


LAMPIRAN

Lampiran 1. *Ethical Clearance*



Materi ini adalah dokumen yang bersifat
Berkelompok dan bersifat rahasia

KOMITE ETIK PENELITIAN KESEHATAN
HEALTH RESEARCH ETHICS COMMITTEE
RSI SULTAN AGUNG
KEPK RSI SULTAN AGUNG

KETERANGAN LAYAK ETIK
DESCRIPTION OF ETHICAL EXEMPTION
"ETHICAL EXEMPTION"

No. 62/EC/KEPK/2020

Protokol penelitian yang diusulkan oleh :
The research protocol proposed by

Peneliti utama : DIVA HANAFIAH FAJRY.
Principal In Investigator

Nama Institusi : UNIVERSITAS ISLAM SULTAN AGUNG
Name of Institution

Dengan Judul
Title

"UJI AKTIVITAS ANTIBAKTERI SEDIAAN SABUN CAIR ANTISEPTIK EKSTRAK ETANOLIK BUAH OKRA (*Abelmoschus esculentus L.*) TERHADAP *Staphylococcus aureus* ATCC 25923"

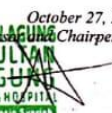
"TEST ACTIVITY ANTIBACTERIAL LIQUID SOAP ANTISEPTIC EXTRACT ETHANOLIC OKRA FRUIT (*Abelmoschus esculentus L.*) TO *Staphylococcus aureus* ATCC 25923"

Dinyatakan layak etik sesuai 7(tujuh) Standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan/Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indikator setiap standar.

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1)Social Values, 2)Scientific Values, 3)Equitable Assessment and Benefits, 4)Risks, 5)Persuasion/Exploitation, 6)Confidentiality and Privacy, and 7)Informed Consent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 27 Oktober 2020 sampai dengan tanggal 27 Oktober 2021.
This declaration of ethics applies during the period October 27, 2020 until October 27, 2021.

October 27, 2020
Prof. Dr. H. Chairperson



YAYASAN BADAN WAKAF SULTAN AGUNG
RSI SULTAN AGUNG
ISLAMIC TEACHING HOSPITAL
Rumah Sakit Sesuai Prinsip Syariah
SEMARANG
Mulamad Aziz Rosidi

www.rsisultanagung.co.id

CS Dipindai dengan CamScanner

Lampiran 2. Sertifikat Bakteri

thermoscientific 12
12

Certificate of Analysis

Product Name: S. aureus ATCC 25923 PK/5 **Product Number:**
Lot Number: 106094 **Expiration Date:** 2

This product has been manufactured, processed and packaged in accordance with Quality Systems Regulation, 21. Representative samples were tested per Remel Inc., a part of Thermo Fisher Scientific Quality Control specifications to meet performance criteria for this product.

Purity:
Standardized aliquots of the rehydrated product are inoculated onto nonselective media and examined for pure growth after appropriate incubation. Selective and Differential media are also tested where applicable.

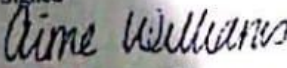
Viability And Quantification:
Each organism is recovered from the preserved state within the required time frame and at an acceptable level. Passages are stated as the current preserved state.

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 manual testing was performed and results were within established limits. Antimicrobial testing performed where applicable within expected ranges.

CFU/loop: >10(4)	Passage: 3
Gram Reaction: Gram Positive Cocci	Biochemical Profile: Vitek 2C GP

Appearance: Preserved Gel Matrix suspended in inoculating loop
pH: N/A

Signed

 Quality Assurance Manager

The identity, purity, and authenticity of the Licensed Products are exclusively the responsibility of Remel Inc. and the ATCC Licensed Derivative Emblem, the ATCC Licensed Derivative Word mark, and the ATCC Catalog Mark of ATCC.
 Remel Inc. is licensed to use these trademarks and to sell products derived from ATCC® culture.

AT

Lampiran 3. Hasil Determinasi



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI SEMARANG
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
LABORATORIUM JURUSAN BIOLOGI

Alamat : Gedung D11 FMIPA UNNES Kampus Sekaran Gunungpalli Semarang 50229
website : biologi.unnes.ac.id, email : labbiologi.unnes@yahoo.com

Semarang, 13 Januari 2021

No : 006 /UN/37.1.4.5/LT/2021
Lampiran : -
Perihal : Hasil identifikasi tumbuhan

Kepada Yth.

Sdr. Diva Hanafiah Fajry - NIM. 33101600433
Mahasiswa Program Studi Farmasi - Fakultas Kedokteran
Universitas Islam Sultan Agung (UNISSULA)
Semarang

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi tumbuhan yang Saudara kirimkan ke Laboratorium Taksonomi Tumbuhan Jurusan Biologi-FMIPA Universitas Negeri Semarang (UNNES), adalah sebagai berikut.

Divisio : Magnoliophyta
Classis : Magnoliopsida
SubClassis : Dilleniidae
Ordo : Malvales
Familia : Malvaceae
Genus : *Abelmoschus*
Species : *Abelmoschus esculentus* (L.) Moench
Vern. name : Okra / Okra, gumbo, lady's finger

Demikian, semoga berguna bagi Saudara.



Kepala Laboratorium Biologi FMIPA UNNES

Dra. Endah Nugrahaningsih WH, M.Kes.
NIP. 196907091998032001

Kepala Laboratorium Biologi

Dra. Endah Peniat, M.Si.
NIP. 196511161991032001

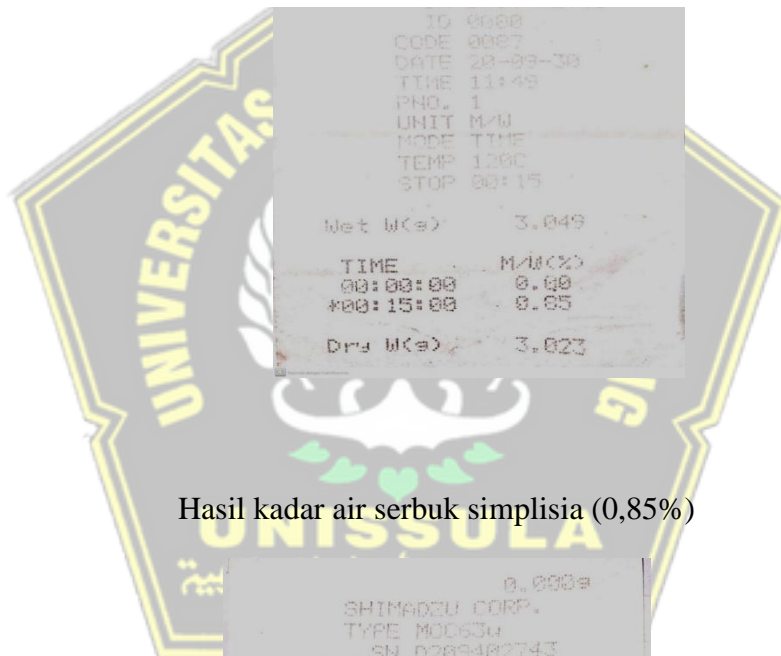
Lampiran 4. Perhitungan Hasil Randeman

Berat serbuk (g)	Berat ekstrak (g)	Randemen %	Karakteristik		
			Bentuk	Warna	Bau
600	125,5	20,9	kental	Coklat pekat	Bau khas okra

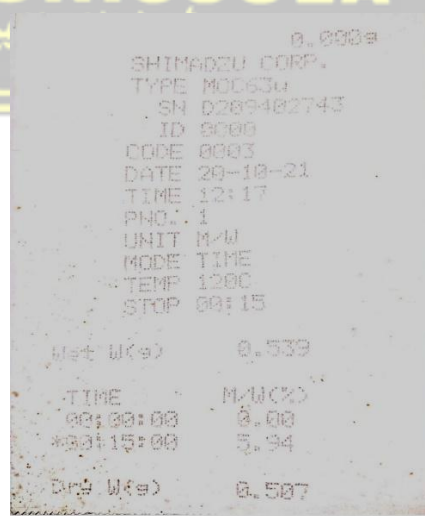
$$\% \text{ Rendemen} = \frac{\text{Bobot Ekstrak Kental}}{\text{Bobot Simplisia}} \times 100\%$$

$$\% \text{ Rendemen} = \frac{125,5 \text{ g}}{600 \text{ g}} \times 100\% \\ = 20,9 \%$$

Lampiran 5. Hasil Persen Kadar Air Serbuk Simplisia dan Ekstrak



Hasil kadar air serbuk simplisia (0,85%)







Hasil kadar air ekstrak (5,94%)

Lampiran 6. Skrining fitokimia

Skrinning Fitokimia Ekstrak Etanolik Buah Okra

Parameter Uji	Reagen	Hasil	Parameter uji positif jika -
Flavonoid	Serbuk Mg + HCL pekat	+	Merah
Fenolik	FeCl ₃ 1%	+	Merah, Biru, ungu atau hitam
Triterpenoid	Liebermann burchard	+	Cincin kecoklatan
Steroid		-	Cincin biru kehijauan

Parameter Uji	Reagen	Warna	Metode	Gambar
				Ekstrak Etanolik
Flavonoid	Serbuk Mg, HCL pekat	Merah	Tabung	 <p>Positif</p>
Fenolik	FeCl ₃	Merah, Ungu, Biru, Hitam	Tabung	 <p>Positif</p>
Triterpen	Kloroform, H ₂ SO ₄	Terbentuk cincin kecoklatan atau violet	Tabung	 <p>Positif</p>
Steroid	Kloroform, H ₂ SO ₄	Terbentuk cincin Hijau atau Biru	Tabung	 <p>Negatif</p>



YAYASAN BADAN WAKAF SULTAN AGUNG
UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA)
 Jl. Raya Kaligawe Km.4 Semarang 50112 Telp.(024) 6583584 (8 Sal) Fax.(024) 6582455
 email: informasi@unissula.ac.id web : www.unissula.ac.id



PRODI FARMASI FK

Bismillah Membangun Generasi Khaira Ummah

LAPORAN HASIL UJI

No. Sertifikat : 01/LPF/II/2021

Informasi Peneliti

Nama : Diva Hanafiah Fajr Tanggal Pengujian: 22 Oktober 2020
 NIM : 33101600433

Hasil Pengujian

Skrining Fitokimia Ekstrak Etanolik Buah Okra (*Abelmoschus esculentus L.*):

Parameter Uji	Reagen	Hasil Identifikasi	Metode	Kesimpulan
Flavonoid	Serbuk Mg dan HCl pekat	Merah	Tabung	Positif
Fenolik	FeCl ₃	Merah, ungu, biru, hitam	Tabung	Positif
Triterpenoid	Kloroform, H ₂ SO ₄	Terbentuk cincin kecoklatan atau violet	Tabung	Positif
Steroid	Kloroform, H ₂ SO ₄	Tidak terbentuk cincin hijau atau biru	Tabung	Negatif

Semarang, 14 Januari 2021

Laboran Prodi Farmasi
 FK UNISSULA

Nisrina Nur Afifah Amd.AF

Kepala Laboratorium Farmasi Unissula

Ika Buana Januarti, M.Sc., Apt

NIK.211213007

Lampiran 7. Kadar Flavonoid Total Ekstrak Etanol Buah

Pembuatan Larutan Sampel

10 mg Ekstrak + 10 etanol pa → ambil 2 ml + 2 ml AlCl₃ 2%

Pembuatan Larutan Baku Kuersetin

$$\text{Ppm} = \frac{\text{mg}}{\text{L}}$$

$$\text{Ppm} = \frac{12,5}{0,025} = 500 \text{ ppm}$$

Pembuatan Larutan Standar

Konsentrasi 10 ppm Kuersetin = N1.V1 = N2. V2

$$10 \cdot 10 = 500 \cdot V2$$

$$\frac{100}{500} = V2$$

$$0,2 = V2$$

Konsentrasi 15 ppm Kuersetin = N1.V1 = N2. V2

$$15 \cdot 10 = 500 \cdot V2$$

$$\frac{150}{500} = V2$$

$$0,3 = V2$$

Konsentrasi 20 ppm Kuersetin = N1.V1 = N2. V2

$$20 \cdot 10 = 500 \cdot V2$$

$$\frac{200}{500} = V2$$

$$0,4 = V2$$

Konsentrasi 25 ppm Kuersetin = N1.V1 = N2. V2

$$25 \cdot 10 = 500 \cdot V2$$

$$\frac{250}{500} = V2$$

$$0,5 = V2$$

$$\text{Konsentrasi 30 ppm Kuersetin} = N1.V1 = N2. V2$$

$$30 \cdot 10 = 500 \cdot V2$$

$$\frac{300}{500} = V2$$

$$0,6 = V2$$

$$\text{Konsentrasi 35 ppm Kuersetin} = N1.V1 = N2. V2$$

$$35 \cdot 10 = 500 \cdot V2$$

$$\frac{350}{500} = V2$$

$$0,7 = V2$$

$$\text{Pembuatan AlCl}_3 \text{ 2 \%} = \frac{2}{100} \times 50 = 1 \text{ gr AlCl}_3 \text{ dalam 50 ml Aquadest}$$

Hasil Pengukuran Kadar Flavonoid Larutan Kurva Baku Kuersetin

Konsentrasi	10	15	20	25	30	35
Kadar Flavonoid	0,2121	0,3194	0,4997	0,6496	0,7983	1,0405
	0,1968	0,3354	0,5023	0,6905	0,7950	1,0319
	0,3462	0,4824	0,5035	0,6542	0,8103	1,0255
Rata-rata ± SD	0,2517 ± 0,0822	0,3791 ± 0,0898	0,5018 ± 0,0019	0,6648 ± 0,0224	0,8012 ± 0,0081	1,0326 ± 0,0075

Hasil Kadar Flavonoid Sampel

Replikasi	Kadar Flavonoid
I	0.3960
II	0.3987
III	0.3864
Rata-rata ± SD	0.3937 ± 0,0064

Perhitungan Konsentrasi Kuersetin Sampel Ekstrak Etanolik Buah Okra

$$a = -0,0805$$

$$b = 0,0304$$

$$r = 0,9939$$

Persamaan regresi linier :

$$y = bx + a$$

$$y = -0,0805x + 0,0304$$

Keterangan : y = absorbansi sampel

x = konsentrasi

$$\text{abs sampel (y)} = 0,3937 \quad \rightarrow \quad y = -0,0805 x + 0,0304$$

$$0,3937 = -0,0805 x + 0,0304$$

$$0,0805 x = 0,3633$$

$$x = \frac{0,3633}{0,0805} = 4,5130 \text{ mg/L}$$

Perhitungan Kadar Flavonoid Total Ekstrak Etanolik Buah Okra

Berat Ekstrak (M) : 0,01 g

Konsentrasi Kuersetin (C) : 4,5130 mg/L

Volume Ekstrak (V) : 0,01 L

Kadar Flavonoid Total

$$= \frac{C \times V}{M}$$

$$= \frac{4,5130 \frac{\text{mg}}{\text{L}} \times 0,01 \text{L}}{0,01 \text{ g}}$$

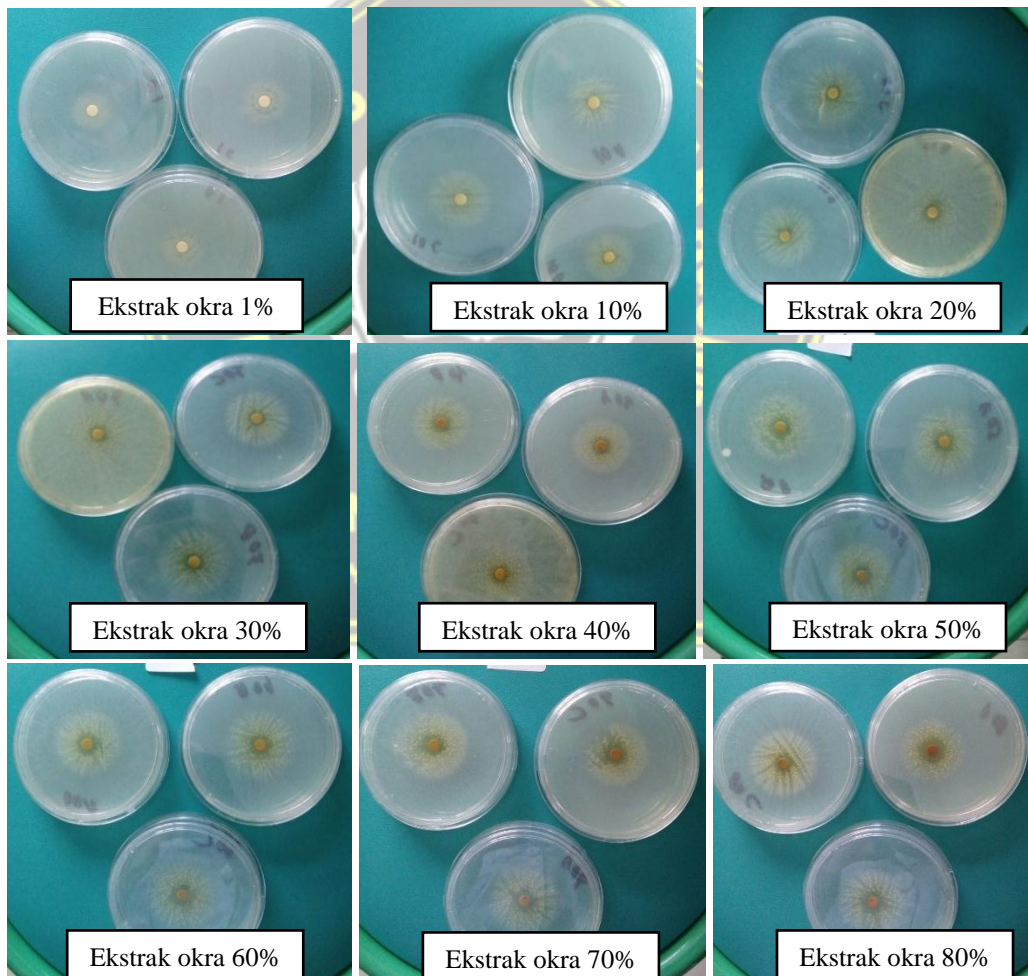
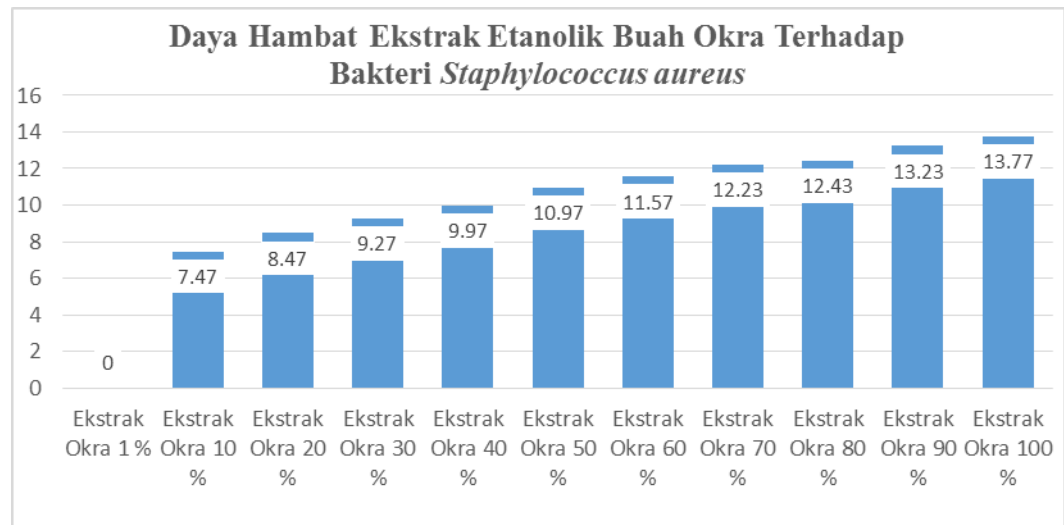
$$= \frac{0,0451 \text{ mg}}{0,01 \text{ g}}$$

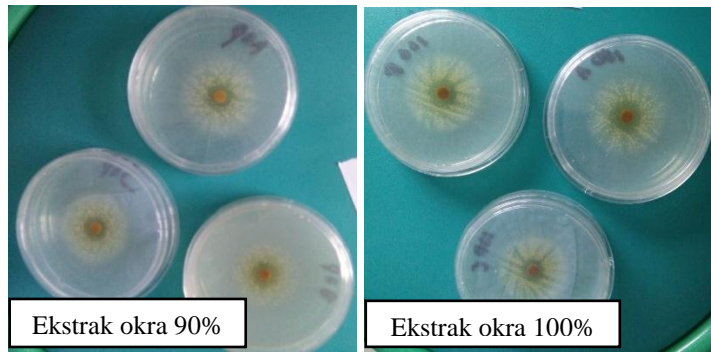
$$= 4,51 \text{ mgQE/g}$$



Lampiran 8. Hasil Daya Hambat Ekstrak Etanolik Buah Okra Terhadap Bakteri *Staphylococcus aureus* ATCC 25923

Sampel	Replikasi	Daya Hambat (mm)	Mean±SD	Kategori
Ekstrak Okra 1 %	1	0	0,00 ± 0,00	Lemah
	2	0		
	3	0		
Ekstrak Okra 10 %	1	7.6	7,47 ± 0,42	Sedang
	2	7		
	3	7.8		
Ekstrak Okra 20 %	1	8.5	8,47 ± 0,25	Sedang
	2	8.2		
	3	8.7		
Ekstrak Okra 30 %	1	9.5	9,27 ± 0,21	Sedang
	2	9.1		
	3	9.2		
Ekstrak Okra 40 %	1	9	9,97 ± 0,95	Kuat
	2	10.9		
	3	10		
Ekstrak Okra 50 %	1	10.9	10,97 ± 0,06	Kuat
	2	11		
	3	11		
Ekstrak Okra 60 %	1	11.5	11,57 ± 0,40	Kuat
	2	11.2		
	3	12		
Ekstrak Okra 70 %	1	12.1	12,23 ± 0,23	Kuat
	2	12.1		
	3	12.5		
Ekstrak Okra 80 %	1	12	12,43 ± 0,51	Kuat
	2	12.3		
	3	13		
Ekstrak Okra 90 %	1	13.5	13,23 ± 0,23	Kuat
	2	13.1		
	3	13.1		
Ekstrak Okra 100 %	1	12	13,77 ± 1,59	Kuat
	2	14.2		
	3	15.1		





Lampiran 9. Hasil Uji Fisik Sediaan Sabun

a. Uji Organoleptis

Replikasi	1	2	3	Kontrol -	Kontrol +
Bentuk	Cairan Kental Homogen	Cairan Kental Homogen	Cairan Kental Homogen	Cairan Kental Homogen	Cairan Kental Homogen
Bau	Khas Floral	Khas Floral	Khas Floral	Khas Floral	Khas lemon
Warna	Coklat	Coklat	Coklat	Kuning	Kuning

b. Uji pH

Replikasi	Sediaan sabun	Kontrol -	Kontrol +
1	8,1	8,0	10,84
2	8,4	8,0	10,81
3	8,0	8,2	10,78
Rata-rata±SD	8,16 ± 0,20	8,06 ± 0,11	10,81 ± 0,03

c. Uji Tinggi Busa

Replikasi	Sediaan sabun	Kontrol -	Kontrol +
1	45	30	98
2	60	25	97
3	40	28	95
Rata-rata±SD	48,5 mm ± 10,40	27,6 mm ± 2,51	96,6 mm ± 1,5

d. Uji Bobot Jenis

Replikasi	Sediaan sabun	Kontrol -	Kontrol +
1	1,08	1,02	1,04
2	1,07	1,03	1,05
3	1,08	1,03	1,05
Rata-rata±SD	1,07 g/ml ± 0,005	1,02 ± 0,005	1,04 ± 0,005

Perhitungan :

$$\text{Bobot jenis (g/ml)} = \frac{c-a}{b-a}$$

- Sediaan sabun

Keterangan : a = piknometer kosong (16,11 g)

b = piknometer berisi air (26,01 g)

c = piknometer berisi sabun (R1=26,85.R2=26,75.R3= 26,89)

Replikasi 1

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,85 - 16,11}{26,01 - 16,11} \\ &= 1,08 \text{ g/ml} \end{aligned}$$

Replikasi 2

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,75 - 16,11}{26,01 - 16,11} \\ &= 1,07 \text{ g/ml} \end{aligned}$$

Replikasi 3

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,89 - 16,11}{26,01 - 16,11} \\ &= 1,08 \text{ g/ml} \end{aligned}$$

- Kontrol negatif

Keterangan : a = piknometer kosong (16,11 g)

b = piknometer berisi air (26,01 g)

c = piknometer berisi sabun (R1=26,30.R2=26,33.R3= 26,38)

Replikasi 1

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,30 - 16,11}{26,01 - 16,11} \\ &= 1,02 \text{ g/ml} \end{aligned}$$

Replikasi 2

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,33 - 16,11}{26,01 - 16,11} \\ &= 1,03 \text{ g/ml} \end{aligned}$$

Replikasi 3

$$\begin{aligned} \text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,38 - 16,11}{26,01 - 16,11} \\ &= 1,03 \text{ g/ml} \end{aligned}$$

- Kontrol positif

Keterangan : a = piknometer kosong (16,11 g)

b = piknometer berisi air (26,01 g)

c = piknometer berisi sabun (R1=26,50.R2=26,56.R3= 26,54)

Replikasi 1

$$\begin{aligned}\text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,50 - 16,11}{26,01 - 16,11} \\ &= 1,04 \text{ g/ml}\end{aligned}$$

Replikasi 2

$$\begin{aligned}\text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,56 - 16,11}{26,01 - 16,11} \\ &= 1,05 \text{ g/ml}\end{aligned}$$

Replikasi 3

$$\begin{aligned}\text{Bobot jenis (g/ml)} &= \frac{c-a}{b-a} \\ &= \frac{26,54 - 16,11}{26,01 - 16,11} \\ &= 1,05 \text{ g/ml}\end{aligned}$$



Lampiran 10. Hasil Analisis Data Menggunakan SPSS

1. Data Daya Hambat Ekstrak Etanolik Buah Okra

a. Normalitas

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	konsentrasi	Statistic	df	Sig.	Statistic	df	Sig.
ekstrak_okrak	konsentrasi 1%	.	3	.	.	3	.
	konsentrasi 10%	.376	3	.	.771	3	.047
	konsentrasi 20%	.219	3	.	.987	3	.780
	konsentrasi 30%	.292	3	.	.923	3	.463
	konsentrasi 40%	.382	3	.	.757	3	.017
	konsentrasi 50%	.385	3	.	.750	3	.000
	konsentrasi 60%	.376	3	.	.772	3	.049
	konsentrasi 70%	.385	3	.	.750	3	.000
	konsentrasi 80%	.382	3	.	.757	3	.015
	konsentrasi 90%	.385	3	.	.750	3	.000
	konsentrasi 100%	.365	3	.	.798	3	.111
	kontrol positif detol	.382	3	.	.757	3	.015

a. Lilliefors Significance Correction

b. Homogenitas

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
ekstrak_okrak	Based on Mean	7.086	11	24	.000
	Based on Median	.481	11	24	.897
	Based on Median and with adjusted df	.481	11	12.858	.884
	Based on trimmed mean	5.639	11	24	.000

c. Kruskal-Wallis

Test Statistics ^{a,b}	
ekstrak_okrak	
Kruskal-Wallis H	21.681
df	11
Asymp. Sig.	.027

a. Kruskal Wallis Test

b. Grouping Variable:
konsentrasi

d. Mann-Whitney

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.121
Asymp. Sig. (2-tailed)	.034
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.964
Asymp. Sig. (2-tailed)	.050
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-3

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.964
Asymp. Sig. (2-tailed)	.050
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-4

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.000
Wilcoxon W	10.000
Z	-.218
Asymp. Sig. (2-tailed)	.827
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-5

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.000
Wilcoxon W	10.000
Z	-.221
Asymp. Sig. (2-tailed)	.825
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-6

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.091
Asymp. Sig. (2-tailed)	.275
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-7

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.000
Wilcoxon W	10.000
Z	-.218
Asymp. Sig. (2-tailed)	.827
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.091
Asymp. Sig. (2-tailed)	.275
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.000
Wilcoxon W	10.000
Z	-.218
Asymp. Sig. (2-tailed)	.827
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

2-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.964
Asymp. Sig. (2-tailed)	.050
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-4

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-5

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.664
Asymp. Sig. (2-tailed)	.507
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-6

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-7

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

3-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-5

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.664
Asymp. Sig. (2-tailed)	.507
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-6

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-7

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi
b. Not corrected for ties.

4-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.500
Wilcoxon W	8.500
Z	-899
Asymp. Sig. (2-tailed)	.369
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-6

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	1.000
Wilcoxon W	7.000
Z	-1.528
Asymp. Sig. (2-tailed)	.127
Exact Sig. [2*(1-tailed Sig.)]	.200 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-7

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.091
Asymp. Sig. (2-tailed)	.275
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	1.000
Wilcoxon W	7.000
Z	-1.528
Asymp. Sig. (2-tailed)	.127
Exact Sig. [2*(1-tailed Sig.)]	.200 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.091
Asymp. Sig. (2-tailed)	.275
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

5-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	1.000
Wilcoxon W	7.000
Z	-1.550
Asymp. Sig. (2-tailed)	.121
Exact Sig. [2*(1-tailed Sig.)]	.200 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-7

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.107
Asymp. Sig. (2-tailed)	.268
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	1.000
Wilcoxon W	7.000
Z	-1.550
Asymp. Sig. (2-tailed)	.121
Exact Sig. [2*(1-tailed Sig.)]	.200 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.107
Asymp. Sig. (2-tailed)	.268
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

6-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

7-8

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.500
Wilcoxon W	10.500
Z	.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

7-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

7-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.500
Wilcoxon W	8.500
Z	-.886
Asymp. Sig. (2-tailed)	.376
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

7-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.500
Wilcoxon W	10.500
Z	.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

7-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.107
Asymp. Sig. (2-tailed)	.268
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

8-9

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

8-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.664
Asymp. Sig. (2-tailed)	.507
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

8-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.000
Wilcoxon W	8.000
Z	-1.107
Asymp. Sig. (2-tailed)	.268
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

8-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

9-10

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.500
Wilcoxon W	8.500
Z	-.886
Asymp. Sig. (2-tailed)	.376
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

9-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	4.000
Wilcoxon W	10.000
Z	-.225
Asymp. Sig. (2-tailed)	.822
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

- a. Grouping Variable: konsentrasi
b. Not corrected for ties.

9-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.664
Asymp. Sig. (2-tailed)	.507
Exact Sig. [2*(1-tailed Sig.)]	.700 ^b

a. Grouping Variable: konsentrasi

b. Not corrected for ties.

10-11

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100 ^b

a. Grouping Variable: konsentrasi

b. Not corrected for ties.

10-12

Test Statistics^a

ekstrak_okrak	
Mann-Whitney U	2.500
Wilcoxon W	8.500
Z	-.886
Asymp. Sig. (2-tailed)	.376
Exact Sig. [2*(1-tailed Sig.)]	.400 ^b

a. Grouping Variable: konsentrasi

b. Not corrected for ties.

11-12

2. Uji Fisik Sediaan Sabun Cair Buah Okra

a. Normalitas

Tests of Normality

Sabun		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
pH	Sabun Ekstrak Okra	,292	3	.	,923	3	,463
	Kontrol (-)	,385	3	.	,750	3	,000
	Kontrol (+)	,175	3	.	1,000	3	1,000
TinggiBusa	Sabun Ekstrak Okra	,292	3	.	,923	3	,463
	Kontrol (-)	,219	3	.	,987	3	,780
	Kontrol (+)	,253	3	.	,964	3	,637
BobotJenis	Sabun Ekstrak Okra	,385	3	.	,750	3	,000
	Kontrol (-)	,385	3	.	,750	3	,000
	Kontrol (+)	,385	3	.	,750	3	,000

a. Lilliefors Significance Correction

b. Homogenitas

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
pH	4.689	2	6	.059
TinggiBusa	6.169	2	6	.035
BobotJenis	.000	2	6	1.000

c. Kruskal-Wallis

Test Statistics^{a,b}

	pH	TinggiBusa	BobotJenis
Chi-Square	5,793	7,200	7,385
df	2	2	2
Asymp. Sig.	,055	,027	,025

a. Kruskal Wallis Test

b. Grouping Variable: Sabun

3. Daya Hambat Sabun Cair Esktrak Etanolik Buah Okra

a. Normalitas

Tests of Normality^b

sabun	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
dayahambat sabun okra	.314	3	.	.893	3	.363
kontrol (+)	.364	3	.	.800	3	.114

b. Homogenitas

Test of Homogeneity of Variances

dayahambat

Levene Statistic	df1	df2	Sig.
10.836	2	6	.010

c. Kruskal-Wallis

Test Statistics^{a,b}

	Dayahambat
Chi-Square	7.448
df	2
Asymp. Sig.	.024

a. Kruskal Wallis Test

b. Grouping Variable: sabun

d. Mann-Whitney

	dayahambat
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^a

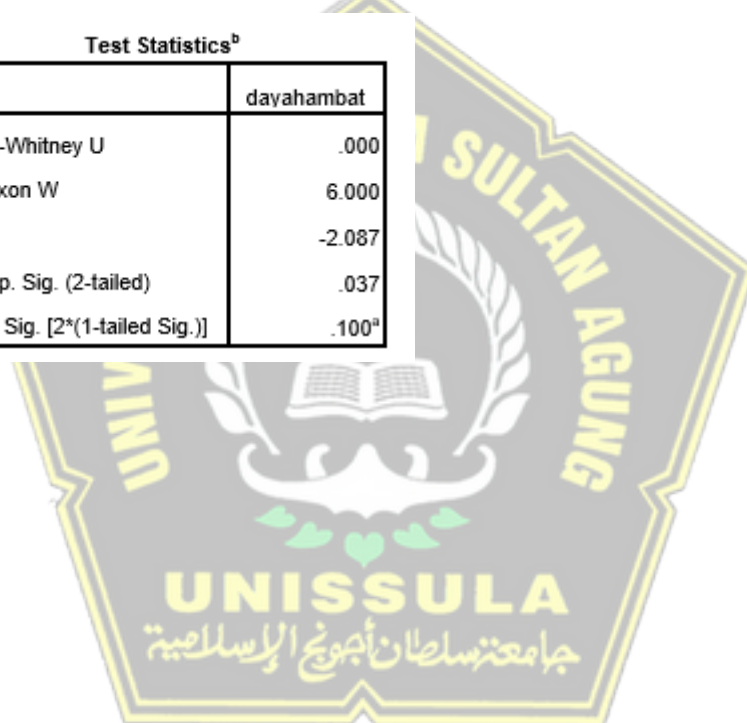
1-2

	dayahambat
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.964
Asymp. Sig. (2-tailed)	.050
Exact Sig. [2*(1-tailed Sig.)]	.100 ^a

1-3

	dayahambat
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.087
Asymp. Sig. (2-tailed)	.037
Exact Sig. [2*(1-tailed Sig.)]	.100 ^a

2-3



Lampiran 11 Dokumentasi Penelitian

Gambar 1. Sortasi Basah



Gambar 2. Pengrajanan



Gambar 3. Pengeringan



Gambar 4. Penghalusan



Gambar 5. Proses Maserasi

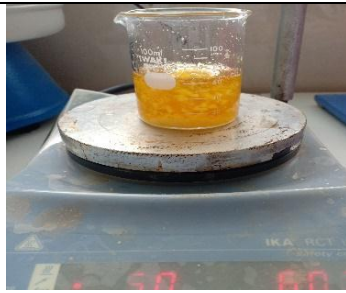


Gambar 6. Proses Rotari



Gambar 7. Pengentalan

Gambar 8. Skrining
FitokimiaGambar 9. Uji Kadar
Flavonoid



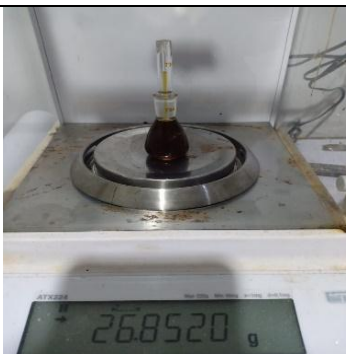
Gambar 10. Pembuatan Sabun



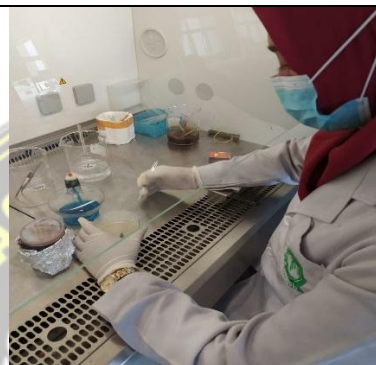
Gambar 11. Uji pH



Gambar 12. Uji Tinggi Busa



Gambar 13. Bobot Jenis



Gambar 14. Uji Antibakteri



Gambar 15. Buah Okra

