BAB V
KESIMPULAN DAN SARAN

A. Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan maka dapat disimpulkan sebagai berikut :

Pertama, ekstrak kayu secang (*Caesalpinia sappan* L.) dapat diformulasikan menjadi sediaan krim *Anti-Aging* dengan mutu fisik dan stabilitas yang baik sampai konsentrasi 9%.

Kedua, sediaan krim *Anti-Aging* ekstrak kayu secang (*Caesalpinia sappan* L.) dengan kosentrasi 3, 6, dan 9% memiliki efektivitas mencegah terjadinya kerutan pada telapak kaki tikus yang terpapar sinar UV-B

Ketiga, Konsentrasi 9% dari formula krim yang paling efektif dalam mencegah kerutan pada telapak kaki tikus yang terpapar sinar UV-B.

B. Saran

Dari penelitian yang telah dilakukan, disarankan pada peneliti selanjutnya agar didapatkan hasil yang lebih maksimal sebagai berikut :

Pertama, dapat dibuat krim Anti-Aging dengan fraksi ekstrak kayu secang yang mencegah terjadinya kerutan pada telapak kaki tikus yang terpapar sinar UV-B.

Kedua, dapat dibuat krim atau sediaan topikal Anti-Aging ekstrak kayu secang yang mencegah terjadinya kerutan pada telapak kaki tikus yang terpapar sinar UV-A.

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LAMPIRAN

Lampiran 1. Hasil determinasi tanaman kayu secang

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS SEBELAS MARET
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
LAB. PROGRAM STUDI BIOLOGI
Jl. Ir. Sutami 36A Kentingan Surakarta 57126 Telp. (0271) 663375 Fax (0271) 663375
http://www.biology.mipa.uns.ac.id, E-mail biologi @ mipa.uns.ac.id

Nomor : 023/UN27.9.6.4/Lab/2019
H a l : Hasil Determinasi Tumbuhan
Lampiran : -

Nama Pemesan : Kinanthi Ambarsari
NIM : 21154527A
Alamat : Program Studi S1 Farmasi Fakultas Farmasi Universitas Setia Budi Surakarta

HASIL DETERMINASI TUMBUHAN

Nama Sampel : *Caesalpinia sappan* L.
Familia : Caesalpiniaceae

Hasil Determinasi menurut C.A. Backer & R.C. Bakhuizen van den Brink, Jr. (1963) :
1b-2b-3b-4b-12b-13b-14b-17b-18b-19b-20b-21b-22b-23b-24b-25b-26b-27a-28b-29b-30b-31a-32a-33a-34a-35a-36d-37b-38b-39b-41b-42b-44b-45b-46e-50b-51b-53b-54b-56b-57b-58b-59a-60b-64b-66b-67b-69b _____ **106. Caesalpiniaceae**
1a-2b-3b-4a-5b-6a-7b _____ **28. *Caesalpinia***
1a-2b-3b-5b-7b-8a _____ ***Caesalpinia sappan* L.**

Deskripsi Tumbuhan :
Habitus : semak atau pohon kecil, menahun, tinggi 5-10 m. Akar : tunggang, bercabang, putih kotor atau putih kekuningan hingga coklat kekuningan. Batang : tegak, bercabang banyak dan panjang, berbentuk bulat, berkayu, mempunyai lentisel, permukaan berduri, bentuk duri bengkok, tersebar, kulit batang berwarna merah. Daun : majemuk menyirip, panjang 25-40 cm, terdiri atas 9-16 pasang sirip, panjang sirip 6.5-17 cm, setiap sirip mempunyai 10-20 pasang anak daun yang berhadapan; anak daun tidak bertangkai, bentuk oval atau oval memanjang, panjang 10-25 mm, lebar 6-11 mm. pangkal anak daun hampir rata, ujung anak daun bundar, tepi anak daun rata, pertulangan anak daun menyirip; panjang daun penumpu 3-4.5 cm. Bunga : tersusun dalam bunga majemuk/perbungaan berupa tandan, terdapat di ujung, panjang tandan 10-40 cm, panjang ibu tangkai bunga 15-20 cm, panjang tangkai bunga 1.5-2.5 cm; pinggir kelopak bunga berambut, panjang daun kelopak yang terbawah ±10 mm, lebar ±4 mm; mahkota bunga memencar, berwarna kuning terang, helaian bendera membundar bergaris tengah 4-6 mm, 4 helai daun mahkota bunga lainnya juga membundar dan bergaris tengah ±10 mm; panjang benang sari ±15 mm; panjang putik ±18 mm. Buah : berupa buah polong, berwarna hitam ketika masak dan hijau ketika masih mentah/muda, berbentuk oval atau oval memanjang, pipih, panjang 6.5-9.5 cm, lebar 2.5-4 cm, berisi 2-4 biji. Biji : panjang biji 15-18 mm, lebar 8-11 mm, tebal 5-7 mm.

Surakarta, 1 Maret 2019

Kepala Lab. Program Studi Biologi

Dr. Tetri Widiyani, M.Si.
NIP. 19711224 200003 2 001

Penanggungjawab
Determinasi Tumbuhan

Suratman, S.Si., M.Si.
NIP. 19800705 200212 1 002

Mengetahui
Kepala Program Studi Biologi FMIPA UNS

Dr. Ratna Setyaningsih, M.Si.
NIP. 19660714 199903 2 001

Lampiran 2. Surat keterangan hewan uji

"ABIMANYU FARM"

√ Mencit putih jantan √ Tikus Wistar √ Swis Webster √ Cacing
√ Mencit Balb/C √ Kelinci New Zaeland

Ngampon RT 04 / RW 04. Mojosongo Kec. Jebres Surakarta. Phone 085 629 994 33 / Lab USB Ska

Yang bertanda tangan di bawah ini:
Nama : Sigit Pramono

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

Naina	: Kinanthi Ambarsari
Nim	: 21154527 A
Institusi	: Universitas Setia Budi

Merupakan hewan uji dengan spesifikasi sebagai berikut:

Jenis hewan	: Tikus Wistar
Umur	: 2-3 bulan
Jumlah	: 20 ekor
Jenis kelamin	: Jantan
Keterangan	: Sehat
Asal-usul	: Unit Pengembangan Hewan Percobaan UGM Yogyakarta

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

Surakarta, 24 Juni 2019
Hormat kami

Sigit Pramono
"ABIMANYU FARM"

Lampiran 3. Surat Ethical clearance

HEALTH RESEARCH ETHICS COMMITTEE
KOMISI ETIK PENELITIAN KESEHATAN
Dr. Moewardi General Hospital
RSUD Dr. Moewardi

School of Medicine Sebelas Maret University
Fakultas Kedokteran Universitas sebelas Maret

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 430 / III /HREC / 2019

The Health Research Ethics Committee Dr. Moewardi General Hospital / School of Medicine Sebelas
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi / Fakultas Kedokteran Universitas Sebelas Maret

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

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

Uji Efektivitas Krim Anti-Aging Ekstrak Etanol Kayu Secang (Caesalpinia sappan L) Pada Telapak Kaki Tikus Galur Wistar (Rattus norvegicus L) Yang Terpapar Sinar UV-B

Principal investigator
Peneliti Utama : Kinanthi Ambarsari
21154527A

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

Is ethically approved
Dinyatakan layak etik

Issued on : 26 Mar 2019

Chairman
Ketua

Dr. Wahyu Dwi Atmoko, SpF
NIP. 19770224 201001 1 004

Lampiran 4. Surat Keterangan Pembuatan Preparat & Penelitian Histopatologi

KEMENTRIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS SEBELAS MARET
FAKULTAS KEDOKTERAN
LABORATORIUM HISTOLOGI
Jl. Ir. Sutami 36A. Surakarta

SURAT KETERANGAN

Bagian Histologi Fakultas Kedokteran Universitas Sebelas Maret Surakarta menerangkan bahwa mahasiswa tersebut di bawah ini :

Nama	:	Kinanthi Ambarsari
NIK	:	21154527A
Fakultas	:	Farmasi
Universitas	:	Universitas Setia Budi
Judul Tesis	:	Uji efektivitas krimanti-aging ekstrak ethanol kayu secang (Caesalpinia sappan L.) pada telapak kaki tikus galur wistar (Rattus norvegicus L.) yang terpapar sinar UV-B.

Telah melaksanakan kegiatan pembuatan preparat di Bagian Laboratorium Histologi FK UNS.

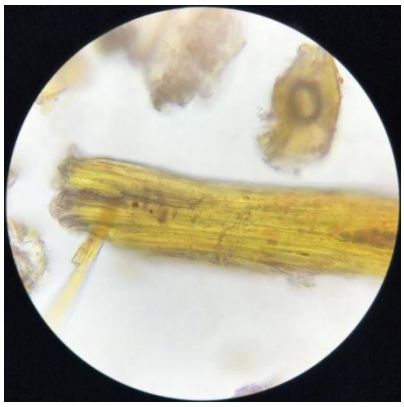
Demikian surat keterangan ini dibuat agar dapat digunakan sebagaimana mestinya.

Surakarta, 13 Mei 2019
Kepala Bagian Histologi FK UNS

Dr.Muthmainah, dr., M.Kes.
NIP. 19660702 199802 2 001

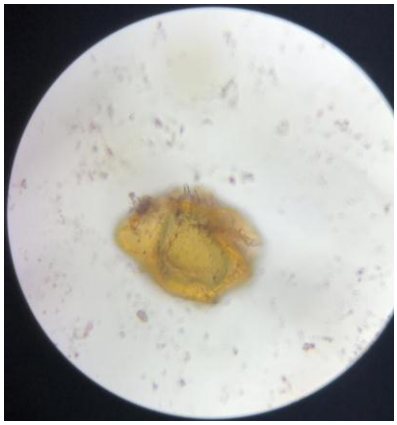
Lampiran 5. Hasil identifikasi simplisia kayu secang

Hasil perbesaran 10x40



fragmen sklerenkim

Sklerenkim dengan Kristal kalsium oksalat



Berkas pengankut bernoktah

Lampiran 6. Pembuatan ekstrak

Serutan kayu secang

serbuk kayu secang

Vacuum Rotary evaporator

ekstrak kayu secang

Lampiran 7. Hasil perhitungan rendemen bobot kering terhadap bobot awal kayu secang

Bobot awal (gram)	Bobot kering (gram)	Rendemen % b/b
3500	3080	88

$$\text{Rendemen } (\%) = \frac{bobot\ kering}{bobot\ basah} \times 100\%$$

$$\text{Rendemen } (\%) = \frac{3080}{3500} \times 100\%$$

$$\text{Rendemen } (\%) = 88$$

Lampiran 8. Hasil pembuatan ektrak etanol kayu secang secara maserasi

Berat serbuk (g)	Berat ekstrak (g)	Rendemen (%b/b)
500	79	15,8

Rendemen (%) = $\frac{bobot\ ekstrak}{bobot\ serbuk} \times 100\%$

Rendemen (%) = $\frac{79}{500} \times 100\%$

Rendemen (%) = 15,8

Lampiran 9. Identifikasi susut pengeringan serbuk dan ekstrak kayu secang

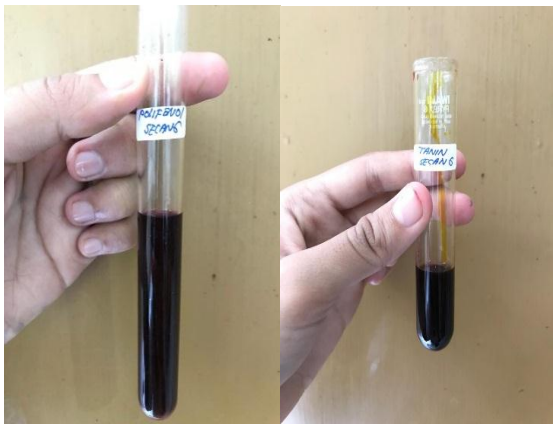
Penetapan Susut Pengeringan Serbuk

Penetapan Susut Pengeringan Ekstrak

Lampiran 10. Identifikasi kandungan kimia ekstrak kayu secang

Hasil uji alkaloid pereaksi mayer

hasil uji flavonoid



Hasil uji polifenol dan tannin

hasil uji glikosida

Lampiran 11. Perhitungan konsentrasi ekstrak

IC_{50} = 11,46 ppm

11,46mg/1000 ml

% = 0,01146 g -> 0,0150 gram

Kelipatan 200x = 3% = 3 gram

Kelipatan 400x = 6% = 6 gram

Kelipatan 600x = 9% = 9 gram

Lampiran 12. Perhitungan penentuan jumlah hewan uji untuk pengujian efektivitas krim menurut rumus frederer (1967)

$$(t-1) (r-1) >15$$

Ket :

t= jumlah kelompok perlakuan

r= jumlah pengulangan / jumlah sampel tiap kelompok

$$(5-1)(n-1)>15$$

$$4n-4 > 15$$

$$4n > 9$$

$$n= 4,75 \rightarrow 5$$

Lampiran 13. Perhitungan formula krim

Formula I 3%

Ekstrak kayu secang $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Propilen glikol $= \frac{7\ gram}{100\ gram} \times 100 gram\ = 7\ gram$

Dinatrium edetat $= \frac{0{,}05\ gram}{100\ gram} \times 100 gram\ = 0{,}05\ gram$

Trietanolamin $= \frac{1\ gram}{100\ gram} \times 100 gram\ = 1\ gram$

Vaselin $= \frac{5\ gram}{100\ gram} \times 100 gram\ = 5\ gram$

Setil alkohol $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Asam stearat $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Gliseril monostearat $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipagin $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipasol $= \frac{0{,}2\ gram}{100\ gram} \times 100 gram\ = 0{,}2\ garm$

Aquadest *ad* $= 100\ - (22{,}35) = 77{,}65 gram$

Formula II 6%

Ekstrak kayu secang $= \frac{6\ gram}{100\ gram} \times 100 gram\ = 6\ gram$

Propilen glikol $= \frac{7\ gram}{100\ gram} \times 100 gram\ = 7\ gram$

Dinatrium edetat $= \frac{0{,}05\ gram}{100\ gram} \times 100 gram\ = 0{,}05\ gram$

Trietanolamin $= \frac{1\ gram}{100\ gram} \times 100 gram\ = 1\ gram$

Vaselin $= \frac{5\ gram}{100\ gram} \times 100 gram\ = 5\ gram$

Setil alkohol $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Asam stearat $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Gliseril monostearat $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipagin $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipasol $= \frac{0{,}2\ gram}{100\ gram} \times 100 gram\ = 0{,}2\ garm$

Aquadest *ad* $= 100\ - (25{,}45) = 74{,}55 gram$

Formula III 9%

Ekstrak kayu secang $= \frac{9\ gram}{100\ gram} \times 100 gram\ = 9\ gram$

Propilen glikol $= \frac{7\ gram}{100\ gram} \times 100 gram\ = 7\ gram$

Dinatrium edetat $= \frac{0{,}05\ gram}{100\ gram} \times 100 gram\ = 0{,}05\ gram$

Trietanolamin $= \frac{1\ gram}{100\ gram} \times 100 gram\ = 1\ gram$

Vaselin $= \frac{5\ gram}{100\ gram} \times 100 gram\ = 5\ gram$

Setil alkohol $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Asam stearat $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Gliseril monostearat $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipagin $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipasol $= \frac{0{,}2\ gram}{100\ gram} \times 100 gram\ = 0{,}2\ garm$

Aquadest *ad* $= 100\ - (28{,}45) = 71{,}55 gram$

Formula IV (Kontrol negatif)

Propilen glikol $= \frac{7\ gram}{100\ gram} \times 100 gram\ = 7\ gram$

Dinatrium edetat $= \frac{0{,}05\ gram}{100\ gram} \times 100 gram\ = 0{,}05\ gram$

Trietanolamin $= \frac{1\ gram}{100\ gram} \times 100 gram\ = 1\ gram$

Vaselin $= \frac{5\ gram}{100\ gram} \times 100 gram\ = 5\ gram$

Setil alkohol $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Asam stearat $= \frac{3\ gram}{100\ gram} \times 100 gram\ = 3\ gram$

Gliseril monostearat $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipagin $= \frac{0{,}1\ gram}{100\ gram} \times 100 gram\ = 0{,}1\ gram$

Nipasol $= \frac{0{,}2\ gram}{100\ gram} \times 100 gram\ = 0{,}2\ garm$

Aquadest *ad* $= 100\ - (19{,}45) = 80{,}55 gram$

Lampiran 14. Hasil gambar pembuatan formula krim

Formula 1

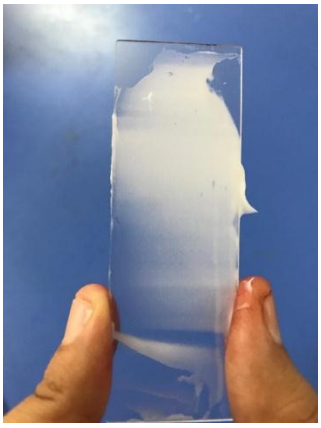
formula 2

Formula 3

formula 4

Lampiran 15. Hasil gambar pengujian sifat fisik krim

a. Hasil uji Homogenitas



(Kontrol negatif)

(Konsentrasi 3%)

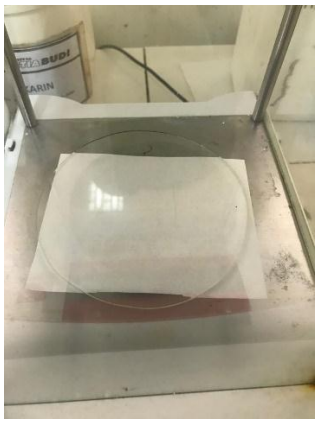
(Konsentrasi 6%)

(Konsentrasi (9%)

b. pengujian pH

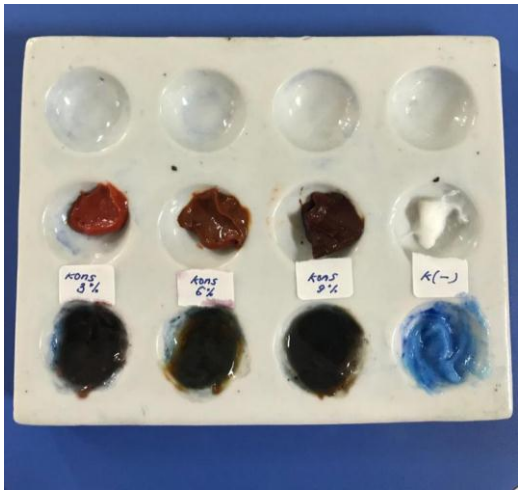
c. Pengujian Viskositas

d. Pengujian daya sebar



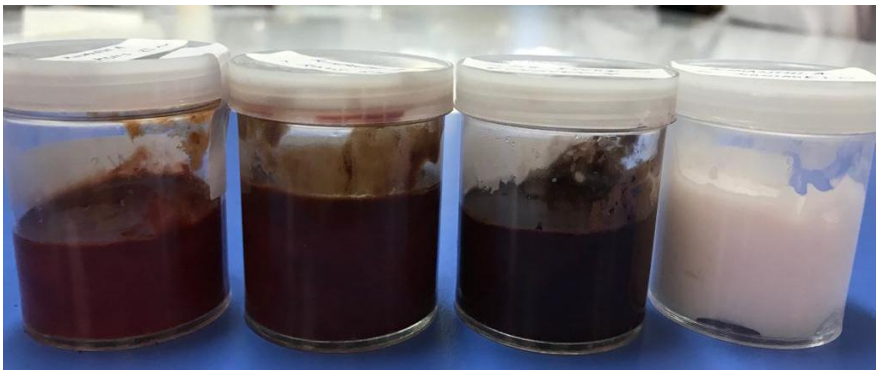
e. Pengujian daya lekat dan uji tipe krim

Pengujian daya lekat pada krim

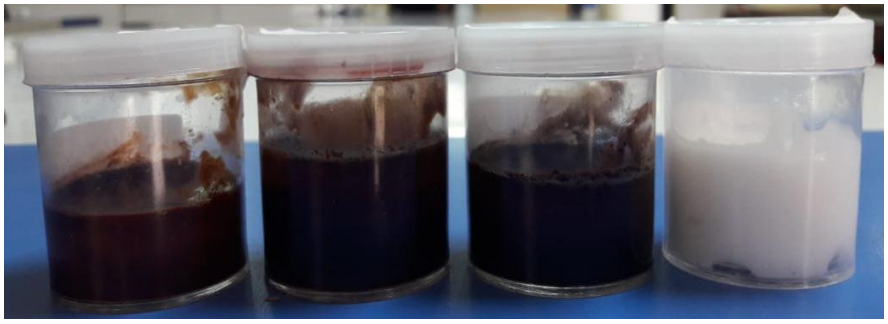


Pengujian Uji Tipe Emulsi krim

f. Stabilitas Krim

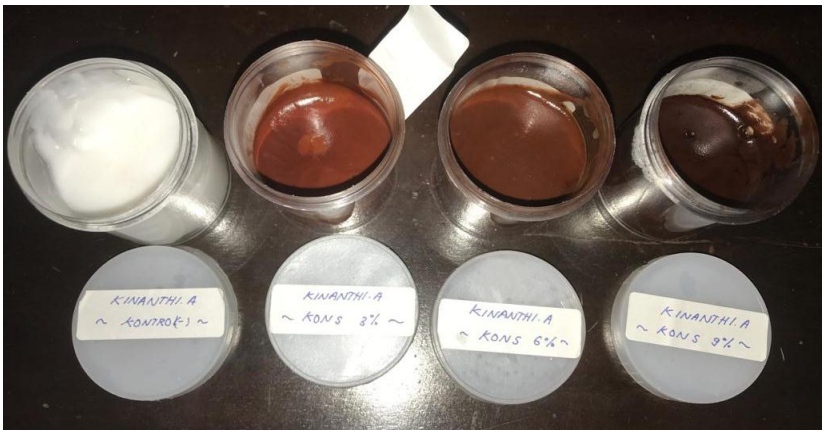


Siklus Pertama

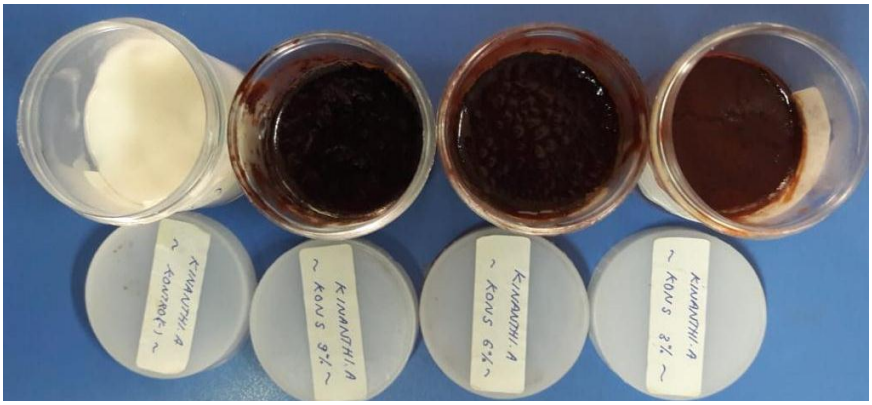


Siklus Ke-2

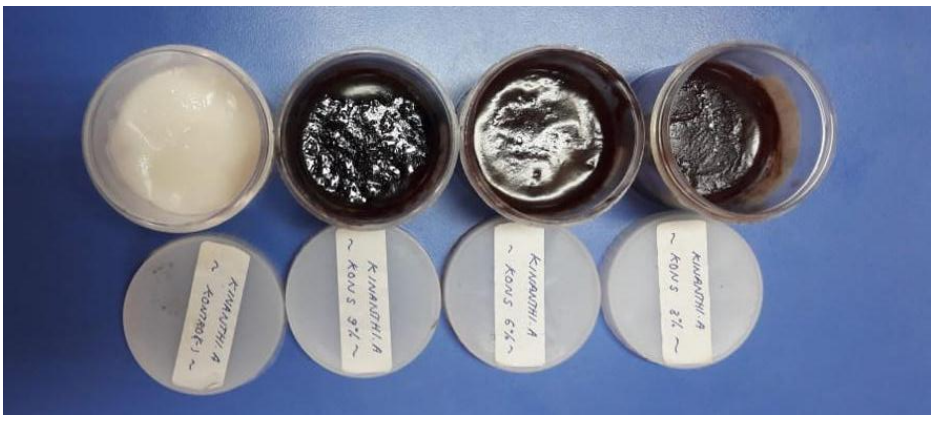
Siklus ke-3



Siklus Ke-4



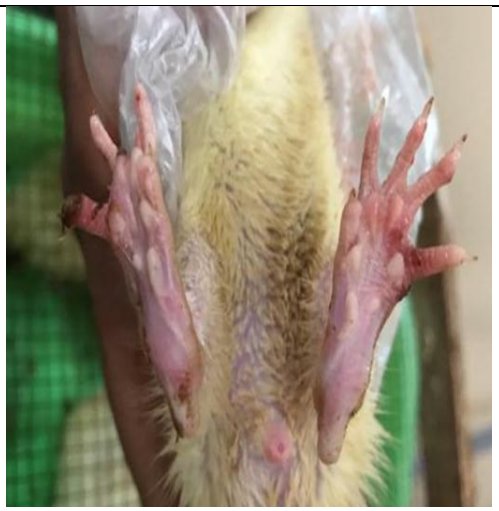
Siklus Ke-5



Siklus Ke-6

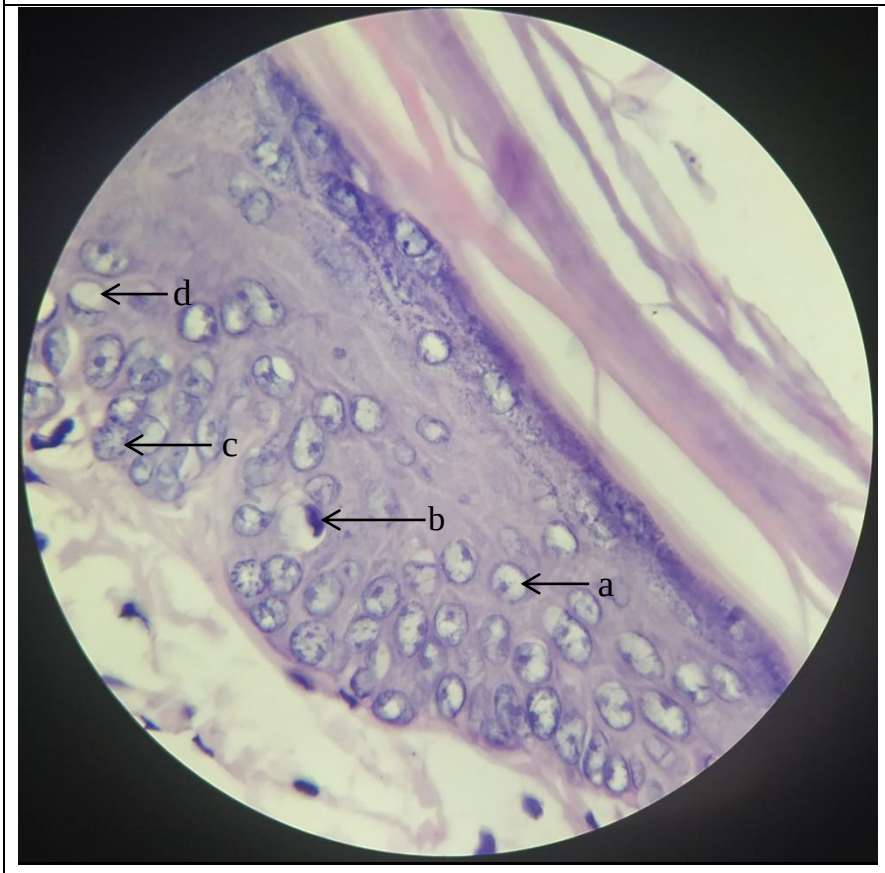
Lampiran 16. Hasil pengamatan keriput telapak kaki tikus

Sampel	**Hasil gambar**	**Skor**		
Kontrol (+)			A	B
		1.	0	3
		2.	0	2
		3.	0	2
		4.	1	3
		5.	0	3
			0,2	**2,6**
Normal			A	B
		1.	-	-
		2.	-	-
		3.	-	-
		4.	-	-
		5.	-	-
Konsentrasi 3%			A	B
		1.	2	3
		2.	2	3
		3.	1	2
		4.	2	2
		5.	3	3
			2,0	**2,6**

Sampel	**Hasil gambar**	**Skor**		
Konsentrasi 6%			A	B
		1.	2	3
		2.	2	3
		3.	1	2
		4.	1	2
		5.	1	3
			1,4	**2,6**
Konsentrasi 9%			A	B
		1.	2	3
		2.	0	3
		3.	0	3
		4.	1	2
		5.	0	3
			0,6	**2,8**

Lampiran 17. Hasil pengamatan kerusakan pada sel epidermis

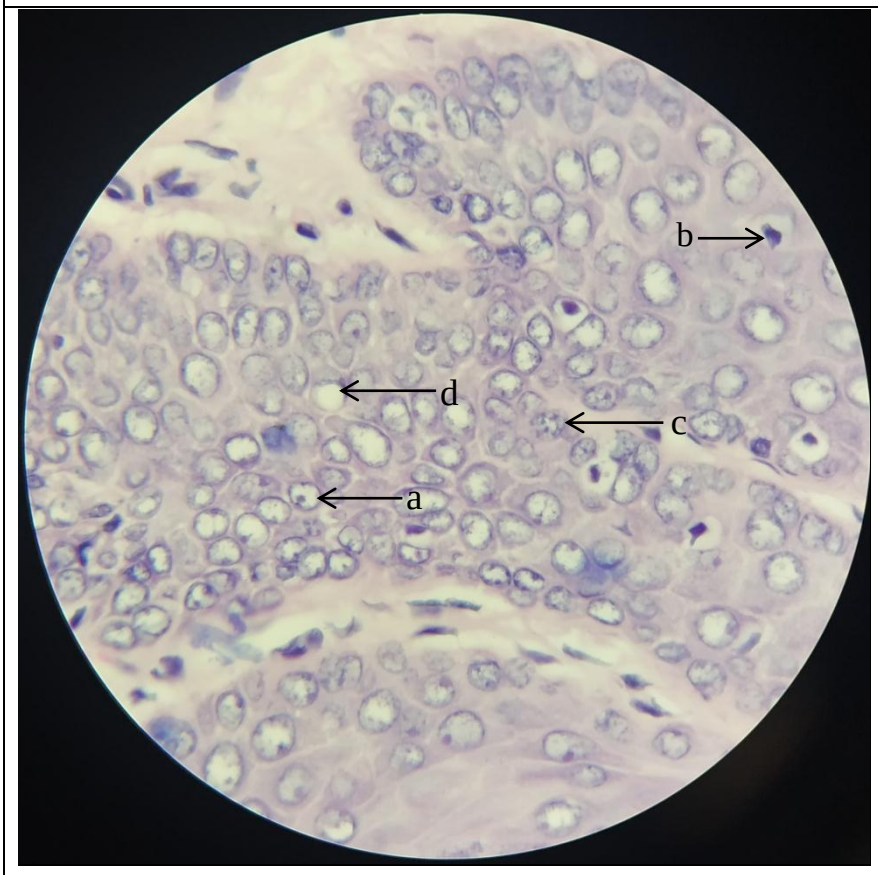
Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
Normal	Kulit	64	8	25	3	36

Normal (Kulit)	
Perbesaran 1000 kali	
	Keterangan 1. a: Sel Normal 2. b: Piknosis 3. c: Karyoreksis 4. d: Karyolisis

Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
Negatif (-)	Kulit	28	21	45	6	72

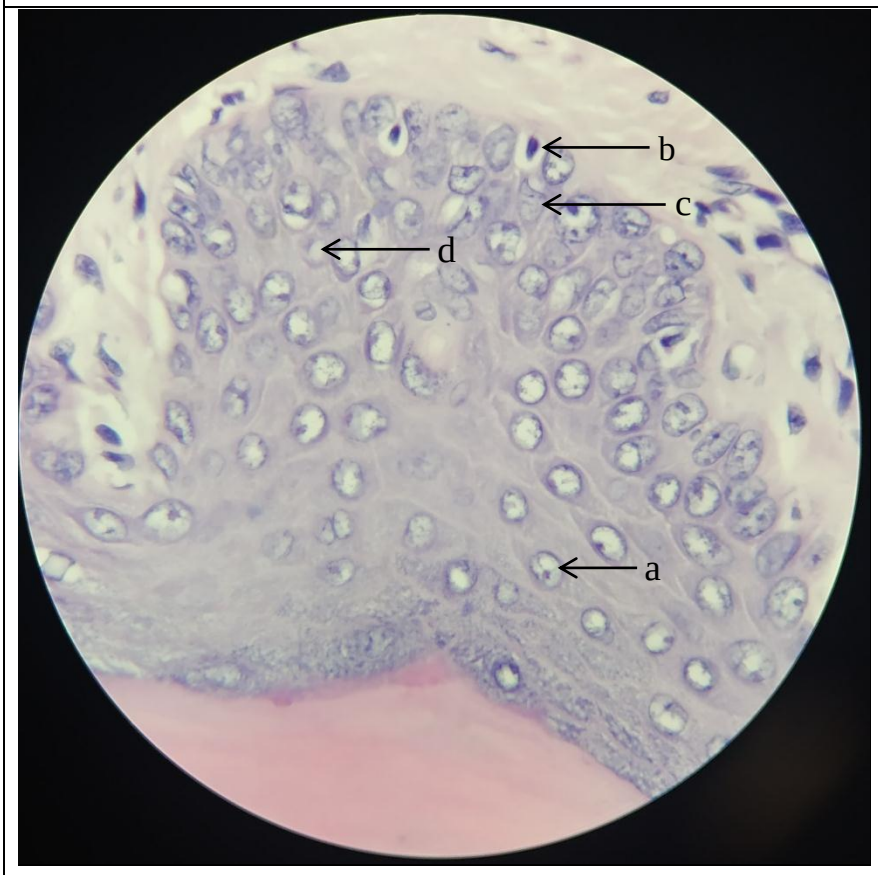
Negatif (Kulit)

Perbesaran 1000 kali

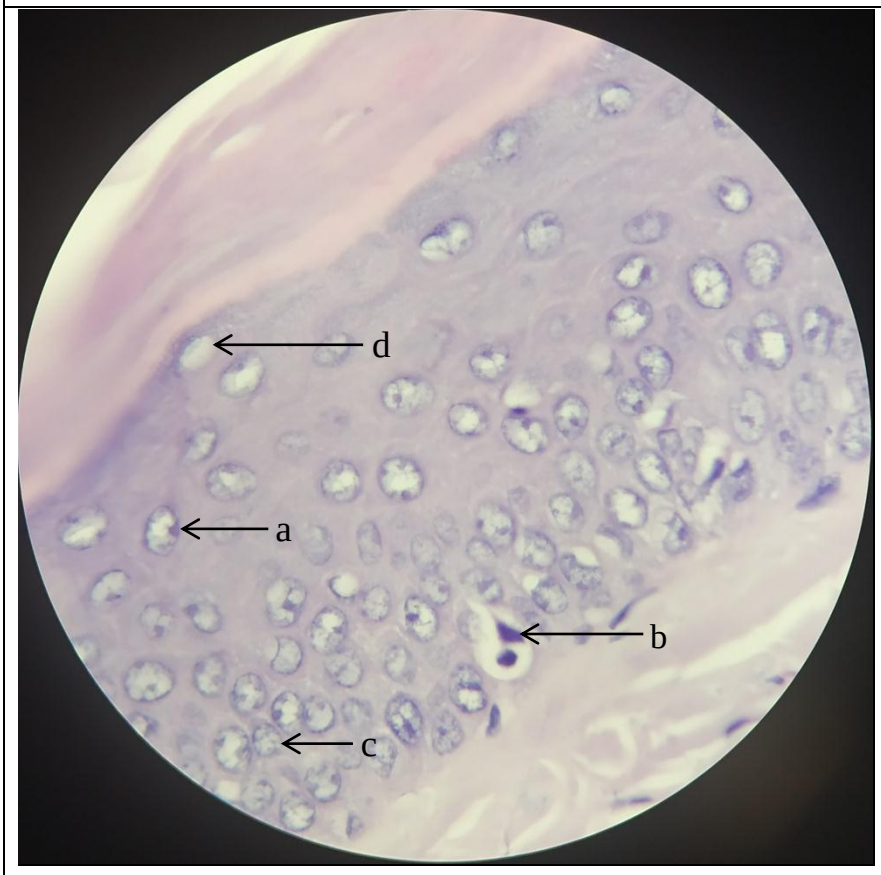


Keterangan
1. a: Sel Normal
2. b: Piknosis
3. c: Karyoreksis
4. d: Karyolisis

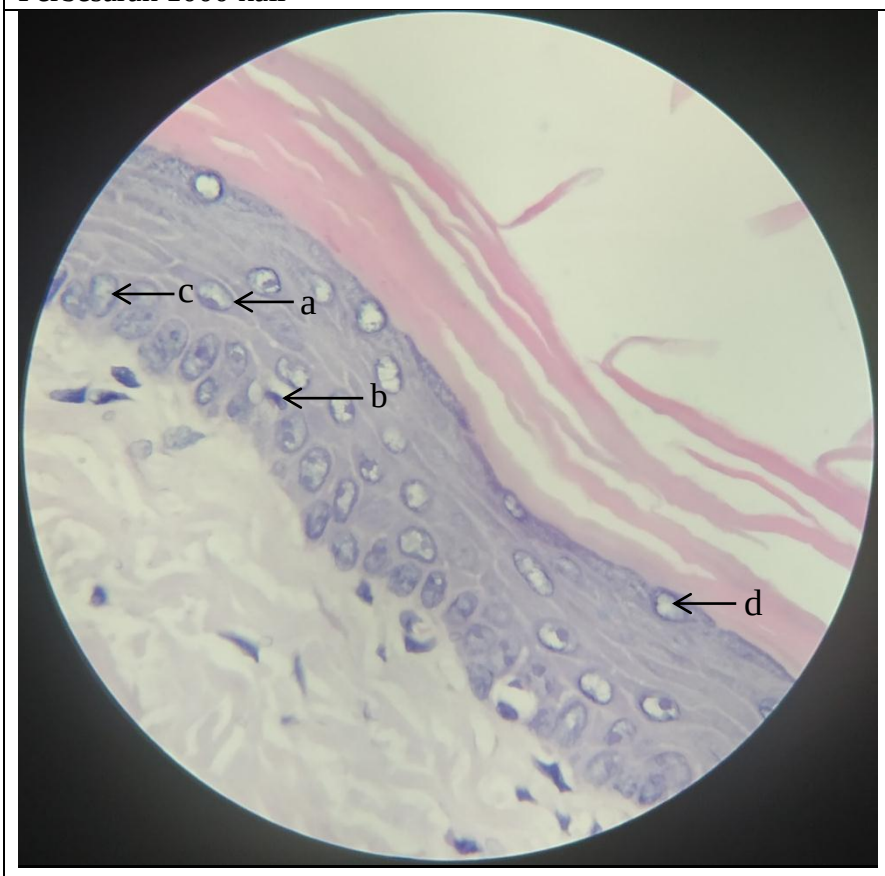
Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
Positif (+)	Kulit	50	12	35	3	50

Positif (Kulit)	
Perbesaran 1000 kali	
	Keterangan 1. a: Sel Normal 2. b: Piknosis 3. c: Karyoreksis 4. d: Karyolisis

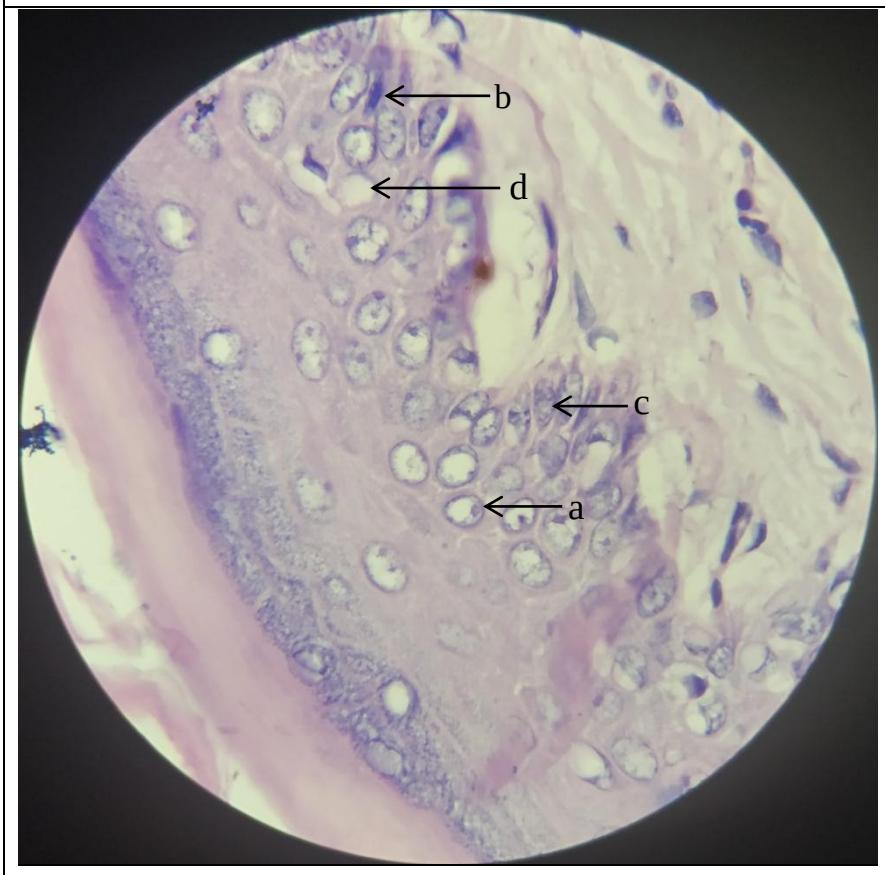
Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
3%	Kulit	38	16	41	5	62

3% (Kulit)	
Perbesaran 1000 kali	
	Keterangan 1. a: Sel Normal 2. b: Piknosis 3. c: Karyoreksis 4. d: Karyolisis

Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
6%	Kulit	44	14	38	4	56

6% (Kulit)	
Perbesaran 1000 kali	
	Keterangan 1. a: Sel Normal 2. b: Piknosis 3. c: Karyorek sis 4. d: Karyolisi s

Kode Pengecatan	Organ	Jumlah Sel				Total Kerusakan
		Normal	Piknosis	Karioreksis	Kariolisis	
9%	Kulit	46	13	37	4	54

9% (Kulit)	
Perbesaran 1000 kali	
	Keterangan 1. a: Sel Normal 2. b: Piknosis 3. c: Karyoreksis 4. d: Karyolisis

Lampiran 18. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji pH sediaan cream ekstrak kayu secang.

Formula	Hari ke-1	Hari ke-7	Hari ke-14	Hari ke-21
Formula I	6,80	6,70	6,58	6,50
	6,75	6,65	6,50	6,00
	6,79	6,60	6,52	7,17
Formula II	6,50	6,30	6,20	610
	6,40	6,30	6,15	6,00
	6,41	6,30	6,15	6,00
Formula III	6,30	6,20	6,10	5,90
	6,25	6,19	6,09	5,95
	6,30	6,19	6,05	5,95
Formula IV	6,76	6,70	6,62	6,59
	6,80	6,70	6,60	6,5
	6,73	6,68	6,60	6,5

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
UjipH	48	6,4113	,29583	5,90	7,17

One-Sample Kolmogorov-Smirnov Test

		UjipH
N		48
Normal Parameters[a,b]	Mean	6,4113
	Std. Deviation	,29583
Most Extreme Differences	Absolute	,118
	Positive	,105
	Negative	-,118
Kolmogorov-Smirnov Z		,817
Asymp. Sig. (2-tailed)		,517

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

Kesimpulan : Sig 0,517 > 0,05, maka data hasil uji pH sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Formula	1	Ekstrak 3%	12
	2	Ekstrak 6%	12
	3	Ekstrak 9%	12
	4	Kontrol negatif	12
Waktu	1	Hari ke 1	12
	2	Hari ke 7	12
	3	Hari ke 14	12
	4	Hari ke 21	12

Descriptive Statistics

Dependent Variable: UjipH

Formula	Waktu	Mean	Std. Deviation	N
Ekstrak 3%	Hari ke 1	6,7800	,02646	3
	Hari ke 7	6,6500	,05000	3
	Hari ke 14	6,5333	,04163	3
	Hari ke 21	6,5567	,58705	3
	Total	6,6300	,27170	12
Ekstrak 6%	Hari ke 1	6,4367	,05508	3
	Hari ke 7	6,3000	,00000	3
	Hari ke 14	6,1667	,02887	3
	Hari ke 21	6,0333	,05774	3
	Total	6,2342	,16099	12
Ekstrak 9%	Hari ke 1	6,2833	,02887	3
	Hari ke 7	6,1933	,00577	3
	Hari ke 14	6,0800	,02646	3
	Hari ke 21	5,9333	,02887	3
	Total	6,1225	,13824	12
Kontrol negative	Hari ke 1	6,7633	,03512	3
	Hari ke 7	6,7333	,05774	3
	Hari ke 14	6,6067	,01155	3
	Hari ke 21	6,5300	,05196	3
	Total	6,6583	,10539	12
Total	Hari ke 1	6,5658	,22476	12
	Hari ke 7	6,4692	,23994	12
	Hari ke 14	6,3467	,23830	12
	Hari ke 21	6,2633	,38845	12
	Total	6,4113	,29583	48

Ranks

	Formula	N	Mean Rank
UjipH	Ekstrak 3%	12	34,17
	Ekstrak 6%	12	16,00
	Ekstrak 9%	12	10,83
	Kontrol negatif	12	37,00
	Total	48	

Test Statistics[a,b]

	UjipH
Chi-Square	31,250
df	3
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Formula 1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,314	3		,893	3	,363
Standardized Residual for Hari7	,175	3		1,000	3	1,000
Standardized Residual for Hari14	,292	3		,923	3	,463
Standardized Residual for Hari21	,205	3		,993	3	,840

a. Lilliefors Significance Correction

jika nilai sig. > 0.05 maka variabel terdistribusi normal

karena sig > 0.05 data pH yaitu normal dapat di lakukan uji repeated measures anova

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,113	3	,038	,431	,738
	Greenhouse-Geisser	,113	1,002	,113	,431	,579
	Huynh-Feldt	,113	1,009	,112	,431	,580
	Lower-bound	,113	1,000	,113	,431	,579
Error(waktu)	Sphericity Assumed	,524	6	,087		
	Greenhouse-Geisser	,524	2,004	,261		
	Huynh-Feldt	,524	2,017	,260		
	Lower-bound	,524	2,000	,262		

nilai greenhouse-geisser sig. sebesar 0,579> 0,05 yang artinya tidak ada perbedaan rata-rata penurunan nilai pH yang nyata(signifikan) dari waktu ke waktu

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	,130	,030	,296	-,197	,457
	3	.247*	,015	,021	,088	,405
	4	,223	,328	1,000	-3,352	3,799
2	1	-,130	,030	,296	-,457	,197
	3	,117	,020	,173	-,104	,337
	4	,093	,356	1,000	-3,784	3,971
3	1	-.247*	,015	,021	-,405	-,088
	2	-,117	,020	,173	-,337	,104
	4	-,023	,336	1,000	-3,681	3,634
4	1	-,223	,328	1,000	-3,799	3,352
	2	-,093	,356	1,000	-3,971	3,784
	3	,023	,336	1,000	-3,634	3,681

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 2

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,314	3		,893	3	,363
Standardized Residual for Hari7	,175	3		1,000	3	1,000
Standardized Residual for Hari14	,292	3		,923	3	,463
Standardized Residual for Hari21	,205	3		,993	3	,840

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,271	3	,090	123,510	,000
	Greenhouse-Geisser	,271	1,013	,267	123,510	,008
	Huynh-Feldt	,271	1,053	,257	123,510	,007
	Lower-bound	,271	1,000	,271	123,510	,008
Error(waktu)	Sphericity Assumed	,004	6	,001		
	Greenhouse-Geisser	,004	2,026	,002		
	Huynh-Feldt	,004	2,107	,002		
	Lower-bound	,004	2,000	,002		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	,137	,032	,301	-,209	,483
	3	.270*	,015	,019	,104	,436
	4	.403*	,003	,000	,367	,440
2	1	-,137	,032	,301	-,483	,209
	3	,133	,017	,092	-,048	,315
	4	,267	,033	,092	-,096	,630
3	1	-.270*	,015	,019	-,436	-,104
	2	-,133	,017	,092	-,315	,048
	4	,133	,017	,092	-,048	,315
4	1	-.403*	,003	,000	-,440	-,367
	2	-,267	,033	,092	-,630	,096
	3	-,133	,017	,092	-,315	,048

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 3

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,385	3		,750	3	,000
Standardized Residual for Hari7	,385	3		,750	3	,000
Standardized Residual for Hari14	,314	3		,893	3	,363
Standardized Residual for Hari21	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,205	3	,068	86,495	,000
	Greenhouse-Geisser	,205	1,960	,105	86,495	,001
	Huynh-Feldt	,205	3,000	,068	86,495	,000
	Lower-bound	,205	1,000	,205	86,495	,011
Error(waktu)	Sphericity Assumed	,005	6	,001		
	Greenhouse-Geisser	,005	3,921	,001		
	Huynh-Feldt	,005	6,000	,001		
	Lower-bound	,005	2,000	,002		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	,090	,015	,166	-,076	,256
	3	,203	,026	,096	-,080	,487
	4	.350*	,029	,040	,036	,664
2	1	-,090	,015	,166	-,256	,076
	3	,113	,013	,081	-,032	,258
	4	.260*	,020	,035	,042	,478
3	1	-,203	,026	,096	-,487	,080
	2	-,113	,013	,081	-,258	,032
	4	,147	,029	,223	-,170	,463
4	1	-.350*	,029	,040	-,664	-,036
	2	-.260*	,020	,035	-,478	-,042
	3	-,147	,029	,223	-,463	,170

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 4

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,204	3		,993	3	,843
Standardized Residual for Hari7	,385	3		,750	3	,000
Standardized Residual for Hari14	,385	3		,750	3	,000
Standardized Residual for Hari21	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,107	3	,036	15,140	,003
	Greenhouse-Geisser	,107	1,708	,063	15,140	,021
	Huynh-Feldt	,107	3,000	,036	15,140	,003
	Lower-bound	,107	1,000	,107	15,140	,060
Error(waktu)	Sphericity Assumed	,014	6	,002		
	Greenhouse-Geisser	,014	3,416	,004		
	Huynh-Feldt	,014	6,000	,002		
	Lower-bound	,014	2,000	,007		

nilai greenhouse-geisser sig. sebesar 0,021< 0,05 yang artinya ada perbedaan rata-rata penurunan nilai pH yang nyata(signifikan) dari waktu ke waktu

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	,030	,051	1,000	-,529	,589
	3	,157	,022	,113	-,081	,395
	4	,233	,038	,150	-,176	,642
2	1	-,030	,051	1,000	-,589	,529
	3	,127	,037	,457	-,277	,531
	4	,203	,055	,394	-,394	,801
3	1	-,157	,022	,113	-,395	,081
	2	-,127	,037	,457	-,531	,277
	4	,077	,023	,489	-,177	,331
4	1	-,233	,038	,150	-,642	,176
	2	-,203	,055	,394	-,801	,394
	3	-,077	,023	,489	-,331	,177

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Lampiran 19. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji viskositas sediaan cream ekstrak kayu secang.

Formula	Hari ke-1	Hari ke-7	Hari ke-14	Hari ke-21
Formula I	350	350	310	300
	340	295	290	270
	370	310	285	275
Formula II	570	550	540	535
	600	550	550	535
	580	530	535	540
Formula III	960	690	675	630
	970	700	650	655
	1000	680	660	650
Formula IV	200	190	185	160
	195	200	180	150
	220	180	170	150

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hasil Viskositas	48	447,08	230,261	150	1000

One-Sample Kolmogorov-Smirnov Test

		Hasil Viskositas
N		48
Normal Parameters[a,b]	Mean	447,08
	Std. Deviation	230,261
Most Extreme Differences	Absolute	,143
	Positive	,143
	Negative	-,141
Kolmogorov-Smirnov Z		,987
Asymp. Sig. (2-tailed)		,284

a. Test distribution is Normal.

b. Calculated from data.

Kesimpulan : Sig 0,284 > 0,05, maka data hasil uji viskositas sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Waktu	1	Waktu ke 1	12
	2	Waktu ke 7	12
	3	Waktu ke 14	12
	4	Waktu ke 21	12
Formula	1	Ekstrak 3%	12
	2	Ekstrak 6%	12
	3	Ekstrak 9%	12
	4	Kontrol negatif	12

Descriptive Statistics

Dependent Variable: Hasil Viskositas

Waktu	Formula	Mean	Std. Deviation	N
Waktu ke 1	Ekstrak 3%	353,33	15,275	3
	Ekstrak 6%	583,33	15,275	3
	Ekstrak 9%	976,67	20,817	3
	Kontrol negatif	205,00	13,229	3
	Total	529,58	304,470	12
Waktu ke 7	Ekstrak 3%	318,33	28,431	3
	Ekstrak 6%	543,33	11,547	3
	Ekstrak 9%	690,00	10,000	3
	Kontrol negatif	190,00	10,000	3
	Total	435,42	203,039	12
Waktu ke 14	Ekstrak 3%	295,00	13,229	3
	Ekstrak 6%	541,67	7,638	3
	Ekstrak 9%	661,67	12,583	3
	Kontrol negatif	178,33	7,638	3
	Total	419,17	200,588	12
Waktu ke 21	Ekstrak 3%	281,67	16,073	3
	Ekstrak 6%	536,67	2,887	3
	Ekstrak 9%	645,00	13,229	3
	Kontrol negatif	153,33	5,774	3
	Total	404,17	204,804	12
Total	Ekstrak 3%	312,08	32,784	12
	Ekstrak 6%	551,25	21,440	12
	Ekstrak 9%	743,33	142,260	12
	Kontrol negatif	181,67	21,356	12
	Total	447,08	230,261	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Hasil Viskositas

F	df1	df2	Sig.
1,759	15	32	,088

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

a. Design: Intercept + Waktu + Formula + Waktu * Formula

ANOVA

Hasil Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2247429,167	3	749143,056	134,808	,000
Within Groups	244512,500	44	5557,102		
Total	2491941,667	47			

Hasil Viskositas

Student-Newman-Keuls[a]

Formula	N	Subset for alpha = 0.05			
		1	2	3	4
Kontrol negatif	12	181,67			
Ekstrak 3%	12		312,08		
Ekstrak 6%	12			551,25	
Ekstrak 9%	12				743,33
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 12,000.

viskositas

Formula 1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,253	3		,964	3	,637
Standardized Residual for Hari7	,282	3		,936	3	,510
Standardized Residual for Hari14	,314	3		,893	3	,363
Standardized Residual for Hari21	,328	3		,871	3	,298

a. Lilliefors Significance Correction

jika nilai sig. > 0.05 maka variabel terdistribusi normal

karena sig > 0.05 data pH yaitu normal dapat di lakukan uji repeated measures anova

Tests of Within-Subjects Effects

Measure: Viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	8872,917	3	2957,639	13,964	,004
	Greenhouse-Geisser	8872,917	1,435	6184,287	13,964	,035
	Huynh-Feldt	8872,917	3,000	2957,639	13,964	,004
	Lower-bound	8872,917	1,000	8872,917	13,964	,065
Error(waktu)	Sphericity Assumed	1270,833	6	211,806		
	Greenhouse-Geisser	1270,833	2,870	442,876		
	Huynh-Feldt	1270,833	6,000	211,806		
	Lower-bound	1270,833	2,000	635,417		

nilai greenhouse-geisser sig. sebesar 0,035> 0,05 yang artinya ada perbedaan rata-rata penurunan nilai pH yang nyata(signifikan) dari waktu ke waktu

Pairwise Comparisons

Measure: Viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	35,000	18,028	1,000	-161,248	231,248
	3	58,333	13,642	,303	-90,174	206,841
	4	71,667	13,017	,189	-70,036	213,369
2	1	-35,000	18,028	1,000	-231,248	161,248
	3	23,333	10,138	,888	-87,027	133,694
	4	36,667	7,265	,223	-42,417	115,751
3	1	-58,333	13,642	,303	-206,841	90,174
	2	-23,333	10,138	,888	-133,694	87,027
	4	13,333	3,333	,343	-22,953	49,620
4	1	-71,667	13,017	,189	-213,369	70,036
	2	-36,667	7,265	,223	-115,751	42,417
	3	-13,333	3,333	,343	-49,620	22,953

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Formula 2

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,253	3		,964	3	,637
Standardized Residual for Hari7	,385	3		,750	3	,000
Standardized Residual for Hari14	,253	3		,964	3	,637
Standardized Residual for Hari21	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	4189,583	3	1396,528	16,218	,003
	Greenhouse-Geisser	4189,583	1,926	2175,444	16,218	,013
	Huynh-Feldt	4189,583	3,000	1396,528	16,218	,003
	Lower-bound	4189,583	1,000	4189,583	16,218	,056
Error(waktu)	Sphericity Assumed	516,667	6	86,111		
	Greenhouse-Geisser	516,667	3,852	134,140		
	Huynh-Feldt	516,667	6,000	86,111		
	Lower-bound	516,667	2,000	258,333		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	40,000	10,000	,343	-68,859	148,859
	3	41,667	6,009	,121	-23,749	107,083
	4	46,667	9,280	,224	-54,350	147,683
2	1	-40,000	10,000	,343	-148,859	68,859
	3	1,667	4,410	1,000	-46,335	49,669
	4	6,667	8,333	1,000	-84,049	97,382
3	1	-41,667	6,009	,121	-107,083	23,749
	2	-1,667	4,410	1,000	-49,669	46,335
	4	5,000	5,774	1,000	-57,850	67,850
4	1	-46,667	9,280	,224	-147,683	54,350
	2	-6,667	8,333	1,000	-97,382	84,049
	3	-5,000	5,774	1,000	-67,850	57,850

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Formula 3

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,292	3		,923	3	,463
Standardized Residual for Hari7	,175	3		1,000	3	1,000
Standardized Residual for Hari14	,219	3		,987	3	,780
Standardized Residual for Hari21	,314	3		,893	3	,363

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	220883,333	3	73627,778	279,747	,000
	Greenhouse-Geisser	220883,333	1,856	119004,604	279,747	,000
	Huynh-Feldt	220883,333	3,000	73627,778	279,747	,000
	Lower-bound	220883,333	1,000	220883,333	279,747	,004
Error(waktu)	Sphericity Assumed	1579,167	6	263,194		
	Greenhouse-Geisser	1579,167	3,712	425,401		
	Huynh-Feldt	1579,167	6,000	263,194		
	Lower-bound	1579,167	2,000	789,583		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	286.667*	16,667	,020	105,236	468,098
	3	315.000*	16,073	,016	140,034	489,966
	4	331.667*	10,138	,006	221,306	442,027
2	1	-286.667*	16,667	,020	-468,098	-105,236
	3	28,333	10,929	,733	-90,639	147,306
	4	45,000	8,660	,211	-49,274	139,274
3	1	-315.000*	16,073	,016	-489,966	-140,034
	2	-28,333	10,929	,733	-147,306	90,639
	4	16,667	14,814	1,000	-144,593	177,926
4	1	-331.667*	10,138	,006	-442,027	-221,306
	2	-45,000	8,660	,211	-139,274	49,274
	3	-16,667	14,814	1,000	-177,926	144,593

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formulas 4

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,314	3		,893	3	,363
Standardized Residual for Hari7	,175	3		1,000	3	1,000
Standardized Residual for Hari14	,253	3		,964	3	,637
Standardized Residual for Hari21	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	4283,333	3	1427,778	12,166	,006
	Greenhouse-Geisser	4283,333	1,294	3309,719	12,166	,049
	Huynh-Feldt	4283,333	2,667	1606,005	12,166	,009
	Lower-bound	4283,333	1,000	4283,333	12,166	,073
Error(waktu)	Sphericity Assumed	704,167	6	117,361		
	Greenhouse-Geisser	704,167	2,588	272,054		
	Huynh-Feldt	704,167	5,334	132,011		
	Lower-bound	704,167	2,000	352,083		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	15,000	13,229	1,000	-129,006	159,006
	3	26,667	11,667	,898	-100,335	153,668
	4	51,667	9,280	,185	-49,350	152,683
2	1	-15,000	13,229	1,000	-159,006	129,006
	3	11,667	4,410	,708	-36,335	59,669
	4	36,667	6,667	,189	-35,906	109,239
3	1	-26,667	11,667	,898	-153,668	100,335
	2	-11,667	4,410	,708	-59,669	36,335
	4	25,000	2,887	,078	-6,425	56,425
4	1	-51,667	9,280	,185	-152,683	49,350
	2	-36,667	6,667	,189	-109,239	35,906
	3	-25,000	2,887	,078	-56,425	6,425

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Lampiran 20. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji daya sebar sediaan cream ekstrak kayu secang

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
DayaSebar	240	6.186	1.2054	3.5	9.4

One-Sample Kolmogorov-Smirnov Test

		DayaSebar
N		240
Normal Parameters[a,b]	Mean	6.186
	Std. Deviation	1.2054
Most Extreme Differences	Absolute	.062
	Positive	.062
	Negative	-.037
Kolmogorov-Smirnov Z		.955
Asymp. Sig. (2-tailed)		.321

a. Test distribution is Normal.

b. Calculated from data.

Kesimpulan : Sig 0,321 > 0,05, maka data hasil uji daya sebar sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Waktu	1	Hari ke 1	60
	2	Hari ke 7	60
	3	Hari ke 14	60
	4	Hari ke 21	60
Formula	1	Ekstrak 3%	60
	2	Ekstrak 6%	60
	3	Ekstrak 9%	60
	4	Kontrol negatif	60

Descriptive Statistics

Dependent Variable: DayaSebar

Waktu	Formula	Mean	Std. Deviation	N
	Ekstrak 3%	5.580	.7975	15
	Ekstrak 6%	5.000	.7378	15
Hari ke 1	Ekstrak 9%	4.613	.6402	15
	Kontrol negatif	5.847	.7080	15
	Total	5.260	.8563	60
	Ekstrak 3%	6.367	.8278	15
	Ekstrak 6%	5.527	.7015	15
Hari ke 7	Ekstrak 9%	5.040	.7414	15
	Kontrol negatif	7.320	.6361	15
	Total	6.063	1.1270	60
	Ekstrak 3%	6.467	.6355	15
	Ekstrak 6%	5.980	.6847	15
Hari ke 14	Ekstrak 9%	5.573	.6912	15
	Kontrol negatif	7.640	.6423	15
	Total	6.415	1.0143	60
	Ekstrak 3%	7.313	.7367	15
	Ekstrak 6%	6.507	.8216	15
Hari ke 21	Ekstrak 9%	6.047	.7386	15
	Kontrol negatif	8.160	.7935	15
	Total	7.007	1.1080	60
	Ekstrak 3%	6.432	.9600	60
	Ekstrak 6%	5.753	.9122	60
Total	Ekstrak 9%	5.318	.8763	60
	Kontrol negatif	7.242	1.1015	60
	Total	6.186	1.2054	240

Levene's Test of Equality of Error Variances[a]

Dependent Variable: DayaSebar

F	df1	df2	Sig.
.415	15	224	.974

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

a.Design: Intercept + Waktu + Formula + Waktu * Formula

ANOVA

DayaSebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	126.890	3	42.297	45.300	.000
Within Groups	220.355	236	.934		
Total	347.245	239			

DayaSebar

Student-Newman-Keuls[a]

Formula	N	Subset for alpha = 0.05			
		1	2	3	4
Ekstrak 9%	60	5.318			
Ekstrak 6%	60		5.753		
Ekstrak 3%	60			6.432	
Kontrol negatif	60				7.242
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 60.000.

ANOVA

DayaSebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	95.907	3	31.969	30.018	.000
Within Groups	251.337	236	1.065		
Total	347.245	239			

DayaSebar

Student-Newman-Keuls[a]

Waktu	N	Subset for alpha = 0.05		
		1	2	3
Hari ke 1	60	5.260		
Hari ke 7	60		6.063	
Hari ke 14	60		6.415	
Hari ke 21	60			7.007
Sig.		1.000	.063	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 60.000.

Lampiran 21. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji daya lekat sediaan cream ekstrak kayu secang.

Formula	Hari ke-1	Hari ke-7	Hari ke-14	Hari ke-21
Formula I	157	100,56	90	72
	120	98	87	73
	146	105	89	74
Formula II	166	131,36	122	84,78
	171	134,76	125,34	85
	159	130	120	80,89
Formula III	208	153,22	131,21	91
	175	150	123,1	92,33
	217	150	125,72	91,43
Formula IV	136,04	92,43	67	50
	139,25	90	67	51
	139,17	93,44	65,46	50

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
DayaLekat	48	113,9685	39,64312	50,00	217,00

One-Sample Kolmogorov-Smirnov Test

		DayaLekat
N		48
Normal Parameters[a,b]	Mean	113,9685
	Std. Deviation	39,64312
Most Extreme Differences	Absolute	,135
	Positive	,135
	Negative	-,060
Kolmogorov-Smirnov Z		,937
Asymp. Sig. (2-tailed)		,344

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

Kesimpulan : Sig 0,344 > 0,05, maka data hasil uji daya lekat sediaan cream ekstrak kayu secang terdistribusi normal.

Descriptive Statistics

Dependent Variable: DayaLekat

Formula	Waktu	Mean	Std. Deviation	N
Ekstrak 3%	Waktu ke 1	141,0000	19,00000	3
	Waktu ke 7	101,1867	3,54183	3
	Waktu ke 14	88,6667	1,52753	3
	Waktu ke 21	73,0000	1,00000	3
	Total	100,9633	27,57169	12
Ekstrak 6%	Waktu ke 1	165,3333	6,02771	3
	Waktu ke 7	132,0400	2,45177	3
	Waktu ke 14	122,4467	2,69788	3
	Waktu ke 21	83,5567	2,31202	3
	Total	125,8442	30,60394	12
Ekstrak 9%	Waktu ke 1	200,0000	22,11334	3
	Waktu ke 7	151,0733	1,85907	3
	Waktu ke 14	126,6767	4,13877	3
	Waktu ke 21	91,5867	,67870	3
	Total	142,3342	42,30480	12
Kontrol negative	Waktu ke 1	138,1533	1,83064	3
	Waktu ke 7	91,9567	1,76817	3
	Waktu ke 14	66,4867	,88912	3
	Waktu ke 21	50,3333	,57735	3
	Total	86,7325	34,68529	12
Total	Waktu ke 1	161,1217	28,86400	12
	Waktu ke 7	119,0642	24,84940	12
	Waktu ke 14	101,0692	26,01154	12
	Waktu ke 21	74,6192	16,22253	12
	Total	113,9685	39,64312	48

Levene's Test of Equality of Error Variances[a]

Dependent Variable: DayaLekat

F	df1	df2	Sig.
6,893	15	32	,000

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

a. Design: Intercept + Formula + Waktu + Formula * Waktu

Ranks

	Formula	N	Mean Rank
DayaLekat	Ekstrak 3%	12	20,08
	Ekstrak 6%	12	28,71
	Ekstrak 9%	12	33,75
	Kontrol negatif	12	15,46
	Total	48	

Test Statistics[a,b]

	DayaLekat
Chi-Square	12,526
Df	3
Asymp. Sig.	,006

a. Kruskal Wallis Test

b. Grouping Variable: Formula

Formula 1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,270	3		,948	3	,561
Standardized Residual for Hari7	,237	3		,977	3	,706
Standardized Residual for Hari14	,253	3		,964	3	,637
Standardized Residual for Hari21	,175	3		1,000	3	1,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: dayalekat

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	7608,422	3	2536,141	30,480	,000
	Greenhouse-Geisser	7608,422	1,039	7322,573	30,480	,029
	Huynh-Feldt	7608,422	1,162	6544,936	30,480	,022
	Lower-bound	7608,422	1,000	7608,422	30,480	,031
Error(waktu)	Sphericity Assumed	499,243	6	83,207		
	Greenhouse-Geisser	499,243	2,078	240,243		
	Huynh-Feldt	499,243	2,325	214,730		
	Lower-bound	499,243	2,000	249,622		

Pairwise Comparisons

Measure: dayalekat

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	39,813	9,960	,344	-68,606	148,233
	3	52,333	10,088	,211	-57,489	162,155
	4	68,000	11,150	,155	-53,383	189,383
2	1	-39,813	9,960	,344	-148,233	68,606
	3	12,520	1,745	,113	-6,472	31,512
	4	28.187*	1,742	,023	9,223	47,151
3	1	-52,333	10,088	,211	-162,155	57,489
	2	-12,520	1,745	,113	-31,512	6,472
	4	15.667*	1,202	,035	2,583	28,750
4	1	-68,000	11,150	,155	-189,383	53,383
	2	-28.187*	1,742	,023	-47,151	-9,223
	3	-15.667*	1,202	,035	-28,750	-2,583

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

formula 2

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,211	3		,991	3	,817
Standardized Residual for Hari7	,276	3		,942	3	,537
Standardized Residual for Hari14	,232	3		,979	3	,725
Standardized Residual for Hari21	,368	3		,790	3	,091

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: dayalekat

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	10192,675	3	3397,558	854,804	,000
	Greenhouse-Geisser	10192,675	1,326	7684,337	854,804	,000
	Huynh-Feldt	10192,675	2,938	3468,740	854,804	,000
	Lower-bound	10192,675	1,000	10192,675	854,804	,001
Error(waktu)	Sphericity Assumed	23,848	6	3,975		
	Greenhouse-Geisser	23,848	2,653	8,990		
	Huynh-Feldt	23,848	5,877	4,058		
	Lower-bound	23,848	2,000	11,924		

Pairwise Comparisons

Measure: dayalekat

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	33.293*	2,196	,026	9,390	57,196
	3	42.887*	2,002	,013	21,098	64,675
	4	81.777*	2,295	,005	56,798	106,755
2	1	-33.293*	2,196	,026	-57,196	-9,390
	3	9.593*	,204	,003	7,372	11,815
	4	48.483*	,970	,002	37,924	59,042
3	1	-42.887*	2,002	,013	-64,675	-21,098
	2	-9.593*	,204	,003	-11,815	-7,372
	4	38.890*	,907	,003	29,013	48,767
4	1	-81.777*	2,295	,005	-106,755	-56,798
	2	-48.483*	,970	,002	-59,042	-37,924
	3	-38.890*	,907	,003	-48,767	-29,013

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 3

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,308	3		,902	3	,391
Standardized Residual for Hari7	,385	3		,750	3	,000
Standardized Residual for Hari14	,258	3		,960	3	,615
Standardized Residual for Hari21	,258	3		,960	3	,616

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: dayalekat

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	18666,562	3	6222,187	52,829	,000
	Greenhouse-Geisser	18666,562	1,043	17894,062	52,829	,016
	Huynh-Feldt	18666,562	1,180	15812,767	52,829	,011
	Lower-bound	18666,562	1,000	18666,562	52,829	,018
Error(waktu)	Sphericity Assumed	706,679	6	117,780		
	Greenhouse-Geisser	706,679	2,086	338,717		
	Huynh-Feldt	706,679	2,361	299,320		
	Lower-bound	706,679	2,000	353,340		

Pairwise Comparisons

Measure: dayalekat

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	48,927	12,473	,356	-86,848	184,702
	3	73,323	11,499	,142	-51,858	198,504
	4	108,413	13,107	,086	-34,271	251,097
2	1	-48,927	12,473	,356	-184,702	86,848
	3	24.397*	1,413	,020	9,017	39,777
	4	59.487*	1,391	,003	44,343	74,630
3	1	-73,323	11,499	,142	-198,504	51,858
	2	-24.397*	1,413	,020	-39,777	-9,017
	4	35.090*	2,754	,037	5,107	65,073
4	1	-108,413	13,107	,086	-251,097	34,271
	2	-59.487*	1,391	,003	-74,630	-44,343
	3	-35.090*	2,754	,037	-65,073	-5,107

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 4

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for Hari1	,377	3		,769	3	,042
Standardized Residual for Hari7	,272	3		,946	3	,553
Standardized Residual for Hari14	,385	3		,750	3	,000
Standardized Residual for Hari21	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: dayalekat

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	13218,561	3	4406,187	1846,211	,000
	Greenhouse-Geisser	13218,561	1,920	6886,063	1846,211	,000
	Huynh-Feldt	13218,561	3,000	4406,187	1846,211	,000
	Lower-bound	13218,561	1,000	13218,561	1846,211	,001
Error(waktu)	Sphericity Assumed	14,320	6	2,387		
	Greenhouse-Geisser	14,320	3,839	3,730		
	Huynh-Feldt	14,320	6,000	2,387		
	Lower-bound	14,320	2,000	7,160		

Pairwise Comparisons

Measure: dayalekat

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	46.197*	1,645	,008	28,292	64,101
	3	71.667*	1,379	,002	56,652	86,682
	4	87.820*	,929	,001	77,709	97,931
2	1	-46.197*	1,645	,008	-64,101	-28,292
	3	25.470*	1,438	,019	9,819	41,121
	4	41.623*	1,344	,006	26,996	56,250
3	1	-71.667*	1,379	,002	-86,682	-56,652
	2	-25.470*	1,438	,019	-41,121	-9,819
	4	16.153*	,451	,005	11,242	21,064
4	1	-87.820*	,929	,001	-97,931	-77,709
	2	-41.623*	1,344	,006	-56,250	-26,996
	3	-16.153*	,451	,005	-21,064	-11,242

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Lampiran 22. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji pH stabilitas sediaan cream ekstrak kayu secang.

Siklus	Replikasi	Formula I	Formula II	Formula III	Formula IV
1	1	6,58	6,20	6	6,70
	2	6,53	6,20	5,97	6,68
	3	6,50	6,22	5,95	6,68
2	1	6,48	6,1	5,90	6,60
	2	6,45	6,08	5,87	6,59
	3	6,47	6,14	5,85	6,57
3	1	6,40	5,97	5,75	6,52
	2	6,36	5,95	5,78	6,46
	3	6,39	5,94	5,77	6,50
4	1	6,30	5,87	5,66	6,40
	2	6,25	5,83	5,66	6,36
	3	6,28	5,89	5,66	6,36
5	1	6,19	5,75	5,55	6,30
	2	6,20	5,73	5,50	6,28
	3	6,19	5,72	5,54	6,25
6	1	6,10	5,65	5,33	6,20
	2	6,11	5,66	5,35	6,19
	3	6,09	5,66	5,34	6,18

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
pH	60	6,1470	,33217	5,50	6,70

One-Sample Kolmogorov-Smirnov Test

		pH
N		72
Normal Parameters[a,b]	Mean	6,0928
	Std. Deviation	,35576
Most Extreme Differences	Absolute	,097
	Positive	,060
	Negative	-,097
Kolmogorov-Smirnov Z		,822
Asymp. Sig. (2-tailed)		,509

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

Kesimpulan : Sig 0,509 > 0,05, maka data hasil uji pH stabilitas sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Formula	1	Ekstrak 3%	18
	2	Ekstrak 6%	18
	3	Ekstrak 9%	18
	4	Kontrol negatif	18
Siklus	1	Siklus 1	12
	2	Siklus 2	12
	3	Siklus 3	12
	4	Siklus 4	12
	5	Siklus 5	12
	6	Siklus 6	12

Descriptive Statistics

Dependent Variable: pH

Formula	Siklus	Mean	Std. Deviation	N
Ekstrak 3%	Siklus 1	6,5367	,04041	3
	Siklus 2	6,4667	,01528	3
	Siklus 3	6,3833	,02082	3
	Siklus 4	6,2767	,02517	3
	Siklus 5	6,1933	,00577	3
	Siklus 6	6,1000	,01000	3
	Total	6,3261	,15752	18
Ekstrak 6%	Siklus 1	6,2067	,01155	3
	Siklus 2	6,1067	,03055	3
	Siklus 3	5,9533	,01528	3
	Siklus 4	5,8633	,03055	3
	Siklus 5	5,7333	,01528	3
	Siklus 6	5,6567	,00577	3
	Total	5,9200	,20024	18
Ekstrak 9%	Siklus 1	5,9733	,02517	3
	Siklus 2	5,8733	,02517	3
	Siklus 3	5,7667	,01528	3
	Siklus 4	5,6600	,00000	3
	Siklus 5	5,5300	,02646	3
	Siklus 6	5,3400	,01000	3
	Total	5,6906	,21840	18
Kontrol negative	Siklus 1	6,6867	,01155	3
	Siklus 2	6,5867	,01528	3
	Siklus 3	6,4933	,03055	3
	Siklus 4	6,3733	,02309	3
	Siklus 5	6,2767	,02517	3
	Siklus 6	6,1900	,01000	3
	Total	6,4344	,17840	18
Total	Siklus 1	6,3508	,29184	12
	Siklus 2	6,2583	,29716	12
	Siklus 3	6,1492	,31298	12
	Siklus 4	6,0433	,30634	12
	Siklus 5	5,9333	,32581	12
	Siklus 6	5,8217	,35901	12
	Total	6,0928	,35576	72

Levene's Test of Equality of Error Variances[a]

Dependent Variable: pH

F	df1	df2	Sig.
1,648	23	48	,072

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

a. Design: Intercept + Formula + Siklus + Formula * Siklus

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6,531	3	2,177	60,288	,000
Within Groups	2,455	68	,036		
Total	8,986	71			

pH

Student-Newman-Keuls[a]

Formula	N	Subset for alpha = 0.05		
		1	2	3
Ekstrak 9%	18	5,6906		
Ekstrak 6%	18		5,9200	
Ekstrak 3%	18			6,3261
Kontrol negatif	18			6,4344
Sig.		1,000	1,000	,092

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 18,000.

ANOVA

pH

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,383	5	,477	4,763	,001
Within Groups	6,603	66	,100		
Total	8,986	71			

pH

Student-Newman-Keuls[a]

Siklus	N	Subset for alpha = 0.05		
		1	2	3
Siklus 6	12	5,8217		
Siklus 5	12	5,9333	5,9333	
Siklus 4	12	6,0433	6,0433	6,0433
Siklus 3	12	6,1492	6,1492	6,1492
Siklus 2	12		6,2583	6,2583
Siklus 1	12			6,3508
Sig.		,064	,067	,091

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,000.

Formula 1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,232	3		,980	3	,726
Standardized Residual for siklus2	,253	3		,964	3	,637
Standardized Residual for siklus3	,292	3		,923	3	,463
Standardized Residual for siklus4	,219	3		,987	3	,780
Standardized Residual for siklus5	,385	3		,750	3	,000
Standardized Residual for siklus6	,175	3		1,000	3	1,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	,416	5	,083	211,969	,000
	Greenhouse-Geisser	,416	1,976	,210	211,969	,000
	Huynh-Feldt	,416	5,000	,083	211,969	,000
	Lower-bound	,416	1,000	,416	211,969	,005
Error(waktu)	Sphericity Assumed	,004	10	,000		
	Greenhouse-Geisser	,004	3,952	,001		
	Huynh-Feldt	,004	10,000	,000		
	Lower-bound	,004	2,000	,002		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	,070	,021	1,000	-,290	,430
	3	,153	,022	,296	-,224	,531
	4	,260	,020	,088	-,086	,606
	5	,343	,024	,073	-,072	,759
	6	.437*	,022	,037	,059	,814
2	1	-,070	,021	1,000	-,430	,290
	3	.083*	,003	,024	,026	,141
	4	.190*	,006	,014	,090	,290
	5	.273*	,012	,029	,066	,481
	6	.367*	,013	,020	,136	,597
3	1	-,153	,022	,296	-,531	,224
	2	-.083*	,003	,024	-,141	-,026
	4	.107*	,003	,015	,049	,164
	5	,190	,015	,096	-,074	,454
	6	,283	,017	,052	-,005	,571
4	1	-,260	,020	,088	-,606	,086
	2	-.190*	,006	,014	-,290	-,090
	3	-.107*	,003	,015	-,164	-,049
	5	,083	,018	,630	-,221	,388
	6	,177	,019	,163	-,144	,497
5	1	-,343	,024	,073	-,759	,072
	2	-.273*	,012	,029	-,481	-,066
	3	-,190	,015	,096	-,454	,074
	4	-,083	,018	,630	-,388	,221
	6	.093*	,003	,019	,036	,151
6	1	-.437*	,022	,037	-,814	-,059
	2	-.367*	,013	,020	-,597	-,136
	3	-,283	,017	,052	-,571	,005
	4	-,177	,019	,163	-,497	,144
	5	-.093*	,003	,019	-,151	-,036

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 2

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,385	3		,750	3	,000
Standardized Residual for siklus2	,253	3		,964	3	,637
Standardized Residual for siklus3	,253	3		,964	3	,637
Standardized Residual for siklus4	,253	3		,964	3	,637
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: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,677	5	,135	365,730	,000
	Greenhouse-Geisser	,677	1,454	,465	365,730	,000
	Huynh-Feldt	,677	4,323	,156	365,730	,000
	Lower-bound	,677	1,000	,677	365,730	,003
Error(waktu)	Sphericity Assumed	,004	10	,000		
	Greenhouse-Geisser	,004	2,908	,001		
	Huynh-Feldt	,004	8,647	,000		
	Lower-bound	,004	2,000	,002		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	,100	,012	,196	-,099	,299
	3	.253*	,015	,049	,002	,504
	4	.343*	,013	,023	,113	,574
	5	.473*	,015	,014	,222	,724
	6	.550*	,006	,002	,450	,650
2	1	-,100	,012	,196	-,299	,099
	3	,153	,023	,336	-,250	,556
	4	.243*	,007	,011	,128	,359
	5	,373	,023	,058	-,030	,776
	6	.450*	,017	,022	,151	,749
3	1	-.253*	,015	,049	-,504	-,002
	2	-,153	,023	,336	-,556	,250
	4	,090	,021	,743	-,270	,450
	5	,220	0,000		,220	,220
	6	.297*	,012	,025	,089	,504
4	1	-.343*	,013	,023	-,574	-,113
	2	-.243*	,007	,011	-,359	-,128
	3	-,090	,021	,743	-,450	,270
	5	,130	,021	,370	-,230	,490
	6	,207	,019	,120	-,114	,527
5	1	-.473*	,015	,014	-,724	-,222
	2	-,373	,023	,058	-,776	,030
	3	-,220	0,000		-,220	-,220
	4	-,130	,021	,370	-,490	,230
	6	,077	,012	,356	-,131	,284
6	1	-.550*	,006	,002	-,650	-,450
	2	-.450*	,017	,022	-,749	-,151
	3	-.297*	,012	,025	-,504	-,089
	4	-,207	,019	,120	-,527	,114
	5	-,077	,012	,356	-,284	,131

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 3

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,806	5	,161	400,920	,000
	Greenhouse-Geisser	,806	1,752	,460	400,920	,000
	Huynh-Feldt	,806	5,000	,161	400,920	,000
	Lower-bound	,806	1,000	,806	400,920	,002
Error(waktu)	Sphericity Assumed	,004	10	,000		
	Greenhouse-Geisser	,004	3,504	,001		
	Huynh-Feldt	,004	10,000	,000		
	Lower-bound	,004	2,000	,002		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	.100*	,000	0,000	,100	,100
	3	,207	,022	,165	-,171	,584
	4	.313*	,015	,032	,062	,564
	5	.443*	,018	,024	,139	,748
	6	.633*	,019	,013	,313	,954
2	1	-.100*	,000	0,000	-,100	-,100
	3	,107	,022	,593	-,271	,484
	4	,213	,015	,069	-,038	,464
	5	.343*	,018	,039	,039	,648
	6	.533*	,019	,018	,213	,854
3	1	-,207	,022	,165	-,584	,171
	2	-,107	,022	,593	-,484	,271
	4	,107	,009	,101	-,046	,259
	5	,237	,023	,144	-,166	,640
	6	.427*	,003	,001	,369	,484
4	1	-.313*	,015	,032	-,564	-,062
	2	-,213	,015	,069	-,464	,038
	3	-,107	,009	,101	-,259	,046
	5	,130	,015	,203	-,134	,394
	6	.320*	,006	,005	,220	,420
5	1	-.443*	,018	,024	-,748	-,139
	2	-.343*	,018	,039	-,648	-,039
	3	-,237	,023	,144	-,640	,166
	4	-,130	,015	,203	-,394	,134
	6	,190	,021	,177	-,170	,550
6	1	-.633*	,019	,013	-,954	-,313
	2	-.533*	,019	,018	-,854	-,213
	3	-.427*	,003	,001	-,484	-,369
	4	-.320*	,006	,005	-,420	-,220
	5	-,190	,021	,177	-,550	,170

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Formula 4

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,232	3		,980	3	,726
Standardized Residual for siklus2	,253	3		,964	3	,637
Standardized Residual for siklus3	,292	3		,923	3	,463
Standardized Residual for siklus4	,219	3		,987	3	,780
Standardized Residual for siklus5	,385	3		,750	3	,000
Standardized Residual for siklus6	,175	3		1,000	3	1,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: pH

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	,536	5	,107	567,435	,000
	Greenhouse-Geisser	,536	1,403	,382	567,435	,000
	Huynh-Feldt	,536	3,698	,145	567,435	,000
	Lower-bound	,536	1,000	,536	567,435	,002
Error(waktu)	Sphericity Assumed	,002	10	,000		
	Greenhouse-Geisser	,002	2,806	,001		
	Huynh-Feldt	,002	7,395	,000		
	Lower-bound	,002	2,000	,001		

Pairwise Comparisons

Measure: pH

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	.100*	,006	,050	,000	,200
	3	,193	,013	,071	-,037	,424
	4	.313*	,007	,007	,198	,429
	5	.410*	,010	,009	,237	,583
	6	.497*	,003	,001	,439	,554
2	1	-.100*	,006	,050	-,200	,000
	3	,093	,019	,560	-,227	,414
	4	.213*	,009	,026	,061	,366
	5	.310*	,006	,005	,210	,410
	6	.397*	,003	,001	,339	,454
3	1	-,193	,013	,071	-,424	,037
	2	-,093	,019	,560	-,414	,227
	4	,120	,012	,137	-,079	,319
	5	,217	,020	,130	-,134	,567
	6	.303*	,017	,045	,015	,591
4	1	-.313*	,007	,007	-,429	-,198
	2	-.213*	,009	,026	-,366	-,061
	3	-,120	,012	,137	-,319	,079
	5	,097	,009	,123	-,056	,249
	6	.183*	,009	,035	,031	,336
5	1	-.410*	,010	,009	-,583	-,237
	2	-.310*	,006	,005	-,410	-,210
	3	-,217	,020	,130	-,567	,134
	4	-,097	,009	,123	-,249	,056
	6	,087	,009	,153	-,066	,239
6	1	-.497*	,003	,001	-,554	-,439
	2	-.397*	,003	,001	-,454	-,339
	3	-.303*	,017	,045	-,591	-,015
	4	-.183*	,009	,035	-,336	-,031
	5	-,087	,009	,153	-,239	,066

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Lampiran 23. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji viskositas stabilitas sediaan cream ekstrak kayu secang.

Siklus	Replikasi	Formula I	Formula II	Formula III	Formula IV
1	1	350	600	960	200
	2	340	590	955	190
	3	330	580	940	180
2	1	325	575	930	175
	2	320	580	925	186
	3	310	560	930	175
3	1	290	550	915	168
	2	275	555	910	165
	3	265	550	905	170
4	1	260	540	895	164
	2	265	545	890	160
	3	255	540	885	165
5	1	240	525	875	140
	2	230	530	875	150
	3	235	538	870	150
6	1	200	495	840	110
	2	210	510	845	115
	3	200	495	835	110

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji Stabilitas	72	468,97	289,522	110	960

One-Sample Kolmogorov-Smirnov Test

		Uji Stabilitas
N		72
Normal Parameters[a,b]	Mean	468,97
	Std. Deviation	289,522
Most Extreme Differences	Absolute	,159
	Positive	,159
	Negative	-,150
Kolmogorov-Smirnov Z		1,353
Asymp. Sig. (2-tailed)		,051

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

Kesimpulan : Sig 0,051 > 0,05, maka data hasil uji viskositas stabilitas sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Formula	1	Ekstrak 3%	18
	2	Ekstrak 6%	18
	3	Ekstrak 9%	18
	4	Kontrol negatif	18
Siklus	1	Siklus 1	12
	2	Siklus 2	12
	3	SIklus 3	12
	4	SIklus 4	12
	5	Siklus 5	12
	6	Siklus 6	12

Descriptive Statistics

Dependent Variable: Uji Stabilitas

Formula	Siklus	Mean	Std. Deviation	N
Ekstrak 3%	Siklus 1	340,00	10,000	3
	Siklus 2	318,33	7,638	3
	SIklus 3	276,67	12,583	3
	SIklus 4	260,00	5,000	3
	Siklus 5	225,00	,000	3
	Siklus 6	203,33	5,774	3
	Total	270,56	49,879	18
Ekstrak 6%	Siklus 1	590,00	10,000	3
	Siklus 2	571,67	10,408	3
	SIklus 3	551,67	2,887	3
	SIklus 4	541,67	2,887	3
	Siklus 5	531,00	6,557	3
	Siklus 6	500,00	8,660	3
	Total	547,67	30,289	18
Ekstrak 9%	Siklus 1	951,67	10,408	3
	Siklus 2	928,33	2,887	3
	SIklus 3	910,00	5,000	3
	SIklus 4	890,00	5,000	3
	Siklus 5	866,67	2,887	3
	Siklus 6	841,67	2,887	3
	Total	898,06	38,238	18
Kontrol negatif	Siklus 1	190,00	10,000	3
	Siklus 2	178,67	6,351	3
	SIklus 3	167,67	2,517	3
	SIklus 4	163,00	2,646	3
	Siklus 5	146,67	5,774	3
	Siklus 6	111,67	2,887	3
	Total	159,61	26,433	18
Total	Siklus 1	517,92	301,266	12
	Siklus 2	499,25	297,721	12
	SIklus 3	476,50	299,552	12
	SIklus 4	463,67	295,313	12
	Siklus 5	442,33	296,631	12
	Siklus 6	414,17	298,251	12
	Total	468,97	289,522	72

formula 1

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,175	3		1,000	3	1,000
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	,175	3		1,000	3	1,000
Standardized Residual for siklus6	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: Viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	39061,111	5	7812,222	205,285	,000
	Greenhouse-Geisser	39061,111	1,590	24563,818	205,285	,000
	Huynh-Feldt	39061,111	5,000	7812,222	205,285	,000
	Lower-bound	39061,111	1,000	39061,111	205,285	,005
Error(waktu)	Sphericity Assumed	380,556	10	38,056		

Pairwise Comparisons

Viskositas

(I) waktu	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
				Lower Bound	Upper Bound
2	21,667	1,667	,088	-7,129	50,462
3	63,333*	1,667	,010	34,538	92,129
4	80,000	5,000	,058	-6,386	166,386
5	105,000*	5,000	,034	18,614	191,386
6	136,667*	6,667	,036	21,485	251,848
1	-21,667	1,667	,088	-50,462	7,129
3	41,667	3,333	,095	-15,924	99,257
4	58,333*	3,333	,049	,743	115,924
5	83,333*	4,410	,042	7,148	159,519
6	115,000*	5,000	,028	28,614	201,386
1	-63,333*	1,667	,010	-92,129	-34,538
2	-41,667	3,333	,095	-99,257	15,924
4	16,667	6,667	1,000	-98,515	131,848
5	41,667	6,009	,303	-62,156	145,490
6	73,333	8,333	,190	-70,643	217,310
1	-80,000	5,000	,058	-166,386	6,386
2	-58,333*	3,333	,049	-115,924	-,743
3	-16,667	6,667	1,000	-131,848	98,515
5	25,000	5,000	,566	-61,386	111,386
6	56,667*	1,667	,013	27,871	85,462
1	-105,000*	5,000	,034	-191,386	-18,614
2	-83,333*	4,410	,042	-159,519	-7,148
3	-41,667	6,009	,303	-145,490	62,156
4	-25,000	5,000	,566	-111,386	61,386
6	31,667	6,009	,513	-72,156	135,490
1	-136,667*	6,667	,036	-251,848	-21,485
2	-115,000*	5,000	,028	-201,386	-28,614
3	-73,333	8,333	,190	-217,310	70,643
4	-56,667*	1,667	,013	-85,462	-27,871
5	-31,667	6,009	,513	-135,490	72,156

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

formula 2

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,175	3		1,000	3	1,000
Standardized Residual for siklus2	,292	3		,923	3	,463
Standardized Residual for siklus3	,385	3		,750	3	,000
Standardized Residual for siklus4	,385	3		,750	3	,000
Standardized Residual for siklus5	,227	3		,983	3	,747
Standardized Residual for siklus6	,385	3		,750	3	,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: Viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Waktu	Sphericity Assumed	15891,111	5	3178,222	72,691	,000
	Greenhouse-Geisser	15891,111	1,346	11805,347	72,691	,005
	Huynh-Feldt	15891,111	3,117	5098,058	72,691	,000
	Lower-bound	15891,111	1,000	15891,111	72,691	,013
Error(waktu)	Sphericity Assumed	437,222	10	43,722		
	Greenhouse-Geisser	437,222	2,692	162,404		
	Huynh-Feldt	437,222	6,234	70,133		
	Lower-bound	437,222	2,000	218,611		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
					Lower Bound	Upper Bound
1	2	18,333	4,410	,799	-57,852	94,519
	3	38,333	6,009	,356	-65,490	142,156
	4	48,333	6,009	,227	-55,490	152,156
	5	59,000	9,539	,377	-105,814	223,814
	6	93,333	6,009	,062	-10,490	197,156
2	1	-18,333	4,410	,799	-94,519	57,852
	3	20,000	5,000	,858	-66,386	106,386
	4	30,000	5,000	,400	-56,386	116,386
	5	40,667	9,333	,733	-120,587	201,920
	6	75,000	5,000	,066	-11,386	161,386
3	1	-38,333	6,009	,356	-142,156	65,490
	2	-20,000	5,000	,858	-106,386	66,386
	4	10,000	0,000		10,000	10,000
	5	20,667	4,333	,619	-54,201	95,534
	6	55,000	0,000		55,000	55,000
4	1	-48,333	6,009	,227	-152,156	55,490
	2	-30,000	5,000	,400	-116,386	56,386
	3	-10,000	0,000		-10,000	-10,000
	5	10,667	4,333	1,000	-64,201	85,534
	6	45,000	0,000		45,000	45,000
5	1	-59,000	9,539	,377	-223,814	105,814
	2	-40,667	9,333	,733	-201,920	120,587
	3	-20,667	4,333	,619	-95,534	54,201
	4	-10,667	4,333	1,000	-85,534	64,201
	6	34,333	4,333	,233	-40,534	109,201
6	1	-93,333	6,009	,062	-197,156	10,490
	2	-75,000	5,000	,066	-161,386	11,386
	3	-55,000	0,000		-55,000	-55,000
	4	-45,000	0,000		-45,000	-45,000
	5	-34,333	4,333	,233	-109,201	40,534

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

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	,175	3		1,000	3	1,000
Standardized Residual for siklus4	,175	3		1,000	3	1,000
Standardized Residual for siklus5	,385	3		,750	3	,000
Standardized Residual for siklus6	,175	3		1,000	3	1,000

a. Lilliefors Significance Correction

Tests of Within-Subjects Effects

Measure: viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	23927,778	5	4785,556	265,046	,000
	Greenhouse-Geisser	23927,778	1,578	15160,867	265,046	,000
	Huynh-Feldt	23927,778	5,000	4785,556	265,046	,000
	Lower-bound	23927,778	1,000	23927,778	265,046	,004
Error(waktu)	Sphericity Assumed	180,556	10	18,056		
	Greenhouse-Geisser	180,556	3,157	57,201		
	Huynh-Feldt	180,556	10,000	18,056		
	Lower-bound	180,556	2,000	90,278		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	23,333	6,667	1,000	-91,848	138,515
	3	41,667	3,333	,095	-15,924	99,257
	4	61,667*	3,333	,044	4,076	119,257
	5	78,333*	4,410	,047	2,148	154,519
	6	111,667*	4,410	,023	35,481	187,852
2	1	-23,333	6,667	1,000	-138,515	91,848
	3	18,333	3,333	,473	-39,257	75,924
	4	38,333	3,333	,112	-19,257	95,924
	5	55,000*	2,887	,041	5,125	104,875
	6	88,333*	4,410	,037	12,148	164,519
3	1	-41,667	3,333	,095	-99,257	15,924
	2	-18,333	3,333	,473	-75,924	39,257
	4	20,000	0,000		20,000	20,000
	5	36,667*	1,667	,031	7,871	65,462
	6	70,000*	2,887	,025	20,125	119,875
4	1	-61,667*	3,333	,044	-119,257	-4,076
	2	-38,333	3,333	,112	-95,924	19,257
	3	-20,000	0,000		-20,000	-20,000
	5	16,667	1,667	,148	-12,129	45,462
	6	50,000*	2,887	,050	,125	99,875
5	1	-78,333*	4,410	,047	-154,519	-2,148
	2	-55,000*	2,887	,041	-104,875	-5,125
	3	-36,667*	1,667	,031	-65,462	-7,871
	4	-16,667	1,667	,148	-45,462	12,129
	6	33,333*	1,667	,037	4,538	62,129
6	1	-111,667*	4,410	,023	-187,852	-35,481
	2	-88,333*	4,410	,037	-164,519	-12,148
	3	-70,000*	2,887	,025	-119,875	-20,125
	4	-50,000*	2,887	,050	-99,875	-,125
	5	-33,333*	1,667	,037	-62,129	-4,538

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

formula 4

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for siklus1	,175	3		1,000	3	1,000
Standardized Residual for siklus2	,385	3		,750	3	,000
Standardized Residual for siklus3	,219	3		,987	3	,780
Standardized Residual for siklus4	,314	3		,893	3	,363
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: viskositas

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
waktu	Sphericity Assumed	11487,611	5	2297,522	62,226	,000
	Greenhouse-Geisser	11487,611	1,745	6582,318	62,226	,002
	Huynh-Feldt	11487,611	5,000	2297,522	62,226	,000
	Lower-bound	11487,611	1,000	11487,611	62,226	,016
Error(waktu)	Sphericity Assumed	369,222	10	36,922		
	Greenhouse-Geisser	369,222	3,490	105,781		
	Huynh-Feldt	369,222	10,000	36,922		
	Lower-bound	369,222	2,000	184,611		

Pairwise Comparisons

Measure: viskositas

(I) waktu		Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	11,333	6,839	1,000	-106,833	129,499
	3	22,333	6,489	1,000	-89,784	134,450
	4	27,000	6,245	,743	-80,896	134,896
	5	43,333	8,819	,585	-109,037	195,704
	6	78,333	6,009	,088	-25,490	182,156
2	1	-11,333	6,839	1,000	-129,499	106,833
	3	11,000	5,033	1,000	-75,960	97,960
	4	15,667	5,175	1,000	-73,738	105,071
	5	32,000	3,512	,177	-28,675	92,675
	6	67,000*	2,000	,013	32,446	101,554
3	1	-22,333	6,489	1,000	-134,450	89,784
	2	-11,000	5,033	1,000	-97,960	75,960
	4	4,667	,333	,076	-1,092	10,426
	5	21,000	3,786	,465	-44,410	86,410
	6	56,000*	3,055	,044	3,217	108,783
4	1	-27,000	6,245	,743	-134,896	80,896
	2	-15,667	5,175	1,000	-105,071	73,738
	3	-4,667	,333	,076	-10,426	1,092
	5	16,333	4,096	,863	-54,435	87,102
	6	51,333	3,180	,057	-3,605	106,271
5	1	-43,333	8,819	,585	-195,704	109,037
	2	-32,000	3,512	,177	-92,675	28,675
	3	-21,000	3,786	,465	-86,410	44,410
	4	-16,333	4,096	,863	-87,102	54,435
	6	35,000	2,887	,101	-14,875	84,875
6	1	-78,333	6,009	,088	-182,156	25,490
	2	-67,000*	2,000	,013	-101,554	-32,446
	3	-56,000*	3,055	,044	-108,783	-3,217
	4	-51,333	3,180	,057	-106,271	3,605
	5	-35,000	2,887	,101	-84,875	14,875

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Lampiran 24. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji Anti-Aging sediaan cream ekstrak kayu secang.

Sampel	Skor Pengamatan				
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 4	Replikasi 5
Kontrol +	0	0	0	1	0
Kontrol -	3	2	2	3	3
Konsentrasi 3%	2	2	1	2	3
Konsentrasi 6%	2	2	1	1	1
Konsentrasi 9%	2	0	0	1	0

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Skor pengamatan	25	1,36	1,075	0	3

One-Sample Kolmogorov-Smirnov Test

		Skor pengamatan
N		25
Normal Parameters[a,b]	Mean	1,36
	Std. Deviation	1,075
Most Extreme Differences	Absolute	,204
	Positive	,177
	Negative	-,204
Kolmogorov-Smirnov Z		1,021
Asymp. Sig. (2-tailed)		,249

a. Test distribution is Normal.

b. Calculated from data.

Kesimpulan : Sig 0,249 > 0,05, maka data hasil uji antiaging sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Formula (Sampel)	1	Kontrol positif	5
	2	Kontrol negatif	5
	3	Konsentrasi 3%	5
	4	Konsentrasi 6%	5
	5	Konsentrasi 9%	5

Descriptive Statistics

Dependent Variable: Skor pengamatan

Formula (Sampel)	Mean	Std. Deviation	N
Kontrol positif	,20	,447	5
Kontrol negative	2,60	,548	5
Konsentrasi 3%	2,00	,707	5
Konsentrasi 6%	1,40	,548	5
Konsentrasi 9%	,60	,894	5
Total	1,36	1,075	25

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Skor pengamatan

F	df1	df2	Sig.
1,022	4	20	,420

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

a. Design: Intercept + Formula

ANOVA

Skor pengamatan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19,360	4	4,840	11,524	,000
Within Groups	8,400	20	,420		
Total	27,760	24			

Skor pengamatan

Student-Newman-Keuls[a]

Formula (Sampel)	N	Subset for alpha = 0.05			
		1	2	3	4
Kontrol positif	5	,20			
Konsentrasi 9%	5	,60	,60		
Konsentrasi 6%	5		1,40	1,40	
Konsentrasi 3%	5			2,00	2,00
Kontrol negative	5				2,60
Sig.		,341	,065	,159	,159

Means for groups in homogeneous subsets are displayed.

Kelompok 1

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	Bagian A - Bagian B	-,600	,548	,245	-1,280	,080	-2,449	4	,070

Kelompok 2

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	Bagian A - Bagian B	-1,200	,447	,200	-1,755	-,645	-6,000	4	,004

kelompok 3

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	Bagian A - Bagian B	-2,200	1,095	,490	-3,560	-,840	-4,491	4	,011

Kelompok 4

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	Bagian A - Bagian B	-2,400	,548	,245	-3,080	-1,720	-9,798	4	,001

Lampiran 25. Uji statistik Kolmogorov-Smirnov, analisis one way anova uji histologi sediaan cream ekstrak kayu secang.

Kelompok	Replikasi	Jumlah sel			Total Kerusakan	Jumlah Sel Normal
		Pinoktik	Karioreksis	Kariolisis		
Normal	1	8	25	3	36	64
	2	8	26	3	37	63
	3	7	24	2	33	67
Negatif (-)	1	21	45	6	72	28
	2	20	44	6	70	30
	3	21	44	6	71	29
Positif (+)	1	12	35	3	50	50
	2	11	34	2	47	53
	3	11	35	3	49	51
3%	1	16	41	5	62	38
	2	17	40	5	62	38
	3	16	41	6	63	37
6%	1	14	38	4	56	44
	2	14	39	5	58	42
	3	14	38	5	57	43
9%	1	13	37	4	54	46
	2	12	36	3	51	49
	3	12	37	3	52	48

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Histologi	54	18,15	14,425	2	45

One-Sample Kolmogorov-Smirnov Test

		Histologi
N		54
Normal Parameters[a,b]	Mean	18,15
	Std. Deviation	14,425
Most Extreme Differences	Absolute	,169
	Positive	,169
	Negative	-,142
Kolmogorov-Smirnov Z		1,240
Asymp. Sig. (2-tailed)		,092

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

Kesimpulan : Sig 0,092 > 0,05, maka data hasil uji histologi sediaan cream ekstrak kayu secang terdistribusi normal.

Between-Subjects Factors

		Value Label	N
Kelompok	1	Normal	9
	2	Negatif (-)	9
	3	Positif (+)	9
	4	3%	9
	5	6%	9
	6	9%	9
JumlahSel	1	Pinoktik	18
	2	Karioreksis	18
	3	Kariolisis	18

Descriptive Statistics

Dependent Variable: Histologi

Kelompok	JumlahSel	Mean	Std. Deviation	N
Normal	Pinoktik	7,67	,577	3
	Karioreksis	25,00	1,000	3
	Kariolisis	2,67	,577	3
	Total	11,78	10,171	9
Negatif (-)	Pinoktik	20,67	,577	3
	Karioreksis	44,33	,577	3
	Kariolisis	6,00	,000	3
	Total	23,67	16,756	9
Positif (+)	Pinoktik	11,33	,577	3
	Karioreksis	34,67	,577	3
	Kariolisis	2,67	,577	3
	Total	16,22	14,342	9
3%	Pinoktik	16,33	,577	3
	Karioreksis	40,67	,577	3
	Kariolisis	5,33	,577	3
	Total	20,78	15,667	9
6%	Pinoktik	14,00	,000	3
	Karioreksis	38,33	,577	3
	Kariolisis	4,67	,577	3
	Total	19,00	15,058	9
9%	Pinoktik	12,33	,577	3
	Karioreksis	36,67	,577	3
	Kariolisis	3,33	,577	3
	Total	17,44	14,942	9
Total	Pinoktik	13,72	4,212	18
	Karioreksis	36,61	6,223	18
	Kariolisis	4,11	1,410	18
	Total	18,15	14,425	54

Levene's Test of Equality of Error Variances[a]

Dependent Variable: Histologi

F	df1	df2	Sig.
1,500	17	36	,150

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

a. Design: Intercept + Kelompok + JumlahSel + Kelompok * JumlahSel

ANOVA

Histologi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10035,148	2	5017,574	257,527	,000
Within Groups	993,667	51	19,484		
Total	11028,815	53			

Histologi

Student-Newman-Keuls[a]

JumlahSel	N	Subset for alpha = 0.05		
		1	2	3
Kariolisis	18	4,11		
Pinoktik	18		13,72	
Karioreksis	18			36,61
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 18,000.

Normal

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	total sel rusak - total sel normal	-29,333	4,163	2,404	-39,676	-18,991	-12,203	2	,007

3%

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	total sel rusak - total sel normal	24,667	1,155	,667	21,798	27,535	37,000	2	,001

6%

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	total sel rusak - total sel normal	14,000	2,000	1,155	9,032	18,968	12,124	2	,007

9%

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	total sel rusak - total sel normal	4,667	3,055	1,764	-2,922	12,256	2,646	2	,118

k+

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	total sel rusak - total sel normal	-2,667	3,055	1,764	-10,256	4,922	-1,512	2	,270

k-

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	total sel rusak - total sel normal	42,000	2,000	1,155	37,032	46,968	36,373	2	,001