.400 ⁺	.748	.009	-12.080	-2.720
5	1	3.600	1.208	.611	-3.957	11.157
	2	10.800 ⁺	.374	.000	8.460	13.140
	3	7.000 ⁺	.548	.003	3.575	10.425
	4	3.600	.600	.058	-.152	7.352
	6	-3.800 ⁺	.200	.001	-5.051	-2.549
6	1	7.400	1.249	.061	-.411	15.211
	2	14.600 ⁺	.510	.000	11.411	17.789
	3	10.800 ⁺	.735	.002	6.204	15.396
	4	7.400 ⁺	.748	.009	2.720	12.080
	5	3.800 ⁺	.200	.001	2.549	5.051

Lampiran 20. Hasil SPSS luas pori

1. Hasil One Way Anova luas pori

One-Sample Kolmogorov-Smirnov Test

		nilaiAUC
N		25
Normal Parameters ^{a,d}	Mean	1.1962
	Std. Deviation	.36082
Most Extreme Differences	Absolute	.172
	Positive	.172
	Negative	-.113
Kolmogorov-Smirnov Z		.858
Asymp. Sig. (2-tailed)		.453

ANOVA

nilaiAUC

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.335	4	.084	.601	.046
Within Groups	2.789	20	.139		
Total	3.125	24			

Test of Homogeneity of Variances

nilaiAUC

Levene Statistic	df1	df2	Sig.
4.295	4	20	.011

nilaiAUC

Student-Newman-Keuls^a

krim	N	Subset for alpha = 0.05	
		1	2
krim kontrol positif	5	1.0270	
krim ekstrak 10%	5	1.1420	
krim ekstrak 7.5%	5	1.1980	
krim ekstrak 5%	5	1.2330	
krim kontrol negatif	5		1.5810
Sig.		.575	.661

2. Hasil *Repeated Measures Anova* luas pori

2.1 Kontrol negatif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.304	5	.149	.817	5	.111
Standardized Residual for sesudahUV	.136	5	.200 [*]	.987	5	.967
Standardized Residual for minggupertama	.229	5	.200 [*]	.858	5	.222
Standardized Residual for minggukedua	.186	5	.200 [*]	.943	5	.687
Standardized Residual for mingguketiga	.264	5	.200 [*]	.903	5	.429
Standardized Residual for minggukeempat	.250	5	.200 [*]	.814	5	.105

Tests of Within-Subjects Effects

Measure:PORI

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
WAKTU	Sphericity Assumed	.062	5	.012	22.754	.000
	Greenhouse-Geisser	.062	1.311	.048	22.754	.004
	Huynh-Feldt	.062	1.694	.037	22.754	.001
	Lower-bound	.062	1.000	.062	22.754	.009
Error (WAKTU)	Sphericity Assumed	.011	20	.001		
	Greenhouse-Geisser	.011	5.244	.002		
	Huynh-Feldt	.011	6.776	.002		
	Lower-bound	.011	4.000	.003		

Pairwise Comparisons

Measure:PORI

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.120 [*]	.008	.002	-.172	-.068
	3	-.096	.022	.195	-.237	.045
	4	-.068	.023	.600	-.210	.074
	5	-.026	.021	1.000	-.160	.108
	6	-.004	.014	1.000	-.094	.086
2	1	.120 [*]	.008	.002	.068	.172
	3	.024	.019	1.000	-.092	.140
	4	.052	.019	.821	-.069	.173
	5	.094	.018	.047	-.019	.207
	6	.116 [*]	.012	.009	.043	.189

3	1	.096	.022	.195	-.045	.237
	2	-.024	.019	1.000	-.140	.092
	4	.028 ⁺	.004	.026	.005	.051
	5	.070 ⁺	.007	.009	.026	.114
	6	.092 ⁺	.010	.010	.031	.153
4	1	.068	.023	.600	-.074	.210
	2	-.052	.019	.821	-.173	.069
	3	-.028 ⁺	.004	.026	-.051	-.005
	5	.042 ⁺	.007	.048	.001	.083
	6	.064	.010	.051	.000	.128
5	1	.026	.021	1.000	-.108	.160
	2	-.094	.018	.097	-.207	.019
	3	-.070 ⁺	.007	.009	-.114	-.026
	4	-.042 ⁺	.007	.048	-.083	.000
	6	.022	.007	.603	-.024	.068
6	1	.004	.014	1.000	-.086	.094
	2	-.116 ⁺	.012	.009	-.189	-.043
	3	-.092 ⁺	.010	.010	-.153	-.031
	4	-.064	.010	.051	-.128	.000
	5	-.022	.007	.603	-.068	.024

2.2 Kontrol positif

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.273	5	.200 ⁺	.852	5	.201
Standardized Residual for sesudahUV	.141	5	.200 ⁺	.979	5	.928
Standardized Residual for minggupertam	.261	5	.200 ⁺	.859	5	.223
Standardized Residual for minggukedua	.237	5	.200 ⁺	.961	5	.814
Standardized Residual for mingguketiga	.237	5	.200 ⁺	.961	5	.814
Standardized Residual for minggukeempat	.349	5	.046	.771	5	.046

Tests of Within-Subjects Effects

Measure:PORI

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
WAKTU	Sphericity Assumed	.091	5	.018	91.902	.000
	Greenhouse-Geisser	.091	2.002	.045	91.902	.000
	Huynh-Feldt	.091	4.011	.023	91.902	.000
	Lower-bound	.091	1.000	.091	91.902	.001
Error(WAKTU)	Sphericity Assumed	.004	20	.000		
	Greenhouse-Geisser	.004	8.010	.000		
	Huynh-Feldt	.004	16.044	.000		
	Lower-bound	.004	4.000	.001		

Pairwise Comparisons

Measure:pori

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.156 [*]	.021	.028	-.290	-.022
	3	-.096	.022	.195	-.237	.045
	4	-.064	.017	.290	-.170	.042
	5	-.028	.011	.986	-.098	.042
	6	.006	.007	1.000	-.041	.053
2	1	.156 [*]	.021	.028	.022	.290
	3	.060 [*]	.008	.030	.008	.112
	4	.092 [*]	.006	.001	.056	.128
	5	.128 [*]	.013	.008	.048	.208
	6	.162 [*]	.017	.010	.057	.267
3	1	.096	.022	.195	-.045	.237
	2	-.060 [*]	.008	.030	-.112	-.008
	4	.032	.008	.242	-.018	.082
	5	.068	.012	.081	-.010	.146
	6	.102	.017	.060	-.005	.209
4	1	.064	.017	.290	-.042	.170
	2	-.092 [*]	.006	.001	-.128	-.056
	3	-.032	.008	.242	-.082	.018
	5	.036	.008	.171	-.015	.087
	6	.070	.013	.078	-.009	.149
5	1	.028	.011	.986	-.042	.098
	2	-.128 [*]	.013	.008	-.208	-.048
	3	-.068	.012	.081	-.146	.010
	4	-.036	.008	.171	-.087	.015
	6	.034 [*]	.005	.039	.002	.066

6	1	-.006	.007	1.000	-.053	.041
	2	-.162 [*]	.017	.010	-.267	-.057
	3	-.102	.017	.060	-.209	.005
	4	-.070	.013	.078	-.149	.009
	5	-.034 [*]	.005	.039	-.066	-.002

2.3 Ekstrak 5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.231	5	.200 [*]	.881	5	.314
Standardized Residual for sesudahUV	.254	5	.200 [*]	.927	5	.573
Standardized Residual for minggupertama	.243	5	.200 [*]	.922	5	.544
Standardized Residual for minggukedua	.203	5	.200 [*]	.923	5	.549
Standardized Residual for mingguketiga	.258	5	.200 [*]	.925	5	.563
Standardized Residual for minggukeempat	.221	5	.200 [*]	.902	5	.421

Tests of Within-Subjects Effects

Measure:PORI

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
WAKTU	Sphericity Assumed	.079	5	.016	45.399	.000
	Greenhouse-Geisser	.079	1.389	.057	45.399	.001
	Huynh-Feldt	.079	1.893	.042	45.399	.000
	Lower-bound	.079	1.000	.079	45.399	.003
Error(WAKTU)	Sphericity Assumed	.007	20	.000		
	Greenhouse-Geisser	.007	5.554	.001		
	Huynh-Feldt	.007	7.571	.001		
	Lower-bound	.007	4.000	.002		

Pairwise Comparisons

Measure:PORI

(I) WAKTU	(J) WAKTU	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.140 [*]	.022	.048	-.278	-.002
	3	-.104 [*]	.016	.047	-.206	-.002
	4	-.066	.016	.233	-.168	.036
	5	-.032	.013	1.000	-.114	.050
	6	-.004	.008	1.000	-.055	.047
2	1	.140 [*]	.022	.048	.002	.278
	3	.036	.006	.058	-.002	.074
	4	.074 [*]	.009	.020	.016	.132
	5	.108 [*]	.012	.014	.030	.186
	6	.136 [*]	.015	.011	.044	.228
3	1	.104 [*]	.016	.047	.002	.206
	2	-.036	.006	.058	-.074	.002
	4	.038	.007	.069	-.003	.079
	5	.072 [*]	.007	.009	.026	.118
	6	.100 [*]	.009	.005	.044	.156
4	1	.066	.016	.233	-.036	.168
	2	-.074 [*]	.009	.020	-.132	-.016
	3	-.038	.007	.069	-.079	.003
	5	.034	.007	.157	-.013	.081
	6	.062 [*]	.009	.029	.008	.116
5	1	.032	.013	1.000	-.050	.114
	2	-.108 [*]	.012	.014	-.186	-.030
	3	-.072 [*]	.007	.009	-.118	-.026
	4	-.034	.007	.157	-.081	.013
	6	.028	.006	.130	-.008	.064
6	1	.004	.008	1.000	-.047	.055
	2	-.136 [*]	.015	.011	-.228	-.044
	3	-.100 [*]	.009	.005	-.156	-.044
	4	-.062 [*]	.009	.029	-.116	-.008
	5	-.028	.006	.130	-.064	.008

2.4 Ekstrak 7,5%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.221	5	.200 [*]	.902	5	.421
Standardized Residual for sesudahUV	.141	5	.200 [*]	.979	5	.928
Standardized Residual for minggupertama	.237	5	.200 [*]	.961	5	.814
Standardized Residual for minggukedua	.224	5	.200 [*]	.842	5	.171
Standardized Residual for mingguketiga	.237	5	.200 [*]	.961	5	.814
Standardized Residual for minggukeempat	.231	5	.200 [*]	.881	5	.314

Tests of Within-Subjects Effects

Measure:PORI

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
WAKTU	Sphericity Assumed	.100	5	.020	154.686	.000
	Greenhouse-Geisser	.100	1.598	.063	154.686	.000
	Huynh-Feldt	.100	2.492	.040	154.686	.000
	Lower-bound	.100	1.000	.100	154.686	.000
Error (WAKTU)	Sphericity Assumed	.003	20	.000		
	Greenhouse-Geisser	.003	6.390	.000		
	Huynh-Feldt	.003	9.969	.000		
	Lower-bound	.003	4.000	.001		

Pairwise Comparisons

Measure:PORI

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.156 [*]	.012	.003	-.232	-.080
	3	-.102 [*]	.009	.004	-.156	-.048
	4	-.054	.012	.166	-.130	.022
	5	-.022	.008	.771	-.072	.028
	6	.004	.005	1.000	-.028	.036
2	1	.156 [*]	.012	.003	.080	.232
	3	.054 [*]	.004	.053	.029	.079
	4	.102 [*]	.006	.001	.066	.138
	5	.134 [*]	.007	.001	.092	.176
	6	.160 [*]	.008	.000	.112	.208

3	1	.102 ⁺	.009	.004	.048	.156
	2	-.054 ⁺	.004	.053	-.079	-.029
	4	.048 ⁺	.006	.018	.012	.084
	5	.080 ⁺	.004	.001	.052	.108
	6	.106 ⁺	.004	.000	.081	.131
4	1	.054 ⁺	.012	.166	-.022	.130
	2	-.102 ⁺	.006	.001	-.138	-.066
	3	-.048 ⁺	.006	.018	-.084	-.012
	5	.032 ⁺	.005	.043	.001	.063
	6	.058 ⁺	.007	.021	.012	.104
5	1	.022 ⁺	.008	.771	-.028	.072
	2	-.134 ⁺	.007	.001	-.176	-.092
	3	-.080 ⁺	.004	.001	-.108	-.052
	4	-.032 ⁺	.005	.043	-.063	-.001
	6	.026 ⁺	.004	.043	.001	.051
6	1	-.004 ⁺	.005	1.000	-.036	.028
	2	-.160 ⁺	.008	.000	-.208	-.112
	3	-.106 ⁺	.004	.000	-.131	-.081
	4	-.058 ⁺	.007	.021	-.104	-.012
	5	-.026 ⁺	.004	.043	-.051	.000

2.5 Ekstrak 10%

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sebelumUV	.221	5	.200 ⁺	.902	5	.421
Standardized Residual for sesudahUV	.312	5	.127	.881	5	.314
Standardized Residual for minggupertama	.127	5	.200 ⁺	.999	5	1.000
Standardized Residual for minggukedua	.141	5	.200 ⁺	.979	5	.928
Standardized Residual for mingguketiga	.231	5	.200 ⁺	.881	5	.314
Standardized Residual for minggukeempat	.349	5	.046	.771	5	.046

Tests of Within-Subjects Effects

Measure:pori

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	.098	5	.020	142.000	.000
	Greenhouse-Geisser	.098	1.915	.051	142.000	.000
	Huynh-Feldt	.098	3.633	.027	142.000	.000
	Lower-bound	.098	1.000	.098	142.000	.000
Error (waktu)	Sphericity Assumed	.003	20	.000		
	Greenhouse-Geisser	.003	7.660	.000		
	Huynh-Feldt	.003	14.532	.000		
	Lower-bound	.003	4.000	.001		

Pairwise Comparisons

Measure:pori

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.152 [*]	.012	.004	-.230	-.074
	3	-.098 [*]	.012	.016	-.170	-.026
	4	-.056	.010	.070	-.117	.005
	5	-.014	.009	1.000	-.072	.044
	6	.006	.007	1.000	-.041	.053
2	1	.152 [*]	.012	.004	.074	.230
	3	.054 [*]	.006	.013	.016	.092
	4	.096 [*]	.007	.002	.054	.138
	5	.138 [*]	.006	.000	.102	.174
	6	.158 [*]	.007	.000	.112	.204
3	1	.098 [*]	.012	.016	.026	.170
	2	-.054 [*]	.006	.013	-.092	-.016
	4	.042 [*]	.002	.000	.029	.055
	5	.084 [*]	.004	.000	.059	.109
	6	.104 [*]	.007	.002	.062	.146
4	1	.056	.010	.070	-.005	.117
	2	-.096 [*]	.007	.002	-.138	-.054
	3	-.042 [*]	.002	.000	-.055	-.029
	5	.042 [*]	.004	.005	.019	.065
	6	.062 [*]	.006	.007	.026	.098
5	1	.014	.009	1.000	-.044	.072
	2	-.138 [*]	.006	.000	-.174	-.102
	3	-.084 [*]	.004	.000	-.109	-.059
	4	-.042 [*]	.004	.005	-.065	-.019
	6	.020	.004	.166	-.008	.048

6	1	-.006	.007	1.000	-.053	.041
	2	-.158*	.007	.000	-.204	-.112
	3	-.104*	.007	.002	-.146	-.062
	4	-.062*	.006	.007	-.098	-.026
	5	-.020	.004	.166	-.048	.008

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.