

LAMPIRAN

Lampiran 1. Determinasi Tumbuhan



LABORATORIUM PEMBELAJARAN BIOLOGI
FAKULTAS SAINS DAN TEKNOLOGI TERAPAN
UNIVERSITAS AHMAD DAHLAN
Jl. Ringroad Selatan, Tamanan, Banguntapan, Bantul

SURAT KETERANGAN
Nomor : 404/Lab.Bio/B/VIII/2023

Yang bertanda tangan di bawah ini Kepala Laboratorium Pembelajaran Biologi Universitas Ahmad Dahlan menerangkan bahwa :

Nama : Laili Nur Zulnika
NIM : 2021142020
Prodi, PT : S1 Farmasi, Universitas Sahid Surakarta

Telah melakukan determinasi daun tanaman dengan bimbingan Hery Setiyawan, M.Si di Laboratorium Biologi Universitas Ahmad Dahlan, pada tanggal 22 Agustus 2023

Tanaman tersebut adalah :
Peperomia pellucida (L.) Kunth

Demikian Surat Keterangan ini untuk dapat dipergunakan seperlunya.

Yogyakarta, 26 Agustus 2023

Kepala Lab. Pembelajaran Biologi

Lehsan Luqman Indra Putra, S. Si., M.Sc.



1b - 2b - 3b - 4b - 12b - 13b - 14b - 17b - 18b - 19b - 20b - 21b - 22b - 23b - 24b - 25b -
26b - 27b - 799b - 800b - 801b - 803b - 804b - 805c - 806b - 807b - 808c - 809b - 810b -
811a - 812b - 815b - 816b - 818b - 820b - 821b - 822a - 823 Piperaceae

1b - 2b - 3a Peperomia

1b - 4a - 5a - 6a *Peperomia pellucida* (L.) Kunth

Flora of Java (Backer, 1965)

Lampiran 2. Daun Sirih Cina Dan Pembuatan Ekstrak



Lampiran 3. Perhitungan Randemen

Randemen : bobot akhir / bobot awal x 100%

Randemen : $148,08/1200 \times 100\% = 12,34\%$

Lampiran 4. Hasil Uji Skrining Fitokimia



Lampiran 5. Gambar preparasi sampel dan uji sifat fisik



Formulasi I



formulasi II



Formulasi III



Ui pH



Uji Homogenitas



Uji Daya Sebar

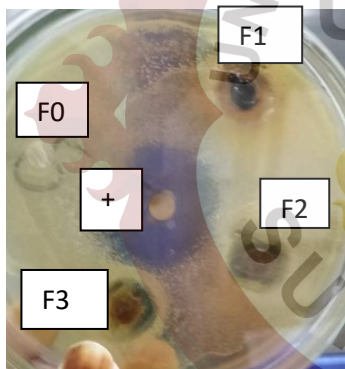


Uji Waktu Mengering

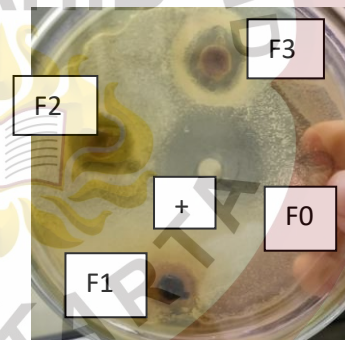


Uji Viskositas

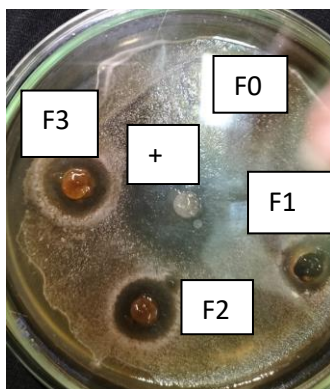
Lampiran 6. Gambar uji aktivitas antibakteri



Replikasi I



Replikasi II



Replikasi III

PRO – Technology
Laboratorium Uji Mikrobiologi
 Jalan Cempaka Putih No.69 - Jakarta Pusat
 Indonesia

SERTIFIKAT HASIL UJI

1. Bakteri : Stock Strain *Propionibacterium acne* ATCC 11827
 2. Nomor Uji Bakteri : V. 1. 7
 3. Tanggal Uji bakteri : 9 – 14 November 2020

Uraian Hasil Uji

Strain V. 1. 7. Biakan Murni dari *Propionibacterium acne* ATCC 11827

- I. Ciri-ciri koloni :
1. Pewarnaan Gram : Bentuk sel batang anaerobik, kecil-kecil, menyebar, berwarna merah violet, Gram positif.
 2. Di tanam pada media Blood Agar-Plate (BAP) : koloni berwarna putih, permukaan koloni cembung

II. Uji Fermentasi Karbohidrat dan Biokimia Penegasan

Uji Fisiologi bakteri	Hasil Uji
1. MOTILITAS	+
2. KATALASE	+
3. KOAGULASE	+
4. GLUKOSA	ASAM : + GAS : 0
5. LAKTOSA	ASAM : + GAS : 0
6. MALTOSA	ASAM : + GAS : 0
7. SUKROSA	ASAM : + GAS : 0
8. DEKTROSA	ASAM : + GAS : +

Catatan:

1. Hasil Uji ini hanya berlaku untuk contoh yang diuji.



Lampiran 7. Perhitungan Daya Sebar

REPLIKASI 1

$$\text{daya sebar } F_0 = \frac{7,5 + 5,5}{2} = 6,5\text{cm}$$

$$\text{daya sebar } F_1 = \frac{6+5}{2} = 5,5 \text{ cm}$$

$$\text{daya sebar } F_2 = \frac{6,5 + 4,5}{2} = 5,5\text{cm}$$

$$\text{daya sebar } F_3 = \frac{6 + 5}{2} = 5,5\text{cm}$$

REPLIKASI 2

$$\text{daya sebar } F_0 = \frac{7,5 + 5,5}{2} = 6,5\text{cm}$$

$$\text{daya sebar } F_1 = \frac{6,5 + 4,5}{2} = 5,5\text{cm}$$

$$\text{daya sebar } F_2 = \frac{5,5 + 6,5}{2} = 6\text{cm}$$

$$\text{daya sebar } F_3 = \frac{6,5 + 5}{2} = 5,5\text{cm}$$

REPLIKASI 3

$$\text{daya sebar } F_0 = \frac{8 + 6}{2} = 7\text{cm}$$

$$\text{daya sebar } F_1 = \frac{6 + 6}{2} = 6\text{cm}$$

$$\text{daya sebar } F_2 = \frac{6,5 + 4,5}{2} = 5,5\text{cm}$$

$$\text{daya sebar } F_3 = \frac{4,5 + 5,5}{2} = 5\text{cm}$$

Lampiran 8. Perhitungan Diameter Zona Hambat

Rumus

$$R = \frac{d1 + d2}{2} =$$

REPLIKASI 1

$$R (+) = \frac{21,6 + 20,9}{2} = 21,25mm$$

$$R F1 = \frac{9,3 + 10,7}{2} = 10mm$$

$$R F2 = \frac{11,7 + 11,4}{2} = 11,55mm$$

$$R F3 = \frac{12,3 + 12,5}{2} = 12,4mm$$

REPLIKASI 2

$$R (+) = \frac{21,3 + 20,6}{2} = 20,95mm$$

$$R F1 = \frac{9,1 + 10,7}{2} = 9,9mm$$

$$R F2 = \frac{10,9 + 11,5}{2} = 11,2mm$$

$$R F3 = \frac{12,5 + 11,7}{2} = 12,1mm$$

REPLIKASI 3

$$R (+) = \frac{21,3 + 21,1}{2} = 21,2mm$$

$$R F1 = \frac{10,2 + 9,1}{2} = 9,65mm$$

$$R F2 = \frac{11,3 + 11,2}{2} = 11,25mm$$

$$R F3 = \frac{12,2 + 11,9}{2} = 12,05mm$$

Lampiran 9. Hasil uji Spss uji sifat fisik

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	Df	Sig.
Dayasebar	Basis	.175	3	.	1.000	3	1.000
	formula 1	.175	3	.	1.000	3	1.000
	formula 2	.328	3	.	.871	3	.298
	formula 3	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

		Test of Homogeneity of Variances				
		Levene Statistic	df1	df2	Sig.	
Dayasebar	Based on Mean	.090	3	8	.964	
	Based on Median	.167	3	8	.916	
	Based on Median and with adjusted df	.167	3	7.959	.916	
	Based on trimmed mean	.094	3	8	.961	

		ANOVA				
Dayasebar		Sum of Squares	df	Mean Square	F	Sig.
Between Groups		2.090	3	.697	3.266	.080
Within Groups		1.707	8	.213		
Total		3.797	11			

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelompok	Statistic	Df	Sig.	Statistic	Df	Sig.
Dayalekat	Basis	.253	3	.	.964	3	.637
	formula 1	.253	3	.	.964	3	.637
	formula 2	.314	3	.	.893	3	.363
	formula 3	.219	3	.	.987	3	.780

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Dayalekat	Based on Mean	5.756	3	8	.321
	Based on Median	1.015	3	8	.435
	Based on Median and with adjusted df	1.015	3	2.457	.512
	Based on trimmed mean	5.142	3	8	.062

a. Lilliefors Significance Correction

ANOVA

Dayalekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36384.667	3	12128.222	655.580	.074
Within Groups	148.000	8	18.500		
Total	36532.667	11			

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelompok	Statistic	Df	Sig.	Statistic	df	Sig.
Viskositas	Basis	.239	3	.	.975	3	.699
	formula 1	.199	3	.	.995	3	.867
	formula 2	.310	3	.	.900	3	.384
	formula 3	.296	3	.	.918	3	.446

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Viskositas	Based on Mean	.085	3	8	.966
	Based on Median	.049	3	8	.985
	Based on Median and with adjusted df	.049	3	7.607	.985
	Based on trimmed mean	.081	3	8	.968

ANOVA

Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1379578.917	3	459859.639	88.733	.068
Within Groups	41460.000	8	5182.500		
Total	1421038.917	11			

Tests of Normality

	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Waktumenge ring	Basis	.361	3	.	.807	3	.132
	formula 1	.328	3	.	.871	3	.298
	formula 2	.349	3	.	.832	3	.194
	formula 3	.367	3	.	.792	3	.097

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Waktumenge ring	Based on Mean	6.013	3	8	.724
	Based on Median	.471	3	8	.711
	Based on Median and with adjusted df	.471	3	4.317	.718
	Based on trimmed mean	4.878	3	8	.073

ANOVA

Waktumengering

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.827	3	1.942	16.936	.081
Within Groups	.917	8	.115		
Total	6.744	11			

Lampiran 10. Hasil uji Spss uji aktivitas antibakteri

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Diameterzo	Positif	.314	3	.	.893	3	.363
nahambat	formula 1	.276	3	.	.942	3	.537
	formula 2	.337	3	.	.855	3	.253
	formula 3	.204	3	.	.993	3	.843
	Negative	.	3	.	.	3	.

a. Lilliefors Significance Correction

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Diameterzo	Based on Mean	2.391	4	10	.120
nahambat	Based on Median	.605	4	10	.668
	Based on Median and with adjusted df	.605	4	6.959	.672
	Based on trimmed mean	2.201	4	10	.142

ANOVA

Diameterzonahambat

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	575.238	4	143.809	6163.261	.000
Within Groups	.233	10	.023		
Total	575.471	14			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Diameter

Tukey HSD

(I) kelompok	(J) kelompok	Mean Difference		Sig.	95% Confidence Interval	
		(I-J)	Std. Error		Lower Bound	Upper Bound
Positif	formula 1	9.45000*	.12472	.000	9.0395	9.8605
	formula 2	7.96667*	.12472	.000	7.5562	8.3771
	formula 3	7.08333*	.12472	.000	6.6729	7.4938
	Negative	19.30000*	.12472	.000	18.8895	19.7105
formula 1	Positif	-9.45000*	.12472	.000	-9.8605	-9.0395
	formula 2	-1.48333*	.12472	.000	-1.8938	-1.0729
	formula 3	-2.36667*	.12472	.000	-2.7771	-1.9562
	Negative	9.85000*	.12472	.000	9.4395	10.2605
formula 2	Positif	-7.96667*	.12472	.000	-8.3771	-7.5562
	formula 1	1.48333*	.12472	.000	1.0729	1.8938
	formula 3	-.88333*	.12472	.000	-1.2938	-.4729
	Negative	11.33333*	.12472	.000	10.9229	11.7438
formula 3	Positif	-7.08333*	.12472	.000	-7.4938	-6.6729
	formula 1	2.36667*	.12472	.000	1.9562	2.7771
	formula 2	.88333*	.12472	.000	.4729	1.2938
	Negative	12.21667*	.12472	.000	11.8062	12.6271
Negative	Positif	-19.30000*	.12472	.000	-19.7105	-18.8895
	formula 1	-9.85000*	.12472	.000	-10.2605	-9.4395
	formula 2	-11.33333*	.12472	.000	-11.7438	-10.9229
	formula 3	-12.21667*	.12472	.000	-12.6271	-11.8062

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

