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Lampiran 1. Gambar Hasil dan Perhitungan Rf Klt



Keterangan Gambar:

A = Standar baku

B = Minyak atsiri daun jeruk nipis

Fase diam = Silika Gel GF₂₅₄

Fase gerak = Toluena : Etil asetat (80 : 20)

Perhitungan Rf dan HRF

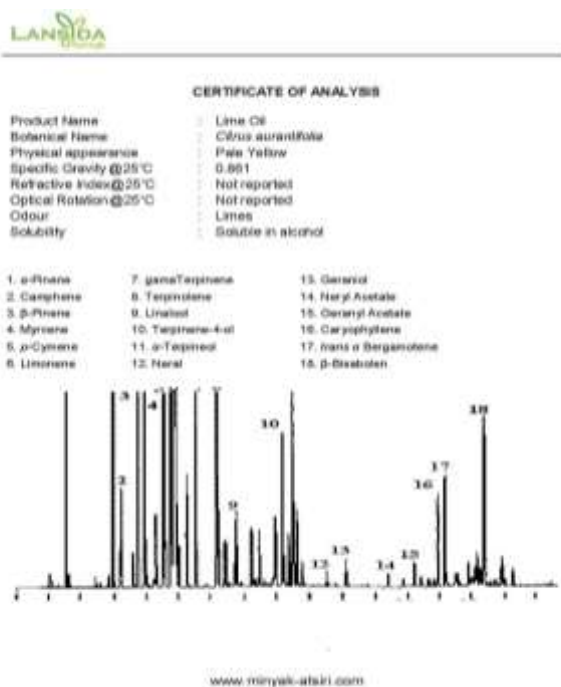
$$Rf \text{ Standar baku} = \frac{4,2}{4,8} = 0,88$$

$$HRf = \frac{4,2}{4,8} \times 100 = 88$$

$$Rf \text{ Minyak atsiri} = \frac{4,7}{5,3} = 0,88$$

$$HRf = \frac{4,7}{5,3} \times 100 = 88$$

Gambar CoA minyak atsiri daun jeruk nipis



Lampiran 2. Gambar dan Hasil Uji Kelarutan Minyak Atsiri Daun Jeruk Nipis Dalam Etanol



Sampel	Kelarutan (Etanol 90%)	Pustaka
Minyak atsiri daun jeruk nipis	1 : 4	1 : 4 dalam etanol 90% (Yustini 2015)

Lampiran 3. Gambar dan Hasil Uji Penetapan Indeks Bias



Sampel	Indeks bias (32,6 ⁰ C)	Pustaka
Minyak atsiri daun jeruk nipis	1,4770	1,4750 – 1,4770 (20 ⁰ C) (Wahyudi <i>et al.</i> , 2017)

Lampiran 4. Perhitungan dan Hasil Penetapan Bobot Jenis Minyak Atsiri Daun Jeruk Nipis

Perhitungan Bj

Bobot piknometer 50 ml kosong = 16,2019 gram

Bobot piknometer + air = 40,8894 gram

Bobot piknometer + Minyak atsiri = 39,5708 gram

Bobot minyak atsiri = 37,4783 – 17,2019 = 20,2764 gram

Bobot air = 40,8894 – 17,2019 = 23,6871 gram

$$= \frac{W_2 - W_0}{W_1 - W_0}$$





$$= \frac{(\text{Bobot pikno} + \text{minyak}) - \text{bobot pikno kosong}}{(\text{Bobot pikno} + \text{air}) - \text{bobot pikno kosong}}$$

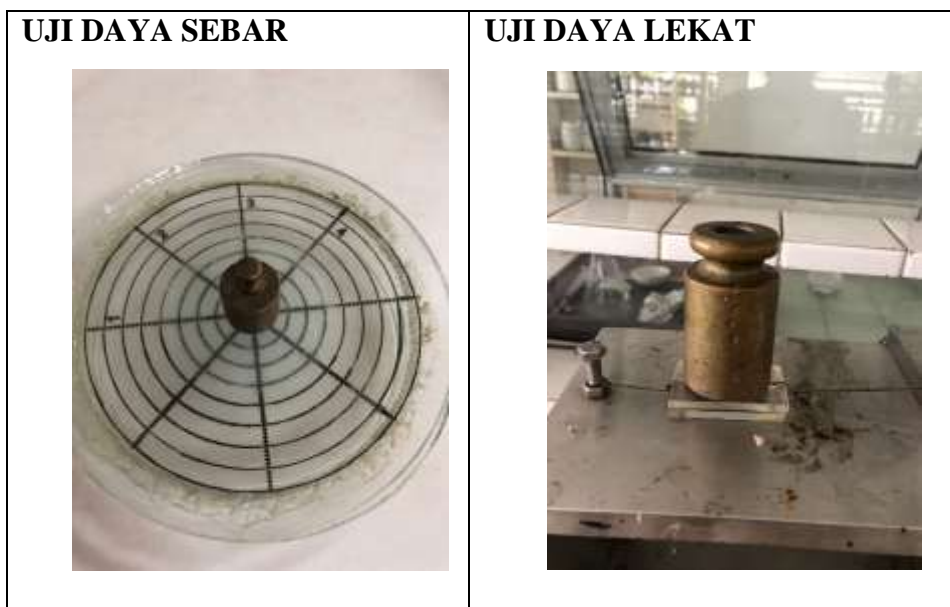
$$= \frac{\text{Bobot ekstrak}}{\text{bobot air}}$$

$$= \frac{20,2764}{23,6871}$$

$$= 0,856$$

Lampiran 5. Hasil Pengujian Mutu Fisik Emulgel Minyak Atsiri Daun Jeruk Nipis

<p>FORMULA</p> 	<p>UJI HOMOGENITAS</p> 
<p>UJI VISKOSITAS</p> 	<p>UJI Ph</p> 



Lampiran 6. Hasil Uji Organoleptis

Formula	Hari ke	Organoleptis		
		Bentuk	Bau	Warna
1	1	Emulgel	Bau Khas	Putih
	21	Emulgel	Bau Khas	Putih
2	1	Emulgel	Bau Khas	Putih
	21	Emulgel	Bau Khas	Putih
3	1	Emulgel	Bau Khas	Putih
	21	Emulgel	Bau Khas	Putih
4	1	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	21	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
5	1	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	21	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
6	1	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	21	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 7. Hasil Uji Homogenitas

Formula	Homogenitas	
	Hari ke-1	Hari ke-21
F1	Homogen	Homogen
F2	Homogen	Homogen
F3	Homogen	Homogen
F4	Homogen	Homogen
F5	Homogen	Homogen
F6	Homogen	Homogen

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 8. Hasil Uji pH

WAKTU	FORMULA	Uji pH			Rata-rata	SD
		R1	R2	R3		
Hari Ke-1	1	6,33	6,30	6,29	6,31	0,02
	2	6,28	6,25	6,23	6,25	0,02
	3	6,14	6,12	6,10	6,12	0,02
	4	5,47	5,44	5,42	5,44	0,02
	5	5,38	5,36	5,33	5,36	0,02
	6	5,21	5,20	5,17	5,19	0,02
Hari Ke-21	1	6,32	6,31	6,28	6,30	0,02
	2	6,26	6,25	6,20	6,24	0,03
	3	6,12	6,10	6,08	6,10	0,02
	4	5,46	5,44	5,40	5,43	0,03
	5	5,36	5,35	5,33	5,35	0,01
	6	5,20	5,18	5,18	5,19	0,01

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 9. Hasil SPSS Uji pH

Case Processing Summary

	pH	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
Hari_1	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%
Hari_21	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

	pH		Statistic	Std. Error		
Hari_1	F1	Mean	6.3067	.01202		
		95% Confidence Interval for Mean	Lower Bound	6.2550		
			Upper Bound	6.3584		
		5% Trimmed Mean	.			
		Median	6.3000			
		Variance	.000			
		Std. Deviation	.02082			
		Minimum	6.29			
		Maximum	6.33			
		Range	.04			
		Interquartile Range	.			
		Skewness	1.293	1.225		
		Kurtosis	.	.		
		F2	F2	Mean	6.2533	.01453
				95% Confidence Interval for Mean	Lower Bound	6.1908
Upper Bound	6.3158					
5% Trimmed Mean	.					
Median	6.2500					
Variance	.001					
Std. Deviation	.02517					
Minimum	6.23					
Maximum	6.28					
Range	.05					
Interquartile Range	.					
Skewness	.586			1.225		
Kurtosis	.			.		

F3	Mean		6.1200	.01155
	95% Confidence Interval for Mean	Lower Bound	6.0703	
		Upper Bound	6.1697	
	5% Trimmed Mean		.	
	Median		6.1200	
	Variance		.000	
	Std. Deviation		.02000	
	Minimum		6.10	
	Maximum		6.14	
	Range		.04	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F4	Mean		5.4433	.01453
	95% Confidence Interval for Mean	Lower Bound	5.3808	
		Upper Bound	5.5058	
	5% Trimmed Mean		.	
	Median		5.4400	
	Variance		.001	
	Std. Deviation		.02517	
	Minimum		5.42	
	Maximum		5.47	
	Range		.05	
	Interquartile Range		.	
	Skewness		.586	1.225
	Kurtosis		.	.
F5	Mean		5.3567	.01453
	95% Confidence Interval for Mean	Lower Bound	5.2942	
		Upper Bound	5.4192	
	5% Trimmed Mean		.	
	Median		5.3600	
	Variance		.001	
	Std. Deviation		.02517	
	Minimum		5.33	
	Maximum		5.38	
	Range		.05	
	Interquartile Range		.	
	Skewness		-.586	1.225
	Kurtosis		.	.
F6	Mean		5.1933	.01202
	95% Confidence Interval for Mean	Lower Bound	5.1416	
		Upper Bound	5.2450	
5% Trimmed Mean		.		

		Median		5.2000	
		Variance		.000	
		Std. Deviation		.02082	
		Minimum		5.17	
		Maximum		5.21	
		Range		.04	
		Interquartile Range		.	
		Skewness		-1.293	1.225
		Kurtosis		.	.
Hari_21	F1	Mean		6.3033	.01202
		95% Confidence Interval for Mean	Lower Bound	6.2516	
			Upper Bound	6.3550	
		5% Trimmed Mean		.	
		Median		6.3100	
		Variance		.000	
		Std. Deviation		.02082	
		Minimum		6.28	
		Maximum		6.32	
		Range		.04	
		Interquartile Range		.	
		Skewness		-1.293	1.225
		Kurtosis		.	.
	F2	Mean		6.2367	.01856
		95% Confidence Interval for Mean	Lower Bound	6.1568	
			Upper Bound	6.3165	
		5% Trimmed Mean		.	
		Median		6.2500	
		Variance		.001	
		Std. Deviation		.03215	
		Minimum		6.20	
		Maximum		6.26	
		Range		.06	
		Interquartile Range		.	
		Skewness		-1.545	1.225
		Kurtosis		.	.
	F3	Mean		6.1000	.01155
		95% Confidence Interval for Mean	Lower Bound	6.0503	
			Upper Bound	6.1497	
		5% Trimmed Mean		.	
		Median		6.1000	
		Variance		.000	
		Std. Deviation		.02000	
		Minimum		6.08	

	Maximum		6.12	
	Range		.04	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F4	Mean		5.4333	.01764
	95% Confidence Interval for Mean	Lower Bound	5.3574	
		Upper Bound	5.5092	
	5% Trimmed Mean		.	
	Median		5.4400	
	Variance		.001	
	Std. Deviation		.03055	
	Minimum		5.40	
	Maximum		5.46	
	Range		.06	
	Interquartile Range		.	
	Skewness		-.935	1.225
	Kurtosis		.	.
F5	Mean		5.3467	.00882
	95% Confidence Interval for Mean	Lower Bound	5.3087	
		Upper Bound	5.3846	
	5% Trimmed Mean		.	
	Median		5.3500	
	Variance		.000	
	Std. Deviation		.01528	
	Minimum		5.33	
	Maximum		5.36	
	Range		.03	
	Interquartile Range		.	
	Skewness		-.935	1.225
	Kurtosis		.	.
F6	Mean		5.1867	.00667
	95% Confidence Interval for Mean	Lower Bound	5.1580	
		Upper Bound	5.2154	
	5% Trimmed Mean		.	
	Median		5.1800	
	Variance		.000	
	Std. Deviation		.01155	
	Minimum		5.18	
	Maximum		5.20	
	Range		.02	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.

Tests of Normality

	pH	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hari_1	F1	.292	3	.	.923	3	.463
	F2	.219	3	.	.987	3	.780
	F3	.175	3	.	1.000	3	1.000
	F4	.219	3	.	.987	3	.780
	F5	.219	3	.	.987	3	.780
	F6	.292	3	.	.923	3	.463
Hari_21	F1	.292	3	.	.923	3	.463
	F2	.328	3	.	.871	3	.298
	F3	.175	3	.	1.000	3	1.000
	F4	.253	3	.	.964	3	.637
	F5	.253	3	.	.964	3	.637
	F6	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Wilcoxon

Test Statistics^a

	Hari_21 - Hari_1
Z	-3.022 ^b
Asymp. Sig. (2-tailed)	.003

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Lampiran 10. Hasil Uji Viskositas

WAKTU	FORMULA	Uji Viskositas			Rata-rata	SD
		R1	R2	R3		
Hari Ke-1	1	150	140	130	140	10,00
	2	160	150	140	150	10,00
	3	160	160	150	156,66	5,77
	4	140	120	130	130	10,00
	5	130	130	140	133,33	5,77
	6	150	140	120	136,66	15,27
Hari Ke-21	1	140	150	130	140	10,00
	2	150	140	140	143,33	5,77
	3	160	150	150	153,33	5,77
	4	120	120	130	123,33	5,77
	5	130	120	140	130	10,00
	6	140	120	150	136,66	15,27

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 11. Hasil SPSS Uji Viskositas

Case Processing Summary

	Visikositas	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
Hari_1	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%
Hari_21	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

Visikositas		Statistic	Std. Error		
Hari_1	F1	Mean	140.00	5.774	
		95% Confidence Interval for Mean	Lower Bound	115.16	
			Upper Bound	164.84	
		5% Trimmed Mean	.		
		Median	140.00		
		Variance	100.000		
		Std. Deviation	10.000		
		Minimum	130		
		Maximum	150		
		Range	20		
		Interquartile Range	.		
		Skewness	.000	1.225	
		Kurtosis	.	.	
		F2	F2	Mean	150.00
95% Confidence Interval for Mean	Lower Bound			125.16	
	Upper Bound			174.84	
5% Trimmed Mean	.				
Median	150.00				
Variance	100.000				
Std. Deviation	10.000				
Minimum	140				
Maximum	160				
Range	20				
Interquartile Range	.				

	Skewness		.000	1.225
	Kurtosis		.	.
F3	Mean		156.67	3.333
	95% Confidence Interval for Mean	Lower Bound	142.32	
		Upper Bound	171.01	
	5% Trimmed Mean		.	
	Median		160.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		150	
	Maximum		160	
	Range		10	
	Interquartile Range		.	
	Skewness		-1.732	1.225
	Kurtosis		.	.
F4	Mean		130.00	5.774
	95% Confidence Interval for Mean	Lower Bound	105.16	
		Upper Bound	154.84	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		100.000	
	Std. Deviation		10.000	
	Minimum		120	
	Maximum		140	
	Range		20	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F5	Mean		133.33	3.333
	95% Confidence Interval for Mean	Lower Bound	118.99	
		Upper Bound	147.68	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		130	
	Maximum		140	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F6	Mean		136.67	8.819
	95% Confidence Interval for Mean	Lower Bound	98.72	
		Upper Bound	174.61	

		5% Trimmed Mean		.
		Median		140.00
		Variance		233.333
		Std. Deviation		15.275
		Minimum		120
		Maximum		150
		Range		30
		Interquartile Range		.
		Skewness		-.935
		Kurtosis		1.225
Hari_21	F1	Mean		140.00
		95% Confidence Interval for Mean	Lower Bound	115.16
			Upper Bound	164.84
		5% Trimmed Mean		.
		Median		140.00
		Variance		100.000
		Std. Deviation		10.000
		Minimum		130
		Maximum		150
		Range		20
		Interquartile Range		.
		Skewness		.000
		Kurtosis		1.225
	F2	Mean		143.33
		95% Confidence Interval for Mean	Lower Bound	128.99
			Upper Bound	157.68
		5% Trimmed Mean		.
		Median		140.00
		Variance		33.333
		Std. Deviation		5.774
		Minimum		140
		Maximum		150
		Range		10
		Interquartile Range		.
		Skewness		1.732
		Kurtosis		1.225
	F3	Mean		153.33
		95% Confidence Interval for Mean	Lower Bound	138.99
			Upper Bound	167.68
		5% Trimmed Mean		.
		Median		150.00
		Variance		33.333
		Std. Deviation		5.774

	Minimum		150	
	Maximum		160	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F4	Mean		123.33	3.333
	95% Confidence Interval for Mean	Lower Bound	108.99	
		Upper Bound	137.68	
	5% Trimmed Mean		.	
	Median		120.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		120	
	Maximum		130	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F5	Mean		130.00	5.774
	95% Confidence Interval for Mean	Lower Bound	105.16	
		Upper Bound	154.84	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		100.000	
	Std. Deviation		10.000	
	Minimum		120	
	Maximum		140	
	Range		20	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F6	Mean		136.67	8.819
	95% Confidence Interval for Mean	Lower Bound	98.72	
		Upper Bound	174.61	
	5% Trimmed Mean		.	
	Median		140.00	
	Variance		233.333	
	Std. Deviation		15.275	
	Minimum		120	
	Maximum		150	
	Range		30	
	Interquartile Range		.	

Skewness	-.935	1.225
Kurtosis	.	.

Tests of Normality

	Visikosasitas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hari_1	F1	.175	3	.	1.000	3	1.000
	F2	.175	3	.	1.000	3	1.000
	F3	.385	3	.	.750	3	.000
	F4	.175	3	.	1.000	3	1.000
	F5	.385	3	.	.750	3	.000
	F6	.253	3	.	.964	3	.637
Hari_21	F1	.175	3	.	1.000	3	1.000
	F2	.385	3	.	.750	3	.000
	F3	.385	3	.	.750	3	.000
	F4	.385	3	.	.750	3	.000
	F5	.175	3	.	1.000	3	1.000
	F6	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

Wilcoxon

Test Statistics^a

Hari_21 - Hari_1	
Z	-1.430 ^b
Asymp. Sig. (2-tailed)	.153

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Lampiran 12. Hasil Uji Daya Sebar

Formula	Replikasi	Beban					Rata-rata ± SD
		10	20	50	100	200	
F1	R1	4,77	4,78	4,91	5,19	5,33	5,00 ± 0,25
	R2	4,74	4,76	4,88	5,13	5,29	4,96 ± 0,24
	R3	4,70	4,75	4,84	5,11	5,22	4,92± 0,22
F2	R1	4,55	4,55	4,68	4,88	5,02	4,73 ± 0,21
	R2	4,52	4,51	4,64	4,86	4,89	4,68 ± 0,18
	R3	4,46	4,57	4,61	4,70	4,84	4,64 ± 0,14
F3	R1	4,00	4,00	4,13	4,33	4,47	4,19 ± 0,21
	R2	3,85	3,88	3,95	4,28	4,34	4,06 ± 0,23
	R3	3,79	3,85	3,93	4,20	4,27	4,01 ± 0,21
F4	R1	4,67	4,85	5,05	5,24	5,30	5,02 ± 0,26
	R2	4,58	4,77	5,02	5,18	5,26	4,96 ± 0,28
	R3	4,50	4,68	4,98	5,12	5,23	4,90 ± 0,30
F5	R1	4,39	4,40	4,65	4,85	4,99	4,66 ± 0,27
	R2	4,28	4,37	4,55	4,71	4,86	4,45 ± 0,24
	R3	4,19	4,29	4,48	4,63	4,77	4,47 ± 0,24
F6	R1	4,24	4,25	4,38	4,68	4,82	4,47 ± 0,26
	R2	4,18	4,22	4,34	4,48	4,57	4,36 ± 0,17
	R3	3,98	4,16	4,27	4,39	4,45	4,25 ± 0,18

Keterangan :

- F1: Formula tanpa minyak atsiri dengan basis HPMC 3%
 F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%
 F3: Formula tanpa minyak atsiri dengan basis HPMC 4%
 F4: Formula minyak atsiri dengan basis HPMC 3%
 F5: Formula minyak atsiri dengan basis HPMC 3,5%
 F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 13. Hasil SPSS Uji Daya Sebar

Case Processing Summary

	Kelompok	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
DayaSebar	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

	Kelompok	Statistic	Std. Error		
DayaSebar	F1	Mean	4.9600	.02309	
		95% Confidence Interval for Mean	Lower Bound	4.8606	
			Upper Bound	5.0594	
		5% Trimmed Mean	.		
		Median	4.9600		
		Variance	.002		
		Std. Deviation	.04000		
		Minimum	4.92		
		Maximum	5.00		
		Range	.08		
		Interquartile Range	.		
		Skewness	.000	1.225	
		Kurtosis	.	.	
		F2	F2	Mean	4.6833
95% Confidence Interval for Mean	Lower Bound			4.5713	
	Upper Bound			4.7953	
5% Trimmed Mean	.				
Median	4.6800				
Variance	.002				
Std. Deviation	.04509				
Minimum	4.64				
Maximum	4.73				
Range	.09				
Interquartile Range	.				
Skewness	.331			1.225	
Kurtosis	.			.	
F3	F3			Mean	4.0867
		95% Confidence Interval for Mean	Lower Bound	3.8559	
			Upper Bound	4.3175	
		5% Trimmed Mean	.		
		Median	4.0600		

	Variance		.009	
	Std. Deviation		.09292	
	Minimum		4.01	
	Maximum		4.19	
	Range		.18	
	Interquartile Range		.	
	Skewness		1.185	1.225
	Kurtosis		.	.
F4	Mean		4.9600	.03464
	95% Confidence Interval for Mean	Lower Bound	4.8110	
		Upper Bound	5.1090	
	5% Trimmed Mean		.	
	Median		4.9600	
	Variance		.004	
	Std. Deviation		.06000	
	Minimum		4.90	
	Maximum		5.02	
	Range		.12	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F5	Mean		4.5600	.05508
	95% Confidence Interval for Mean	Lower Bound	4.3230	
		Upper Bound	4.7970	
	5% Trimmed Mean		.	
	Median		4.5500	
	Variance		.009	
	Std. Deviation		.09539	
	Minimum		4.47	
	Maximum		4.66	
	Range		.19	
	Interquartile Range		.	
	Skewness		.467	1.225
	Kurtosis		.	.
F6	Mean		4.3600	.06351
	95% Confidence Interval for Mean	Lower Bound	4.0867	
		Upper Bound	4.6333	
	5% Trimmed Mean		.	
	Median		4.3600	
	Variance		.012	
	Std. Deviation		.11000	
	Minimum		4.25	
	Maximum		4.47	

Range	.22	
Interquartile Range	.	
Skewness	.000	1.225
Kurtosis	.	.

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
DayaSebar	F1	.175	3	.	1.000	3	1.000
	F2	.196	3	.	.996	3	.878
	F3	.280	3	.	.938	3	.520
	F4	.175	3	.	1.000	3	1.000
	F5	.208	3	.	.992	3	.826
	F6	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Descriptives

DayaSebar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F1	3	4.9600	.04000	.02309	4.8606	5.0594	4.92	5.00
F2	3	4.6833	.04509	.02603	4.5713	4.7953	4.64	4.73
F3	3	4.0867	.09292	.05364	3.8559	4.3175	4.01	4.19
F4	3	4.9600	.06000	.03464	4.8110	5.1090	4.90	5.02
F5	3	4.5600	.09539	.05508	4.3230	4.7970	4.47	4.66
F6	3	4.3600	.11000	.06351	4.0867	4.6333	4.25	4.47
Total	18	4.6017	.32905	.07756	4.4380	4.7653	4.01	5.02

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaSebar	Based on Mean	.760	5	12	.596
	Based on Median	.478	5	12	.786
	Based on Median and with adjusted df	.478	5	8.265	.784
	Based on trimmed mean	.742	5	12	.607

ANOVA

DayaSebar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.767	5	.353	57.189	.000
Within Groups	.074	12	.006		
Total	1.841	17			

Tuckey

DayaSebar

Tukey HSD^a

Kelompok	N	Subset for alpha = 0.05			
		1	2	3	4
F3	3	4.0867			

F6	3	4.3600		
F5	3	4.5600	4.5600	
F2	3		4.6833	
F1	3			4.9600
F4	3			4.9600
Sig.		1.000	.075	.435

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Multiple Comparisons

Dependent Variable: DayaSebar

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F1	F2	.27667*	.06418	.010	.0611	.4922
	F3	.87333*	.06418	.000	.6578	1.0889
	F4	.00000	.06418	1.000	-.2156	.2156
	F5	.40000*	.06418	.000	.1844	.6156
	F6	.60000*	.06418	.000	.3844	.8156
F2	F1	-.27667*	.06418	.010	-.4922	-.0611
	F3	.59667*	.06418	.000	.3811	.8122
	F4	-.27667*	.06418	.010	-.4922	-.0611
	F5	.12333	.06418	.435	-.0922	.3389
	F6	.32333*	.06418	.003	.1078	.5389
F3	F1	-.87333*	.06418	.000	-1.0889	-.6578
	F2	-.59667*	.06418	.000	-.8122	-.3811
	F4	-.87333*	.06418	.000	-1.0889	-.6578
	F5	-.47333*	.06418	.000	-.6889	-.2578
	F6	-.27333*	.06418	.011	-.4889	-.0578
F4	F1	.00000	.06418	1.000	-.2156	.2156
	F2	.27667*	.06418	.010	.0611	.4922
	F3	.87333*	.06418	.000	.6578	1.0889
	F5	.40000*	.06418	.000	.1844	.6156
	F6	.60000*	.06418	.000	.3844	.8156
F5	F1	-.40000*	.06418	.000	-.6156	-.1844
	F2	-.12333	.06418	.435	-.3389	.0922
	F3	.47333*	.06418	.000	.2578	.6889
	F4	-.40000*	.06418	.000	-.6156	-.1844
	F6	.20000	.06418	.075	-.0156	.4156
F6	F1	-.60000*	.06418	.000	-.8156	-.3844
	F2	-.32333*	.06418	.003	-.5389	-.1078
	F3	.27333*	.06418	.011	.0578	.4889
	F4	-.60000*	.06418	.000	-.8156	-.3844
	F5	-.20000	.06418	.075	-.4156	.0156

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

Lampiran 14. Hasil Uji Daya Lekat

Daya lekat (detik) emulgel				Rata-rata \pm SD
Formula	Replikasi 1	Replikasi 2	Replikasi 3	
1	00,45	00,43	00,44	00,44 \pm 0,01
2	00,64	00,66	00,65	00,65 \pm 0,01
3	00,70	00,70	00,68	00,69 \pm 0,01
4	00,02	00,01	00,02	00,01 \pm 0,00
5	00,08	00,10	00,10	00,09 \pm 0,01
6	00,14	00,13	00,15	00,14 \pm 0,01

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 15. Hasil SPSS Uji Daya Lekat Case Processing Summary

	Kelompok	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
DayaLekat	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

	Kelompok		Statistic	Std. Error	
DayaLekat	F1	Mean	.4400	.00577	
		95% Confidence Interval for Mean	Lower Bound	.4152	
			Upper Bound	.4648	
		5% Trimmed Mean	.		
		Median	.4400		
		Variance	.000		
		Std. Deviation	.01000		
		Minimum	.43		
		Maximum	.45		
		Range	.02		
		Interquartile Range	.		
		Skewness	.000	1.225	
		Kurtosis	.	.	
		F2	F2	Mean	.6500
95% Confidence Interval for Mean	Lower Bound			.6252	
	Upper Bound			.6748	
5% Trimmed Mean	.				
Median	.6500				
Variance	.000				
Std. Deviation	.01000				
Minimum	.64				
Maximum	.66				
Range	.02				
Interquartile Range	.				
Skewness	.000			1.225	
Kurtosis	.			.	
F3	F3			Mean	.6933
		95% Confidence Interval for Mean	Lower Bound	.6646	
			Upper Bound	.7220	
		5% Trimmed Mean	.		
		Median	.7000		

	Variance		.000	
	Std. Deviation		.01155	
	Minimum		.68	
	Maximum		.70	
	Range		.02	
	Interquartile Range		.	
	Skewness		-1.732	1.225
	Kurtosis		.	.
F4	Mean		.0167	.00333
	95% Confidence Interval for Mean	Lower Bound	.0023	
		Upper Bound	.0310	
	5% Trimmed Mean		.	
	Median		.0200	
	Variance		.000	
	Std. Deviation		.00577	
	Minimum		.01	
	Maximum		.02	
	Range		.01	
	Interquartile Range		.	
	Skewness		-1.732	1.225
	Kurtosis		.	.
F5	Mean		.0933	.00667
	95% Confidence Interval for Mean	Lower Bound	.0646	
		Upper Bound	.1220	
	5% Trimmed Mean		.	
	Median		.1000	
	Variance		.000	
	Std. Deviation		.01155	
	Minimum		.08	
	Maximum		.10	
	Range		.02	
	Interquartile Range		.	
	Skewness		-1.732	1.225
	Kurtosis		.	.
F6	Mean		.1400	.00577
	95% Confidence Interval for Mean	Lower Bound	.1152	
		Upper Bound	.1648	
	5% Trimmed Mean		.	
	Median		.1400	
	Variance		.000	
	Std. Deviation		.01000	
	Minimum		.13	
	Maximum		.15	

Range	.02	
Interquartile Range	.	
Skewness	.000	1.225
Kurtosis	.	.

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
DayaLekat	F1	.175	3	.	1.000	3	1.000
	F2	.175	3	.	1.000	3	1.000
	F3	.385	3	.	.750	3	.000
	F4	.385	3	.	.750	3	.000
	F5	.385	3	.	.750	3	.000
	F6	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Kruskall

Test Statistics^{a,b}

DayaLekat	
Kruskal-Wallis H	16.630
df	5
Asymp. Sig.	.005

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Lampiran 16. Hasil Uji Stabilitas

Formula	Stabilitas	Organoleptis (Sebelum)		
		Bentuk	Bau	Warna
1	Sebelum	Emulgel	Bau Khas	Putih
	Sesudah	Emulgel	Bau Khas	Putih
2	Sebelum	Emulgel	Bau Khas	Putih
	Sesudah	Emulgel	Bau Khas	Putih
3	Sebelum	Emulgel	Bau Khas	Putih
	Sesudah	Emulgel	Bau Khas	Putih
4	Sebelum	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	Sesudah	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
5	Sebelum	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	Sesudah	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
6	Sebelum	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih
	Sesudah	Emulgel	Khas minyak atsiri daun jeruk nipis	Putih

Formula	Homogenitas	
	Sebelum	Sesudah
F1	Homogen	Homogen
F2	Homogen	Homogen
F3	Homogen	Homogen
F4	Homogen	Homogen
F5	Homogen	Homogen
F6	Homogen	Homogen

WAKTU	FORMULA	Uji Stabilitas Viskositas			Rata-rata	SD
		R1	R2	R3		
Sebelum	1	150	140	130	140	10,00
	2	160	150	140	150	10,00
	3	160	160	150	156,66	5,77
	4	140	120	130	130	10,00
	5	130	130	140	133,33	5,77
	6	150	140	120	136,66	15,27
Sesudah	1	140	150	130	140	10,00
	2	150	140	140	143,33	5,77
	3	160	150	150	153,33	5,77
	4	120	120	130	123,33	5,77
	5	130	120	140	130	10,00
	6	140	120	150	136,66	15,27

Lampiran 17. Hasil SPSS Uji Viskositas Sebelum dan Sesudah Stabilitas

Case Processing Summary

	Viskositas	N	Valid		Cases Missing		Total	
			N	Percent	N	Percent	N	Percent
Sebelum	F1		3	100.0%	0	0.0%	3	100.0%
	F2		3	100.0%	0	0.0%	3	100.0%
	F3		3	100.0%	0	0.0%	3	100.0%
	F4		3	100.0%	0	0.0%	3	100.0%
	F5		3	100.0%	0	0.0%	3	100.0%
	F6		3	100.0%	0	0.0%	3	100.0%
Sesudah	F1		3	100.0%	0	0.0%	3	100.0%
	F2		3	100.0%	0	0.0%	3	100.0%
	F3		3	100.0%	0	0.0%	3	100.0%
	F4		3	100.0%	0	0.0%	3	100.0%
	F5		3	100.0%	0	0.0%	3	100.0%
	F6		3	100.0%	0	0.0%	3	100.0%

Descriptives

Viskositas		Statistic	Std. Error	
Sebelum	F1	Mean	140.00	5.774
	95% Confidence Interval for Mean	Lower Bound	115.16	
		Upper Bound	164.84	
	5% Trimmed Mean	.		
	Median	140.00		
	Variance	100.000		
	Std. Deviation	10.000		
	Minimum	130		
	Maximum	150		
	Range	20		
	Interquartile Range	.		
	Skewness	.000	1.225	
	Kurtosis	.	.	
	F2	F2	Mean	150.00
95% Confidence Interval for Mean		Lower Bound	125.16	
		Upper Bound	174.84	
5% Trimmed Mean		.		
Median		150.00		
Variance		100.000		
Std. Deviation		10.000		
Minimum		140		
Maximum		160		
Range		20		
Interquartile Range		.		
Skewness		.000	1.225	

	Kurtosis		.	.
F3	Mean		156.67	3.333
	95% Confidence Interval for Mean	Lower Bound	142.32	
		Upper Bound	171.01	
	5% Trimmed Mean		.	
	Median		160.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		150	
	Maximum		160	
	Range		10	
	Interquartile Range		.	
	Skewness		-1.732	1.225
	Kurtosis		.	.
F4	Mean		130.00	5.774
	95% Confidence Interval for Mean	Lower Bound	105.16	
		Upper Bound	154.84	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		100.000	
	Std. Deviation		10.000	
	Minimum		120	
	Maximum		140	
	Range		20	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F5	Mean		133.33	3.333
	95% Confidence Interval for Mean	Lower Bound	118.99	
		Upper Bound	147.68	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		130	
	Maximum		140	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F6	Mean		136.67	8.819
	95% Confidence Interval for Mean	Lower Bound	98.72	
		Upper Bound	174.61	
	5% Trimmed Mean		.	

		Median	140.00	
		Variance	233.333	
		Std. Deviation	15.275	
		Minimum	120	
		Maximum	150	
		Range	30	
		Interquartile Range	.	
		Skewness	-.935	1.225
		Kurtosis	.	.
Sesu	F1	Mean	140.00	5.774
dah		95% Confidence Interval for Mean	Lower Bound Upper Bound	115.16 164.84
		5% Trimmed Mean	.	
		Median	140.00	
		Variance	100.000	
		Std. Deviation	10.000	
		Minimum	130	
		Maximum	150	
		Range	20	
		Interquartile Range	.	
		Skewness	.000	1.225
		Kurtosis	.	.
	F2	Mean	143.33	3.333
		95% Confidence Interval for Mean	Lower Bound Upper Bound	128.99 157.68
		5% Trimmed Mean	.	
		Median	140.00	
		Variance	33.333	
		Std. Deviation	5.774	
		Minimum	140	
		Maximum	150	
		Range	10	
		Interquartile Range	.	
		Skewness	1.732	1.225
		Kurtosis	.	.
	F3	Mean	153.33	3.333
		95% Confidence Interval for Mean	Lower Bound Upper Bound	138.99 167.68
		5% Trimmed Mean	.	
		Median	150.00	
		Variance	33.333	
		Std. Deviation	5.774	
		Minimum	150	

	Maximum		160	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F4	Mean		123.33	3.333
	95% Confidence Interval for Mean	Lower Bound	108.99	
		Upper Bound	137.68	
	5% Trimmed Mean		.	
	Median		120.00	
	Variance		33.333	
	Std. Deviation		5.774	
	Minimum		120	
	Maximum		130	
	Range		10	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.
F5	Mean		130.00	5.774
	95% Confidence Interval for Mean	Lower Bound	105.16	
		Upper Bound	154.84	
	5% Trimmed Mean		.	
	Median		130.00	
	Variance		100.000	
	Std. Deviation		10.000	
	Minimum		120	
	Maximum		140	
	Range		20	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F6	Mean		136.67	8.819
	95% Confidence Interval for Mean	Lower Bound	98.72	
		Upper Bound	174.61	
	5% Trimmed Mean		.	
	Median		140.00	
	Variance		233.333	
	Std. Deviation		15.275	
	Minimum		120	
	Maximum		150	
	Range		30	
	Interquartile Range		.	
	Skewness		-.935	1.225
	Kurtosis		.	.

Tests of Normality

	Visikositas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Sebelum	F1	.175	3	.	1.000	3	1.000
	F2	.175	3	.	1.000	3	1.000
	F3	.385	3	.	.750	3	.000
	F4	.175	3	.	1.000	3	1.000
	F5	.385	3	.	.750	3	.000
	F6	.253	3	.	.964	3	.637
Sesudah	F1	.175	3	.	1.000	3	1.000
	F2	.385	3	.	.750	3	.000
	F3	.385	3	.	.750	3	.000
	F4	.385	3	.	.750	3	.000
	F5	.175	3	.	1.000	3	1.000
	F6	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

Wilcoxon

Test Statistics^a

Sesudah -
Sebelum

Z	-1.430 ^b
Asymp. Sig. (2-tailed)	.153

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

WAKTU	FORMULA	Uji Stabilitas pH			Rata-rata	SD
		R1	R2	R3		
Sebelum	1	6,33	6,30	6,29	6,31	0,02
	2	6,28	6,25	6,23	6,25	0,02
	3	6,14	6,12	6,10	6,12	0,02
	4	5,47	5,44	5,42	5,44	0,02
	5	5,38	5,36	5,33	5,36	0,02
	6	5,21	5,20	5,17	5,19	0,02
Sesudah	1	6,32	6,31	6,28	6,30	0,02
	2	6,26	6,25	6,20	6,24	0,03
	3	6,12	6,10	6,08	6,10	0,02
	4	5,46	5,44	5,40	5,43	0,03
	5	5,36	5,35	5,33	5,35	0,01
	6	5,20	5,18	5,18	5,19	0,01

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

Lampiran 18. Hasil SPSS Uji Stabilitas pH
Case Processing Summary

	pH	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
Sebelum	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%
Sesudah	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

	pH		Statistic	Std. Error	
Sebelum	F1	Mean	6.3067	.01202	
		95% Confidence Interval for Mean	Lower Bound	6.2550	
			Upper Bound	6.3584	
		5% Trimmed Mean	.		
		Median	6.3000		
		Variance	.000		
		Std. Deviation	.02082		
		Minimum	6.29		
		Maximum	6.33		
		Range	.04		
		Interquartile Range	.		
		Skewness	1.293	1.225	
		Kurtosis	.	.	
			F2	Mean	6.2533
95% Confidence Interval for Mean	Lower Bound			6.1908	
	Upper Bound			6.3158	
5% Trimmed Mean	.				
Median	6.2500				
Variance	.001				
Std. Deviation	.02517				
Minimum	6.23				
Maximum	6.28				
Range	.05				
Interquartile Range	.				
Skewness	.586			1.225	
Kurtosis	.			.	

F3	Mean		6.1200	.01155
	95% Confidence Interval for Mean	Lower Bound	6.0703	
		Upper Bound	6.1697	
	5% Trimmed Mean		.	
	Median		6.1200	
	Variance		.000	
	Std. Deviation		.02000	
	Minimum		6.10	
	Maximum		6.14	
	Range		.04	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F4	Mean		5.4433	.01453
	95% Confidence Interval for Mean	Lower Bound	5.3808	
		Upper Bound	5.5058	
	5% Trimmed Mean		.	
	Median		5.4400	
	Variance		.001	
	Std. Deviation		.02517	
	Minimum		5.42	
	Maximum		5.47	
	Range		.05	
	Interquartile Range		.	
	Skewness		.586	1.225
	Kurtosis		.	.
F5	Mean		5.3567	.01453
	95% Confidence Interval for Mean	Lower Bound	5.2942	
		Upper Bound	5.4192	
	5% Trimmed Mean		.	
	Median		5.3600	
	Variance		.001	
	Std. Deviation		.02517	
	Minimum		5.33	
	Maximum		5.38	
	Range		.05	
	Interquartile Range		.	
	Skewness		-.586	1.225
	Kurtosis		.	.
F6	Mean		5.1933	.01202
	95% Confidence Interval for Mean	Lower Bound	5.1416	
		Upper Bound	5.2450	
5% Trimmed Mean		.		

		Median	5.2000	
		Variance	.000	
		Std. Deviation	.02082	
		Minimum	5.17	
		Maximum	5.21	
		Range	.04	
		Interquartile Range	.	
		Skewness	-1.293	1.225
		Kurtosis	.	.
Sesudah	F1	Mean	6.3033	.01202
		95% Confidence Interval for Mean	Lower Bound 6.2516 Upper Bound 6.3550	
		5% Trimmed Mean	.	
		Median	6.3100	
		Variance	.000	
		Std. Deviation	.02082	
		Minimum	6.28	
		Maximum	6.32	
		Range	.04	
		Interquartile Range	.	
		Skewness	-1.293	1.225
		Kurtosis	.	.
	F2	Mean	6.2367	.01856
		95% Confidence Interval for Mean	Lower Bound 6.1568 Upper Bound 6.3165	
		5% Trimmed Mean	.	
		Median	6.2500	
		Variance	.001	
		Std. Deviation	.03215	
		Minimum	6.20	
		Maximum	6.26	
		Range	.06	
		Interquartile Range	.	
		Skewness	-1.545	1.225
		Kurtosis	.	.
	F3	Mean	6.1000	.01155
		95% Confidence Interval for Mean	Lower Bound 6.0503 Upper Bound 6.1497	
		5% Trimmed Mean	.	
		Median	6.1000	
		Variance	.000	
		Std. Deviation	.02000	
		Minimum	6.08	

	Maximum		6.12	
	Range		.04	
	Interquartile Range		.	
	Skewness		.000	1.225
	Kurtosis		.	.
F4	Mean		5.4333	.01764
	95% Confidence Interval for Mean	Lower Bound	5.3574	
		Upper Bound	5.5092	
	5% Trimmed Mean		.	
	Median		5.4400	
	Variance		.001	
	Std. Deviation		.03055	
	Minimum		5.40	
	Maximum		5.46	
	Range		.06	
	Interquartile Range		.	
	Skewness		-.935	1.225
	Kurtosis		.	.
F5	Mean		5.3467	.00882
	95% Confidence Interval for Mean	Lower Bound	5.3087	
		Upper Bound	5.3846	
	5% Trimmed Mean		.	
	Median		5.3500	
	Variance		.000	
	Std. Deviation		.01528	
	Minimum		5.33	
	Maximum		5.36	
	Range		.03	
	Interquartile Range		.	
	Skewness		-.935	1.225
	Kurtosis		.	.
F6	Mean		5.1867	.00667
	95% Confidence Interval for Mean	Lower Bound	5.1580	
		Upper Bound	5.2154	
	5% Trimmed Mean		.	
	Median		5.1800	
	Variance		.000	
	Std. Deviation		.01155	
	Minimum		5.18	
	Maximum		5.20	
	Range		.02	
	Interquartile Range		.	
	Skewness		1.732	1.225
	Kurtosis		.	.

Tests of Normality

	pH	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Sebelum	F1	.292	3	.	.923	3	.463
	F2	.219	3	.	.987	3	.780
	F3	.175	3	.	1.000	3	1.000
	F4	.219	3	.	.987	3	.780
	F5	.219	3	.	.987	3	.780
	F6	.292	3	.	.923	3	.463
Sesudah	F1	.292	3	.	.923	3	.463
	F2	.328	3	.	.871	3	.298
	F3	.175	3	.	1.000	3	1.000
	F4	.253	3	.	.964	3	.637
	F5	.253	3	.	.964	3	.637
	F6	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

Wilcoxon

Test Statistics^a

	Sesudah - Sebelum
Z	-3.022 ^b
Asymp. Sig. (2-tailed)	.003

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Lampiran 19. Hasil Daya Hambat Minyak Atsiri Daun Jeruk Nipis

KONSENTRASI	Daya Hambat (mm)			Rata-rata	SD
	R1	R2	R3		
	K (-)	-	-		
K (+)	23,8	23,5	23	23,60	0,17
5%	15,4	15,7	15,5	15,53	0,15
10%	17,5	17,3	17,9	17,56	0,30
15%	22,6	22,7	23,1	22,80	0,26

Keterangan :

K (-) : CMCNa 1%

K (+) : Klindamisin

5% : Konsentrasi minyak atsiri 5%

10% : Konsentrasi minyak atsiri 10%

15% : Konsentrasi minyak atsiri 15%

GAMBAR HASIL :**Replikasi 1****Replikasi 2****Replikasi 3**

Lampiran 20. Hasil SPSS Daya Hambat Minyak Atsiri Daun Jeruk Nipis

Case Processing Summary

Kelompok	N	Valid		Cases Missing		N	Total	
		N	Percent	N	Percent		N	Percent
DayaHambat								
Kontrol negatif	3	3	100.0%	0	0.0%	3	3	100.0%
Kontrol positif	3	3	100.0%	0	0.0%	3	3	100.0%
5%	3	3	100.0%	0	0.0%	3	3	100.0%
10%	3	3	100.0%	0	0.0%	3	3	100.0%
15%	3	3	100.0%	0	0.0%	3	3	100.0%

Descriptives

DayaHambat	Kelompok	Statistic	Std. Error		
DayaHambat	Kontrol negatif	Mean	.000		
		95% Confidence Interval for Mean	Lower Bound	.000	
			Upper Bound	.000	
		5% Trimmed Mean	.000		
		Median	.000		
		Variance	.000		
		Std. Deviation	.0000		
		Minimum	.0		
		Maximum	.0		
		Range	.0		
		Interquartile Range	.0		
		Skewness	.		
		Kurtosis	.		
		DayaHambat	Kontrol positif	Mean	23.433
				95% Confidence Interval for Mean	Lower Bound
Upper Bound	24.437				
5% Trimmed Mean	.				
Median	23.500				
Variance	.163				
Std. Deviation	.4041				
Minimum	23.0				
Maximum	23.8				
Range	.8				
Interquartile Range	.				
Skewness	-.722				
Kurtosis	.				
DayaHambat	5%			Mean	15.533
				95% Confidence Interval for Mean	Lower Bound
		Upper Bound	15.913		

	5% Trimmed Mean		.	
	Median		15.500	
	Variance		.023	
	Std. Deviation		.1528	
	Minimum		15.4	
	Maximum		15.7	
	Range		.3	
	Interquartile Range		.	
	Skewness		.935	1.225
	Kurtosis		.	.
10%	Mean		17.567	.1764
	95% Confidence Interval for Mean	Lower Bound	16.808	
		Upper Bound	18.326	
	5% Trimmed Mean		.	
	Median		17.500	
	Variance		.093	
	Std. Deviation		.3055	
	Minimum		17.3	
	Maximum		17.9	
	Range		.6	
	Interquartile Range		.	
	Skewness		.935	1.225
	Kurtosis		.	.
15%	Mean		22.800	.1528
	95% Confidence Interval for Mean	Lower Bound	22.143	
		Upper Bound	23.457	
	5% Trimmed Mean		.	
	Median		22.700	
	Variance		.070	
	Std. Deviation		.2646	
	Minimum		22.6	
	Maximum		23.1	
	Range		.5	
	Interquartile Range		.	
	Skewness		1.458	1.225
	Kurtosis		.	.

Tests of Normality

	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
DayaHambat	Kontrol negatif	.	3	.	.	3	.
	Kontrol positif	.232	3	.	.980	3	.726
	5%	.253	3	.	.964	3	.637
	10%	.253	3	.	.964	3	.637
	15%	.314	3	.	.893	3	.363

a. Lilliefors Significance Correction

Descriptives

DayaHambat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol negatif	3	.000	.0000	.0000	.000	.000	.0	.0
Kontrol positif	3	23.433	.4041	.2333	22.429	24.437	23.0	23.8
5%	3	15.533	.1528	.0882	15.154	15.913	15.4	15.7
10%	3	17.567	.3055	.1764	16.808	18.326	17.3	17.9
15%	3	22.800	.2646	.1528	22.143	23.457	22.6	23.1
Total	15	15.867	8.7869	2.2688	11.001	20.733	.0	23.8

Test of Homogeneity of Variances

DayaHambat		Levene Statistic	df1	df2	Sig.
		Based on Mean	2.595	4	10
Based on Median	.989	4	10	.456	
Based on Median and with adjusted df	.989	4	6.469	.476	
Based on trimmed mean	2.456	4	10	.114	

ANOVA

DayaHambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1080.233	4	270.058	3857.976	.000
Within Groups	.700	10	.070		
Total	1080.933	14			

Tuckey

Multiple Comparisons

Dependent Variable: DayaHambat

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol negatif	Kontrol positif	-23.4333*	.2160	.000	-24.144	-22.722
	5%	-15.5333*	.2160	.000	-16.244	-14.822
	10%	-17.5667*	.2160	.000	-18.278	-16.856
	15%	-22.8000*	.2160	.000	-23.511	-22.089
Kontrol positif	Kontrol negatif	23.4333*	.2160	.000	22.722	24.144
	5%	7.9000*	.2160	.000	7.189	8.611

	10%	5.8667*	.2160	.000	5.156	6.578
	15%	.6333	.2160	.087	-.078	1.344
5%	Kontrol negatif	15.5333*	.2160	.000	14.822	16.244
	Kontrol positif	-7.9000*	.2160	.000	-8.611	-7.189
	10%	-2.0333*	.2160	.000	-2.744	-1.322
	15%	-7.2667*	.2160	.000	-7.978	-6.556
10%	Kontrol negatif	17.5667*	.2160	.000	16.856	18.278
	Kontrol positif	-5.8667*	.2160	.000	-6.578	-5.156
	5%	2.0333*	.2160	.000	1.322	2.744
	15%	-5.2333*	.2160	.000	-5.944	-4.522
15%	Kontrol negatif	22.8000*	.2160	.000	22.089	23.511
	Kontrol positif	-.6333	.2160	.087	-1.344	.078
	5%	7.2667*	.2160	.000	6.556	7.978
	10%	5.2333*	.2160	.000	4.522	5.944

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

DayaHambat

Tukey HSD^a

Kelompok	N	Subset for alpha = 0.05			
		1	2	3	4
Kontrol negatif	3	.000			
5%	3		15.533		
10%	3			17.567	
15%	3				22.800
Kontrol positif	3				23.433
Sig.		1.000	1.000	1.000	.087

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 21. Hasil Daya Hambat Sediaan Emulgel Minyak Atsiri Daun Jeruk Nipis

Konsentrasi	Daya Hambat (mm)			Rata-rata	SD
	R1	R2	R3		
K (+)	22,2	21,5	21	22,40	0,17
F1	-	-	-	-	-
F2	-	-	-	-	-
F3	-	-	-	-	-
F4	13,2	13,7	13,5	13,47	0,25
F5	15,8	15,6	15,3	15,57	0,25
F6	19,7	19,2	19,8	19,57	0,32

Keterangan :

F1: Formula tanpa minyak atsiri dengan basis HPMC 3%

F2: Formula tanpa minyak atsiri dengan basis HPMC 3,5%

F3: Formula tanpa minyak atsiri dengan basis HPMC 4%

F4: Formula minyak atsiri dengan basis HPMC 3%

F5: Formula minyak atsiri dengan basis HPMC 3,5%

F6: Formula minyak atsiri dengan basis HPMC 4%

GAMBAR HASIL :**Replikasi 1****Replikasi 2****Replikasi 3**

Lampiran 22. Hasil SPSS Daya Hambat Bakteri Sediaan Emulgel Minyak Atsiri Daun Jeruk Nipis

Case Processing Summary

	Kelompok	Valid		Cases Missing		Total	
		N	Percent	N	Percent	N	Percent
DayaHambat	Kontrol positif	3	100.0%	0	0.0%	3	100.0%
	F1	3	100.0%	0	0.0%	3	100.0%
	F2	3	100.0%	0	0.0%	3	100.0%
	F3	3	100.0%	0	0.0%	3	100.0%
	F4	3	100.0%	0	0.0%	3	100.0%
	F5	3	100.0%	0	0.0%	3	100.0%
	F6	3	100.0%	0	0.0%	3	100.0%

Descriptives

	Kelompok	Statistic	Std. Error		
DayaHambat	Kontrol positif	Mean	22.4000	.10000	
		95% Confidence Interval for Mean	Lower Bound	21.9697	
			Upper Bound	22.8303	
		5% Trimmed Mean	.		
		Median	22.5000		
		Variance	.030		
		Std. Deviation	.17321		
		Minimum	22.20		
		Maximum	22.50		
		Range	.30		
		Interquartile Range	.		
		Skewness	-1.732	1.225	
		Kurtosis	.	.	
		F1		Mean	.0000
95% Confidence Interval for Mean	Lower Bound			.0000	
	Upper Bound			.0000	
5% Trimmed Mean	.0000				
Median	.0000				
Variance	.000				
Std. Deviation	.00000				
Minimum	.00				
Maximum	.00				
Range	.00				
Interquartile Range	.00				
Skewness	.			.	
Kurtosis	.			.	
F2				Mean	.0000

	95% Confidence Interval for Mean	Lower Bound	.0000	
		Upper Bound	.0000	
	5% Trimmed Mean		.0000	
	Median		.0000	
	Variance		.000	
	Std. Deviation		.00000	
	Minimum		.00	
	Maximum		.00	
	Range		.00	
	Interquartile Range		.00	
	Skewness		.	.
	Kurtosis		.	.
F3	Mean		.0000	.00000
	95% Confidence Interval for Mean	Lower Bound	.0000	
		Upper Bound	.0000	
	5% Trimmed Mean		.0000	
	Median		.0000	
	Variance		.000	
	Std. Deviation		.00000	
	Minimum		.00	
	Maximum		.00	
	Range		.00	
	Interquartile Range		.00	
	Skewness		.	.
	Kurtosis		.	.
F4	Mean		13.4667	.14530
	95% Confidence Interval for Mean	Lower Bound	12.8415	
		Upper Bound	14.0918	
	5% Trimmed Mean		.	
	Median		13.5000	
	Variance		.063	
	Std. Deviation		.25166	
	Minimum		13.20	
	Maximum		13.70	
	Range		.50	
	Interquartile Range		.	
	Skewness		-.586	1.225
	Kurtosis		.	.
F5	Mean		15.5667	.14530
	95% Confidence Interval for Mean	Lower Bound	14.9415	
		Upper Bound	16.1918	
	5% Trimmed Mean		.	
	Median		15.6000	

	Variance		.063	
	Std. Deviation		.25166	
	Minimum		15.30	
	Maximum		15.80	
	Range		.50	
	Interquartile Range		.	
	Skewness		-.586	1.225
	Kurtosis		.	.
F6	Mean		19.5667	.18559
	95% Confidence Interval for Mean	Lower Bound	18.7681	
		Upper Bound	20.3652	
	5% Trimmed Mean		.	
	Median		19.7000	
	Variance		.103	
	Std. Deviation		.32146	
	Minimum		19.20	
	Maximum		19.80	
	Range		.60	
	Interquartile Range		.	
	Skewness		-1.545	1.225
	Kurtosis		.	.

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
DayaHambat	Kontrol positif	.385	3	.	.750	3	.000
	F1	.	3	.	.	3	.
	F2	.	3	.	.	3	.
	F3	.	3	.	.	3	.
	F4	.219	3	.	.987	3	.780
	F5	.219	3	.	.987	3	.780
	F6	.328	3	.	.871	3	.298

a. Lilliefors Significance Correction

Descriptives

DayaHambat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol positif	3	22.4000	.17321	.10000	21.9697	22.8303	22.20	22.50
F1	3	.0000	.00000	.00000	.0000	.0000	.00	.00
F2	3	.0000	.00000	.00000	.0000	.0000	.00	.00
F3	3	.0000	.00000	.00000	.0000	.0000	.00	.00
F4	3	13.4667	.25166	.14530	12.8415	14.0918	13.20	13.70

F5	3	15.5667	.25166	.14530	14.9415	16.1918	15.30	15.80
F6	3	19.5667	.32146	.18559	18.7681	20.3652	19.20	19.80
Total	21	10.1429	9.39402	2.04994	5.8668	14.4190	.00	22.50

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
DayaHambat	Based on Mean	4.576	6	14	.009
	Based on Median	1.152	6	14	.384
	Based on Median and with adjusted df	1.152	6	6.245	.431
	Based on trimmed mean	4.219	6	14	.012

ANOVA

DayaHambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1764.431	6	294.072	7917.321	.000
Within Groups	.520	14	.037		
Total	1764.951	20			

Tuckey

Multiple Comparisons

Dependent Variable: DayaHambat

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol positif	F1	22.40000*	.15736	.000	21.8627	22.9373
	F2	22.40000*	.15736	.000	21.8627	22.9373
	F3	22.40000*	.15736	.000	21.8627	22.9373
	F4	8.93333*	.15736	.000	8.3960	9.4706
	F5	6.83333*	.15736	.000	6.2960	7.3706
	F6	2.83333*	.15736	.000	2.2960	3.3706
F1	Kontrol positif	-22.40000*	.15736	.000	-22.9373	-21.8627
	F2	.00000	.15736	1.000	-.5373	.5373
	F3	.00000	.15736	1.000	-.5373	.5373
	F4	-13.46667*	.15736	.000	-14.0040	-12.9294
	F5	-15.56667*	.15736	.000	-16.1040	-15.0294
	F6	-19.56667*	.15736	.000	-20.1040	-19.0294
F2	Kontrol positif	-22.40000*	.15736	.000	-22.9373	-21.8627
	F1	.00000	.15736	1.000	-.5373	.5373
	F3	.00000	.15736	1.000	-.5373	.5373
	F4	-13.46667*	.15736	.000	-14.0040	-12.9294
	F5	-15.56667*	.15736	.000	-16.1040	-15.0294
	F6	-19.56667*	.15736	.000	-20.1040	-19.0294
F3	Kontrol positif	-22.40000*	.15736	.000	-22.9373	-21.8627
	F1	.00000	.15736	1.000	-.5373	.5373
	F2	.00000	.15736	1.000	-.5373	.5373
	F4	-13.46667*	.15736	.000	-14.0040	-12.9294
	F5	-15.56667*	.15736	.000	-16.1040	-15.0294
	F6	-19.56667*	.15736	.000	-20.1040	-19.0294
F4	Kontrol positif	-8.93333*	.15736	.000	-9.4706	-8.3960

	F1	13.46667*	.15736	.000	12.9294	14.0040
	F2	13.46667*	.15736	.000	12.9294	14.0040
	F3	13.46667*	.15736	.000	12.9294	14.0040
	F5	-2.10000*	.15736	.000	-2.6373	-1.5627
	F6	-6.10000*	.15736	.000	-6.6373	-5.5627
F5	Kontrol positif	-6.83333*	.15736	.000	-7.3706	-6.2960
	F1	15.56667*	.15736	.000	15.0294	16.1040
	F2	15.56667*	.15736	.000	15.0294	16.1040
	F3	15.56667*	.15736	.000	15.0294	16.1040
	F4	2.10000*	.15736	.000	1.5627	2.6373
	F6	-4.00000*	.15736	.000	-4.5373	-3.4627
F6	Kontrol positif	-2.83333*	.15736	.000	-3.3706	-2.2960
	F1	19.56667*	.15736	.000	19.0294	20.1040
	F2	19.56667*	.15736	.000	19.0294	20.1040
	F3	19.56667*	.15736	.000	19.0294	20.1040
	F4	6.10000*	.15736	.000	5.5627	6.6373
	F5	4.00000*	.15736	.000	3.4627	4.5373

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

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Tukey HSD^a

Kelompok	N	Subset for alpha = 0.05				
		1	2	3	4	5
F1	3	.0000				
F2	3	.0000				
F3	3	.0000				
F4	3		13.4667			
F5	3			15.5667		
F6	3				19.5667	
Kontrol positif	3					22.4000
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.