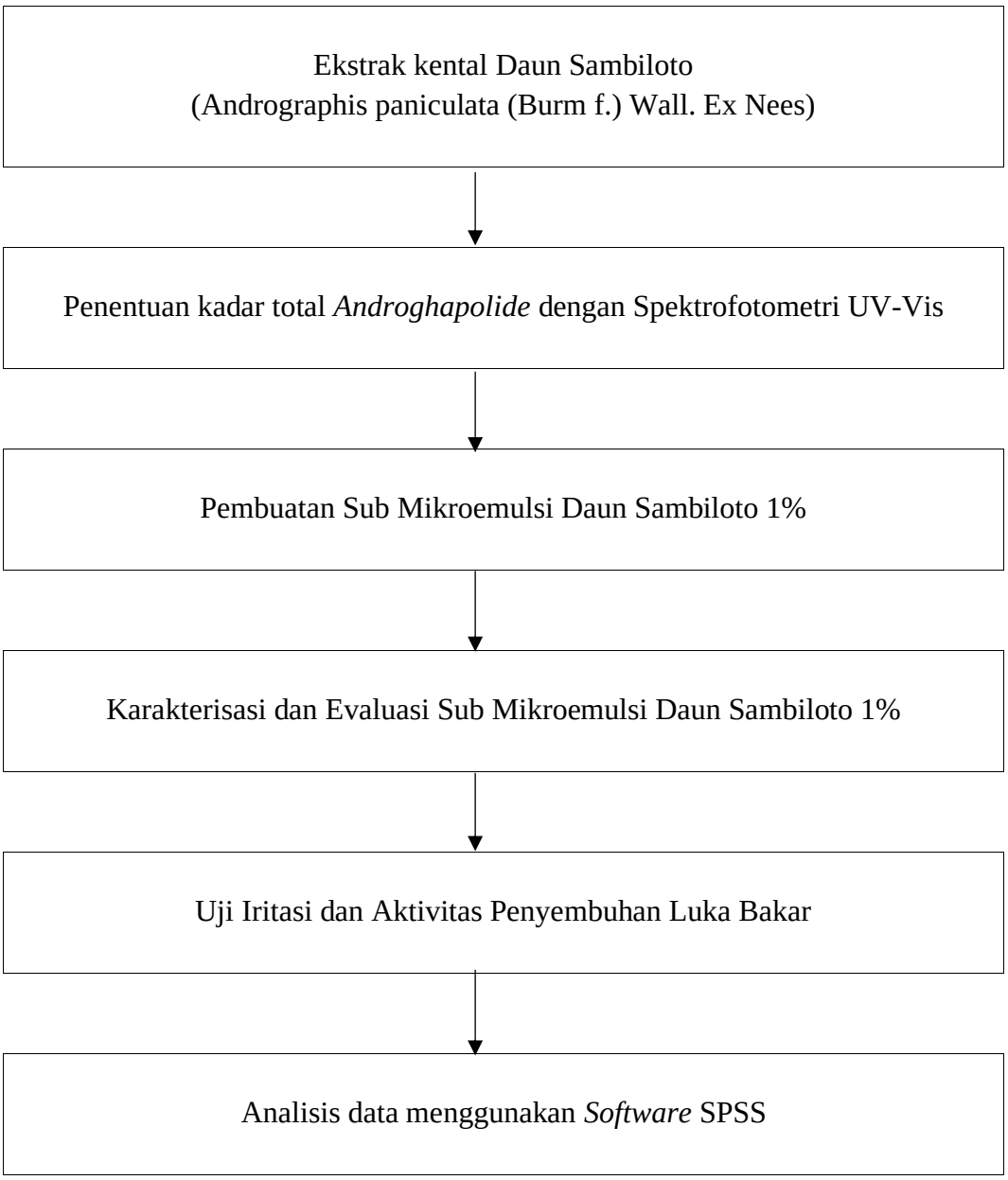
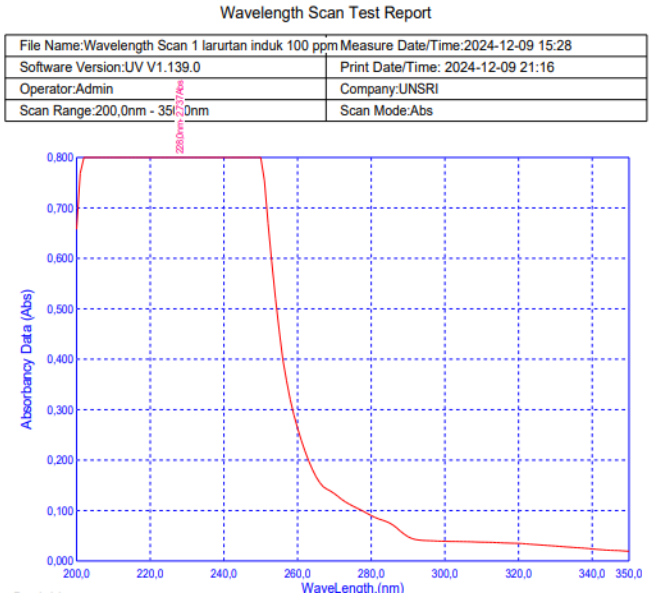
LAMPIRAN

Lampiran 1. Skema Kerja Umum



Lampiran 2. Penentuan Kurva Kalibrasi *Androghapolide*

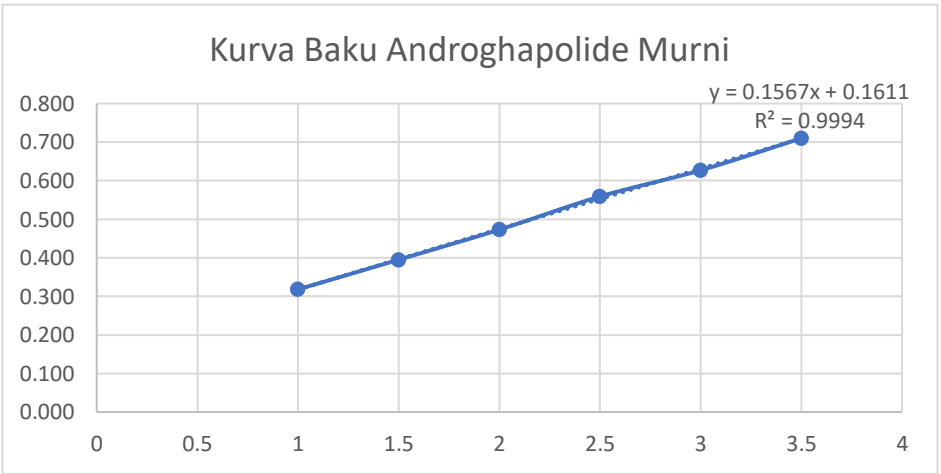
1. Panjang Gelombang Maksimum 228 nm



2. Tabel Hasil Pembuatan Kurva Baku

Konsentrasi (ppm)	Absorbansi
1	0,318
1,5	0,395
2	0,473
2,5	0,559
3	0,627
3,5	0,710

3. Kurva Kalibrasi *Androghapolide*



Lampiran 3. Perhitungan Kadar *Total Androghapolide Content* Ekstrak

Replikasi	Absorbansi	Faktor Pengenceran	Rata – Rata ± SD	Kadar mg/gr ± SD
1	0.673			
2	0.673	100	0.6733 ± 0,0005	32,688±0,030
3	0.674			

Persamaan regresi linier pada kurva baku *Androghapolide*:
y = 0,1567x + 0,1611

Keterangan:
x = Kadar *Androghapolide*
y = Absorbansi rata – rata

Perhitungan kadar *Androghapolide*

$x = \frac{\boldsymbol{y - 0{,}1611}}{\boldsymbol{0{,}1567}}$

$x = \frac{\boldsymbol{0{,}6733 - 0{,}1611}}{\boldsymbol{0{,}1567}}$

x = 3.266 µg/mL konversi mg/mL = 0,003266 mg/mL

Kadar *Androghapolide Total* $= \frac{x\frac{mg}{L} \times volume}{Gram\ Ekstrak\ (g)}$ x FP

$= \frac{0{,}003266 \times 10}{0{,}01}$ x 100

= 326,6751 mg/gr

1 gram ekstrak etanol daun sambiloto mengandung 326,6751 mg *Androghapolide*

Persentase Kadar $= \frac{326{,}6751}{1000}$ x 100%

= 32,6675 %

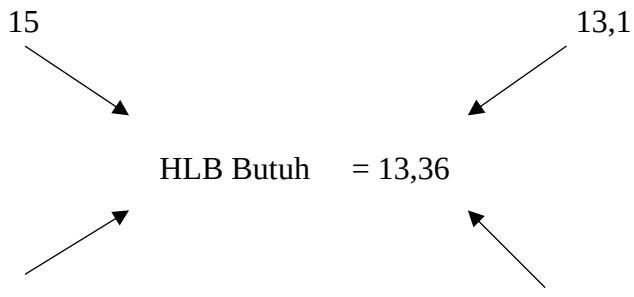
Lampiran 4. Perhitungan Nilai HLB Sub Mikroemulsi Ekstrak Daun Sambiloto

HLB Tween 80 = 15

HLB PEG-400 = 13,1

HLB Butuh minyak atsiri daun kemangi = 13,36

Tween 80 PEG-400



HLB Campuran x berat total = (HLB a. x) + (HLB b.y)

HLB Campuran x 1,9 = (15 x 0,26) + (13,1 x 1,64)

HLB Campuran x 1,9 = 3,9 + 21,484

HLB Campuran x 1,9 = 25,384

HLB Campuran = $\frac{25,384}{1,9}$

HLB Campuran = 13,36

Lampiran 5. Perhitungana Kadar *Androghapolide* dalam Sediaan

Replikasi	Absorbansi	X	Kadar	Rerata Kadar	%Kadar	Rerata ± SD
1	0.697	3.420	63,449		19,410	
2	0.706	3.477	64,515	64,199	19,736	19,639±0,163
3	0.707	3.484	64,633		19,772	

Diketahui

Persamaan regresi linier pada kurva baku *Androghapolide* **(Lampiran 2)**

Perhitungan kadar *Androghapolide*

x = $\frac{\boldsymbol{y - 0{,}1611}}{\boldsymbol{0{,}1567}}$

x = $\frac{\boldsymbol{0{,}697 - 01611}}{\boldsymbol{0{,}1567}}$

x = 3,420ppm

Kadar *Androghapolide Total* = $\frac{x\frac{mg}{L} \times volume\ sampel\ (L)}{5ml\ x\ bobot\ jenis\ (g)}$ x FP

= $\frac{3{,}420 \times 0{,}05\ L}{5{,}3925}$ x 2000

= 63,449 mg/gr

5 mL Sub mikroemulsi mengandung 63,449 mg/gr *Androghapolide*

Persentase Kadar = $\frac{Kadar\ yang\ didapat}{Kadar\ TAC}$ x 100%

= $\frac{63{,}449}{326{,}675}$ x 100%

= 19,410%

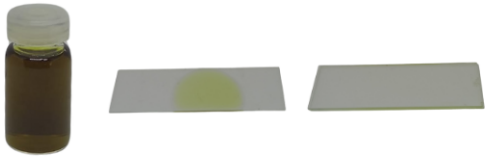
Persentase Kadar Sebenarnya = $Kadar\ sediaan \times Hasil\ \%EE$

= 19,410% x 0,99%

= 0,1909% (Kadar 1x pengolesan)

Lampiran 6. Hasil Evaluasi Karakteristik Sub mikroemulsi

1. Uji Organoleptis



2. Uji pH Submikroemulsi

Replikasi 1 Replikasi 2 Replikasi 3

3. Uji Viskositas

LABORATORIUM
KIMIA PENGOLAHAN DAN SENSORIS HASIL PERTANIAN
JURUSAN TEKNOLOGI PERTANIAN
FAKULTAS PERTANIAN
Jl. Palembang-Prabumulih Km.32 Indralaya (OI) Telp. (0711) 580664

LAPORAN ANALISA
No. 90/LABKHP/X/2024

Nama Pemesan : Dian Arifando Rusyadi
Tanggal Terima : 15 Oktober 2024
Tanggal Selesai : 24 Oktober 2024
Jumlah Sampel : 3
Jenis Analisa : Viskositas (Viskometer NDJ-8S)
Jenis Sampel : Submikro Emulsi Ekstrak Daun Sambiloto

No	Kode	Viskositas (m.Pa.s)
1	1	11,10
2	2	12,50
3	3	12,86

Palembang, 24 Oktober 2024
Koordinator Teknis Laboratorium,

Hafsah, ST.,M.T
NIP.198006202001122001

4. Uji Bobot Jenis

Berat Piknometer + Air

Replikasi	W1	W0	Massa Akhir	Rerata
1	17,3504	12,3354	5,015	
2	17,3503	12,3354	5,0149	5,0148
3	17,3501	12,3354	5,0147	

Keterangan;

W0 : Piknometer Kosong ; W1 : Piknometer Terisi

Berat Piknometer + Sub mikroemulsi 1%

Replikasi	W1	W0	Massa Akhir	Rerata
1	17,8014	12,3354	5,466	
2	17,809	12,3354	5,4736	5,42466
3	17,6698	12,3354	5,3344	

Perhitungan

Massa Piknometer Kosong	Massa Piknometer + Aquademineral	Massa Piknometer + Sub Mikroemulsi 1%	Densitas Aquademineral	Berat Jenis Sub Mikroemulsi 1%
12,3354	5,0148	5,42466	0,997	1,078

Berat Jenis $= \frac{Berat\ Piknometer+Sediaan}{Berat\ Piknometer+Aquademineral}$ x Densitas Aquademineral

$= \frac{5,42466}{5,0148}$ x 0,997 = 1,078 (Lebih berat dibandingkan aquademineral)

5. Perhitungan Efisiensi Penjerapan

Replikasi	Absorbansi	x	Kadar	%EE	Rerata ± SD
1	0,383	1,416	141,608	99,567	
2	0,381	1,403	190,560	99,571	99,567 ± 0,002
3	0,384	1,422	192,554	99,565	

Perhitungan

Persamaan regresi linier pada kurva baku *Androghapolide* **(Lampiran 2)**

Perhitungan kadar Tak Terjerap

$x = \frac{\boldsymbol{y - 0{,}1611}}{\boldsymbol{0{,}1567}}$

$x = \frac{\boldsymbol{0{,}383 - 0{,}1611}}{\boldsymbol{0{,}1567}}$

x = 1,416 ppm

Kadar TakTerjerap $= \frac{\boldsymbol{x\frac{mg}{L} \times volume\ sampel\ (L)}}{\boldsymbol{Bobot\ Sampel\ (g)}}$ x FP

$= \frac{\boldsymbol{1{,}416\frac{mg}{L} \times 0{,}00005\ L}}{\boldsymbol{0{,}005}}$ x 1000

= 141,608 mg/gr

% Efisiensi Penjerapan $= \frac{\boldsymbol{Kadar\ sediaan - kadar\ tak\ terjerap\ (L)}}{\boldsymbol{Kadar\ sediaan}}$ x 100%

$= \frac{\boldsymbol{32688 - 141{,}608}}{\boldsymbol{32688}}$ x 100

= 99,567%

% EE Tak terjerap dalam sediaan = %EE x Jumlah kadar sediaan formula

= 99,567 x 1%

= 0,995%

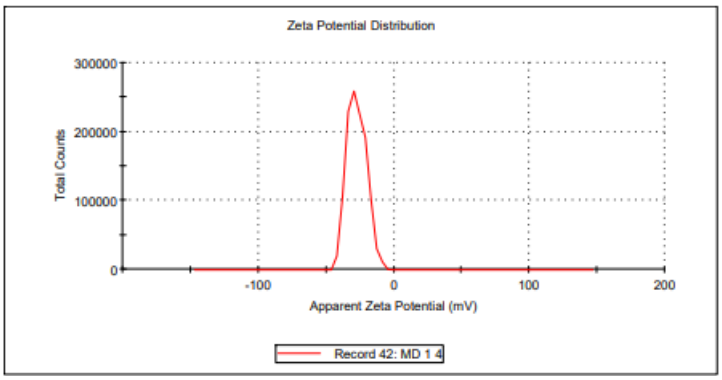
6. Uji PSA (Uukuran Partikel, Indeks Polidispersitas dan Zeta Potensial

a. Zeta Potensial

Results

		Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -27.3	**Peak 1:**	-27.3	100.0	6.96
Zeta Deviation (mV): 6.96	**Peak 2:**	0.00	0.0	0.00
Conductivity (mS/cm): 0.0188	**Peak 3:**	0.00	0.0	0.00

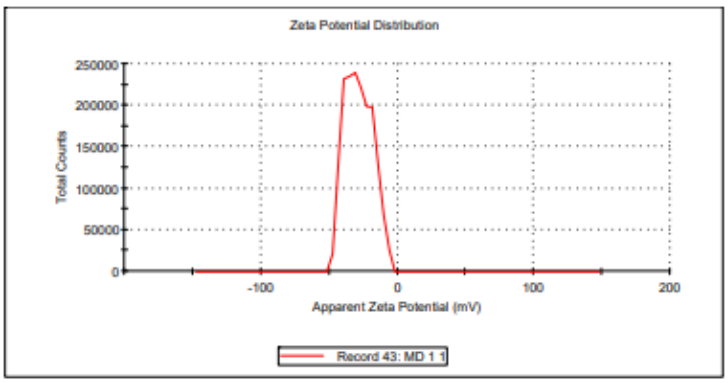
Result quality Good



Results

		Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -28.2	**Peak 1:**	-28.2	100.0	9.86
Zeta Deviation (mV): 9.86	**Peak 2:**	0.00	0.0	0.00
Conductivity (mS/cm): 0.0184	**Peak 3:**	0.00	0.0	0.00

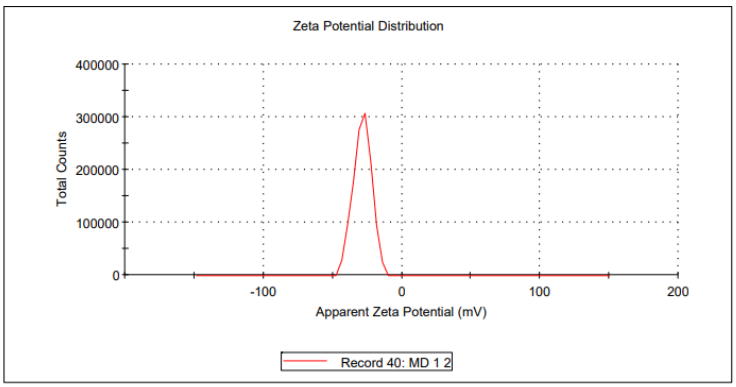
Result quality Good



Results

		Mean (mV)	Area (%)	St Dev (mV)
Zeta Potential (mV): -28.4	**Peak 1:**	-28.4	100.0	6.46
Zeta Deviation (mV): 6.46	**Peak 2:**	0.00	0.0	0.00
Conductivity (mS/cm): 0.0191	**Peak 3:**	0.00	0.0	0.00

Result quality Good



b. Indeks Polidispersitas dan Ukuran Partikel

Cumulant Results

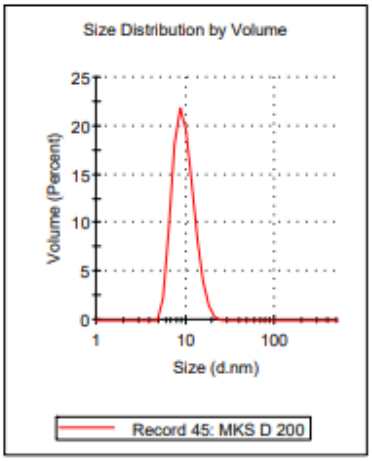
Z-Avg (nm):	61.79
Pd Index:	0.217
Pd (nm):	28.8
%Pd:	46.6
Derived kcps:	2024.7

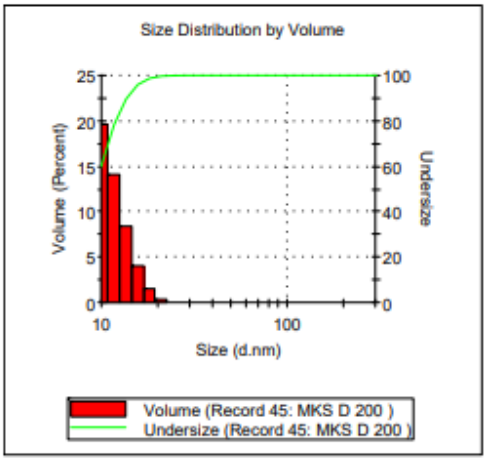
Distribution Results

	Size (d.nm):	% Vol	σ	%Pd
Peak 1:	9.810	100.0	2.730	27.8
Peak 2:	288.2	0.0	88.32	30.6
Peak 3:	0.000	5.4	481.8	9.3

Undersize Results

Dv (%)	Size (d.nm):
10	6.72
50	9.33
90	13.7
100	7460





Cumulant Results

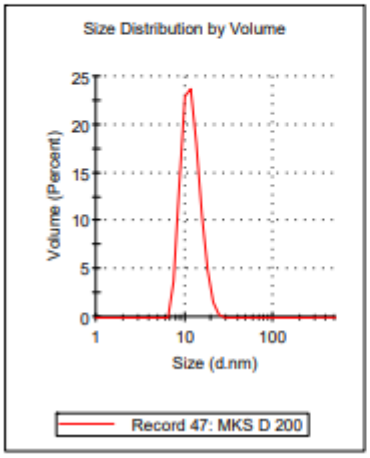
Z-Avg (nm):	83.50
Pd Index:	0.281
Pd (nm):	44.3
%Pd:	53.0
Derived kcps:	3739.3

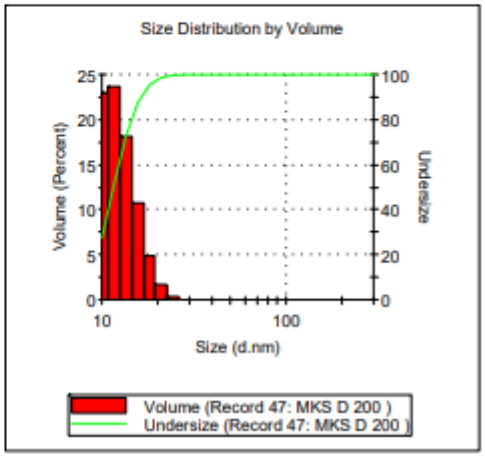
Distribution Results

	Size (d.nm):	% Vol	σ	%Pd
Peak 1:	12.03	99.9	2.943	24.5
Peak 2:	421.4	0.1	124.8	29.6
Peak 3:	0.000	4.9	460.2	8.8

Undersize Results

Dv (%)	Size (d.nm):
10	8.62
50	11.5
90	16.4
100	7460





Sample Details

Name: MKS D 200
Filename: MKS.dts
Operator: User
Date and Time: Friday, September 20, 2024 11:08:46
SOP: mansettings.nano

Cumulant Results

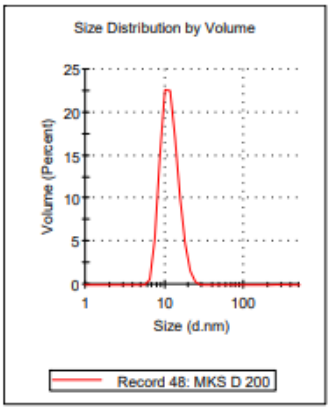
Z-Avg (nm): 146.9
Pd Index: 0.244
Pd (nm): 72.6
%Pd: 49.4
Derived kcps: 4368.5

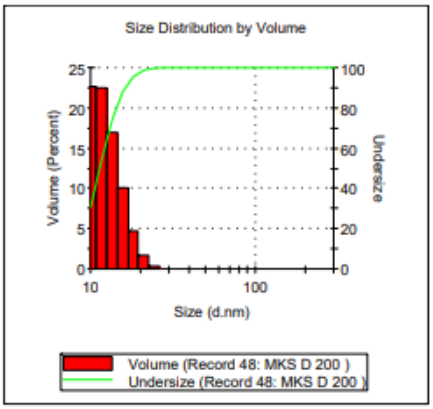
Distribution Results

	Size (d.nm):	% Vol	σ	%Pd
Peak 1:	11.85	99.9	3.033	25.6
Peak 2:	316.9	0.1	85.66	27.0
Peak 3:	0.000	2.1	6.104e-5	.0

Undersize Results

Dv (%)	Size (d.nm):
10	8.31
50	11.4
90	16.3
100	7460



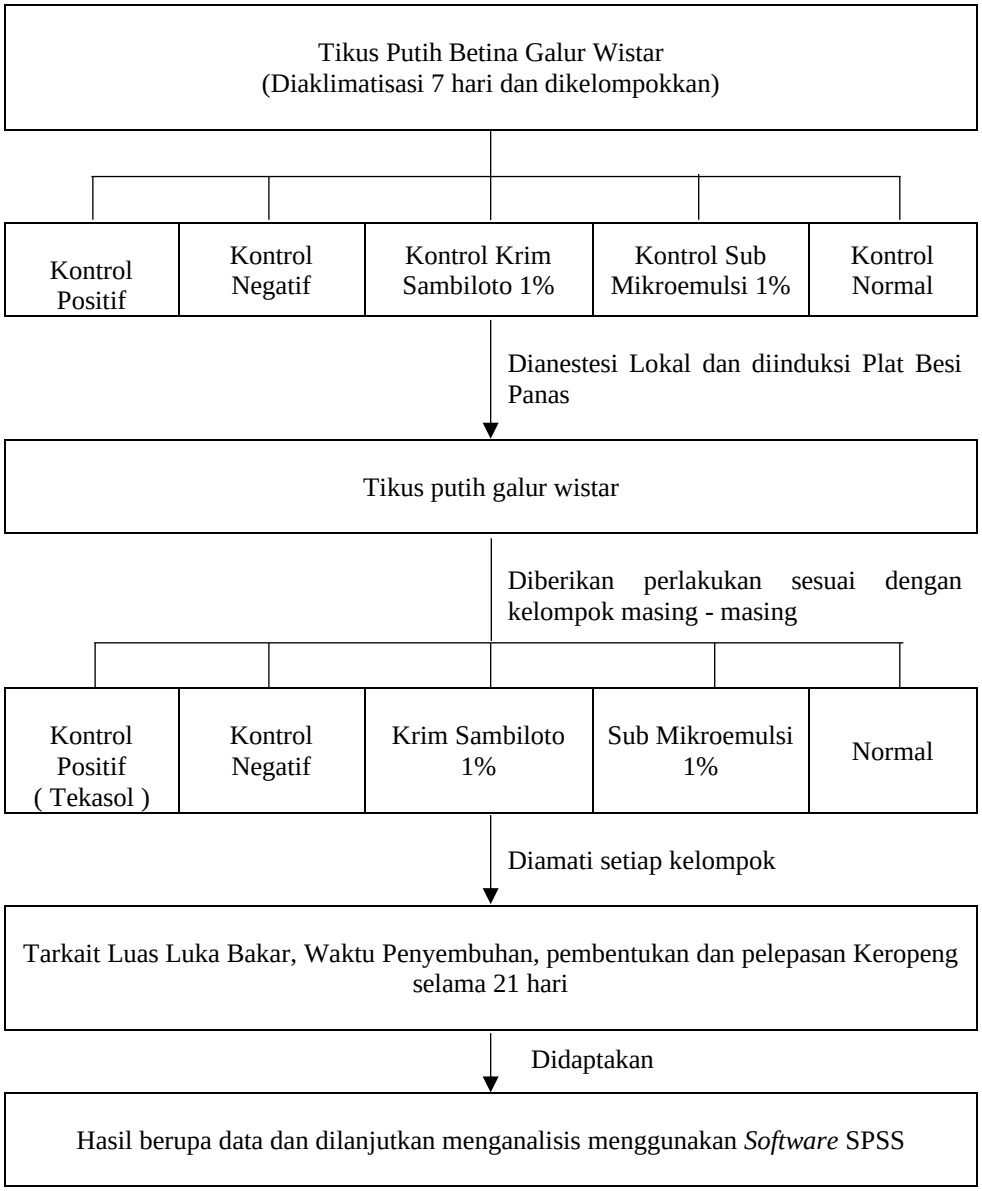


Size d.nm	Mean Volume Percent	Std Dev Volume Percent
0.4000	0.0	
0.4632	0.0	
0.5365	0.0	
0.6213	0.0	
0.7195	0.0	
0.8332	0.0	
0.9649	0.0	
1.117	0.0	
1.294	0.0	
1.499	0.0	
1.736	0.0	
2.010	0.0	
2.328	0.0	
2.696	0.0	
3.122	0.0	
3.615	0.0	
4.187	0.0	
4.849	0.0	
5.615	0.0	
6.503	0.6	
7.531	5.3	
8.721	15.1	
10.10	22.6	
11.70	22.5	

Size d.nm	Mean Volume Percent	Std Dev Volume Percent
13.54	17.0	
15.69	10.1	
18.17	4.7	
21.04	1.6	
24.36	0.3	
28.21	0.0	
32.67	0.0	
37.84	0.0	
43.82	0.0	
50.75	0.0	
58.77	0.0	
68.06	0.0	
78.82	0.0	
91.28	0.0	
105.7	0.0	
122.4	0.0	
141.8	0.0	
164.2	0.0	
190.1	0.0	
220.2	0.0	
255.0	0.0	
295.3	0.0	
342.0	0.0	
396.1	0.0	

Size d.nm	Mean Volume Percent	Std Dev Volume Percent
458.7	0.0	
531.2	0.0	
615.1	0.0	
712.4	0.0	
825.0	0.0	
955.4	0.0	
1106	0.0	
1281	0.0	
1484	0.0	
1718	0.0	
1990	0.0	
2305	0.0	
2669	0.0	
3091	0.0	
3580	0.0	
4145	0.0	
4801	0.0	
5560	0.0	
6439	0.0	
7456	0.0	
8635	0.0	
1.000e4	0.0	

Lampiran 7. Skema Uji Aktivitas Penyembuhan Luka Bakar



Lampiran 8. Perhitungan Persiapan Hewan Uji

Penentuan hewan uji pada masing-masing kelompok dilakukan dengan menggunakan rumus Federer yang dapat dilihat dibawah ini:

$$(n-1)\ (t-1) \geq 15$$

$$(n-1)\ (5-1) \geq 15$$

$$4(n-1) \geq 15$$

$$4n-4 \geq 15+4$$

$$n \geq 19/4$$

$$n \geq 4.75$$

Berdasarkan perhitungan yang telah dilakukan menggunakan rumus, hewan uji yang akan digunakan dalam penelitian ini sebanyak 5 ekor tikus pada masing-masing kelompok.

Total Hewan Uji $= n \times t$

$= 5 \times 5$

= 25 Ekor Tikus

Jadi untuk penelitian ini dibutuhkan 5 ekor tikus Betina galur wistar.

Lampiran 9. Perhitungan Dosis Anastesi Lidokain 2%

Contoh Perhitungan:

Pemberian dosis lidokain 4 mg/KgBB, berdasarkan perhitungan berikut :

Berat badan tikus = 160 gram = 0,16 kg

Dosis Ledokain = 4 mg/KgBB

Konsentrasi Lidokain 2% = 2% (2grm/100ml atau 20mg/mL

Langkah perhitungan

Dosis Total Lidokain (dalam mg)

Dosis lidokain (mg) = 4Mg/kgBB × 0,16 =0,64 mg

Konversi Dosis kedalam Volume (mL)

Rumus:

$$\text{Volume (mL)} = \frac{Dosis\ (mg)}{konsentrasi\ (\frac{mg}{mL})}$$

$$= \frac{0{,}64\ mL}{20}$$

$$= 0{,}032\text{mL}$$

Jadi masing-masing tikus yang akan dianastesi mendapatkan lidokain 2% sebanyak 0,032 mL.

Lampiran 10. Sertifikat Persetujuan Etik

UNIVERSITAS AHMAD DAHLAN
KOMITE ETIK PENELITIAN (KEP UAD)
Jl. Prof. Dr. Soepomo, S. H, Yogyakarta Telp (0274) 563515,Ekstension 3310

Surat Persetujuan Etik (*Ethical Approval*)
Untuk Penelitian yang Menggunakan Hewan Coba sebagai Subjek Penelitian

PERSETUJUAN ETIK (*ETHICAL APPROVAL*)
Nomor : 022412171

Yang bertanda tangan di bawah ini, Ketua Komite Etik Penelitian Universitas Ahmad Dahlan, setelah dilaksanakan pembahasan dan penilaian, dengan ini memutuskan protokol penelitian yang berjudul: **"Uji Aktivitas Penyembuhan Luka Bakar Sub Mikroemulsi Ekstrak Daun Sambiloto dengan Kombinasi Tween-80 dan PEG-400 terhadap Tikus Galur Wistar"**
yang menggunakan hewan coba sebagai subjek penelitian, yang diajukan oleh:

Ketua Peneliti: **apt. Vitri Agustiarini, M. Farm.**

Anggota: **Dian Arifando Rusyadi**

dapat disetujui pelaksanaannya. Persetujuan ini berlaku selama 1(satu) tahun setelah *Ethical Approval* dikeluarkan.

Pada akhir penelitian, laporan pelaksanaan penelitian harus diserahkan kepada KEP UAD. Jika ada perubahan protokol dan/atau perpanjangan penelitian, harus mengajukan kembali permohonan kajian etik penelitian (amandemen protokol).

Yogyakarta, 27 Desember 2024
Komite Etik Penelitian
Universitas Ahmad Dahlan,

dr. Nurul Qomariyah, M.Med., Ed.

Lampiran 11. Sertifikat Hewan Uji

TIKUS PENELITIAN PALEMBANG
Jalan Seduduk Putih No. 89 RT. 27 RW. 07
Kec. Ilir Timur II Kel. 8 Ilir Kota Palembang Sumatera Selatan
Telp. 0813-5068-3378 – 081278811795

SURAT KETERANGAN
Nomor: 004/TPP-010/2024

Yang Bertanda tangan dibawah ini:

Nama	: Dian Arifando Rusyadi
NIM	08061182126014
Jurusan	: Farmasi
Fakultas	: Matematika dan Ilmu Pengetahuan Alam
Universitas	: Universitas Sriwijaya
Judul Skripsi	: Uji Aktivitas penyembuhan luka bakar Sub Mikroemulsi Ekstrak Daun Sambiloto dengan kombinasi PEG 400 dan Tween 80 Terhadap Tikus *Galur Wistar*.

Menerangkan hewan uji dengan spesifikasi:

Galur	: Wistar
Jumlah	: 35 ekor
Jenis Kelamin	: Betina
Berat Badan	: 150-250
Umur	: 3 bulan

Demikian surat keterangan ini dibuat untuk dapat digunakan sebaik-baiknya.

Palembang, 01 Oktober 2024

ATP ADOUH TIKUS PALEMBANG

Waluyo, S.Pd,.M.Si

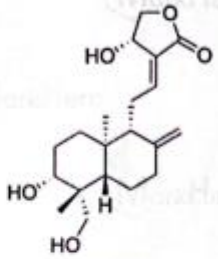
Lampiran 12. ***Certificate of Analysis Androghapolide***

EBM Scientific and Technology, Ltd. (EBM Scitech)
Jl. Bukit Raya No. 582, Ciumbuleuit, Cidadap, Bandung City 40142,
West Java, Indonesia
www.markherb.com

CERTIFICATE OF ANALYSIS

For Laboratory Use Only

Product name	Andrographolide
Other names	(3E,4S)-3-[2-[(1R,4aS,5R,6R,8aS)-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylidene-3,4,4a,6,7,8-hexahydro-1H-naphthalen-1-yl]ethylidene]-4-hydroxyoxolan-2-one ; Andrographolide; Andrographis; Andrografolida (INA)
CAS	5508-58-7
Catalog No.	TER-1-50 | TER-1-100
Lot Number	# 190209
Formula	$C_{20}H_{30}O_5$
Molecular mass	350.45 g/mol
Date of sample	13/06/2022
Date of report	16/06/2022



Structure

ANALYTICAL RESULTS

Test	Method	Specification	Result
Appearance	NA	White, powder	White, powder
Purity	UPLC-PDA	> 90%	93.22%
UV spectrum	UPLC-PDA	230 nm	230 nm
Mass spectrum	UPLC-TQD MS	Conforms	Conforms
NMR	^{1}H-NMR, ^{13}C-NMR	NA	NA

NA, not available

STORAGE CONDITIONS

Storage	Room temperature in a dry place, keep away from direct light
Transport	Room temperature

Digitally signed by
Andi Rifki Rosandy, Ph.D
Date: 18.06.2022
Bandung - Indonesia

Lampiran 13. *Certificate of Analysis* Minyak Kemangi

Date : February 26, 2018

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Customer identification : Holy Basil - Tulsi - 3031
Type : Essential oil
Source : *Ocimum sanctum*

ANALYSIS

Method: PC-PA-014-17J19 - Analysis of the composition of an essential oil, or other volatile liquid, by FAST GC-FID (in French); identifications validated by GC-MS.
Analyst : Sylvain Mercier, M. Sc., Chimiste
Analysis date : February 22, 2018

Checked and approved by :

Alexis St-Gelais, M. Sc., chimiste 2013-174

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Lampiran 14. *Certificate of Analysis* PEG-400

FRED HOLMBERG & CO

MATERIAL SAFETY DATA SHEET

Produced date: 2012-08-10
Replaces date: 2012-04-16

1. Identification of the substance/preparation and the company

Commercial product name	**Polyethylene glycol 400, PEG 400**
Use of the substance/preparation	Petroleum chemicals, coatings, lubricants, plastics, inks, detergents, cleaning agent
Synonyms	Ethylene oxide polymer, Poly(oxyethylene) glycol
CAS-nr	25322-68-3
EC-nr	500-038-2
REACH registration number	05-2114142277-51-0000
Company	Fred Holmberg & Co AB
Adress	Box 60056 S-216 10 Limhamn Sweden
Telephone number	+46 (0)40 15 79 20
Fax	+46 (0)40 16 22 95
e-mail	fred.info@holmberg.se
Contact person	Fred Holmberg
Emergency telephone number	Fred Holmberg 040-15 79 20 (office hours) or. 08-33 12 31 toxicity information central (office hours), 112 for emergency central
Created by	Linus Olofsson, Fred Holmberg & Co AB, Tel. +46 (0)480-42 20 00

2. Hazards Identification

This product is not classified as dangerous according to EC criteria.

3. Composition/Information on ingredients

EC-nr	CAS-nr	Substance	Conc. % (w/w)	Classification
500-038-2	25322-68-3	Polyethylene glycol	100	Not classified as hazardous material.

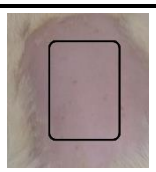
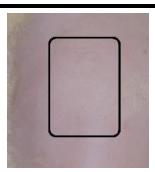
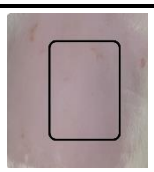
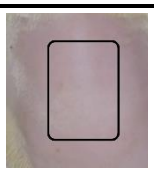
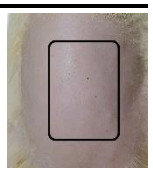
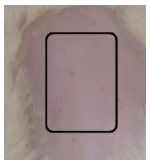
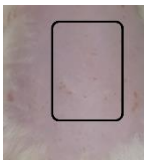
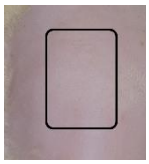
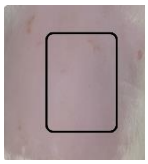
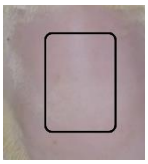
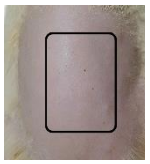
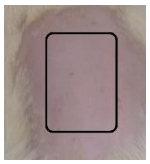
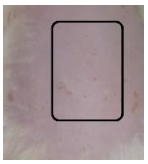
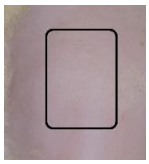
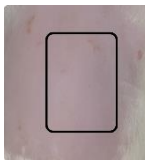
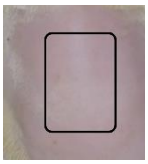
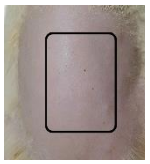
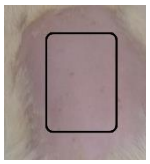
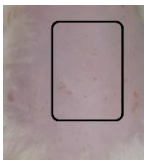
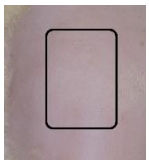
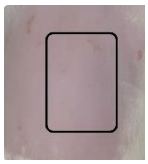
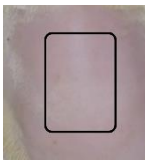
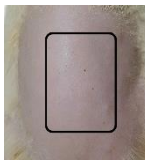
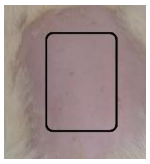
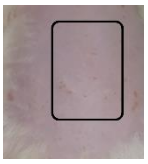
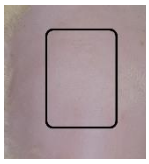
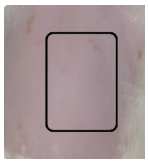
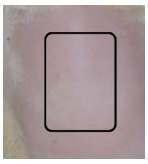
Lampiran 15. Perhitungan Derajat Indeks Iritasi Primer

Indeks Iritasi = $\frac{\boldsymbol{Jumlah\ eritemia\ 0;1;24;48;72\ jam + jumlah\ edema\ 0;1;24;48;72\ jam}}{\boldsymbol{jumlah\ tikus}}$

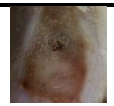
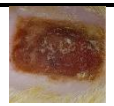
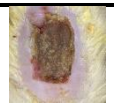
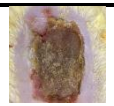
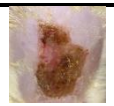
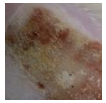
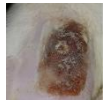
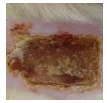
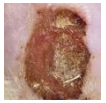
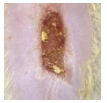
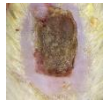
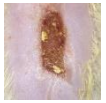
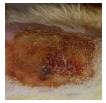
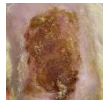
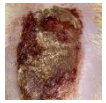
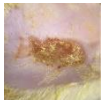
Tikus 1 = $\frac{\mathbf{0+0}}{\mathbf{3}}$ = 0

Tikus 2 = $\frac{\mathbf{0+0}}{\mathbf{3}}$ = 0

Lampiran 16. Gambar Pengamatan Iritasi Primer

Jam	Kelompok Tikus					
	Tikus Normal			Tikus Sub Mikroemulsi 1%		
	1	2	3	1	2	3
0						
1						
24						
48						
72						

Lampiran 17. Gambar Pengamatan Perubahan Rerata Luka Bakar

Kelompok Tikus	Pengamatan Luka Hari Ke										
	0	2	4	6	8	10	12	14	16	18	20
Kontrol Positif											
Kontrol Negatif											
Krim Sambiloto 1%											
Sub Mikroemulsi 1%											

Lampiran 18. Data Luas Luka Bakar Derajat 2

Kelompok Tikus	Luas Luka Awal (cm^2)	Rerata Luas Luka Awal (cm^2)	Luas Luka Akhir (cm^2)	Penurunan Luas Luka (cm^2)	Rerata penurunan luas luka (cm^2) ± SD	Persentase Penyembuhan (%)	Rerata Persentase Penyembuhan (%)
Kontrol Positif	6.2	6.193333333	0.44	5.76	5.613 ± 0.236	92.90	90.60
	6.08		0.8	5.28		86.84	
	6.3		0.5	5.8		92.06	
Kontrol Negatif	6.3	6.543333333	2.3	4	4.11 ± 0.141	63.49	62.88
	6.51		2.2	4.31		66.20	
	6.82		2.8	4.02		58.94	
Kontrol Krim Sambiloto 1%	6.09	6.4	1.05	5.04	5.54 ± 0.356	82.75	86.47
	6.51		0.78	5.73		88.01	
	6.6		0.75	5.85		88.63	
Kontrol Sub Mikroemulsi 1%	6	6.236666667	0.44	5.56	5.763 ± 0.712	92.66	92.30
	5.51		0.5	5.01		90.92	
	7.2		0.48	6.72		93.33	

Lampiran 19. Hasil Analisis Statistika Luas Luka Bakar Derajat Dua

Paired Sampel T Test

Hipotesis :

Ho = Data penurunan luas luka bakar tidak berbeda signifikan

Ha = Data penurunan luas luka bakar berbeda signifikan

Pengambilan Keputusan :

Jika nilai signifikansi > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Kelompok Positif Hari ke-1 dan Hari Ke-20

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	Positif_Awal - Positif_Akhir	5.61333	0.28937	0.16707	4.89451	6.33216	33.599	2	0.001

Kesimpulan:

1. Karena Sig. (2-tailed) = 0.001 < 0.05, maka Ho ditolak.
2. Artinya, terdapat perbedaan yang signifikan antara data awal dan data akhir pada kelompok positif.

Kelompok Negatif Hari ke-1 dan Hari ke-20

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	Negatif_Awal - Negatif_Akhir	4.11000	0.17349	0.10017	3.67902	4.54098	41.032	2	0.001

Kesimpulan:

1. Karena Sig. (2-tailed) = 0.001 < 0.05, maka Ho ditolak.
2. Artinya, terdapat perbedaan yang signifikan antara data awal dan data akhir pada kelompok negatif

Kelompok Krim Sambiloto 1% Hari ke-1 dan Hari ke-20

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	Krim_Sambiloto_1%_Awal - Krim_Sambiloto_1%_Akhir	5.54000	0.43715	0.25239	4.45406	6.62594	21.950	2	0.002

Kesimpulan:

1. Karena Sig. (2-tailed) = 0.002 < 0.05, maka Ho ditolak.
2. Artinya, terdapat perbedaan yang signifikan antara data awal dan data akhir pada kelompok Krim Sambiloto 1%

Kelompok Sub mikroemulsi 1% Hari ke-1 dan Hari ke-20

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	Krim_Sub_Mikroemulsi_1%_Awal - Krim_Sub_Mikroemulsi_1%_Akhir	5.76333	0.87295	0.50400	3.59482	7.93185	11.435	2	0.008

Kesimpulan:

1. Karena **Sig. (2-tailed) = 0.008 < 0.05**, maka Ho **ditolak**.
2. Artinya, **terdapat perbedaan yang signifikan antara data awal dan data akhir** pada kelompok Sub mikroemulsi 1%

One-Way ANOVA

a. Uji Normalitas

Tujuan : untuk distribusi normal data penurunan luas luka bakar

Hipotesis :

Ho = Data penurunan luas luka bakar terdistribusi normal

Ha = Data penurunan luas luka bakar tidak terdistribusi normal

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	kelompok_Perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
TBSA	Positif	.191	3	.	.997	3	.900
	negatif	.217	3	.	.988	3	.789
	Krim Sambiloto 1%	.324	3	.	.878	3	.317
	Sub mikroemulsi 1%	.276	3	.	.942	3	.537

a. Lilliefors Significance Correction

Keputusan: data luas luka bakar atau TBSA seluruh kelompok uji terdistribusi normal.

b. Uji Homogenitas

Tujuan : untuk melihat data penurunan luas luka bakar homogen atau tidak

Hipotesis :

Ho = Data penurunan luas luka bakar terdistribusi homogen

Ha = Data penurunan luas luka bakar tidak terdistribusi homogen

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
TBSA	Based on Mean	1.865	3	8	.214
	Based on Median	.505	3	8	.689
	Based on Median and with adjusted df	.505	3	5.048	.695
	Based on trimmed mean	1.728	3	8	.238

Keputusan: data luas luka bakar atau TBSA seluruh kelompok uji terdistribusi homogen.

c. Uji *Multipe Comparsion tipe* LSD (Least Significant Difference)

Tujuan : untuk menentukan data penurunan luas luka bakar abnormal kelompok mana yang memberikan nilai berbeda secara signifikan dengan kelompok lainnya.

Hipotesis :

Ho : Data penurunan luas luka bakar tidak berbeda secara signifikan

Ha : Data penurunan luas luka bakar berbeda secara signifikan

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Multiple Comparisons

Dependent Variable: TBSA

	(I) kelompok_Perlakuan	(J) kelompok_Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
LSD	Positif	Negative	-.35000	.23870	.181	-.9004	.2004
		Krim Sambiloto 1%	-.20667	.23870	.412	-.7571	.3438
		Sub mikroemulsi 1%	-.28667	.23870	.264	-.8371	.2638
	Negative	Positif	.35000	.23870	.181	-.2004	.9004
		Krim Sambiloto 1%	.14333	.23870	.565	-.4071	.6938
		Sub mikroemulsi 1%	.06333	.23870	.797	-.4871	.6138
	Krim Sambiloto 1%	Positif	.20667	.23870	.412	-.3438	.7571
		negatif	-.14333	.23870	.565	-.6938	.4071
		Sub mikroemulsi 1%	-.08000	.23870	.746	-.6304	.4704
	Sub mikroemulsi 1%	Positif	.28667	.23870	.264	-.2638	.8371
		negatif	-.06333	.23870	.797	-.6138	.4871
		Krim Sambiloto 1%	.08000	.23870	.746	-.4704	.6304

Keputusan: data luas luka bakar atau TBSA seluruh kelompok uji tidak berbeda signifikan.

Lampiran 20. Hasil Analisis Statistika Persentase Penyembuhan Luka Bakar Derajat Dua

a. Uji Normalitas

Tujuan : untuk distribusi normal data persentase penurunan luas luka bakar

Hipotesis :

Ho = Data persentase penyembuhan luka bakar terdistribusi normal

Ha = Data persentase penyembuhan luka bakar tidak terdistribusi normal

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	kelompok_Perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
Persentase_TBSA	Positif	.338	3	.	.852	3	.245
	Negative	.233	3	.	.979	3	.724
	Krim Sambiloto 1%	.354	3	.	.820	3	.164
	Sub mikroemulsi 1%	.357	3	.	.815	3	.151

a. Lilliefors Significance Correction

Keputusan: data persentase penyembuhan luka bakar seluruh kelompok uji terdistribusi normal

b. Uji Homogenitas

Tujuan : untuk melihat data penurunan luas luka bakar homogen atau tidak

Hipotesis :

Ho = Data penurunan luas luka bakar terdistribusi homogen

Ha = Data penurunan luas luka bakar tidak terdistribusi homogen

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Persentase_TBSA	Based on Mean	1.931	3	8	.203
	Based on Median	.493	3	8	.697
	Based on Median and with adjusted df	.493	3	5.789	.701
	Based on trimmed mean	1.770	3	8	.230

Keputusan: data persentase penyembuhan luka bakar seluruh kelompok uji terdistribusi homogen

c. Uji *Multipe Comparsion tipe* LSD (Least Significant Difference)

Tujuan : untuk menentukan data penurunan luas luka bakar abnormal kelompok mana yang memberikan nilai berbeda secara signifikan dengan kelompok lainnya.

Hipotesis :

Ho : Data penurunan luas luka bakar tidak berbeda secara signifikan

Ha : Data penurunan luas luka bakar berbeda secara signifikan

Pengambilan Keputusan :

Jika nilai signifikan > 0,05 Ho diterima

Jika nilai signifikan < 0,05 Ho ditolak

Multiple Comparisons

Dependent Variable: Persentase_TBSA

	(I) kelompok_Perlakuan	(J) kelompok_Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	Positif	Negative	27.72000*	2.20130	.000	22.6438	32.7962
		Krim Sambiloto 1%	5.55333*	2.20130	.036	.4771	10.6295
		Sub mikroemulsi 1%	-1.67096	2.20130	.470	-6.7472	3.4052
	negatif	Positif	-27.72000*	2.20130	.000	-32.7962	-22.6438
		Krim Sambiloto 1%	-22.16667*	2.20130	.000	-27.2429	-17.0905
		Sub mikroemulsi 1%	-29.39096*	2.20130	.000	-34.4672	-24.3148
	Krim Sambiloto 1%	Positif	-5.55333*	2.20130	.036	-10.6295	-.4771
		Negative	22.16667*	2.20130	.000	17.0905	27.2429
		Sub mikroemulsi 1%	-7.22429*	2.20130	.011	-12.3005	-2.1481
	Sub mikroemulsi 1%	Positif	1.67096	2.20130	.470	-3.4052	6.7472
		Negative	29.39096*	2.20130	.000	24.3148	34.4672
		Krim Sambiloto 1%	7.22429*	2.20130	.011	2.1481	12.3005

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

Keputusan: data persentase penyembuhan luka bakar seluruh kelompok uji tidak berbeda signifikan.