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Lampiran 1. Hasil determinasi tanaman pepaya (*Carica papaya* L.)



UPT-LABORATORIUM

Jl. Letjen Sutoyo, Mojosongo-Solo 57127 Telp. 0271-852518, Fax. 0271-853275

Nomor : 163/DET/UPT-LAB/18.03.2021
Hal : Hasil determinasi tumbuhan
Lamp. : -

Nama Pemesan : Eka Ayu Lutfiana
NIM : 23175051A
Alamat : Fakultas Farmasi, Universitas Setia Budi, Surakarta
Nama Sampel : *Carica papaya* L.

HASIL DETERMINASI TUMBUHAN

Klasifikasi
Kingdom : Plantae
Super Divisi : Spermatophyta
Divisi : Magnoliophyta
Kelas : Magnoliopsida/Dicotyledoneae
Ordo : Brassicales
Famili : Caricaceae
Genus : Carica
Species : *Carica papaya* L.

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :
1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 14a – 15a.golongan 8 – 109b –
119b – 120a – 121b – 124b – 125a – 126a. Familia 85. Caricaceae. 1. *Carica papaya* L.

Deskripsi:

- Habitus** : Semak berbentuk pohon, tinggi lk 2-3 meter.
- Batang** : Batang bulat silindris, lurus, percabangan monopodial, di atas bercabang, sebelah dalam berupa spons dan berongga, di luar terdapat tanda bekas daun yang banyak.
- Akar** : Akar tunggang.
- Daun** : Daun tunggal, berjejal pada ujung batang dan ujung cabang, tangkai daun bulat silindris, berongga, panjang 110-115 cm; helaian daun bulat telur, bertulang daun menjari, bercangap menjari berbagi menjari, ujung runcing, pangkal berbentuk jantung, garis tengah lk 98 cm, taju selalu berlekuk menyirip tidak beraturan.
- Bunga** : Bunga berkelamin dua pada karangan bunga yang jantan, pada tandan yang serupa malai, kelopak sangat kecil, mahkota bentuk terompet, putih kekuningan dengan tepi yang bertaju 5 dan tabung yang panjang, langsing, taju terputar dalam kuncup, kepalasari bertangkai pendek dan duduk.
- Buah** : Buah buni bulat telur memanjang, hijau kekuningan, berdaging dan berisi cairan.
- Biji** : Biji hitam, bulat telur, banyak, dibungkus oleh selaput yang berisi cairan, di dalamnya berduri tempel, berjerawat.

Kepala UPT-LAB
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 18 Maret 2021
Penanggung jawab
Determinasi Tumbuhan

A handwritten signature in black ink, appearing to be 'Dra. Dewi Sulistyawati'.

Dra. Dewi Sulistyawati. M.Sc.

Lampiran 2. Perhitungan presentase bobot kering terhadap bobot basah

Berat Basah (g)	Berat Kering (g)	Randemen (%)
10.000	2.258	22.58%

$$\begin{aligned} \% \text{ rendemen bobot kering} &= \frac{10.000}{2.258} \times 100\% \\ &= 22.58\% \end{aligned}$$

Lampiran 3. Perhitungan presentase berat serbuk terhadap berat kering

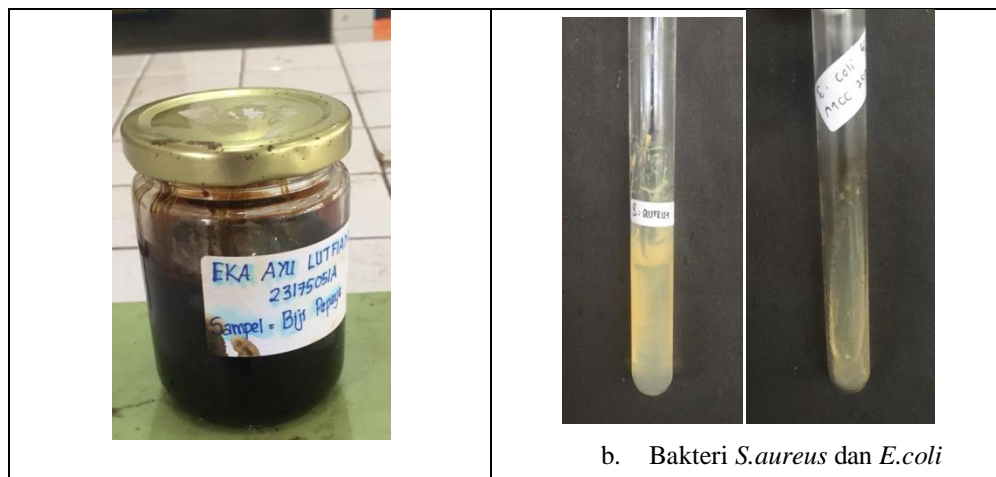
Berat Kering (g)	Berat Serbuk (g)	Randemen (%)
2.258	1.100	48.71%









$$\begin{aligned} \% \text{ rendemen berat serbuk} &= \frac{\text{Berat serbuk}}{\text{Berat biji kering}} \times 100\% \\ &= \frac{1.100}{2.258} \times 100\% \\ &= 48,71\% \end{aligned}$$

Lampiran 4. Perhitungan presentase ekstrak etanol






Berat Serbuk (g)	Berat Ekstrak (g)	Randemen (%)
900	192	21.33%

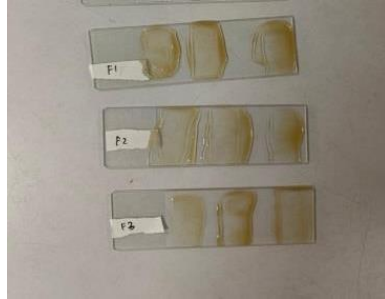
$$\begin{aligned} \% \text{ rendemen ekstrak kental} &= \frac{\text{Bobot ekstrak kental}}{\text{Bobot serbuk}} \times 100\% \\ &= \frac{192}{900} \times 100\% \\ &= 21,33\% \end{aligned}$$

Lampiran 5. Gambaran alat dan bahan penelitian

<p>a. Ekstrak biji pepaya</p>	
 <p>c. <i>Vacum Rotary Evaporator</i></p>	 <p>d. Moisture balance</p>
 <p>e. Inkubator</p>	 <p>f. pH meter</p>
 <p>g. Alat daya lekat</p>	 <p>h. Alat daya sebar</p>
 <p>i. Viscometer Rion-04T</p>	 <p>j. Oven</p>

Lampiran 6. Hasil uji kandungan kimia ekstrak biji pepaya

 <p>a. Flavonoid</p>	 <p>b. Triterpenoid</p>
 <p>c. Alkaloid (Mayer)</p>	 <p>d. Alkaloid (Dragendorf)</p>
 <p>e. Uji bebas etanol</p>	

Lampiran 7. Hasil uji mutu fisik sediaan

a. Uji homogenitas



b. Sediaan



c. Uji daya sebar



d. Uji viskositas



e. uji daya lekat

Lampiran 8. Hasil uji viskositas gel *hand sanitizer* ekstrak biji pepaya

Data Uji Viskositas (dPAS)						
	F1	F2	F3	Kb1	Kb2	Kb3
Hari 1	100	150	190	250	280	335
	110	145	190	260	280	340
	110	150	180	260	295	340
RATA - RATA	106,67	148,33	186,67	256,67	285,00	338,33
SD	5,77	2,89	5,77	5,77	8,66	2,89
Hari 21	90	140	185	245	260	320
	95	140	185	250	275	330
	95	130	180	250	280	315
RATA - RATA	93,33	136,67	183,33	248,33	271,67	321,67
SD	2,89	5,77	2,89	2,89	7,64	7,64

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Viskositas	Formula 1	.225	6	.200*	.876	6	.252
	Formula 2	.204	6	.200*	.902	6	.389
	Formula 3	.202	6	.200*	.853	6	.167
	Kontrol basis 1	.325	6	.047	.827	6	.101
	Kontrol basis 2	.274	6	.177	.902	6	.389
	Kontrol basis 3	.183	6	.200*	.890	6	.320

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Test of Homogeneity of Variances

Viskositas

Levene Statistic	df1	df2	Sig.
.807	5	30	.554

ANOVA

Viskositas					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	228138.889	5	45627.778	649.249	.000
Within Groups	2108.333	30	70.278		
Total	230247.222	35			

Post Hoc Tests

Multiple Comparisons

Viskositas

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	-42.500*	4.840	.000	-57.22	-27.78
	Formula 3	-85.000*	4.840	.000	-99.72	-70.28
	Kontrol basis 1	-152.500*	4.840	.000	-167.22	-137.78
	Kontrol basis 2	-178.333*	4.840	.000	-193.05	-163.61
	Kontrol basis 3	-230.000*	4.840	.000	-244.72	-215.28
Formula 2	Formula 1	42.500*	4.840	.000	27.78	57.22
	Formula 3	-42.500*	4.840	.000	-57.22	-27.78
	Kontrol basis 1	-110.000*	4.840	.000	-124.72	-95.28
	Kontrol basis 2	-135.833*	4.840	.000	-150.55	-121.11
	Kontrol basis 3	-187.500*	4.840	.000	-202.22	-172.78
Formula 3	Formula 1	85.000*	4.840	.000	70.28	99.72
	Formula 2	42.500*	4.840	.000	27.78	57.22

Formula 1	6	100.00					
Formula 2	6		142.50				
Formula 3	6			185.00			
Kontrol basis 1	6				252.50		
Kontrol basis 2	6					278.33	
Kontrol basis 3	6						330.00
Sig.		1.000	1.000	1.000	1.000	1.000	1.000
Means for groups in homogeneous subsets are displayed.							

Lampiran 9. Hasil uji pH gel *hand sanitizer* ekstrak biji pepaya

Data uji ph						
	F1	F2	F3	Kb1	Kb2	Kb3
Hari 1	6,18	6,24	6,35	6,25	6,29	6,45
	6,17	6,23	6,38	6,28	6,29	6,44
	6,18	6,23	6,38	6,28	6,3	6,45
RATA - RATA	6,18	6,23	6,37	6,27	6,29	6,45
SD	0,01	0,01	0,02	0,02	0,01	0,01
Hari 21	6,15	6,2	6,33	6,22	6,25	6,42
	6,15	6,21	6,33	6,22	6,25	6,42
	6,16	6,2	6,32	6,23	6,24	6,41
RATA - RATA	6,15	6,20	6,33	6,22	6,25	6,42
SD	0,01	0,01	0,01	0,01	0,02	0,01

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Uji pH Formula 1	.195	6	.200 [*]	.861	6	.191
Formula 2	.251	6	.200 [*]	.869	6	.223
Formula 3	.256	6	.200 [*]	.849	6	.154
Kontrol basis 1	.224	6	.200 [*]	.831	6	.111
Kontrol basis 2	.278	6	.161	.837	6	.122
Kontrol basis 3	.251	6	.200 [*]	.869	6	.223

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Test of Homogeneity of Variances

Uji pH

Levene Statistic	df1	df2	Sig.
2.464	5	30	.055

ANOVA

Uji pH	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.275	5	.055	112.181	.000
Within Groups	.015	30	.000		
Total	.290	35			

Post Hoc Tests

Multiple Comparisons

Uji pH

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	-.05333*	.01279	.003	-.0922	-.0144
	Formula 3	-.18333*	.01279	.000	-.2222	-.1444
	Kontrol basis 1	-.08167*	.01279	.000	-.1206	-.0428
	Kontrol basis 2	-.10500*	.01279	.000	-.1439	-.0661
	Kontrol basis 3	-.26667*	.01279	.000	-.3056	-.2278
Formula 2	Formula 1	.05333*	.01279	.003	.0144	.0922
	Formula 3	-.13000*	.01279	.000	-.1689	-.0911
	Kontrol basis 1	-.02833	.01279	.261	-.0672	.0106
	Kontrol basis 2	-.05167*	.01279	.004	-.0906	-.0128
	Kontrol basis 3	-.21333*	.01279	.000	-.2522	-.1744
Formula 3	Formula 1	.18333*	.01279	.000	.1444	.2222
	Formula 2	.13000*	.01279	.000	.0911	.1689
	Kontrol basis 1	.10167*	.01279	.000	.0628	.1406
	Kontrol basis 2	.07833*	.01279	.000	.0394	.1172
	Kontrol basis 3	-.08333*	.01279	.000	-.1222	-.0444
Kontrol basis 1	Formula 1	.08167*	.01279	.000	.0428	.1206
	Formula 2	.02833	.01279	.261	-.0106	.0672
	Formula 3	-.10167*	.01279	.000	-.1406	-.0628
	Kontrol basis 2	-.02333	.01279	.467	-.0622	.0156
	Kontrol basis 3	-.18500*	.01279	.000	-.2239	-.1461
Kontrol basis 2	Formula 1	.10500*	.01279	.000	.0661	.1439
	Formula 2	.05167*	.01279	.004	.0128	.0906
	Formula 3	-.07833*	.01279	.000	-.1172	-.0394

Kontrol basis 1	.02333	.01279	.467	-.0156	.0622
Kontrol basis 3	-.16167*	.01279	.000	-.2006	-.1228
Kontrol basis 3 Formula 1	.26667*	.01279	.000	.2278	.3056
Formula 2	.21333*	.01279	.000	.1744	.2522
Formula 3	.08333*	.01279	.000	.0444	.1222
Kontrol basis 1	.18500*	.01279	.000	.1461	.2239
Kontrol basis 2	.16167*	.01279	.000	.1228	.2006

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

Homogeneous Subsets

Uji pH

Tukey HSD

Kelompok	N	Subset for alpha = 0.05				
		1	2	3	4	5
Formula 1	6	6.1650				
Formula 2	6		6.2183			
Kontrol basis 1	6		6.2467	6.2467		
Kontrol basis 2	6			6.2700		
Formula 3	6				6.3483	
Kontrol basis 3	6					6.4317
Sig.		1.000	.261	.467	1.000	1.000

Means for groups in homogeneous subsets are displayed.

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Lampiran 10. Hasil uji daya sebar gel *hand sanitizer* ekstrak biji pepaya

Data daya sebar (cm)		
FORMULA	Hari 1	Hari 21

F1	Beban 50	5,75	5,80
		5,80	5,90
		5,85	6,00
	Rata - Rata	5,53	5,90
	SD	0,38	0,08
	Beban 100	6,43	6,50
		6,57	6,65
		6,60	6,70
	Rata - Rata	6,53	6,62
	SD	0,09	0,10
	Beban 150	6,55	6,60
		6,34	6,50
		6,45	6,70
	Rata - Rata	6,45	6,60
SD	0,11	0,10	
F2	Beban 50	5,53	5,50
		5,50	5,58
		5,52	5,60
	Rata - rata	5,52	5,56
	SD	0,02	0,05
	Beban 100	6,03	6,10
		6,00	6,20
		6,09	6,15
	Rata - rata	6,04	6,15
	SD	0,05	0,05
	Beban 150	6,43	6,50
		6,40	6,47
		6,42	6,49
	Rata - rata	6,42	6,49
SD	0,02	0,02	
F3	Beban 50	5,20	5,25
		5,15	5,35
		5,25	5,20
	Rata - rata	5,20	5,27
	SD	0,05	0,08
	Beban 100	5,40	5,58
		5,45	5,60
		5,40	5,55
	Rata - rata	5,42	5,58
	SD	0,03	0,03

	Beban 150	6,15	6,30
		6,20	6,25
		6,10	6,15
	Rata - rata	6,15	6,23
	SD	0,05	0,08
Kb1	Beban 50	6,75	6,83
		6,45	6,82
		6,70	6,85
	Rata - rata	6,63	6,83
	SD	0,16	0,02
	Beban 100	7,02	7,11
		7,08	7,25
		7,06	7,20
	Rata - rata	7,05	7,19
	SD	0,03	0,07
	Beban 150	7,08	7,26
		7,05	7,19
		7,05	7,21
	Rata - rata	7,06	7,22
SD	0,02	0,04	
Kb2	Beban 50	6,30	6,50
		6,28	6,45
		6,45	6,52
	Rata - rata	6,34	6,49
	SD	0,09	0,04
	Beban 100	6,38	6,55
		6,42	6,58
		6,40	6,60
	Rata - rata	6,40	6,58
	SD	0,02	0,02
	Beban 150	5,55	5,77
		5,76	5,88
		5,78	5,95
	Rata - rata	5,70	5,87
SD	0,13	0,09	
Kb3	Beban 50	5,40	5,62
		5,39	5,57
		5,40	5,52
	Rata - rata	5,40	5,57
	SD	0,01	0,05
	Beban 100	5,73	5,92

	5,73	5,84
	5,70	5,79
Rata - rata	5,72	5,85
SD	0,02	0,07
Beban 150	6,15	6,34
	6,13	6,25
	6,15	6,31
Rata - rata	6,14	6,30
SD	0,01	0,05

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Daya Sebar	F1 Beban 50	.212	6	.200 [*]	.933	6	.607
	F1 Beban 100	.146	6	.200 [*]	.982	6	.961
	F1 Beban 150	.111	6	.200 [*]	.999	6	1.000
	F2 Beban 50	.245	6	.200 [*]	.865	6	.205
	F1 Beban 100	.144	6	.200 [*]	.973	6	.914
	F2 Beban 150	.203	6	.200 [*]	.924	6	.533
	F3 Beban 50	.237	6	.200 [*]	.927	6	.554
	F3 Beban 50	.221	6	.200 [*]	.855	6	.171
	F3 Beban 150	.214	6	.200 [*]	.958	6	.804
	KB1 Beban 50	.245	6	.200 [*]	.802	6	.061
	KB1 Beban 100	.212	6	.200 [*]	.934	6	.608
	KB1 Beban 150	.245	6	.200 [*]	.865	6	.205
	KB2 Beban 50	.295	6	.113	.850	6	.156
	KB2 Beban 100	.255	6	.200 [*]	.847	6	.148
	KB2 Beban 150	.270	6	.196	.922	6	.523

KB3 Beban 50	.297	6	.105	.848	6	.152
KB3 Beban 100	.246	6	.200*	.913	6	.458
KB3 Beban 150	.285	6	.139	.863	6	.200

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Test of Homogeneity of Variances

Daya Sebar

Levene Statistic	df1	df2	Sig.
.957	17	90	.512

ANOVA

Daya Sebar	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31.814	17	1.871	206.976	.000
Within Groups	.814	90	.009		
Total	32.628	107			

Homogeneous Subsets

Daya Sebar

Tukey HSD

Kelompok	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
F3 Beban 50	6	5.2333							
KB3 Beban 50	6		5.4833						
F3 Beban 50	6		5.4967						

F2 Beban 50	6		5.5383						
KB2 Beban 150	6			5.7817					
KB3 Beban 100	6			5.7850					
F1 Beban 50	6			5.8500					
F1 Beban 100	6				6.0950				
F3 Beban 150	6				6.1917				
KB3 Beban 150	6				6.2217	6.2217			
KB2 Beban 50	6					6.4167	6.4167		
F2 Beban 150	6						6.4517		
KB2 Beban 100	6						6.4883		
F1 Beban 150	6						6.5233		
F1 Beban 100	6						6.5750	6.5750	
KB1 Beban 50	6							6.7333	
KB1 Beban 100	6								7.1200
KB1 Beban 150	6								7.1400
Sig.		1.000	1.000	.999	.676	.056	.283	.283	1.000
Means for groups in homogeneous subsets are displayed.									

Lampiran 11. Hasil uji daya lekat gel *hand sanitizer* ekstrak biji pepaya

Data uji daya lekat (detik)						
	F1	F2	F3	Kb1	Kb2	Kb3
Hari 1	3,12	3,28	3,42	3,22	3,48	3,58
	3,15	3,25	3,45	3,25	3,45	3,57
	3,15	3,23	3,45	3,25	3,48	3,55
Rata - Rata	3,14	3,25	3,44	3,24	3,47	3,57
SD	0,02	0,03	0,02	0,02	0,02	0,02
Hari 21	3,08	3,23	3,38	3,18	3,42	3,55

	3,1	3,2	3,35	3,22	3,45	3,54
	3,11	3,2	3,35	3,22	3,45	3,53
Rata – Rata	3,10	3,21	3,36	3,21	3,44	3,54
SD	0,02	0,02	0,02	0,02	0,02	0,01

Test of Homogeneity of Variances

Daya lekat

Levene Statistic	df1	df2	Sig.
2.267	5	30	.073

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Daya lekat	Formula 1	.205	6	.200*	.925	6	.540
	Formula 2	.188	6	.200*	.915	6	.472
	Formula 3	.192	6	.200*	.852	6	.162
	Kontrol Basis 1	.282	6	.147	.856	6	.177
	Kontrol Basis 2	.254	6	.200*	.866	6	.212
	Kontrol basis 3	.238	6	.200*	.950	6	.737

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

ANOVA

Daya lekat

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	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.818	5	.164	181.782	.000
Within Groups	.027	30	.001		
Total	.844	35			

Multiple Comparisons

Daya lekat

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	-.11333*	.01732	.000	-.1660	-.0607
	Formula 3	-.28167*	.01732	.000	-.3343	-.2290
	Kontrol Basis 1	-.10500*	.01732	.000	-.1577	-.0523
	Kontrol Basis 2	-.33667*	.01732	.000	-.3893	-.2840
	Kontrol basis 3	-.43500*	.01732	.000	-.4877	-.3823
Formula 2	Formula 1	.11333*	.01732	.000	.0607	.1660
	Formula 3	-.16833*	.01732	.000	-.2210	-.1157
	Kontrol Basis 1	.00833	.01732	.996	-.0443	.0610
	Kontrol Basis 2	-.22333*	.01732	.000	-.2760	-.1707
	Kontrol basis 3	-.32167*	.01732	.000	-.3743	-.2690
Formula 3	Formula 1	.28167*	.01732	.000	.2290	.3343
	Formula 2	.16833*	.01732	.000	.1157	.2210
	Kontrol Basis 1	.17667*	.01732	.000	.1240	.2293
	Kontrol Basis 2	-.05500*	.01732	.037	-.1077	-.0023
	Kontrol basis 3	-.15333*	.01732	.000	-.2060	-.1007
Kontrol Basis 1	Formula 1	.10500*	.01732	.000	.0523	.1577
	Formula 2	-.00833	.01732	.996	-.0610	.0443
	Formula 3	-.17667*	.01732	.000	-.2293	-.1240

	Kontrol Basis 2	-.23167*	.01732	.000	-.2843	-.1790
	Kontrol basis 3	-.33000*	.01732	.000	-.3827	-.2773
Kontrol Basis 2	Formula 1	.33667*	.01732	.000	.2840	.3893
	Formula 2	.22333*	.01732	.000	.1707	.2760
	Formula 3	.05500*	.01732	.037	.0023	.1077
	Kontrol Basis 1	.23167*	.01732	.000	.1790	.2843
	Kontrol basis 3	-.09833*	.01732	.000	-.1510	-.0457
Kontrol basis 3	Formula 1	.43500*	.01732	.000	.3823	.4877
	Formula 2	.32167*	.01732	.000	.2690	.3743
	Formula 3	.15333*	.01732	.000	.1007	.2060
	Kontrol Basis 1	.33000*	.01732	.000	.2773	.3827
	Kontrol Basis 2	.09833*	.01732	.000	.0457	.1510

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

Homogeneous Subsets

Daya lekat

Tukey HSD

Kelompok	N	Subset for alpha = 0.05				
		1	2	3	4	5
Formula 1	6	3.1183				
Kontrol Basis 1	6		3.2233			
Formula 2	6		3.2317			
Formula 3	6			3.4000		
Kontrol Basis 2	6				3.4550	
Kontrol basis 3	6					3.5533
Sig.		1.000	.996	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Daya lekat

Tukey HSD

Kelompok	N	Subset for alpha = 0.05				
		1	2	3	4	5
Formula 1	6	3.1183				
Kontrol Basis 1	6		3.2233			
Formula 2	6		3.2317			
Formula 3	6			3.4000		
Kontrol Basis 2	6				3.4550	
Kontrol basis 3	6					3.5533
Sig.		1.000	.996	1.000	1.000	1.000

Lampiran 12. Hasil uji stabilitas pH gel *hand sanitizer* ekstrak biji pepaya

Formula	Replikasi	Uji pH	
		Sebelum <i>freeze thaw</i>	Sesudah <i>freeze thaw</i>
F1	1	6,18	6,12
	2	6,17	6,12
	3	6,19	6,13
	Rata - Rata	6,18	6,12
	SD	0,01	0,01
F2	1	6,22	6,2
	2	6,25	6,19
	3	6,24	6,2
	Rata - Rata	6,24	6,20
	SD	0,02	0,01
F3	1	6,35	6,32
	2	6,38	6,31
	3	6,38	6,32
	Rata - Rata	6,37	6,32
	SD	0,02	0,01
Kb1	1	6,26	6,2

	2	6,28	6,2
	3	6,29	6,21
	Rata - Rata	6,28	6,20
	SD	0,02	0,01
Kb2	1	6,29	6,24
	2	6,29	6,23
	3	6,3	6,23
	Rata - Rata	6,29	6,23
	SD	0,01	0,01
Kb3	1	6,45	6,42
	2	6,44	6,41
	3	6,44	6,41
	Rata - Rata	6,44	6,41
	SD	0,01	0,01

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
pH Formula 1	.252	6	.200*	.841	6	.133
Formula 2	.254	6	.200*	.907	6	.415
Formula 3	.271	6	.191	.843	6	.139
Kontrol Basis 1	.265	6	.200*	.835	6	.118
Kontrol Basis 2	.289	6	.129	.794	6	.051
Kontrol Basis 3	.251	6	.200*	.869	6	.223

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Group Statistics

Waktu	N	Mean	Std. Deviation	Std. Error Mean
pH Sebelum freeze thaw	18	6.3000	.08918	.02102

Sesudah freeze thaw	18	6.2478	.09632	.02270
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Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
pH	Equal variances assumed	.165	.687	1.688	34	.101	.05222	.03094	-.01065	.11510
	Equal variances not assumed			1.688	33.800	.101	.05222	.03094	-.01067	.11511

Lampiran 13. Hasil uji stabilitas viskositas gel *hand sanitizer* ekstrak biji pepaya

Formula	Replikasi	Viskositas (dpa's)	
		Sebelum <i>freeze thaw</i>	Sesudah <i>freeze thaw</i>
F1	1	100	105
	2	110	105
	3	110	95
	Rata - Rata	106,67	101,67
	SD	5,77	5,77
F2	1	150	135
	2	145	140
	3	150	145
	Rata - Rata	148,33	140,00
	SD	2,89	5,00
F3	1	190	185
	2	190	180

	3	180	175
	Rata - Rata	186,67	180,00
	SD	5,77	5,00
Kb1	1	250	245
	2	260	240
	3	260	235
	Rata - Rata	256,67	240,00
	SD	5,77	5,00
Kb2	1	280	270
	2	280	275
	3	295	290
	Rata - Rata	285,00	278,33
	SD	8,66	5,00
Kb3	1	335	320
	2	340	315
	3	340	315
	Rata - Rata	338,33	316,67
	SD	2,89	2,89

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Viskositas 1	.223	6	.200*	.908	6	.421
Formula 2	.223	6	.200*	.908	6	.421
Formula 3	.209	6	.200*	.907	6	.415
Kontrol Basis 1	.204	6	.200*	.918	6	.493
Kontrol Basis 2	.238	6	.200*	.950	6	.737
Kontrol Basis 3	.232	6	.200*	.808	6	.070

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

a. R Squared = .996 (Adjusted R Squared = .995)

Group Statistics

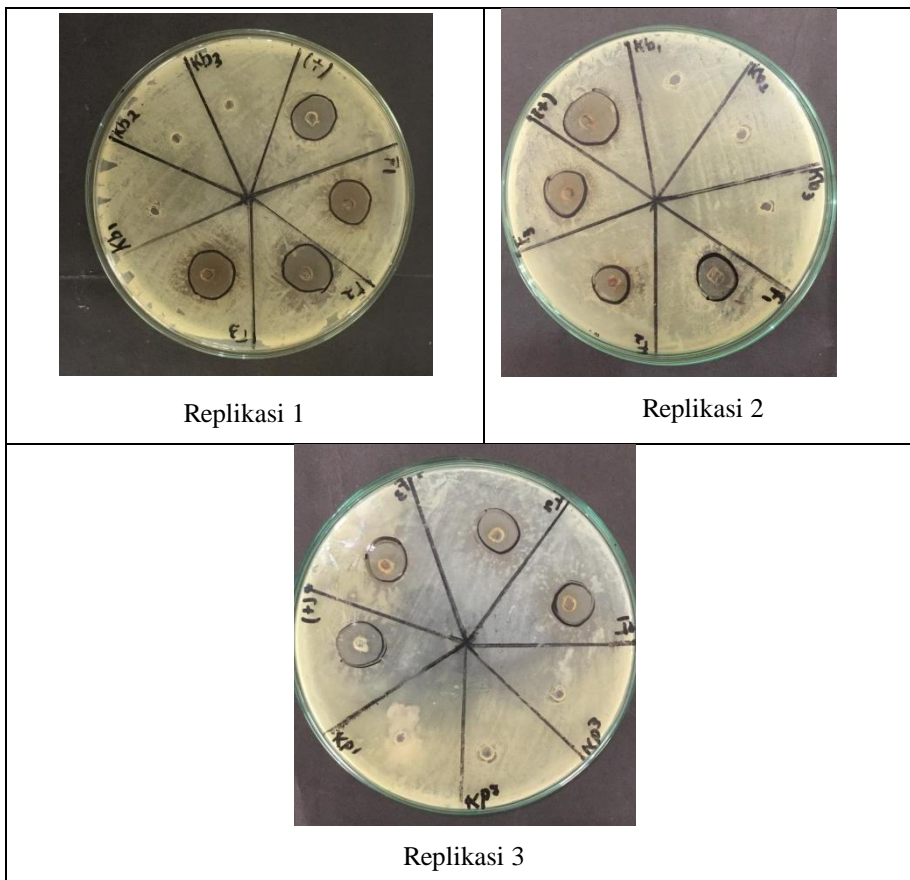
Waktu		N	Mean	Std. Deviation	Std. Error Mean
Viskositas	Sebelum freeze thaw	18	220.28	82.738	19.501
	Sesudah freeze thaw	18	209.44	78.176	18.426

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means
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		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Viskositas	Equal variances assumed	.137	.714	.404	34	.689	10.833	26.830	-43.691	65.358
	Equal variances not assumed			.404	33.891	.689	10.833	26.830	-43.698	65.364

Lampiran 14. Uji aktivitas antibakteri gel *hand sanitizer* ekstrak biji pepaya terhadap *Esherichia coli*



Formula	Daya Hambat Bakteri <i>Escherichia coli</i>				
	Replikasi 1	Replikasi 2	Replikasi 3	Rata - Rata	SD
F1	16,33	15,67	16,67	16,22	0,51
F2	17,40	17,33	17,67	17,47	0,18
F3	17,33	18,33	17,67	17,78	0,51
Kb1	0	0	0	0,00	0,00
Kb2	0	0	0	0,00	0,00
Kb3	0	0	0	0,00	0,00
Kontrol positif	19,67	20	20,33	20,00	0,33

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Daya Hambat Bakteri E. Coli	Formula 1	.250	3	.967	3	.651
	Formula 2	.311	3	.897	3	.375
	Formula 3	.250	3	.967	3	.651
	Kontrol Positif	.175	3	1.000	3	1.000

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

Daya Hambat Bakteri E. Coli

Levene Statistic	df1	df2	Sig.
1.070	3	8	.414

ANOVA

Daya Hambat Bakteri E. Coli

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.259	3	7.420	45.091	.000
Within Groups	1.316	8	.165		
Total	23.576	11			

Post Hoc Tests

Multiple Comparisons

Daya Hambat Bakteri E.
Coli

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	-1.24333*	.33121	.023	-2.3040	-.1827
	Formula 3	-1.55333*	.33121	.007	-2.6140	-.4927
	Kontrol Positif	-3.77667*	.33121	.000	-4.8373	-2.7160
Formula 2	Formula 1	1.24333*	.33121	.023	.1827	2.3040
	Formula 3	-.31000	.33121	.787	-1.3707	.7507
	Kontrol Positif	-2.53333*	.33121	.000	-3.5940	-1.4727
Formula 3	Formula 1	1.55333*	.33121	.007	.4927	2.6140
	Formula 2	.31000	.33121	.787	-.7507	1.3707
	Kontrol Positif	-2.22333*	.33121	.001	-3.2840	-1.1627
Kontrol Positif	Formula 1	3.77667*	.33121	.000	2.7160	4.8373
	Formula 2	2.53333*	.33121	.000	1.4727	3.5940
	Formula 3	2.22333*	.33121	.001	1.1627	3.2840

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

Homogeneous Subsets

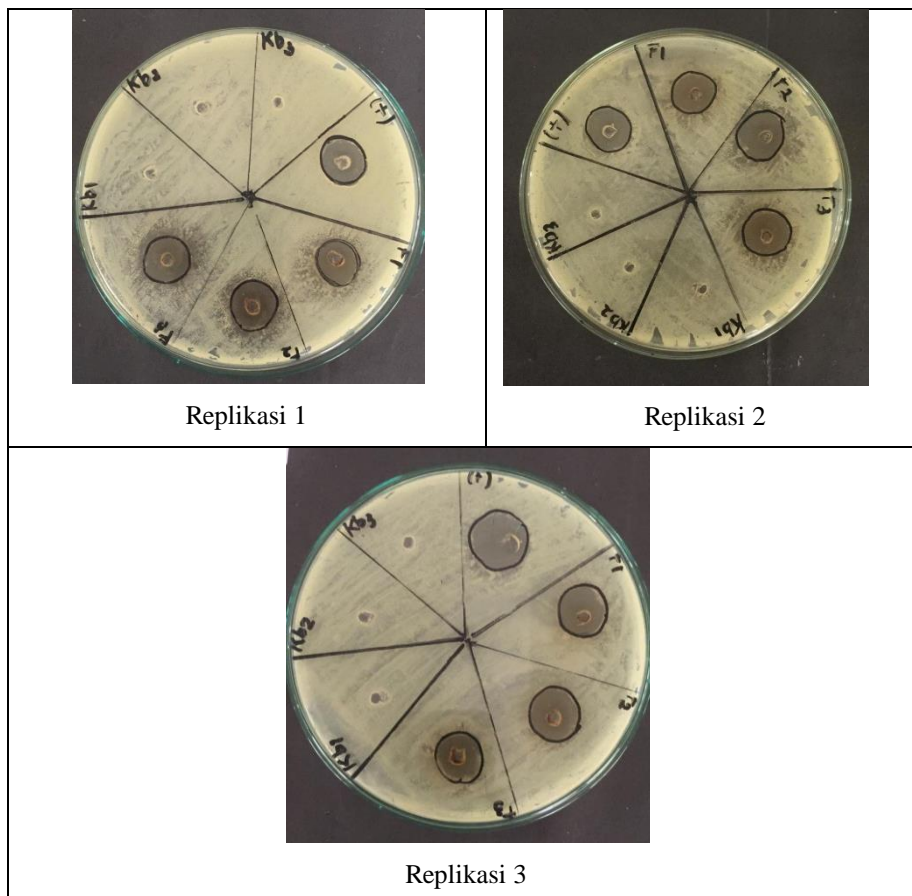
Daya Hambat Bakteri E. Coli

Tukey HSD

Kelompok	N	Subset for alpha = 0.05		
		1	2	3
Formula 1	3	16.2233		
Formula 2	3		17.4667	
Formula 3	3		17.7767	
Kontrol Positif	3			20.0000
Sig.		1.000	.787	1.000

Means for groups in homogeneous subsets are displayed.

Lampiran 15. Uji identifikasi aktivitas antibakteri gel *hand sanitizer* ekstrak biji pepaya terhadap *Staphylococcus aureus*



Formula	Daya Hambat Bakteri <i>S. aureus</i>				
	Replikasi 1	Replikasi 2	Replikasi 3	Rata - Rata	SD
F1	18	18,33	19	18,44	0,51
F2	18,33	19	18,67	18,67	0,34
F3	18,33	19	19,67	19,00	0,67
Kb1	0	0	0	0,00	0,00
Kb2	0	0	0	0,00	0,00
Kb3	0	0	0	0,00	0,00
Kontrol positif	20	19,67	21	20,22	0,69

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Daya Hambat Bakteri <i>S. aerous</i> 1	.176	3	.	1.000	3	.984
Formula 2	.255	3	.	.963	3	.630
Formula 3	.175	3	.	1.000	3	1.000
Kontrol Positif	.293	3	.	.922	3	.459

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

Daya Hambat Bakteri *S. aerous*

Levene Statistic	df1	df2	Sig.
.597	3	8	.634

ANOVA

Daya Hambat Bakteri *S. aerous*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.669	3	1.890	5.813	.021
Within Groups	2.601	8	.325		
Total	8.270	11			

Multiple Comparisons

Daya Hambat Bakteri *S. aerous*

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	.22333	.46555	.961	-1.2675	1.7142
	Formula 3	-.33333	.46555	.888	-1.8242	1.1575
	Kontrol Positif	-1.55667*	.46555	.041	-3.0475	-.0658
Formula 2	Formula 1	-.22333	.46555	.961	-1.7142	1.2675
	Formula 3	-.55667	.46555	.646	-2.0475	.9342
	Kontrol Positif	-1.78000*	.46555	.021	-3.2708	-.2892
Formula 3	Formula 1	.33333	.46555	.888	-1.1575	1.8242
	Formula 2	.55667	.46555	.646	-.9342	2.0475
	Kontrol Positif	-1.22333	.46555	.112	-2.7142	.2675
Kontrol Positif	Formula 1	1.55667*	.46555	.041	.0658	3.0475
	Formula 2	1.78000*	.46555	.021	.2892	3.2708
	Formula 3	1.22333	.46555	.112	-.2675	2.7142

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

Homogeneous Subsets

Daya Hambat Bakteri *S. aerous*

Tukey HSD

Kelompok	N	Subset for alpha = 0.05	
		1	2
Formula 2	3	18.4433	
Formula 1	3	18.6667	
Formula 3	3	19.0000	19.0000
Kontrol Positif	3		20.2233
Sig.		.646	.112

Means for groups in homogeneous subsets are displayed.