

L

A

M

P

I

R

A

N

Lampiran 1. Determinasi



UPT-LABORATORIUM
UNIVERSITAS SETIA BUDI SURAKARTA

Nomor : 264/DET/UPT-LAB/30.06.2021

Hal : Hasil determinasi tumbuhan

Lamp. : -

Nama Pemesan : Eva Fitriana

NIM : 23175274A

Alamat : Program Studi S-1 Farmasi, Universitas Setia Budi, Surakarta

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

HASIL DETERMINASI TUMBUHAN

Klasifikasi

Kingdom	: Plantae
Super Divisi	: Spermatophyta
Divisi	: Magnoliophyta
Kelas	: Magnoliopsida/Dicotyledoneae
Ordo	: Solanales
Famili	: Convolvulaceae.
Genus	: Ipomoea
Species	: <i>Ipomoea batatas</i> Lamk.

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 : Akar tunggang, terdapat umbi menggembung, ungu.

- Batang : Batang bulat, bergetah, pada buku membentuk akar, gundul sampai berambut, hijau, panjang sampai 5 m.
- Daun : Daun tunggal, bulat telur sampai membulat dengan pangkal berbentuk jantung atau terpancung, rata atau berssudut sampai berlekuk, kadang-kadang berbagi menjari 3 – 5 berbagi menjari 5 dalam, tangkai daun panjang, herbaceus, hijau. Tangkai daun 4 – 20 cm.
- Bunga : Bunga majemuk payung, karangan bunga di ketiak. 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.

Surakarta, 30 Juni 2021

Kepala UPT-LAB

Universitas Setia Budi

Penanggung jawab

Determinasi Tumbuhan



Asik Gunawan, Amdk



Dra. Dewi Sulistyawati, M.Sc.

Lampiran 2. Surat Kesehatan hewan


PEMERINTAH KOTA SURAKARTA
DINAS PERTANIAN,
KETAHANAN PANGAN DAN PERIKANAN
 JL. Yap Tjwan Bing (Jagalan) No. 26 Telp. (0271) 656816 – Fax. (0271) 656816
 Website www.disperTan.surakarta.co.id E-mail pertanian_ska@yahoo.co.id
 SURAKARTA
 57124

SURAT KETERANGAN KESEHATAN HEWAN

Nomor : 524.3/ 198 /SKKH

Yang bertandatangan di bawah ini drh. Evy Nurwulandari Dokter Hewan yang berwenang di wilayah Kota Surakarta, menerangkan bahwa pada hari Senin tanggal 22 bulan Februari tahun 2021 telah memeriksa hewan di bawah ini :

NO	JENIS HEWAN	SUB SPESIES/ TRAH	JUMLAH (ekor)			UMUR (bln)	Tanda / Warna
			Jtn	Btn	Total		
1	Kelinci	New Zealand	6	0	6	3-4	Putih

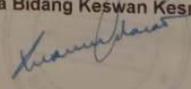
Menerangkan bahwa hewan-hewan tersebut di atas : sehat, atau saat pemeriksaan tidak menunjukkan tanda klinis penyakit hewan menular, khususnya Avian Influenza (30 hari terakhir tidak terjadi wabah Avian Influenza radius 1 km dari tempat asal hewan).

KETERANGAN :

Nama pemilik/pengirim : Sdr. Yuliyanto Ratno Saputro
 No KTP/SIM pemilik/pengirim : 3372053007720003
 No telp. Pemilik/pengirim : 082133998945
 Alamat pemilik/pengirim : Sumber Rt.04 Rw.03 Surakarta.
 Daerah asal hewan : Pasar Burung Depok, Surakarta.
 Daerah tujuan : Universitas Setia Budi Surakarta
 Nama dan alamat penerima : Eva Fitriana
 Rencana dikirim : Senin, 22 Februari 2021
 Kendaraan : Mobil.

Setelah sampai di daerah tujuan segera melaporkan ke dinas yang membidangi fungsi peternakan dan kesehatan hewan.

Surakarta, 22 Februari 2021.

a.n. KEPALA DINAS PERTANIAN'
 KETAHANAN PANGAN DAN PERIKANAN
 KOTA SURAKARTA
 Kepala Bidang Keswan Kesmavet


drh. EVY NURWULANDARI
 Pembina
 NIP. 19700806199803 2 004

Tembusan Yth :

1. Walikota Surakarta (sebagai laporan);
2. Kepala Dinas Peternakan dan Kesehatan Hewan Provinsi Jawa Tengah;
3. Kepala Balai Karantina Surakarta;
4. Arsip.

Lampiran 3. Surat keterangan layak etik

KEPK-RSDM

2/17/2021


HEALTH RESEARCH ETHICS COMITTE
KOMISI ETIK PENELITIAN KESEHATAN

Dr. Moewardi General Hospital
RSUD Dr. Moewardi

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 112 / II / HREC / 2021

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

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

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

UJI AKTIVITAS ANTI-AGING EMULGEL EKSTRAK ETANOL DAUN UBI JALAR UNGU (*Ipomoea batatas* (L.) PADA PUNGGUNG KELINCI NEW ZEALAND YANG DIPAPAR SINAR UV-A

<i>Principal investigator</i> Peneliti Utama	: Eva Fitriana 23175274A
<i>Location of research</i> Lokasi Tempat Penelitian	: Universitas Setia Budi

Is ethically approved
Dinyatakan layak etik

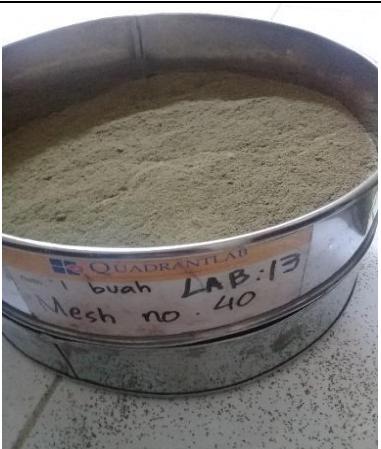


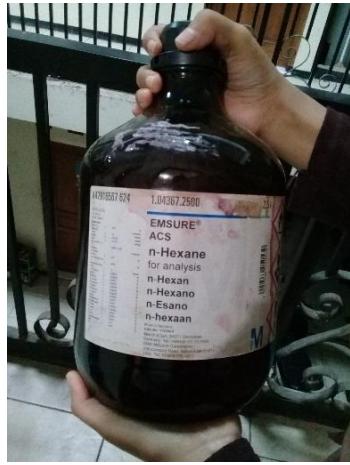
Issued on : 17 Februari 2021

Chairman
Ketua

Wahyu Dwi Atmoko, Sp.F
19770224 201001 1 004

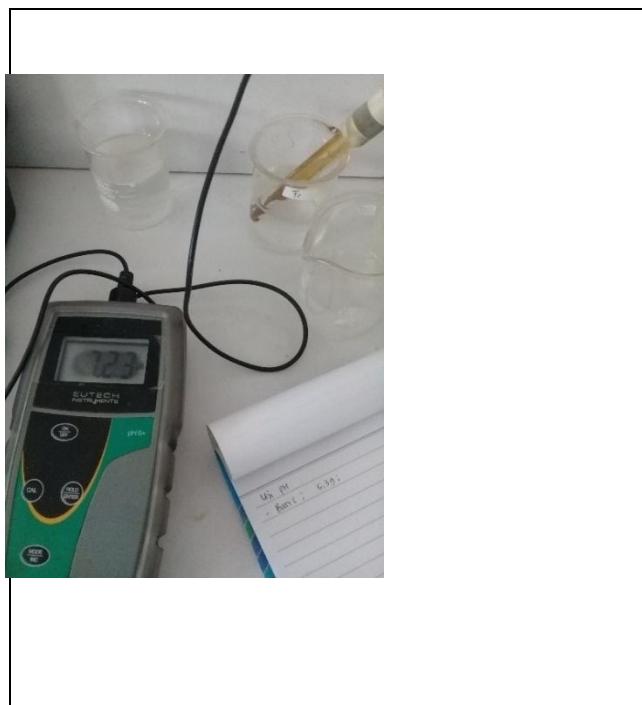
Lampiran 4. Gambar penelitian**A. Foto alat, bahan dan proses penelitian**

	Daun ubi jalar ungu
	Serbuk daun ubi jalar ungu
	Mesh

	Penimbangan serbuk
	Alat maserasi
	<i>Vaccum Evaporatory</i>

	Destilasi <i>Sterling bidwell</i>
	Moisture balance
	Piknometer

	Proses susut pengeringan dengan <i>gravimetri</i>
	Viscometer
	Alat daya sebar

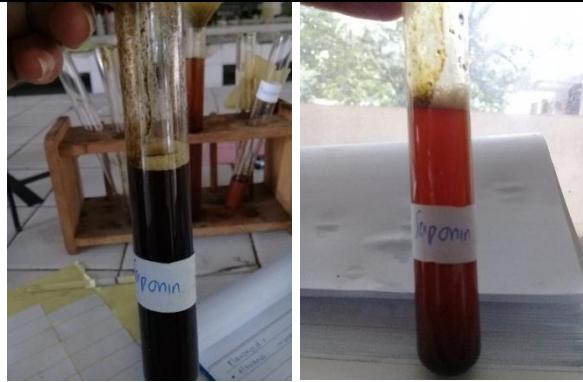
	Alat pH meter
	Alat daya lekat
	Ekstrak daun ubi jalar ungu
	Kontrol positif (KSH® <i>premium brightening with grape seed oil</i>)

		Sediaan formula emulgel
		Stabilitas emulgel
		Gambar alat Skin Analyzer EH900U
		Proses pencukuran punggung kelinci
		Gambar proses induksi kerutan menggunakan sinar UV-A pada hewan uji kelinci

	Gambar proses pengukuran parameter kerutan menggunakan alat Skin Analyzer
---	---

B. Uji Tabung

 	Flavonoid
---	------------------

	alkaloid
	Tannin
	Saponin

C. Iritasi Kulit

Setelah dioleskan emulgel



pengamatan iritasi kulit

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

Diketahui :

- Bobot daun ubi jalar ungu basah = 10000 gram
- Bobot daun ubi jalar ungu kering = 2500 gram
- Bobot serbuk daun ubi jalar ungu = 2100 gram

Perhitungan % rendemen

$$\% \text{ rendemen} = \frac{\text{bobot serbuk daun ubi jalar ungu}}{\text{bobot daun ubi jalar ungu kering}} \times 100\%$$

$$\% \text{ rendemen} = \frac{2500}{10000} \times 100\%$$

$$\% \text{ rendemen} = 25\%$$

Lampiran 6. Perhitungan rendemen berat daun ubi jalar ungu menjadi serbuk daun ubi jalar ungu

Diketahui :

- Bobot daun ubi jalar ungu kering = 2500 gram
- Bobot serbuk daun ubi jalar ungu = 2100 gram

Perhitungan % rendemen

$$\% \text{ rendemen} = \frac{\text{bobot serbuk daun ubi jalar ungu}}{\text{bobot daun ubi jalar ungu kering}} \times 100\%$$

$$\% \text{ rendemen} = \frac{2100}{2500} \times 100\%$$

$$\% \text{ rendemen} = 84\%$$

Lampiran 7. Perhitungan rendemen ekstrak

Diketahui :

- Bobot ekstrak = 190 gram
- Bobot serbuk daun ubi jalar ungu = 957 gram

Perhitungan % rendemen

$$\% \text{ rendemen} = \frac{\text{bobot ekstrak kental}}{\text{bobot simplisia}} \times 100\%$$

$$\% \text{ rendemen} = \frac{190}{957} \times 100\%$$

$$\% \text{ rendemen} = 19,85\%$$

Lampiran 8. Perhitungan kadar air

a. Kadar air serbuk

Kadar air serbuk daun ubi jalar ungu dengan metode destilasi *sterling bidwell*

No.	Bobot pengambilan (g)	Volume air (ml)	Kadar air (%)
1.	20	1,8	9,0
2.	20	1,7	8,5
3.	20	1,9	9,5
Rata-rata ± SD			9 ± 0,5

$$\text{Perhitungan replikasi 1} = \frac{\text{volume air}}{\text{bobot pengambilan}} \times 100\% \\ = \frac{1.8}{20} \times 100\% = 9\%$$

$$\text{Perhitungan replikasi 2} = \frac{\text{volume air}}{\text{bobot pengambilan}} \times 100\% \\ = \frac{1.7}{20} \times 100\% = 8.5\%$$

$$\text{Perhitungan replikasi 3} = \frac{\text{volume air}}{\text{bobot pengambilan}} \times 100\% \\ = \frac{1.9}{20} \times 100\% = 9.5\% \\ \text{Rata-rata} = \frac{9.0+8.5+9.5}{3} \\ = 9 \%$$

b. Kadar air ekstrak

Kadar air ekstrak daun ubi jalar ungu dengan metode *gravimetri*

Replikasi	Ekstrak sebelum (g)	Ekstrak sesudah (g)	Kadar air (%)
1	6,48	6,01	7,25
2	5,52	5,02	9,05
3	6,46	5,93	8,20
Rata-rata ± SD			8,2 ± 0,9

Perhitungan kadar air ekstrak daun ubi jalar ungu

Replikasi 1

Berat kurs kosong = 23,528 g

Berat kurs + ekstrak = 33,538 g

Berat ekstrak = 10,010 g

Berat ekstrak daun ubi jalar ungu berturut-turut setelah dioven =

- 30,450 g
- 30,010 g (berat sebelum)
- 29,754 g
- 29,537 g (berat sesudah)
- 29,489 g

Ekstrak sebelum = ekstrak sebelum-kurs kosong

$$= 30,010 \text{ g} - 23,528 \text{ g}$$

$$= 6,482 \text{ g}$$

Ekstrak sesudah = ekstrak sesudah - kurs kosong

$$= 29,537 \text{ g} - 23,528 \text{ g}$$

$$= 6,009 \text{ g}$$

$$\begin{aligned} \% \text{ kadar air} &= \frac{\text{ekstrak sebelum} - \text{ekstrak sesudah}}{\text{ekstrak sebelum}} \times 100\% \\ &= \frac{6,48 \text{ g} - 6,01 \text{ g}}{6,48 \text{ g}} \times 100\% \\ &= 7,25 \% \end{aligned}$$

Replikasi 2

Berat kurs kosong = 21,517 g

Berat kurs + ekstrak = 31,674 g

Berat ekstrak = 10,157 g

Berat ekstrak daun ubi jalar ungu berturut-turut setelah dioven =

- 27,040 g (berat sebelum)
- 26,785 g
- 26,542 g (berat sesudah)
- 26,320 g
- 26,285 g

Ekstrak sebelum = ekstrak sebelum-kurs kosong

$$= 27,040 \text{ g} - 21,517 \text{ g}$$

$$= 5,523 \text{ g}$$

Ekstrak sesudah = ekstrak sesudah - kurs kosong

$$= 26,542 \text{ g} - 21,517 \text{ g}$$

$$= 5,025 \text{ g}$$

$$\begin{aligned} \% \text{ kadar air} &= \frac{\text{ekstrak sebelum} - \text{ekstrak sesudah}}{\text{ekstrak sebelum}} \times 100\% \\ &= \frac{5,52 \text{ g} - 5,02 \text{ g}}{5,52 \text{ g}} \times 100\% \\ &= 9,05 \% \end{aligned}$$

Replikasi 3

Berat kurs kosong = 18,922 g

Berat kurs + ekstrak = 28,935 g

Berat ekstrak = 10,013 g

Berat ekstrak daun ubi jalar ungu berturut-turut setelah dioven =

- 25,381 g (berat sebelum)
- 25,002 g
- 24,857 g (berat sesudah)
- 24,650 g
- 24,407 g

Ekstrak sebelum = ekstrak sebelum-kurs kosong

$$= 25,381 \text{ g} - 18,922 \text{ g}$$

$$= 6,459 \text{ g}$$

Ekstrak sesudah = ekstrak sesudah - kurs kosong

$$= 24,857 \text{ g} - 18,922 \text{ g}$$

$$= 5,935 \text{ g}$$

$$\begin{aligned} \% \text{ kadar air} &= \frac{\text{ekstrak sebelum} - \text{ekstrak sesudah}}{\text{ekstrak sebelum}} \times 100\% \\ &= \frac{6,46 \text{ g} - 5,93 \text{ g}}{5,93 \text{ g}} \times 100\% \\ &= 8,20 \% \end{aligned}$$

$$\text{Rata-rata \% kadar air} = \frac{24,5}{3}$$

$$= 8,17 \%$$

Lampiran 9. Perhitungan bobot jenis

Diketahui

- Bobot piknometer kosong = 31,422 gram
- Bobot piknometer + air = 82,590 gram
- Bobot piknometer + ekstrak replikasi 1= 83,921 gram
- Bobot piknometer + ekstrak replikasi 2= 83,850 gram
- Bobot piknometer + ekstrak replikasi 3= 83,152 gram

$$\text{bobot jenis} = \frac{\text{Bobot sampel} - \text{bobot pikno kosong}}{\text{bobot air} - \text{pikno kosong}}$$

$$\text{bobot jenis replikasi 1} = \frac{83,921 - 31,422}{82,590 - 31,422} = 1,026 \text{ g/ml}$$

$$\text{bobot jenis replikasi 2} = \frac{83,850 - 31,422}{82,590 - 31,422} = 1,024 \text{ g/ml}$$

$$\text{bobot jenis replikasi 3} = \frac{83,152 - 31,422}{82,590 - 31,422} = 1,010 \text{ g/ml}$$

$$\text{rata-rata bobot jenis} = \frac{3,06}{3} = 1,02 \text{ g/ml}$$

Lampiran 10. Hasil uji mutu fisik emulgel

1. Organoleptis

Formula	Minggu ke-1			Minggu ke-4		
	Warna	Bau	Bentuk	Warna	Bau	Bentuk
F1	Putih	Tidak berbau	Semi padat	Putih	Tidak berbau	Semi padat
F2	Coklat	Khas daun ubi	Semi padat	Cokelat	Khas daun ubi	Semi padat
F3	Coklat	Khas daun ubi	Semi padat	Cokelat	Khas daun ubi	Semi padat
F4	Cokelat	Khas daun ubi	Semi padat	Cokelat	Khas daun ubi	Semi padat

2. Homogenitas

Waktu	Formula	Hasil uji homogenitas
Hari ke-1	Formula 1	Homogen
	Formula 2	Homogen
	Formula 3	Homogen
	Formula 4	Homogen
Hari ke-28	Formula 1	Homogen
	Formula 2	Homogen
	Formula 3	Homogen
	Formula 4	Homogen

3. Daya lekat

Uji daya lekat Minggu ke-1				
Formula	Rep 1	Rep 2	Rep 3	Rata-rata±SD
F1	3,15	2,55	2,05	2,58±0,55
F2	3,00	2,50	1,95	2,48±0,52
F3	3,15	2,59	1,25	2,33±0,98
F4	2,88	2,73	1,56	2,39±0,72

Uji daya lekat Minggu ke-4				
Formula	Rep 1	Rep 2	Rep 3	Rata-rata±SD
F1	2,96	1,91	1,77	2,21±0,65
F2	2,03	1,65	1,25	1,64±0,39
F3	1,58	2,25	1,69	1,84±0,36
F4	1,25	1,39	2,22	1,62±0,52

4. Daya sebar

sediaan	replikasi	Hari ke-1				Hari ke-28			
		beban				Beban			
		0	50	100	150	0	50	100	150
sediaan	1	3,8	4,1	4,43	4,8	4,025	4,625	4,95	5,25
kontrol	2	3,8	4,3	4,48	4,8	3,95	4,6	4,93	5,18
negatif	3	3,7	4,2	4,55	4,9	3,95	4,6	5	5,28
rata-rata SD		3,7±0,04	4,2±0,06	4,48±0,06	4,8±0,03	3,97±0,04	4,60±0,01	4,96±0,04	5,23±0,05
emulgel	1	3,1	3,6	3,95	4,5	3,6	3,95	4,3	4,9
ekstrak 1,5%	2	3,1	3,5	4	4,6	3,52	3,97	4,33	4,93
	3	3,2	3,6	4,08	4,6	3,6	4	4,35	4,98
Rata-rata SD		3,1±0,06	3,5±0,03	4,01±0,06	4,5±0,04	3,57±0,04	3,97±0,02	4,33±0,02	4,93±0,04
emulgel	1	3,3	3,9	4,75	5,1	3,62	4,07	4,95	5,45
ekstrak 3%	2	3,3	4	4,73	5,1	3,67	4,30	4,95	5,43
	3	3,3	4	4,7	5,1	3,75	4,12	4,93	5,48
rata-rata SD		3,3±0,02	3,9±0,01	4,73±0,02	5,1±0,03	3,68±0,06	4,167±0,11	4,94±0,01	5,45±0,02
emulgel	1	4,2	4,9	5,1	5,4	4,55	5,02	5,6	5,95
ekstrak 6%	2	4,1	4,9	5,13	5,5	4,42	4,92	5,5	5,95
	3	4,1	4,8	5,13	5,7	4,37	4,9	5,43	5,93
rata-rata SD		4,1±0,05	4,8±0,07	5,12±0,01	5,5±0,15	4,45±0,09	4,95±0,06	5,51±0,08	5,94±0,01

5. pH

Formula	Hari ke-1	Hari ke-28
Kontrol negatif	5,58	4,91
	5,42	4,79
	5,91	4,84
Rata-rata ±SD	5,64±0,25	4,85±0,06
Emulgel ekstrak 1,5%	5,97	4,65
	5,58	4,55
	5,73	4,83
Rata-rata ±SD	5,76±0,19	4,67±0,14
Emulgel ekstrak 3%	5,75	4,72
	5,83	4,77
	5,92	4,92
Rata-rata ±SD	5,83±0,08	4,80±0,10
Emulgel ekstrak 6%	5,98	4,78
	5,81	4,59
	5,95	4,89
Rata-rata± SD	5,91±0,09	4,75±0,15

6. Viskositas

viskositas	hari ke 1	Hari ke-28
Kontrol negatif	300	285
	280	300
	290	290
Rata-rata ±SD	290±10	291,67±7,63
Emulgel ekstrak 1,5%	250	220
	240	220
	250	210
Rata-rata ±SD	246,67±5,77	216,67±5,77
Emulgel ekstrak 3%	200	200
	210	190
	200	180
Rata-rata ±SD	203,33±5,77	190±10
Emulgel ekstrak 6%	180	170
	190	165
	180	170
Rata-rata± SD	183,33±5,77	168,33±2,88

Lampiran 11. Uji statistik daya lekat emulgel

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_lekat	.201	12	.195	.919	12	.280

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

daya_lekat

Levene Statistic	df1	df2	Sig.
.841	3	8	.509

ANOVA

daya_lekat

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.111	3	.037	.072	.973
Within Groups	4.109	8	.514		
Total	4.220	11			

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair T1 - 1 T28	.56083	.84783	.24475	.02215	1.09952	2.291	11	.043			

Lampiran 12. Uji statistik daya sebar

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
daya_sebar	.198	12	.200*	.917	12	.259

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

daya_sebar

Levene Statistic	df1	df2	Sig.
3.896	3	8	.055

ANOVA

daya_sebar

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.412	3	.471	121.582	.000
Within Groups	.031	8	.004		
Total	1.443	11			

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)		
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference						
				Mean	Lower	Upper				
Pair 1 – hari 1 – hari 28	- .78385	.24642	.07113	-.94042	-.62729	11.019	- 11	.000		

Lampiran 13. Uji statistik pH emulgel

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pH	.171	12	.200*	.904	12	.181

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

pH

Levene Statistic	df1	df2	Sig.
1.664	3	8	.251

ANOVA

pH

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.124	3	.041	1.421	.306
Within Groups	.233	8	.029		
Total	.357	11			

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair 1 pH hari 1 - pH hari 28	1.01583	.20394	.05887	.88626	1.14541	17.255	11	.000			

Lampiran 14. Uji stastik viskositas emulgel

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
viskositas	.185	12	.200*	.905	12	.185

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

viskositas

Levene Statistic	df1	df2	Sig.
.333	3	8	.802

ANOVA

viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20291.667	3	6763.889	135.278	.000
Within Groups	400.000	8	50.000		
Total	20691.667	11			

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair T1 - 1 T28	14.16667	15.78741	4.55743	4.13582	24.19751	3.108	11		.010			

Lampiran 15. Uji statistik pH stabilitas

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig,	Statistic	df	Sig,
pH sebelum stabilitas	,171	12	,200*	,904	12	,181
pH setelah stabilitas	,205	12	,177	,895	12	,137

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

a, Lilliefors Significance Correction

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig,
pH sebelum stabilitas	1,664	3	8	,251
pH setelah stabilitas	1,709	3	8	,242

ANOVA

		Sum of Squares	df	Mean Square	F	Sig,
pH sebelum stabilitas	Between Groups	,124	3	,041	1,421	,306
	Within Groups	,233	8	,029		
	Total	,357	11			
pH setelah stabilitas	Between Groups	,035	3	,012	,978	,450
	Within Groups	,097	8	,012		
	Total	,132	11			

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair 1 pH sebelum stabilitas - pH setelah stabilitas	1.02333	.20051	.05788	.89593	1.15073	17.679	11		.000			

Lampiran 16. Uji statistik Viskositas Stabilitas

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig,	Statistic	df	Sig,
viskositas sebelum stabilitas	,185	12	,200*	,905	12	,185
viskositas setelah stabilitas	,177	12	,200*	,888	12	,111

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

a, Lilliefors Significance Correction

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig,
viskositas sebelum stabilitas	,333	3	8	,802
viskositas setelah stabilitas	,937	3	8	,467

ANOVA

		Sum of Squares	df	Mean Square	F	Sig,
viskositas sebelum stabilitas	Between Groups	20291,667	3	6763,889	135,278	,000
	Within Groups	400,000	8	50,000		
	Total	20691,667	11			
viskositas setelah stabilitas	Between Groups	23716,667	3	7905,556	90,349	,000
	Within Groups	700,000	8	87,500		
	Total	24416,667	11			

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair viskositas 1 sebelum stabilitas - viskositas setelah stabilitas	14.16667	15.20068	4.38806	4.50862	23.82472	3.228	11	.008			

Lampiran 17. Hasil skin analyzer

a. Uji kolagen

Kelompok	Replikasi	HASIL UJI KOLAGEN				
		Sebelum induksi sinar uv-a	Setelah induksi sinar uv-a (t0)	Hari ke-30	Peningkatan parameter	T30-T0
					T0-T (-14)	
(-)	1	65	44	50	-21	6
	2	68	47	59	-21	12
	3	64	45	54	-19	9
	4	69	48	52	-21	4
	5	63	46	55	-17	9
	Rata-rata ± SD	65,8 ± 2,58	46±1,58	54±3,39	-19,8±1,78	8±3,08
(+)	1	69	43	67	-26	24
	2	70	40	65	-30	25
	3	68	42	57	-26	15
	4	72	41	70	-31	29
	5	66	45	68	-21	23
	Rata-rata± SD	69±2,23	42,2±1,92	65,4±5,02	-26,8±3,96	23,2±5,11
1,50%	1	72	39	51	-33	12
	2	75	39	65	-36	26
	3	78	40	55	-38	15
	4	75	42	62	-33	20
	5	73	38	63	-35	25
	Rata-rata ± SD	74,6±2,303	39,6±1,51	59,2±5,93	-35±2,12	19,6±6,10
3%	1	65	58	70	-7	12
	2	65	55	71	-10	16
	3	63	51	70	-12	19
	4	69	54	73	-15	19
	5	67	57	70	-10	13
	Rata-rata ± SD	65,8±2,28	55±2,73	70,8±1,30	-10,8±2,94	15,8±3,27
6%	1	69	48	71	-21	23
	2	68	48	69	-20	21
	3	70	45	83	-25	38
	4	69	48	65	-21	17
	5	69	49	65	-20	16
	Rata-rata ± SD	69±0,70	47,6±1,51	70,6±7,40	-21,4±2,07	23±8,86

b. Uji elastisitas

Kelompok	replikasi	hasil uji elastisitas				
		sebelum induksi UV-A	sinar	setelah induksi sinar uv-a (T0)	hari ke-30	peningkatan parameter
					T0-T (-14)	T30-T0
(-)	1	64	58	61	-6	3
	2	69	53	58	-16	5
	3	67	56	62	-11	6
	4	68	57	60	-11	3
	5	68	52	59	-16	7
Rata-rata ±SD		67,2±1,92	55,2±2,58	60±1,58	-12±4,18	4,8±1,78
(+)	1	68	56	75	-12	19
	2	69	53	71	-16	18
	3	69	55	73	-14	18
	4	68	54	73	-14	19
	5	70	54	76	-16	22
Rata-rata± SD		68,8±0,84	54,4±1,14	73,6±1,94	-14,4±1,67	19,2±1,64
1,50%	1	69	57	67	-12	10
	2	67	55	65	-12	10
	3	71	58	70	-13	12
	4	70	54	71	-16	17
	5	70	56	69	-14	13
Rata-rata ±SD		69,4±1,52	56±1,58	68,4±2,41	-13,4±1,67	12,4±2,88
3%	1	65	45	65	-20	20
	2	63	50	67	-13	17
	3	68	52	69	-16	17
	4	67	53	61	-14	8
	5	65	58	63	-7	5
Rata-rata± SD		65,6±1,95	51,6±4,72	65±3,16	-14±4,74	13,4±6,50
6%	1	67	51	71	-16	20
	2	63	54	71	-9	17
	3	65	53	75	-12	22
	4	68	50	71	-18	21
	5	67	51	69	-16	18
Rata-rata ±SD		66±2	51,8±1,64	71,4±2,19	-14,2±3,63	19,6±2,07

c. Uji kelembapan

Kelompok	Replikasi	Hasil uji kelembapan				
		Sebelum induksi sinar uv-a (t-14)	Setelah induksi sinar uv-a (t30)	Hari ke-30	Peningkatan parameter	
					T0-T (-14)	T30-T0
(-)	1	18	6	8	-12	2
	2	15	5	9	-10	4
	3	15	7	9	-8	2
	4	14	9	7	-5	-2
	5	12	6	10	-6	4
Rata-rata ± SD		$14,8 \pm 2,17$	$6,6 \pm 1,52$	$8,6 \pm 1,14$	$-8,2 \pm 2,86$	$2 \pm 2,45$
(+)	1	11	9	20	-2	11
	2	11	9	25	-2	16
	3	14	8	18	-6	10
	4	12	9	20	-3	11
	5	15	8	20	-7	12
Rata-rata ± SD		$12,6 \pm 1,82$	$10 \pm 0,55$	$20,6 \pm 2,61$	$-4 \pm 2,34$	$12 \pm 2,34$
1,50%	1	30	5	14	-25	9
	2	33	6	15	-27	9
	3	31	7	11	-24	4
	4	28	5	11	-23	6
	5	29	7	13	-22	6
Rata-rata ± SD		$30,2 \pm 1,92$	$6,00 \pm 1,00$	$12,8 \pm 1,79$	$-24,2 \pm 1,92$	$6,8 \pm 2,17$
3%	1	14	5	15	-9	10
	2	16	6	11	-10	5
	3	17	5	9	-12	4
	4	15	7	15	-8	8
	5	15	6	13	-9	7
Rata-rata ± SD		$15,4 \pm 1,14$	$5,8 \pm 0,84$	$12,6 \pm 2,69$	$-9,6 \pm 1,52$	$6,8 \pm 2,39$
6%	1	15	7	20	-8	3
	2	18	8	25	-10	1
	3	20	7	21	-13	1
	4	18	8	23	-10	6
	5	19	9	25	-10	6
Rata-rata ± SD		$18 \pm 1,87$	$7,8 \pm 0,84$	$23,4 \pm 2,30$	$-10,2 \pm 1,79$	$3,4 \pm 2,51$

Lampiran 18. Persentase peningkatan Aktivitas anti-aging

a. Kolagen

kelinci	Replikasi	Sesudah UV	Hari ke-28	% Peningkatan
K-	1	44	50	12,00
	2	47	59	20,34
	3	45	54	16,67
	4	48	52	7,69
	5	46	55	16,36
Rata-rata ± SD		46±1,58	54±3,39	14,61±4,87
kelinci 2	Replikasi	Sesudah UV	Hari ke-28	% peningkatan
K+	1	43	67	35,82
	2	40	65	38,46
	3	42	57	26,32
	4	41	70	41,43
	5	45	68	33,82
Rata-rata ± SD		42,2±1,92	65,4±5,030	35,17±5,715
kelinci 3	Replikasi	Sesudah UV	T28	% peningkatan
1,5%	1	39	51	23,53
	2	39	65	40,00
	3	40	55	27,27
	4	42	62	32,26
	5	38	63	39,68
Rata-rata ± SD		39,6±1,52	59,2±5,93	32,55±7,34
kelinci 4	Replikasi	Sesudah UV	T28	%peningkatan
3%	1	58	70	17,14
	2	55	71	22,54
	3	51	70	27,14
	4	54	73	26,03
	5	57	70	18,57
Rata-rata ± SD		55±2,74	70,8±1,30	22,28±4,41
kelinci 5	Replikasi	Sesudah UV	T28	%peningkatan
6%	1	48	71	32,39
	2	48	69	30,43
	3	45	83	45,78
	4	48	65	26,15
	5	49	65	24,62
Rata-rata ± SD		47,6±1,52	70,6±7,40	31,88±3,38

b. elastisitas

Kelinci	Replikasi	Sesudah UV	Hari ke-28	% peningkatan
Kelinci 1 K-	1,00	58	61	4,92
	2,00	53	58	8,62
	3,00	56	62	9,68
	4,00	57	60	5,00
	5,00	52	59	11,86
RATA-RATA		55,20±2,59	60,00±1,58	8,02±3,03
Kelinci 3 DUJU 1,5%	1,00	57	67	67,00
	2,00	55	65	65,00
	3,00	58	70	70,00
	4,00	54	71	71,00
	5,00	56	69	69,00
RATA-RATA		56,00±1,58	68,40±2,41	68,40±2,41
Kelinci 4 DUJU 3%	1,00	45	65	30,77
	2,00	50	67	25,37
	3,00	52	69	24,64
	4,00	53	61	13,11
	5,00	58	63	7,94
RATA-RATA		51,60±1,64	65,00±3,16	20,37±9,47
Kelinci 5 DUJU 6%	1,00	51	71	28,17
	2,00	54	71	23,94
	3,00	53	75	29,33
	4,00	50	71	29,58
	5,00	51	69	26,09
RATA-RATA		51,80±4,72	71,40±2,19	27,42±2,38
Kelinci 2 K +	1,00	56	75	25,33
	2,00	53	71	25,35
	3,00	55	73	24,66
	4,00	54	73	26,03
	5,00	54	76	28,95
RATA-RATA		54,40±1,64	73,60±1,95	26,06±1,68

c. kelembapan

kelinci	Replikasi	Sesudah UV	Hari ke-28	%peningkatan
K-	1	6	8	25,00
	2	5	9	44,44
	3	7	9	22,22
	4	9	7	-28,57
	5	6	10	40,00
RATA-RATA		$6,60 \pm 1,52$	$8,60 \pm 1,14$	$20,62 \pm 29,09$
DUJU 1,5%	1	5	14	64,29
	2	6	15	60,00
	3	7	11	36,36
	4	5	11	54,55
	5	7	13	46,15
RATA-RATA		$6,00 \pm 1,00$	$12,80 \pm 1,79$	$52,27 \pm 11,18$
DUJU 3%	1	5	15	66,67
	2	6	11	45,45
	3	5	9	44,44
	4	7	15	53,33
	5	6	13	53,85
RATA-RATA		$5,80 \pm 0,84$	$12,60 \pm 2,61$	$52,75 \pm 8,91$
DUJU 6%	1	7	20	65,00
	2	8	25	68,00
	3	7	21	66,67
	4	8	23	65,22
	5	9	25	64,00
RATA-RATA		$7,80 \pm 0,84$	$22,80 \pm 2,28$	$65,78 \pm 1,57$
K +	1	9	20	55,00
	2	9	25	64,00
	3	8	18	55,56
	4	9	20	55,00
	5	8	20	60,00
RATA-RATA		$8,60 \pm 0,55$	$20,60 \pm 2,61$	$57,91 \pm 4,00$

Lampiran 19. Uji statistik kolagen

a. Sebelum (t-14) dan setelah induksi sinar UV-A (t0)

Descriptive Statistics

	N	Mean	Std, Deviation	Minimum	Maximum
Sebelum induksi	25	68,8400	3,81532	63,00	78,00
Setelah induksi sinar UV-A	25	46,0800	5,65626	38,00	58,00

One-Sample Kolmogorov-Smirnov Test

	t14	t0
N	25	25
Normal Parameters ^{a,b}		
Mean	68,8400	46,0800
Std, Deviation	3,81532	5,65626
Most Extreme Absolute	,163	,127
Differences Positive	,163	,127
Negative	-,093	-,079
Test Statistic	,163	,127
Asymp, Sig, (2-tailed)	,084 ^c	,200 ^{c,d}

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

d, This is a lower bound of the true significance,

Paired Samples Test

	Paired Differences						t	df	Sig, (2-tailed)			
	Mean	Std, Deviation	Std, Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair t14 - t0 1	22,76000	8,52584	1,70517	19,24070	26,27930	13,348	24	,000				

b. Setelah diinduksi sinar UV-A(T0) dan Pengolesan selama 4 minggu (T30)

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
t0	25	46,0800	5,65626	38,00	58,00
t30	25	64,0000	8,13429	50,00	83,00

One-Sample Kolmogorov-Smirnov Test

	t0	t30
N	25	25
Normal Parameters ^{a,b}	Mean 46,0800	64,0000
	Std. Deviation 5,65626	8,13429
Most Extreme Differences	Absolute ,127	,149
	Positive ,127	,115
	Negative ,079	-,149
Test Statistic	,127	,149
Asymp. Sig. (2-tailed)	,200 ^{c,d}	,158 ^c

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

d, This is a lower bound of the true significance,

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair t0 - 1 t30	-17,92000	7,76166	1,55233	-21,12385	-14,71615	-11,544	24		,000			

ANOVA

		Sum of Squares	df	Mean Square	F	Sig,
t0	Between Groups	694,640	4	173,660	47,448	,000
	Within Groups	73,200	20	3,660		
	Total	767,840	24			
t30	Between Groups	1074,000	4	268,500	10,447	,000
	Within Groups	514,000	20	25,700		
	Total	1588,000	24			

Setelah induksi sinar UV-ATukey HSD^a

Formula	N	Subset for alpha = 0,05		
		1	2	3
emulgel 1,5%	5	39,6000		
kontrol positif	5	42,2000		
kontrol negatif	5		46,0000	
emulgel 6%	5		47,6000	
emulgel 3%	5			55,0000
Sig,		,239	,681	1,000

Means for groups in homogeneous subsets are displayed,

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

Setelah dioles selama 30 hariTukey HSD^a

Formula	N	Subset for alpha = 0,05		
		1	2	3
kontrol negatif	5	54,0000		
emulgel 1,5%	5	59,2000	59,2000	
kontrol positif	5		65,4000	65,4000
emulgel 6%	5			70,6000
emulgel 3%	5			70,8000
Sig,		,501	,333	,465

Means for groups in homogeneous subsets are displayed,

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

Lampiran 20. Uji statistik elastisitas hewan uji

a. Sebelum induksi (t-14) dan setelah induksi sinar UV-A (t30)

Descriptive Statistics

	N	Mean	Std, Deviation	Minimum	Maximum
T14	25	67,4000	2,17945	63,00	71,00
T0	25	53,8000	3,04138	45,00	58,00

One-Sample Kolmogorov-Smirnov Test

			T14	T0
N			25	25
Normal Parameters ^{a,b}	Mean		67,4000	53,8000
	Std, Deviation		2,17945	3,04138
Most Differences	Extreme	Absolute	,187	,116
		Positive	,105	,084
		Negative	-,187	-,116
Test Statistic			,187	,116
Asymp, Sig, (2-tailed)			,024 ^c	,200 ^{c,d}

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

d, This is a lower bound of the true significance,

Paired Samples Test

	Paired Differences						t	df	Sig, (2-tailed)			
	Mean	Std, Deviation	Std, Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair 1 - T0	13,60000	3,25320	,65064	12,25714	14,94286	20,902	24	,000				

ANOVA

		Sum of Squares	df	Mean Square	F	Sig,
T14	Between Groups	56,000	4	14,000	4,828	,007
	Within Groups	58,000	20	2,900		
	Total	114,000	24			
T0	Between Groups	80,000	4	20,000	2,817	,053
	Within Groups	142,000	20	7,100		
	Total	222,000	24			

Sebelum induksi sinar UV-ATukey HSD^a

Formula	N	Subset for alpha = 0,05	
		1	2
emulgel ekstrak daun ubi jalar ungu 3%	5	65,6000	
emulgel ekstrak daun ubi jalar ungu 6%	5	66,0000	
Kontrol negatif	5	67,2000	67,2000
kontrol positif	5	68,8000	68,8000
ekstrak emulgel daun ubi jalar ungu 1,5%	5		69,4000
Sig,		,052	,283

Means for groups in homogeneous subsets are displayed,

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

Setelah induksi sinar UV-ATukey HSD^a

Formula	N	Subset for alpha = 0,05	
		1	
emulgel ekstrak daun ubi jalar ungu 3%	5	51,6000	
emulgel ekstrak daun ubi jalar ungu 6%	5	51,8000	
kontrol positif	5	54,4000	
Kontrol negatif	5	55,2000	
ekstrak emulgel daun ubi jalar ungu 1,5%	5	56,0000	
Sig,		,106	

Means for groups in homogeneous subsets are displayed,

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

b. Setelah induksi sinar uv-a (T0) dan pengolesan emulgel 4 minggu (T30)

Descriptive Statistics

	N	Mean	Std, Deviation	Minimum	Maximum
T0	25	53,8000	3,04138	45,00	58,00
T30	25	67,6800	5,34416	58,00	76,00

One-Sample Kolmogorov-Smirnov Test

		T0	T30
N		25	25
Normal Parameters ^{a,b}	Mean	53,8000	67,6800
	Std, Deviation	3,04138	5,34416
Most Differences	Extreme Absolute	,116	,158
	Positive	,084	,096
	Negative	-,116	-,158
Test Statistic		,116	,158
Asymp, Sig, (2-tailed)		,200 ^{c,d}	,111 ^c

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

d, This is a lower bound of the true significance,

Paired Samples Test

	Paired Differences						t	df	Sig, (2-tailed)			
	Mean	Std, Deviation	Std, Error	95% Confidence Interval of the Difference								
				Mean	Lower	Upper						
Pair T0 - 1 T30	- 13,88000	6,36606	1,27321	- 16,50778	- 11,25222	- 10,902	24		,000			

ANOVA

		Sum of Squares	df	Mean Square	F	Sig,
T0	Between Groups	80,000	4	20,000	2,817	,053
	Within Groups	142,000	20	7,100		
	Total	222,000	24			
T30	Between Groups	577,840	4	144,460	26,851	,000
	Within Groups	107,600	20	5,380		
	Total	685,440	24			

Setelah induksi sinar UV-ATukey HSD^a

Formula	N	Subset for alpha = 0,05
		1
emulgel ekstrak daun ubi jalar ungu 3%	5	51,6000
emulgel ekstrak daun ubi jalar ungu 6%	5	51,8000
kontrol positif	5	54,4000
kontrol negatif	5	55,2000
emulgel ekstrak daun ubi jalar ungu 1,5%	5	56,0000
Sig,		,106

Means for groups in homogeneous subsets are displayed,

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

Setelah pengolesan selama 30 hari

Tukey HSD^a

Formula	N	Subset for alpha = 0,05			
		1	2	3	4
kontrol negatif	5	60,0000			
emulgel ekstrak daun ubi jalar ungu 3%	5		65,0000		
emulgel ekstrak daun ubi jalar ungu 1,5%	5		68,4000	68,4000	
emulgel ekstrak daun ubi jalar ungu 6%	5			71,4000	71,4000
kontrol positif	5				73,6000
Sig,		1,000	,180	,282	,574

Means for groups in homogeneous subsets are displayed,

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

Lampiran 21. Hasil spss kelembapan pada hewan uji

a. Sebelum dan setelah induksi Sinar UV-A

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
T14	25	18,2000	6,58281	11,00	33,00
T0	25	6,9600	1,42829	5,00	9,00

One-Sample Kolmogorov-Smirnov Test

	T14	T0
N	25	25
Normal Parameters ^{a,b}		
Mean	18,2000	6,9600
Std. Deviation	6,58281	1,42829
Most Extreme Differences		
Absolute	,232	,149
Positive	,232	,149
Negative	-,137	-,127
Test Statistic		
	,232	,149
Asymp. Sig. (2-tailed)	,001 ^c	,155 ^c

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
T14	Between Groups	974,000	4	243,500	73,788	,000
	Within Groups	66,000	20	3,300		
	Total	1040,000	24			
T0	Between Groups	28,960	4	7,240	7,240	,001
	Within Groups	20,000	20	1,000		
	Total	48,960	24			

T14Tukey HSD^a

Formula	N	Subset for alpha = 0,05		
		1	2	3
kontrol positif	5	12,6000		
kontrol negatif	5	14,8000	14,8000	
emulgel ekstrak daun ubi jalar ungu 3%	5	15,4000	15,4000	
emulgel ekstrak daun ubi jalar ungu 6%	5		18,0000	
emulgel ekstrak daun ubi jalar ungu 1,5%	5			30,2000
Sig,		,146	,076	1,000

Means for groups in homogeneous subsets are displayed,

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

T0Tukey HSD^a

Formula	N	Subset for alpha = 0,05		
		1	2	3
emulgel ekstrak daun ubi jalar ungu 3%	5	5,8000		
emulgel ekstrak daun ubi jalar ungu 1,5%	5	6,0000	6,0000	
kontrol negatif	5	6,6000	6,6000	
emulgel ekstrak daun ubi jalar ungu 6%	5		7,8000	7,8000
kontrol positif	5			8,6000
Sig,		,715	,067	,715

Means for groups in homogeneous subsets are displayed,

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

Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)			
	Mean	Std, Deviation	Std, Error Mean	95% Confidence Interval of the Difference								
				Lower	Upper							
Pair 1	T14 - 00	11,240 7,24155	1,44831	8,25084	14,22916	7,761	24	,000				
T0												

b. Setelah induksi sinar UV-A dan pengolesan emulgel selama 4 minggu (T30)

Descriptive Statistics

	N	Mean	Std, Deviation	Minimum	Maximum
T0	25	6,9600	1,42829	5,00	9,00
T30	25	15,4800	5,79598	7,00	25,00

One-Sample Kolmogorov-Smirnov Test

		T0	T30
N		25	25
Normal Parameters ^{a,b}	Mean	6,9600	15,4800
	Std, Deviation	1,42829	5,79598
Most Differences	Extreme Absolute	,149	,142
	Positive	,149	,140
	Negative	-,127	-,142
Test Statistic		,149	,142
Asymp, Sig, (2-tailed)		,155 ^c	,200 ^{c,d}

a, Test distribution is Normal,

b, Calculated from data,

c, Lilliefors Significance Correction,

d, This is a lower bound of the true significance,

Paired Samples Test

	Paired Differences					t	df	Sig, (2-tailed)			
	Mean	Std, Deviation	Std, Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair T0 - 1 T30	- 8,52000	5,04249	1,00850	-10,60144	-6,43856	- 8,448	24	,000			

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
T0	Between Groups	28,960	4	7,240	7,240	,001
	Within Groups	20,000	20	1,000		
	Total	48,960	24			
T30	Between Groups	713,040	4	178,260	38,253	,000
	Within Groups	93,200	20	4,660		
	Total	806,240	24			

Setelah induksi sinar UV-A

Tukey HSD^a

formula	N	Subset for alpha = 0,05		
		1	2	3
emulgel ekstrak daun ubi jalar ungu 3%	5	5,8000		
emulgel ekstrak daun ubi jalar ungu 1,5%	5	6,0000	6,0000	
kontrol negatif	5	6,6000	6,6000	
emulgel ekstrak daun ubi jalar ungu 6%	5		7,8000	7,8000
kontrol positif	5			8,6000
Sig,		,715	,067	,715

Means for groups in homogeneous subsets are displayed,

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

Setelah dioles selama 30 hariTukey HSD^a

formula	N	Subset for alpha = 0,05		
		1	2	3
kontrol negatif	5	8,6000		
emulgel ekstrak daun ubi jalar ungu 3%	5	12,6000	12,6000	
emulgel ekstrak daun ubi jalar ungu 1,5%	5		12,8000	
kontrol positif	5			20,6000
emulgel ekstrak daun ubi jalar ungu 6%	5			22,8000
Sig,		,057	1,000	,508

Means for groups in homogeneous subsets are displayed,

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

Lampiran 22. Uji iritasi primer