

## DAFTAR PUSTAKA

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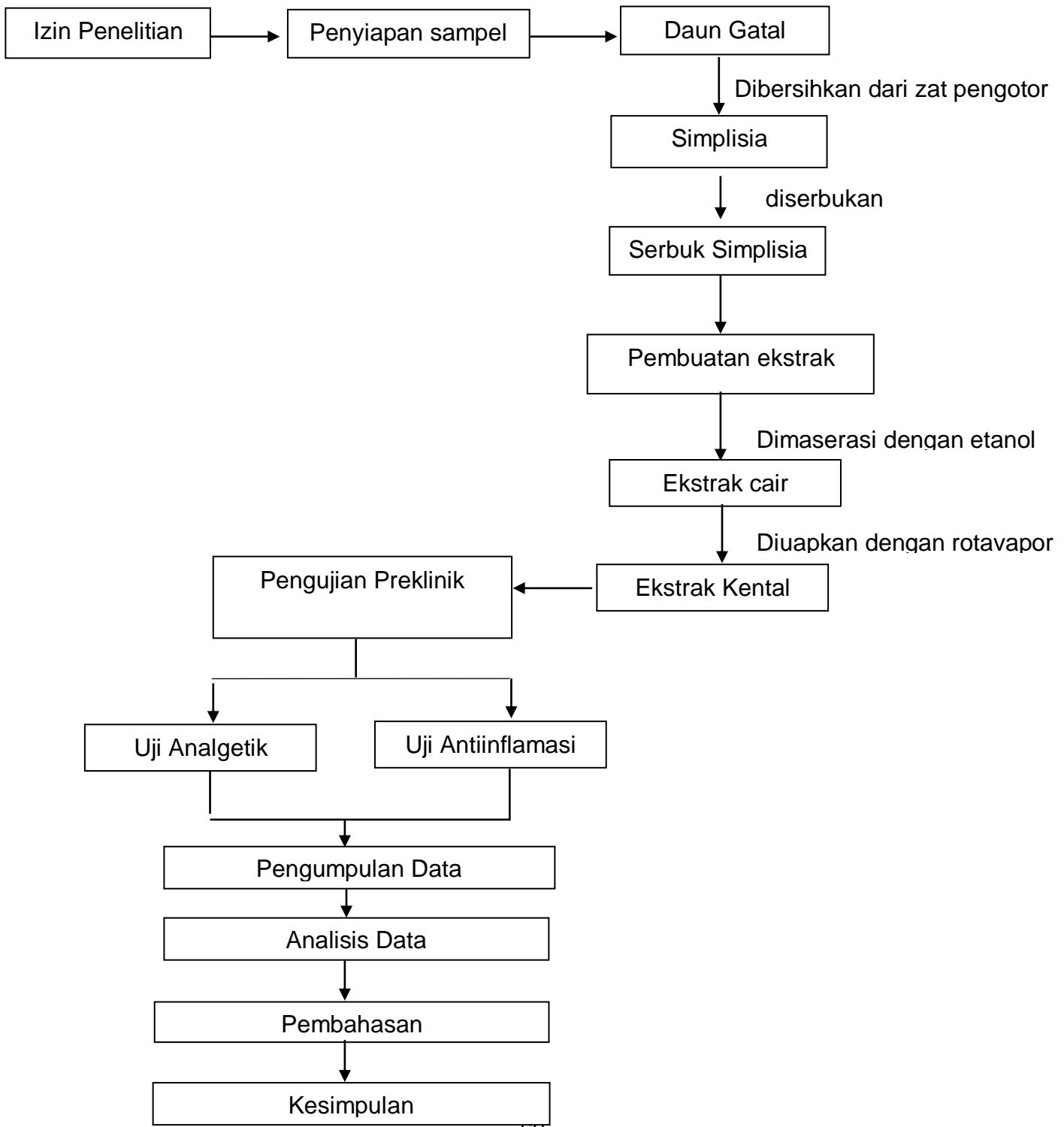
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## LAMPIRAN

### A. ALUR PENELITIAN



## B. DOKUMENTASI PENELITIAN



Gambar 10. Sampel Daun Gatal (*Laportea decumana* (Roxb) Wedd)



Gambar 11. Proses penguapan pada Rotavapor



**Gambar 12. Hasil Basis Krim**



**Gambar 13. Hasil Sediaan Krim Ekstrak Daun Gatal**



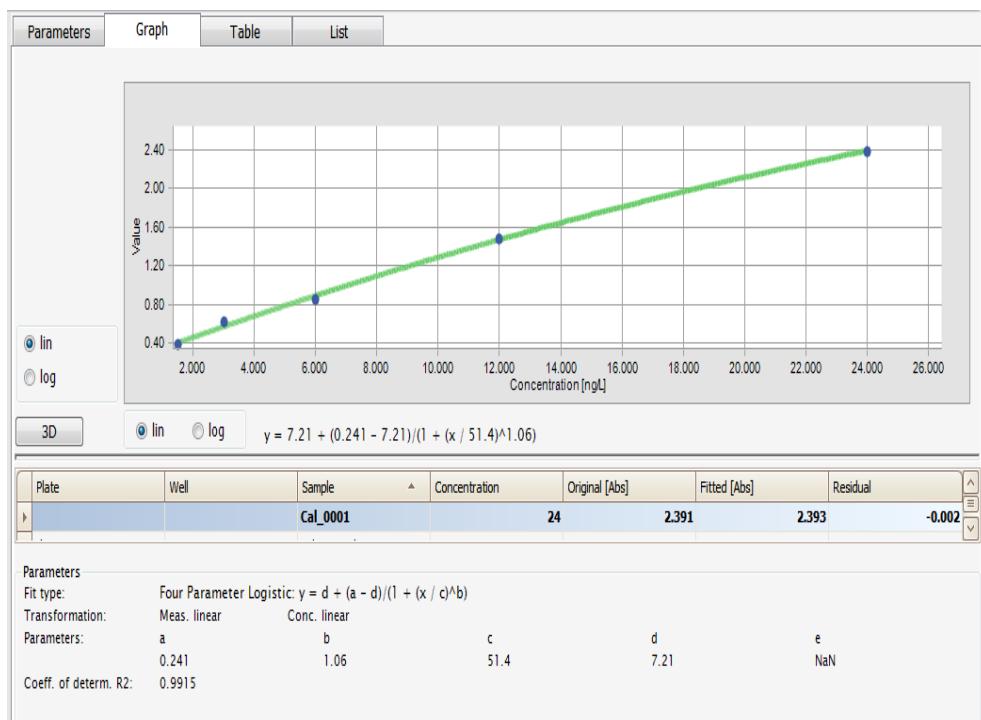
**Gambar 14. Kaki Tikus Pasca Injeksi Formalin 1%**



**Gambar 15. Pengukuran Edema Pada Pletismometer**



**Gambar 16. Pengukuran Jaringan IL-6 Pada Reader Elissa**



**Gambar 17. Kurva Standar IL-6 Elissa**

## C. DATA STATISTIK

### 1. Interleuki-6 (IL-6)

Table Analyzed	IL6				
One-way analysis of variance					
P value	< 0,0001				
P value summary	***				
Are means signif. different? (P < 0,05)	Yes				
Number of groups	5				
F	16,63				
R square	0,8160				
ANOVA Table	SS	Df	MS		
Residual (within columns)	8,120	15	0,5413		
Total	44,13	19			
Tukey's Multiple Comparison Test	Mean Diff,	Q	Significant? P < 0,05?	Summary	95% CI of diff
KONTROL NEGATIF vs LD CREAM 0,5%	0,2185	0,5941	No	ns	-1,388 to 1,825
KONTROL NEGATIF vs LD CREAM 1 %	0,7531	2,047	No	ns	-0,8534 to 2,360
KONTROL NEGATIF vs LD CREAM 2%	2,521	6,854	Yes	**	0,9149 to 4,128
KONTROL NEGATIF vs KONTROL POSITIF	3,393	9,223	Yes	***	1,786 to 5,000
LD CREAM 0,5% vs LD CREAM 1 %	0,5346	1,453	No	ns	-1,072 to 2,141
LD CREAM 0,5% vs LD CREAM 2%	2,303	6,260	Yes	**	0,6964 to 3,909
LD CREAM 0,5% vs KONTROL POSITIF	3,174	8,629	Yes	***	1,568 to 4,781
LD CREAM 1 % vs LD CREAM 2%	1,768	4,807	Yes	*	0,1618 to 3,375
LD CREAM 1 % vs KONTROL POSITIF	2,640	7,176	Yes	**	1,033 to 4,246
LD CREAM 2% vs KONTROL POSITIF	0,8715	2,369	No	ns	-0,7350 to 2,478

## 2. Jilatan Kaki Tikus

Table Analyzed	DATA JILATAN				
One-way analysis of variance					
P value	0,0043				
P value summary	**				
Are means signif. different? (P < 0.05)	Yes				
Number of groups	5				
F	7,673				
R square	0,7543				
ANOVA Table	SS	Df	MS		
Residual (within columns)	82,67	10	8,267		
Total	336,4	14			
Tukey's Multiple Comparison Test	Mean Diff,	Q	Significant? P < 0,05?	Summary	95% CI of diff
Negative Control vs LD 0,5%	8,000	4,819	Yes	*	0,2744 to 15,73
Negative Control vs LD 1 %	9,333	5,623	Yes	*	1,608 to 17,06
Negative Control vs LD 2%	11,67	7,028	Yes	**	3,941 to 19,39
Negative Control vs Positive Control	10,33	6,225	Yes	**	2,608 to 18,06
LD 0,5% vs LD 1 %	1,333	0,8032	No	ns	-6,392 to 9,059
LD 0,5% vs LD 2%	3,667	2,209	No	ns	-4,059 to 11,39
LD 0,5% vs Positive Control	2,333	1,406	No	ns	-5,392 to 10,06
LD 1 % vs LD 2%	2,333	1,406	No	ns	-5,392 to 10,06
LD 1 % vs Positive Control	1,000	0,6024	No	ns	-6,726 to 8,726
LD 2% vs Positive Control	-1,333	0,8032	No	ns	-9,059 to 6,392

### 3. Hentakan Kaki Tikus

Table Analyzed	Data Hentakan				
One-way analysis of variance					
P value	0,0005				
P value summary	***				
Are means signif. different? (P < 0,05)	Yes				
Number of groups	5				
F	13,36				
R square	0,8423				
ANOVA Table	SS	Df	MS		
Residual (within columns)	27203	10	2720		
Total	172520	14			
Tukey's Multiple Comparison Test	Mean Diff,	Q	Significant? P < 0,05?	Summary	95% CI of diff
Negative Control vs LD 0,5 %	-14,33	0,4760	No	Ns	-154,5 to 125,8
Negative Control vs LD 1 %	92,33	3,066	No	Ns	-47,81 to 232,5
Negative Control vs LD 2 %	182,0	6,044	Yes	*	41,86 to 322,1
Negative Control vs Positive Control	236,3	7,848	Yes	**	96,19 to 376,5
LD 0,5 % vs LD 1 %	106,7	3,542	No	Ns	-33,48 to 246,8
LD 0,5 % vs LD 2 %	196,3	6,520	Yes	**	56,19 to 336,5
LD 0,5 % vs Positive Control	250,7	8,324	Yes	**	110,5 to 390,8
LD 1 % vs LD 2 %	89,67	2,978	No	Ns	-50,48 to 229,8
LD 1 % vs Positive Control	144,0	4,782	Yes	*	3,857 to 284,1
LD 2 % vs Positive Control	54,33	1,804	No	Ns	-85,81 to 194,5

#### 4. Edema

Table Analyzed	DATA EDEMA				
<b>Repeated Measures ANOVA</b>					
P value	<b>0,0001</b>				
P value summary	***				
Are means signif. different? (P < 0.05)	<b>Yes</b>				
Number of groups	<b>5</b>				
F	<b>11,51</b>				
R square	<b>0,7421</b>				
Was the pairing significantly effective?					
R square	<b>0,3510</b>				
F	<b>8,390</b>				
P value	<b>0,0008</b>				
P value summary	***				
Is there significant matching? (P < 0.05)	<b>Yes</b>				
ANOVA Table	<b>SS</b>	<b>Df</b>	<b>MS</b>		
Individual (between rows)	<b>1,149</b>	<b>4</b>	<b>0,2872</b>		
Residual (random)	<b>0,5476</b>	<b>16</b>	<b>0,03423</b>		
Total	<b>3,272</b>	<b>24</b>			
Tukey's Multiple Comparison Test	<b>Mean Diff,</b>	<b>Q</b>	<b>Significant? P &lt; 0,05?</b>	<b>Summary</b>	<b>95% CI of diff</b>
Negative Control vs LD Cream 0,5%	<b>0,05000</b>	<b>0,6043</b>	<b>No</b>	<b>ns</b>	<b>-0,3085 to 0,4085</b>
Negative Control vs LD Cream 1%	<b>-0,05800</b>	<b>0,7010</b>	<b>No</b>	<b>ns</b>	<b>-0,4165 to 0,3005</b>
Negative Control vs LD Cream 2%	<b>0,4560</b>	<b>5,511</b>	<b>Yes</b>	<b>**</b>	<b>0,09750 to 0,8145</b>
Negative Control vs Positive Control	<b>0,5473</b>	<b>6,615</b>	<b>Yes</b>	<b>**</b>	<b>0,1888 to 0,9058</b>
LD Cream 0,5% vs LD Cream 1%	<b>-0,1080</b>	<b>1,305</b>	<b>No</b>	<b>ns</b>	<b>-0,4665 to 0,2505</b>
LD Cream 0,5% vs LD Cream 2%	<b>0,4060</b>	<b>4,907</b>	<b>Yes</b>	<b>*</b>	<b>0,04750 to 0,7645</b>
LD Cream 0,5% vs Positive Control	<b>0,4973</b>	<b>6,011</b>	<b>Yes</b>	<b>**</b>	<b>0,1388 to 0,8558</b>
LD Cream 1% vs LD Cream 2%	<b>0,5140</b>	<b>6,212</b>	<b>Yes</b>	<b>**</b>	<b>0,1555 to 0,8725</b>
LD Cream 1% vs Positive Control	<b>0,6053</b>	<b>7,316</b>	<b>Yes</b>	<b>***</b>	<b>0,2468 to 0,9638</b>
LD Cream 2% vs Positive Control	<b>0,09133</b>	<b>1,104</b>	<b>No</b>	<b>ns</b>	<b>-0,2672 to 0,4498</b>

## D. KODE ETIK PENELITIAN



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN

RISET, DAN TEKNOLOGI

UNIVERSITAS HASANUDDIN

FAKULTAS KESEHATAN MASYARAKAT

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### REKOMENDASI PERSETUJUAN ETIK

Nomor : 9712/UN4.14.1/TP.01.02/2022

Tanggal : 23 Agustus 2022

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No.Protokol	16822092171	No. Sponsor Protokol	
Peneliti Utama	Djulfikri Mewar	Sponsor	Pribadi
Judul Penelitian	<b>Uji Preklinik Efek Antiinflamasi dan Analgetik Ekstrak Etanol Daun Gatal (<i>Laportea decumana (Roxb.) Wedd</i>) Secara Topikal Terhadap Tikus Putih (<i>Rattus Norvegicus</i>)</b>		
No.Versi Protokol	1	Tanggal Versi	16 Agustus 2022
No.Versi PSP	1	Tanggal Versi	16 Agustus 2022
Tempat Penelitian	<b>Laboratorium BioFarmasi Fakultas Farmasi Universitas Hasanuddin</b>		
Judul Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 23 Agustus 2022 Sampai 23 Agustus 2023	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian	Nama : Prof.dr. Veni Hadju,M.Sc,Ph.D	Tanda tangan 	Tanggal 23 Agustus 2022 
Sekretaris komisi Etik Penelitian	Nama : Dr. Wahiduddin, SKM.,M.Kes	Tanda tangan 	Tanggal 23 Agustus 2022 

Kewajiban Peneliti Utama :

1. Menyertakan Amandemen Protokol untuk persetujuan sebelum di implementasikan
2. Menyampaikan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
3. Menyampaikan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian risiko tinggi dan setiap setahun untuk penelitian risiko rendah
4. Menyampaikan laporan akhir setelah Penelitian berakhir
5. Melaporkan pernyimpangan dari protocol yang disetujui (protocol deviation/violation)
6. Mematuhi semua peraturan yang ditentukan

## E. PERHITUNGAN

### 1. Perhitungan Bahan Basis Krim

- Cethyl Alkohol 2%

$$\frac{2}{100} \times 150 = 3 \text{ gr}$$

- Trietanolamin 4%

$$\frac{4}{100} \times 150 = 6 \text{ gr}$$

- Asam Stearat 10%

$$\frac{10}{100} \times 150 = 15 \text{ gr}$$

- Propilen Glikol 10%

$$\frac{10}{100} \times 150 = 15 \text{ gr}$$

- Parafin Cair 5%

$$\frac{5}{100} \times 150 = 7,5 \text{ gr}$$

- Hydantoin 0,1%

$$\frac{0,1}{100} \times 150 = 0,15 \text{ gr}$$

- Aqudest qs

$$3 + 6 + 15 + 15 + 7,5 + 0,15 = 46,65$$

$$150 \text{ gr} - 46,65 = 103,35 \text{ gr}$$

## 2. Perhitungan dosis krim ekstrak daun gatal

- Dosis Krim Ekstrak Daun Gatal 0,5%

$$\frac{0,5}{100} \times 30 \text{ gr} = 0,15 \text{ gr}$$

- Dosis Krim Ekstrak Daun Gatal 1%

$$\frac{1}{100} \times 30 \text{ gr} = 0,3 \text{ gr}$$

- Dosis Krim Ekstrak Daun Gatal 2%

$$\frac{2}{100} \times 30 \text{ gr} = 0,6 \text{ gr}$$

## 3. Perhitungan Persen Proteksi Jilatan Kaki

$$\text{Persen Proteksi} = \frac{a - b}{a} \times 100$$

Ket : (a) = Rata – rata kontrol negatif,

(b) = Rata – rata kelompok perlakuan

- Kelompok perlakuan 0,5%

$$= \frac{12,67 - 4,67}{12,67} \times 100 = 63,1\%$$

- Kelompok Perlakuan 1%

$$= \frac{12,67 - 3,33}{12,67} \times 100 = 73,7\%$$

- Kelompok perlakuan 2%

$$= \frac{12,67 - 1,00}{12,67} \times 100 = 92,1\%$$

- Kelompok Perlakuan Kontrol Positif

$$= \frac{12,67 - 1,00}{12,67} \times 100 = 92,1\%$$

#### **4. Perhitungan Persen Proteksi Hentakan Kaki**

$$\text{Persen Proteksi} = \frac{a - b}{a} \times 100$$

Ket : (a) = Rata – rata kontrol negatif

(b) = Rata – rata kelompok perlakuan

- Kelompok perlakuan 0,5%

$$= \frac{341,7 - 356}{341,7} \times 100 = 4,1\%$$

- Kelompok Perlakuan 1%

$$= \frac{341,7 - 249,3}{341,7} \times 100 = 27,1\%$$

- Kelompok Perlakuan 2%

$$= \frac{341,7 - 159,7}{341,7} \times 100 = 53,2\%$$

- Kelompok Kontrol Positif

$$= \frac{341,7 - 105,3}{341,7} \times 100 = 69,2\%$$