

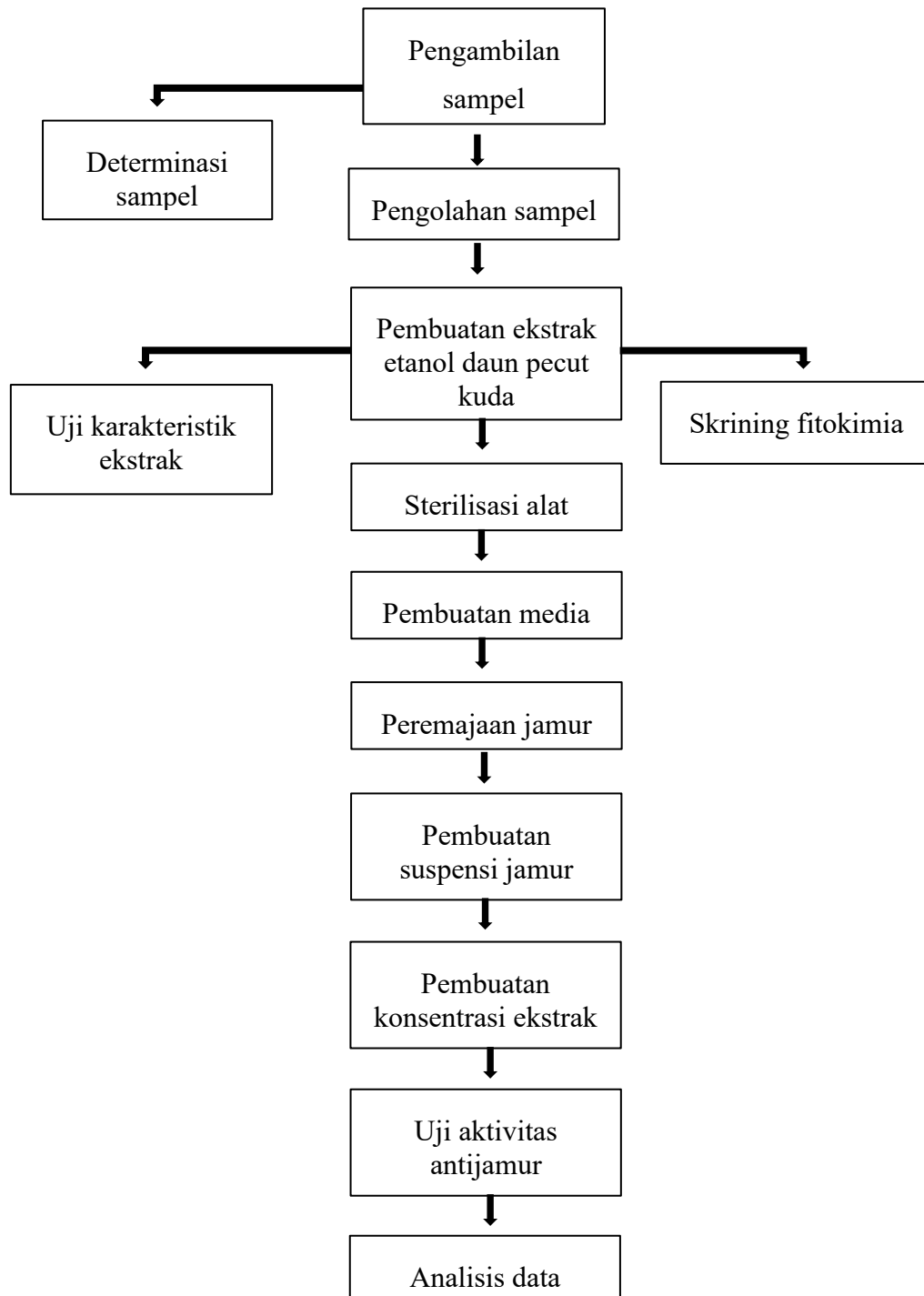
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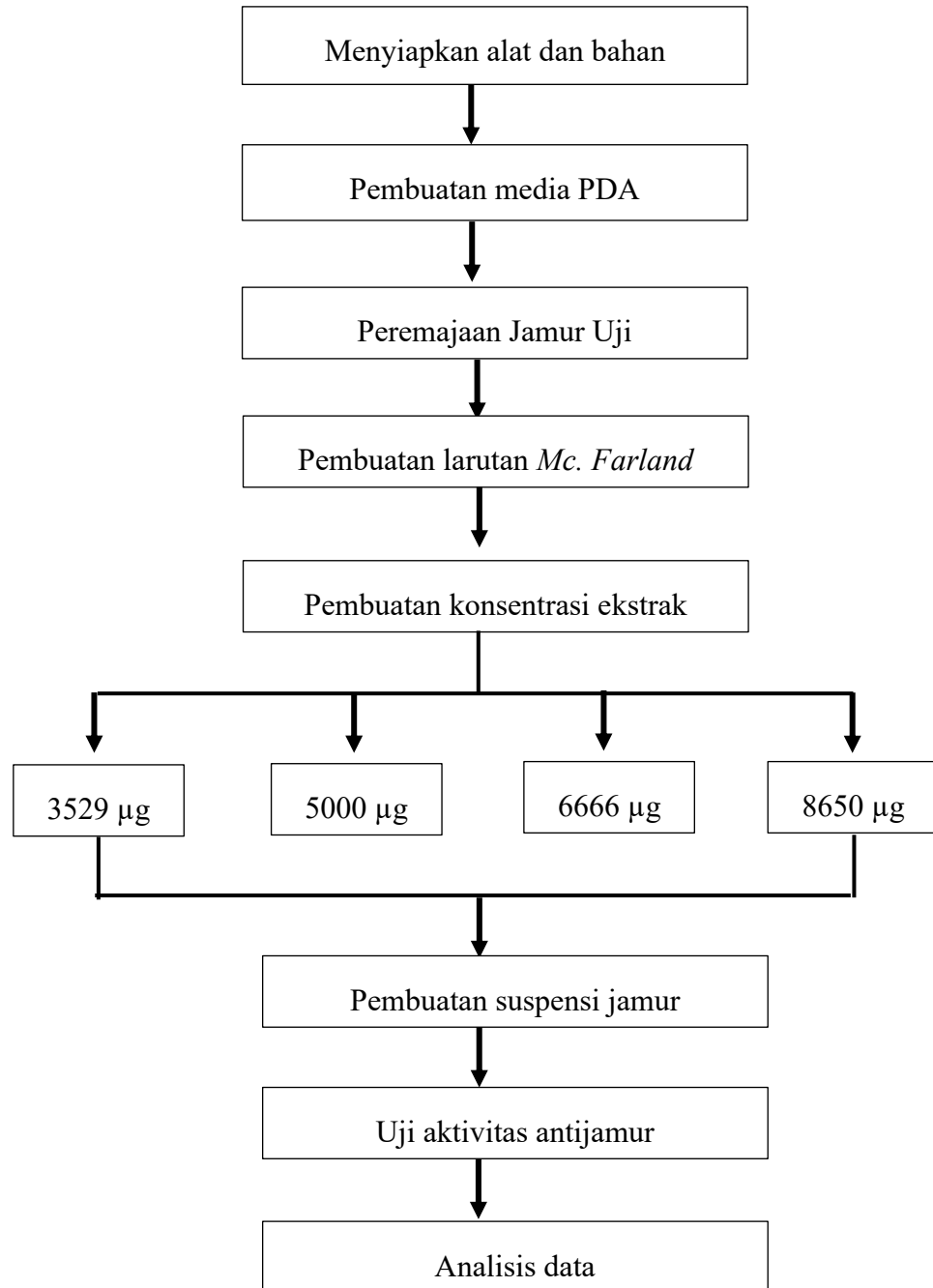
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LAMPIRAN**Lampiran 1. Skema Alur Penelitian**

Lampiran 2. Skema Kerja Pengujian Aktivitas Antijamur

Lampiran 3. Surat Determinasi


HERBARIUM UNIVERSITAS ANDALAS (ANDA)
 Departemen Biologi FMIPA Universitas Andalas Kampus Limau Manih Padang
 Sumbar Indonesia 25163 Telp. +62-751-777427 e-mail: herbariumanda@yahoo.com

Nomor : 167/K-ID/ANDA/II/2025
 Lampiran : -
 Perihal : Hasil Identifikasi

Kepada yth,
 Suhaera, S.Farm.,M.Pharm.Sci
 Di
 Tempat

Dengan hormat,
 Sehubungan dengan surat permohonan determinasi sampel dari Institut Kesehatan Mitra Bunda No. 030/K/S1-Farmasi/IKMB/II/2025 tanggal 17 Februari 2025 di Herbarium Universitas Andalas Departemen Biologi FMIPA Universitas Andalas, kami telah membantu mengidentifikasi tumbuhan yang dibawa, dari:

Nama : Suhaera, S.Farm.,M.Pharm.Sci
 Instansi : Institut Kesehatan Mitra Bunda

Berikut ini diberikan hasil identifikasi yang dikeluarkan dari Herbarium Universitas Andalas.

No	Family	Spesies
1.	Verbenaceae	<i>Stachytarpheta jamaicensis</i> (L.) Vahl

Demikian surat ini dibuat untuk dapat digunakan seperlunya.

Padang, 26 Februari 2025
 Kepala,

 Dr. Nurainas
 NIP. 196908141995122001

Lampiran 4. Sertifikat Jamur *Trichophyton rubrum*

thermo scientific		Thermo Fisher Scientific Microbiology 12076 Santa Fe Trail Drive 12230 Santa Fe Trail Drive Lenexa, KS 66215 800.255.6730 800.447.5761 fax www.thermoFisher.com
Certificate of Analysis		
Product Name: T. rubrum ATCC 28188 PK/5	Product Number: R4608301	
Lot Number: 549066	Expiration Date: 2026-03-18 (YYYY-MM-DD)	
This product has been manufactured, processed and packaged in accordance with Quality Systems Regulation, 21 CFR Part #20. Representative samples were tested per Remel Inc., a part of Thermo Fisher Scientific Quality Control specifications and were found to meet performance criteria for this product.		
Purity: Standardized aliquots of the rehydrated product are inoculated onto nonselective media and examined for pure growth following the appropriate incubation. Selective and Differential media are also tested where applicable.		
Viability And Quantification: Each organism is recovered from the preserved state within the required time frame and at an acceptable level. Passage number is stated as the current preserved state.		
Macroscopic And Microscopic Morphology: Colony morphology is consistent with documented referenced description. Traditional staining is performed.		
Characterization: Organism exhibits characteristic biochemical, enzymatic, genotypical and/or biochemical reactions. Automated and/or conventional testing was performed and results were within established limits. Antimicrobial testing performed where applicable. Results within expected ranges.		
In Vitro Hair Perforation: Negative Urea Test: Negative Trichophyton Agars: Growth on numbers 1 - 5		
CFU/loop: >10(3)	Passage: 3 Identification Profile: MicroSEQ®	
Macroscopic Morphology: Colony morphology: PDA, 30°C, 10 days - Granular, fluffy, downy, sometimes powdery; white, pale pink. Typically wine red. Sometimes brown, or yellow orange.		
Microscopic Morphology: Septate hyphae; numerous lateral tear shaped microconidia, solitary or sometimes in clusters along hyphae. Rare macroconidia., thin walled, pencil or cigar shaped having 2-8 cells, form directly on ends of thick hyphae singly or in groups. Arthroconidia tend to form from both hyphae and macroconidia.		
Appearance: Preserved Gel Matrix suspended in inoculating loop pH: N/A		
Page 1 of 2		

Lampiran 5. Sertifikat Ketokonazole



BADAN PENGAWAS OBAT DAN MAKANAN
 Jl. Percetakan Negara No. 23 Jakarta Pusat 10560 Indonesia
 Telp. (021) 424 4691, 424 4819, 424 5075, Fax : 424 5150, 420 1427
 Email : ppomn@pom.go.id; sekretariatkappomn@gmail.com Website : www.pom.go.id

SERTIFIKAT ANALISIS

NAMA ZAT : KETOCONAZOLE / KETOKONAZOL BPFI

CAS No. : 65277-42-1

NO KONTROL : AB0124189

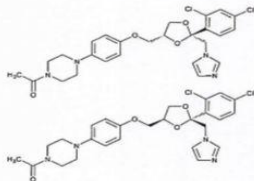
FORMULA : $C_{26}H_{35}Cl_2N_4O_4$

BOBOT MOLEKUL : 531,43 g/mol

TUJUAN PENGGUNAAN :

- Identifikasi secara spektrofotometri inframerah
- Identifikasi secara kromatografi cair kinerja tinggi
- Uji kemurnian secara kromatografi cair kinerja tinggi
- Penetapan kadar

WADAH DAN PENYIMPANAN : Dalam wadah tertutup rapat, disimpan pada suhu ruang terkendali hingga 25°C.



PENGUJIAN	METODE	SPESIFIKASI	HASIL
Pemerian	-	Serbuk hablur, warna putih	Memenuhi syarat
Identifikasi	Spektrofotometri inframerah	Sesuai baku primer <i>Ketoconazole</i> USPRS	Memenuhi syarat
	Kromatografi cair kinerja tinggi	- Kromatogram pelarut tidak menunjukkan puncak dengan waktu retensi yang sama dengan larutan uji dan baku - Waktu retensi puncak utama pada kromatogram larutan uji sesuai dengan larutan baku	Memenuhi syarat
Susut pengeringan	Gravimetri	≤ 0,5%	0,03% (n = 6; SD = 0,01%)
Sisa pemaparan	Gravimetri	≤ 0,1%	0,09% (n = 6; SD = 0,01%)
Uji kemurnian	Differential Scanning Calorimetry	148°C - 152 °C	150,13°C (n = 3; RSD = 0,42%)
	Kromatografi cair kinerja tinggi	-	Cemaran total = 0,23%

Kadar yang ditetapkan (assigned value) 99,68%; U = 1,28%; k = 2



Kepala Pusat Pengembangan Pengujian Obat dan Makanan Nasional
 u.p. Ketua Tim Pengembangan Baku Pembanding
 Atiek Supandati Eka S., S.Si., Apt., MKM
 Tanggal adopsi : 3 Juli 2024

Sertifikat tidak diperkenankan untuk direproduksi tanpa izin tertulis dari PPPOMN

Versi 1

Halaman 1 dari 1



Lampiran 6. Karakteristik Simplisia Daun Pecut Kuda

Tabel 4. Hasil Pemeriksaan Organoleptik Simplisia

Pemeriksaan	Keterangan	Gambar
Organoleptik	Warna: Hijau Tua Bau: Khas daun kering Rasa : Tidak berasa	

Lampiran 7. Perhitungan Rendemen Ekstrak Pecut Kuda

- Rendemen Ekstrak Etanol Daun Pecut Kuda

- Berat awal simplisia daun pecut kuda: 1800 gram
- Berat ekstrak etanol daun pecut kuda: 203 gram
- $\% \text{ Rendemen} = \frac{\text{Berat ekstrak kental}}{\text{Berat sampel yang digunakan}} \times 100\%$
 $= \frac{203 \text{ gram}}{1800 \text{ gram}} \times 100\%$
 $= 11,2\%$

- Rendemen Ekstrak Etil Asetat Daun Pecut Kuda

- Berat awal simplisia daun pecut kuda: 250 gram
- Berat ekstrak etil asetat daun pecut kuda: 8 gram
- $\% \text{ Rendemen} = \frac{\text{Berat ekstrak kental}}{\text{Berat sampel yang digunakan}} \times 100\%$
 $= \frac{8 \text{ gram}}{250 \text{ gram}} \times 100\%$
 $= 3,2\%$

- Rendemen Ekstrak N-Heksan Daun Pecut Kuda

- Berat awal simplisia daun pecut kuda: 250 gram
- Berat ekstrak n-heksan daun pecut kuda: 2,14 gram
- $\% \text{ Rendemen} = \frac{\text{Berat ekstrak kental}}{\text{Berat sampel yang digunakan}} \times 100\%$
 $= \frac{2,14 \text{ gram}}{250 \text{ gram}} \times 100\%$
 $= 0,8\%$

Lampiran 8. Hasil Penetapan Susut Pengeringan

Tabel 5. Hasil Penetapan Susut Pengeringan Simplisia Pecut Kuda

Berat krus kosong (A)	Berat krus + simplisia pecut kuda sebelum pemanasan (B)	Berat krus + simplisia pecut kuda setelah pemanasan (C)	%Susut pengeringan
29,025 gram	31,025 gram	Oven ke-1 = 30,895 gram Oven ke-2 = 30,850 gram Oven ke-3 = 30,850 gram	8,75%

$$\begin{aligned}
 \% \text{Susut Pengeringan} &= \frac{(B-A)-(C-A)}{(B-A)} \times 100\% \\
 &= \frac{(31,025 \text{ gram} - 29,025 \text{ gram}) - (30,850 \text{ gram} - 29,025 \text{ gram})}{(31,025 \text{ gram} - 29,025 \text{ gram})} \times 100\% \\
 &= \frac{2 \text{ gram} - 1,825 \text{ gram}}{2 \text{ gram}} \times 100\% \\
 &= 8,75\%
 \end{aligned}$$

Lampiran 9. Hasil Penetapan Kadar Air

Tabel 6. Hasil Penetapan Kadar Air Simplisia Pecut Kuda

Berat cawan porselin kosong (A)	Berat cawan porselin + simplisia pecut kuda sebelum pemanasan (B)	Berat cawan porselin + simplisia pecut kuda setelah pemanasan (C)	% Kadar air
75,475 gram	77,475 gram	Oven ke-1 = 77,310 gram Oven ke-2 = 77,290 gram Oven ke-3 = 77,290 gram	9,25%

$$\begin{aligned}
 \% \text{ Kadar Air} &= \frac{(B-C)}{(B-A)} \times 100\% \\
 &= \frac{(77,475 \text{ gram} - 77,290 \text{ gram})}{(77,475 \text{ gram} - 75,475 \text{ gram})} \times 100\% \\
 &= \frac{0,185 \text{ gram}}{2 \text{ gram}} \times 100\% \\
 &= 9,25\%
 \end{aligned}$$

Lampiran 10. Penetapan Hasil Kadar Abu

Tabel 7. Hasil Penetapan Kadar Air Simplisia Pecut Kuda

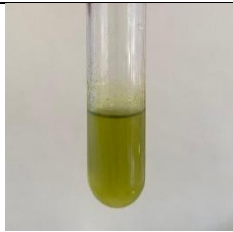
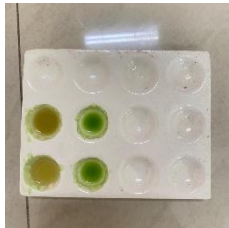
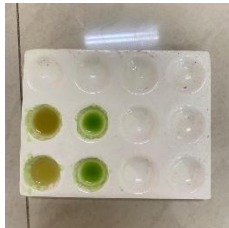
Berat krus kosong (A)	Berat krus + simplisia pecut kuda sebelum pemanasan (B)	Berat krus + simplisia pecut kuda setelah pemanasan (C)	%Kadar abu
46,230 gram	48,230 gram	Pemijaran ke-1 = 46,445 gram Pemijaran ke-2 = 46,440 gram	10,5%

$$\begin{aligned}
 \% \text{ Kadar Air} &= \frac{(C-A)}{(B-A)} \times 100\% \\
 &= \frac{(46,440\text{gram}-46,230 \text{ gram})}{(48,230 \text{ gram}-46,230 \text{ gram})} \times 100\% \\
 &= \frac{0,21 \text{ gram}}{2 \text{ gram}} \times 100\% \\
 &= 10,5\%
 \end{aligned}$$

Lampiran 11. Skrining Fitokimia Ekstrak Etanol Daun Pecut Kuda

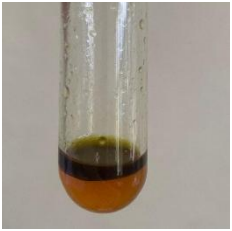
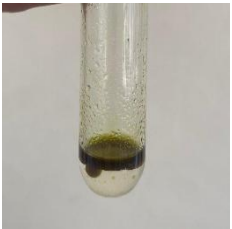
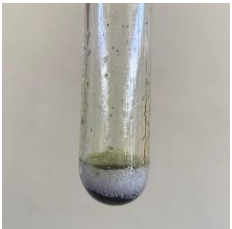
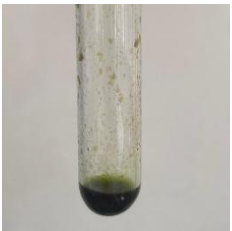
Tabel 8. Hasil Skrining Fitokimia Ekstrak Etanol Daun Pecut Kuda

Pemeriksaan	Reagen	Hasil Uji	Keterangan	Gambar
Alkaloid	H ₂ SO ₄ 2N dan Pereaksi Dragendroff	(-)	Tidak terbentuk endapan coklat atau merah	
	H ₂ SO ₄ 2N dan Pereaksi Mayer	(-)	Tidak terbentuk endapan putih	
Flavonoid	H ₂ SO ₄ 2N	(+)	Terbentuk warna jingga	
Fenolik	FeCl ₃ 5%	(+)	Terbentuk warna hijau kehitaman	
Saponin	Aquadest panas dan HCl pekat	(-)	Tidak terbentuk busa stabil	

				
Steroid	CH ₃ COOH, Dietil eter, dan H ₂ SO ₄	(-)	Tidak terjadi perubahan warna	
Terpenoid	CH ₃ COOH, Dietil eter, dan H ₂ SO ₄	(+)	Terjadi perubahan warna cokelat	

Lampiran 12. Skrining Fitokimia Ekstrak Etil Asetat Daun Pecut Kuda

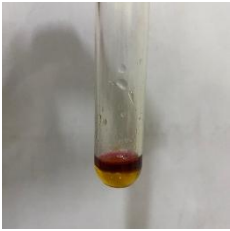
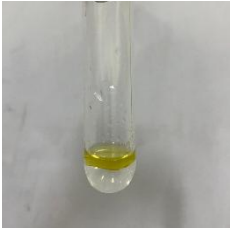
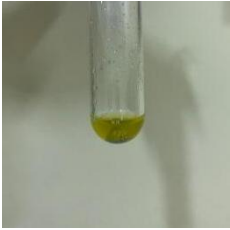
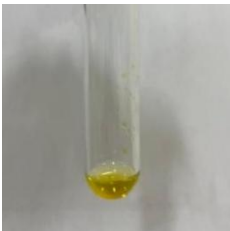
Tabel 9. Hasil Skrining Fitokimia Ekstrak Etil Asetat Daun Pecut Kuda

Pemeriksaan	Reagen	Hasil Uji	Keterangan	Gambar
Alkaloid	H ₂ SO ₄ 2N dan Pereaksi Dragendroff	(+)	Terbentuk endapan coklat atau merah	
	H ₂ SO ₄ 2N dan Pereaksi Mayer	(+)	Terbentuk endapan putih	
Flavonoid	HCl Pekat dan Serbuk Mg	(+)	Terbentuk buih dengan intensitas banyak	
Fenolik	FeCl ₃ 5%	(+)	Terbentuk warna hijau kehitaman	
Saponin	Aquadest panas dan HCl pekat	(-)	Tidak terbentuk busa stabil	

Steroid	CH_3COOH , Dietil eter, dan H_2SO_4	(-)	Tidak terjadi perubahan warna	
Terpenoid	CH_3COOH , Dietil eter, dan H_2SO_4	(-)	Tidak terjadi perubahan warna	

Lampiran 13. Skrining Fitokimia Ekstrak N-Heksana Daun Pecut Kuda

Tabel 10. Hasil Skrining Fitokimia Ekstrak N-Heksana Daun Pecut Kuda

Pemeriksaan	Reagen	Hasil Uji	Keterangan	Gambar
Alkaloid	H ₂ SO ₄ 2N dan Pereaksi Dragendroff	(+)	Terbentuk endapan merah atau coklat	
	H ₂ SO ₄ 2N dan Pereaksi Mayer	(+)	Terbentuk endapan putih	
Flavonoid	HCl Pekat dan Serbuk Mg	(-)	Tidak terbentuk buih dan perubahan warna	
Fenolik	FeCl ₃ 5%	(-)	Tidak terjadi perubahan warna	
Saponin	Aquadest panas dan HCl pekat	(-)	Tidak terbentuk busa stabil	

				
Steroid	CH ₃ COOH, Dietil eter, dan	(-)	Tidak terjadi perubahan warna	
Terpenoid	CH ₃ COOH, Dietil eter, dan H ₂ SO ₄	(-)	Tidak terjadi perubahan warna	

Lampiran 14. Peremajaan Jamur

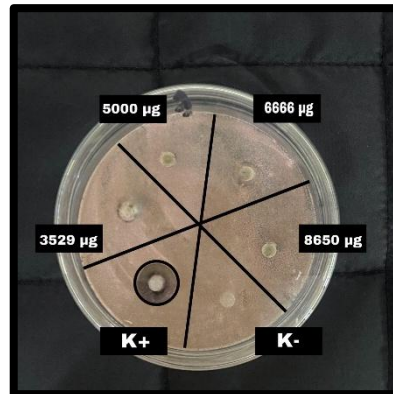
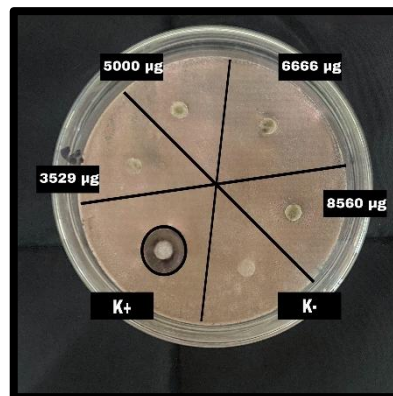
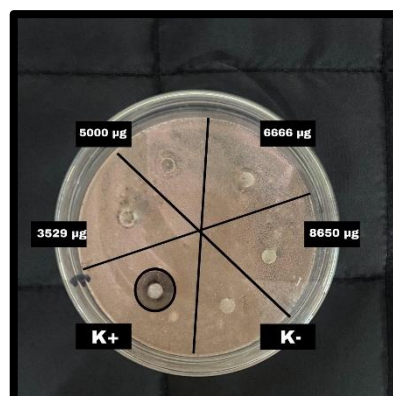


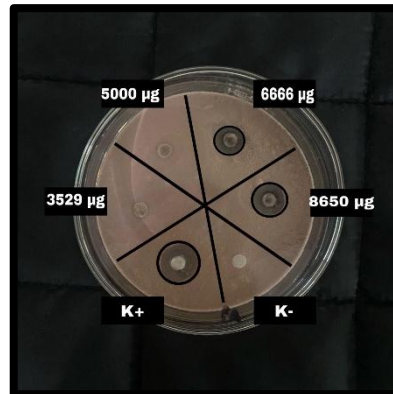
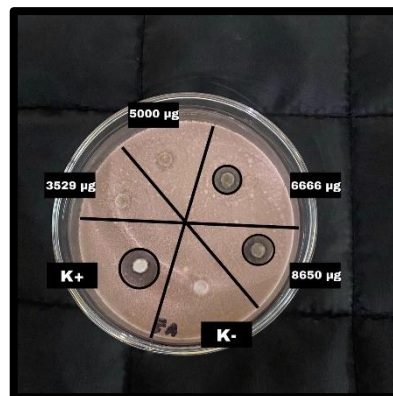
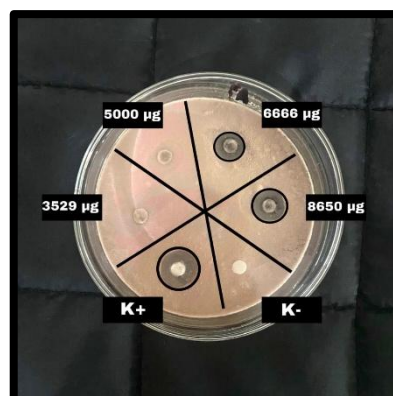
Gambar 3. Peremajaan Jamur *Trichopyton rubrum*

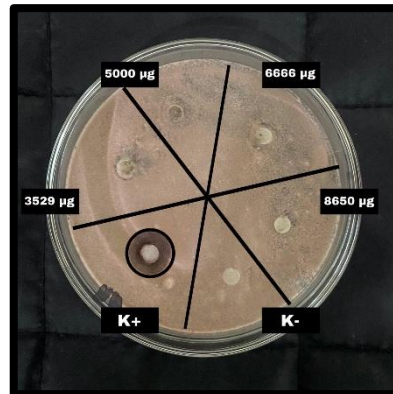
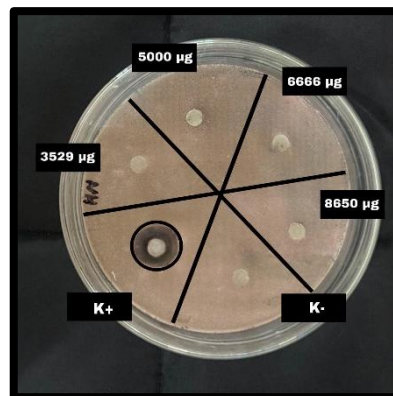
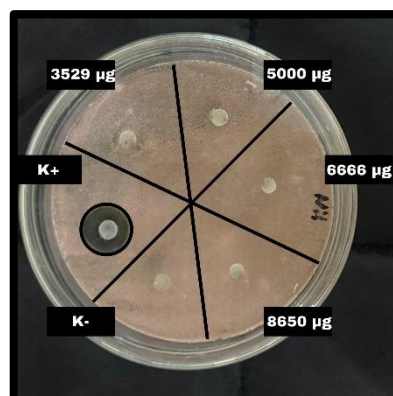
Lampiran 15. Hasil Uji Aktivitas Antijamur *Trichophyton rubrum*

Tabel 11. Hasil Pengukuran Daya Hambat *Trichophyton rubrum*

Ekstrak	Konsentrasi	Daya Hambat (mm)			
		1x	2x	3x	Rata - rata
Ekstrak Etanol Daun Pecut Kuda	3529 µg/disc	0	0	0	0
	5000 µg/disc	0	0	0	0
	6666 µg/disc	0	0	0	0
	8650 µg/disc	0	0	0	0
	Kontrol Negatif	0	0	0	0
	Kontrol Positif	15,2	14,8	15,3	15,1
Ekstrak Etil Asetat Daun Pecut Kuda	3529 µg/disc	0	0	0	0
	5000 µg/disc	0	0	0	0
	6666 µg/disc	12,8	13,0	13,1	13
	8650 µg/disc	14,0	13,7	14,2	14
	Kontrol Negatif	0	0	0	0
	Kontrol Positif	15,5	15,8	15,2	15,5
Ekstrak N-Heksana Daun Pecut Kuda	3529 µg/disc	0	0	0	0
	5000 µg/disc	0	0	0	0
	6666 µg/disc	0	0	0	0
	8650 µg/disc	0	0	0	0
	Kontrol Negatif	0	0	0	0
	Kontrol Positif	15,0	15, 2	14,7	15

Lampiran 16. Hasil Uji Aktivitas Antijamur**Perlakuan I****Perlakuan II****Perlakuan III****Gambar 4.** Hasil Uji Aktivitas Antijamur Ekstrak Etanol Daun Pecut Kuda

Lampiran 17. Hasil Uji Aktivitas Antijamur**Perlakuan I****Perlakuan II****Perlakuan III****Gambar 5.** Hasil Uji Aktivitas Antijamur Ekstrak Etil Asetat Daun Pecut Kuda

Lampiran 18. Hasil Uji Aktivitas Antijamur**Perlakuan I****Perlakuan II****Perlakuan III****Gambar 6.** Hasil Uji Aktivitas Antijamur Ekstrak N-Heksan Daun Pecut Kuda

Lampiran 19. Pengujian Statistika

1. Uji Normalitas

Tests of Normality							
Perlakuan		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Zona Hambat Etanol	Dosis 3529 µg	.	3	.	.	3	.
	Dosis 5000 µg	.	3	.	.	3	.
	Dosis 6666 µg	.	3	.	.	3	.
	Dosis 8560 µg	.	3	.	.	3	.
	Kontrol +	.314	3	.	.893	3	.363
	Kontrol -	.	3	.	.	3	.
Zona Hambat N-Heksan	Dosis 3529 µg	.	3	.	.	3	.
	Dosis 5000 µg	.	3	.	.	3	.
	Dosis 6666 µg	.	3	.	.	3	.
	Dosis 8560 µg	.	3	.	.	3	.
	Kontrol +	.219	3	.	.987	3	.780
	Kontrol -	.	3	.	.	3	.
Zona Hambat Etil Asetat	Dosis 3529 µg	.	3	.	.	3	.
	Dosis 5000 µg	.	3	.	.	3	.
	Dosis 6666 µg	.253	3	.	.964	3	.637
	Dosis 8560 µg	.219	3	.	.987	3	.780
	Kontrol +	.175	3	.	1.000	3	1.000
	Kontrol -	.	3	.	.	3	.

2. Uji Homogenitas

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Zona Hambat Etanol	Based on Mean	12.000	5	12	.000
	Based on Median	1.923	5	12	.164
	Based on Median and with adjusted df	1.923	5	2.000	.377
	Based on trimmed mean	10.562	5	12	.000

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Zona Hambat N-Heksan	Based on Mean	5.953	5	12	.005
	Based on Median	3.571	5	12	.033
	Based on Median and with adjusted df	3.571	5	2.000	.233
	Based on trimmed mean	5.791	5	12	.006

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Zona Hambat Etil Asetat	Based on Mean	3.130	5	12	.049
	Based on Median	2.358	5	12	.104
	Based on Median and with adjusted df	2.358	5	5.194	.180
	Based on trimmed mean	3.086	5	12	.051

3. Uji post hoc Bonferroni

Dosis 3529 µg	Dosis 5000 µg	.00000	.14011	1.000	-.5112	.5112
	Dosis 6666 µg	-12.96667*	.14011	.000	-13.4779	-12.4554
	Dosis 8560 µg	-13.96667*	.14011	.000	-14.4779	-13.4554
	Kontrol +	-15.50000*	.14011	.000	-16.0112	-14.9888
	Kontrol -	.00000	.14011	1.000	-.5112	.5112
Dosis 5000 µg	Dosis 3529 µg	.00000	.14011	1.000	-.5112	.5112
	Dosis 6666 µg	-12.96667*	.14011	.000	-13.4779	-12.4554
	Dosis 8560 µg	-13.96667*	.14011	.000	-14.4779	-13.4554
	Kontrol +	-15.50000*	.14011	.000	-16.0112	-14.9888
	Kontrol -	.00000	.14011	1.000	-.5112	.5112
Dosis 6666 µg	Dosis 3529 µg	12.96667*	.14011	.000	12.4554	13.4779
	Dosis 5000 µg	12.96667*	.14011	.000	12.4554	13.4779
	Dosis 8560 µg	-1.00000*	.14011	.000	-1.5112	-.4888
	Kontrol +	-2.53333*	.14011	.000	-3.0446	-2.0221
	Kontrol -	12.96667*	.14011	.000	12.4554	13.4779
Dosis 8560 µg	Dosis 3529 µg	13.96667*	.14011	.000	13.4554	14.4779
	Dosis 5000 µg	13.96667*	.14011	.000	13.4554	14.4779
	Dosis 6666 µg	1.00000*	.14011	.000	.4888	1.5112
	Kontrol +	-1.53333*	.14011	.000	-2.0446	-1.0221
	Kontrol -	13.96667*	.14011	.000	13.4554	14.4779
Kontrol +	Dosis 3529 µg	15.50000*	.14011	.000	14.9888	16.0112
	Dosis 5000 µg	15.50000*	.14011	.000	14.9888	16.0112
	Dosis 6666 µg	2.53333*	.14011	.000	2.0221	3.0446
	Dosis 8560 µg	1.53333*	.14011	.000	1.0221	2.0446
	Kontrol -	15.50000*	.14011	.000	14.9888	16.0112
Kontrol -	Dosis 3529 µg	.00000	.14011	1.000	-.5112	.5112
	Dosis 5000 µg	.00000	.14011	1.000	-.5112	.5112
	Dosis 6666 µg	-12.96667*	.14011	.000	-13.4779	-12.4554
	Dosis 8560 µg	-13.96667*	.14011	.000	-14.4779	-13.4554
	Kontrol +	-15.50000*	.14011	.000	-16.0112	-14.9888

Lampiran 19. Pembuatan Larutan Uji Perlakuan

Pembuatan konsentrasi ekstrak dengan rumus :

$$\% \text{ Konsentrasi} = \frac{m}{v} \times 100\%$$

Keterangan:

% Konsentrasi = Konsentrasi ekstrak yang terdapat dalam pelarut

m = Berat / massa dari ekstrak (gram)

v = Jumlah total antara ekstrak dan pelarut setelah ditambahkan pelarut (mL)

- Konsentrasi 15%

$$\% \frac{m}{v} \times 100\%$$

$$15\% = \frac{m}{2 \text{ mL}} \times 100\%$$

$$15\% = \frac{100\% \times m}{2 \text{ mL}}$$

$$100\% \times m = 15\% \times 2 \text{ mL}$$

$$100 \times m = 30$$

$$m = 0,3 \text{ gram}$$

$$\text{pelarut} = \text{volume total} - \text{massa ekstrak}$$

$$= 2 \text{ mL} - 0,3 \text{ gram}$$

$$= 1,7 \text{ mL}$$

- Konversi ke $\mu\text{g}/\mu\text{L}$

$$0,3 \text{ gram} = 300.000 \mu\text{g}$$

$$1,7 \text{ mL} = 1700 \mu\text{L}$$

$$= \frac{300.000 \mu\text{g}}{1700 \mu\text{L}} = 176,47 \mu\text{g}/\mu\text{L}$$

$$= 20 \mu\text{L} \times 176,47 \mu\text{g} = 3.529 \mu\text{g}/\text{disc}$$

- Konsentrasi 20%

$$\% \frac{m}{v} \times 100\%$$

$$20\% = \frac{m}{2 \text{ mL}} \times 100\%$$

$$20\% = \frac{100\% \times m}{2 \text{ mL}}$$

$$100\% \times m = 20\% \times 2 \text{ mL}$$

$$100 \times m = 40$$

$$m = 0,4 \text{ gram}$$

$$\text{pelarut} = \text{volume total} - \text{massa ekstrak}$$

$$= 2 \text{ mL} - 0,4 \text{ gram}$$

$$= 1,6 \text{ mL}$$

- Konversi ke $\mu\text{g}/\mu\text{L}$

$$0,4 \text{ gram} = 400.000 \mu\text{g}$$

$$1,6 \text{ mL} = 1600 \mu\text{L}$$

$$= \frac{400.000 \mu\text{g}}{1600 \mu\text{L}} = 250 \mu\text{g}/\mu\text{L}$$

$$= 20 \mu\text{L} \times 250 \mu\text{g} = 5000 \mu\text{g}/\text{disc}$$

- Konsentrasi 25%

$$\% \frac{m}{v} \times 100\%$$

$$25\% = \frac{m}{2 \text{ mL}} \times 100\%$$

$$25\% = \frac{100\% \times m}{2 \text{ mL}}$$

$$100\% \times m = 25\% \times 2 \text{ mL}$$

$$100 \times m = 50$$

$$m = 0,5 \text{ gram}$$

$$\text{pelarut} = \text{volume total} - \text{massa ekstrak}$$

$$= 2 \text{ mL} - 0,5 \text{ gram}$$

$$= 1,5 \text{ mL}$$

- Konversi ke $\mu\text{g}/\mu\text{L}$

$$0,5 \text{ gram} = 500.000 \mu\text{g}$$

$$1,5 \text{ mL} = 1500 \mu\text{L}$$

$$= \frac{500.000 \mu\text{g}}{1500 \mu\text{L}} = 333 \mu\text{g}/\mu\text{L}$$

$$= 20 \mu\text{L} \times 333 \mu\text{g} = 6.666 \mu\text{g/disc}$$

- Konsentrasi 30%

$$\% \frac{m}{v} \times 100\%$$

$$30\% = \frac{m}{2 \text{ mL}} \times 100\%$$

$$30\% = \frac{100\% \times m}{2 \text{ mL}}$$

$$100\% \times m = 30\% \times 2 \text{ mL}$$

$$100 \times m = 60$$

$$m = 0,6 \text{ gram}$$

$$\text{pelarut} = \text{volume total} - \text{massa ekstrak}$$

$$= 2 \text{ mL} - 0,6 \text{ gram}$$

$$= 1,4 \text{ mL}$$

○ Konversi ke $\mu\text{g}/\mu\text{L}$

$$0,6 \text{ gram} = 600.000 \mu\text{g}$$

$$1,4 \text{ mL} = 1400 \mu\text{L}$$

$$= \frac{600.000 \mu\text{g}}{1400 \mu\text{L}} = 428 \mu\text{g}/\mu\text{L}$$

$$= 20 \mu\text{L} \times 428 \mu\text{g} = 8.560 \mu\text{g}/\text{disc}$$