

BAB V

KESIMPILAN DAN SARAN

A. Kesimpulan

Kesimpulan yang didapat dari hasil penelitian terhadap uji mutu fisik lip balm minyak zaitun:

1. Sediaan lipbalm minyak zaitun (*olive oil*) dengan perbedaan konsentrasi cera flava pada F1= 27%, F2=28% dan F3=29% dan minyak zaitun pada formulasi 3 memiliki hasil daya sebar yang rendah, daya lekat yang lama, dan viskositas yang tinggi dibandingkan dengan formula 1 dan formula 2.
2. Sifat fisik lip balm minyak zaitun(*Olive oil*) menggunakan pewarna ekstrak bunga rosella dengan variasi cera flava dan minyak zaitun menghasilkan mutu fisik yang baik mempunyai susunan yang homogen, pH yang sesuai, tidak mengiritasi dan stabil dalam penyimpanan.

B. Saran

Berdasarkan kesimpulan penelitian, dapat ditarik saran yaitu:

1. Perlu dilakukan pengembangan dengan formulasi yang berbeda hingga didapat hasil sediaan lip balm yang terbaik dalam hal mutu dan stabilitasnya.
2. Perlu dilakukan penelitian lebih lanjut untuk mengetahui efek terapi dari lip balm minyak zaitun.

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Lampiran 1. Perhitungan formula

A. Formula I

$$\text{Gliserin} = 5 \times \frac{15}{100} = 0,75 \text{ g}$$

$$\text{Cera flava} = 27 \times \frac{15}{100} = 4,05 \text{ g}$$

$$\text{Nipasol} = 0,20 \times \frac{15}{100} = 0,03 \text{ g}$$

$$\text{Lanolin} = 15 \times \frac{15}{100} = 2,25 \text{ g}$$

$$\text{As. Sitrat} = 0,5 \times \frac{15}{100} = 0,075 \text{ g}$$

$$\text{Eks. Rosella} = 0,75 \times \frac{15}{100} = 0,11 \text{ g}$$

$$\text{Minyak zaitun ad 15 (7,27 - 15 = 7,73 g)}$$

B. Formula II

$$\text{Gliserin} = 5 \times \frac{15}{100} = 0,75 \text{ g}$$

$$\text{Cera flava} = 28 \times \frac{15}{100} = 4,2 \text{ g}$$

$$\text{Nipasol} = 0,20 \times \frac{15}{100} = 0,03 \text{ g}$$

$$\text{Lanolin} = 15 \times \frac{15}{100} = 2,25 \text{ g}$$

$$\text{As. Sitrat} = 0,5 \times \frac{15}{100} = 0,075 \text{ g}$$

$$\text{Eks. Rosella} = 0,75 \times \frac{15}{100} = 0,11 \text{ g}$$

$$\text{Minyak zaitun ad 15 (7,4 - 15 = 7,5 g)}$$

C. Formula III

$$\text{Gliserin} = 5 \times \frac{15}{100} = 0,75 \text{ g}$$

$$\text{Cera flava} = 29 \times \frac{15}{100} = 4,35 \text{ g}$$

$$\text{Nipasol} = 0,20 \times \frac{15}{100} = 0,03 \text{ g}$$

$$\text{Lanolin} = 15 \times \frac{15}{100} = 2,25 \text{ g}$$

$$\text{As. Sitrat} = 0,5 \times \frac{15}{100} = 0,075 \text{ g}$$

$$\text{Eks. Rosella} = 0,75 \times \frac{15}{100} = 0,11 \text{ g}$$

$$\text{Minyak zaitun ad 15 (7,56 - 15 = 7,43 g)}$$

Lampiran 2. Hasil determinasi bunga rosella



No : 398/DET/UPT-LAB/23/IV/2019
Hal : SuratKeteranganDeterminasiTumbuhan

Menerangkanbahwa :

Nama : Meganingrum Wulandari
NIM : 19161207 B
Fakultas : Farmasi Universitas Setia Budi

Telah mendeterminasikan tumbuhan : **Rosella (*Hibiscus sabdariffa* L.)**

Determinasi berdasarkan Steenis: FLORA

1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 14a – 15a. golongan 8. 109b – 119b – 120b – 128b – 129b – 135b – 136b – 139b – 140b – 142b – 143b – 146b – 154b – 155b – 156b – 162b – 163b – 167b – 169b – 171a – 172b – 173b – 174b – 176a. familia 75. Malvaceae. 1a – 2b – 3b. 5. Hibiscus. 1b – 2b – 4a. ***Hibiscus sabdariffa* L.**

Deskripsi :

Habitus : Semak 1 tahun, tegak, tinggi 0,5 – 3 m.
Akar : Sistem akar tunggang.
Batang : Bulat, berwarna merah, bentuk silindris, berkayu, percabangan monopodial, dengan duri tempel atau tidak.
Daun : Bertangkai, yang besar panjangnya 6 – 11 cm, bulat telur, bentuk lingkaran atau oval melintang, kerap kali bercangap 3 atau berbagi 3, tepi beringgit.
Bunga : Di ketiak, umumnya berdiri sendiri. Daun kelopak tambahan 8 – 12, berdaging tebal, satu dengan lainnya maupun dengan pangkal tabung kelopak bersatu, taju bentuk garis lanset. Kelopak berbagi 5 dalam, taju bentuk lanset, berdaging tebal, merah tua. Daun mahkota bulat telur terbalik, panjang 3 – 5 cm, kuning pucat dengan noda ungu atau kuning cerah pada pangkalnya. Tabung benang sari boleh dikatakan seluruhnya tertutup dengan kepala sari, ungu. Tangkai bunga panjang 1 – 2 cm.
Buah : Bentuk bulat telur, berambut jarang, membuka dengan 5 katup, diselubungi oleh kelopak yang jelas lebih panjang dari buahnya.
Biji : 3 – 4 per ruang.
Pustaka : Steenis C.G.G.J., Bloembergen S. Eyma P.J. (1978): *FLORA*, PT PradnyaParamita. Jl. KebonSirih 46.Jakarta Pusat, 1978.

Surakarta, 23 April 2019
Tim determinasi

Dr. Kartinah Wirjosoendjojo, SU.

Lampiran 3. Perhitungan persen randemen ekstrak bunga rosella

$$\begin{aligned}\text{Randemen} &= \frac{\text{berat ekstra kental}}{\text{berat serbuk}} \times 100\% \\ &= \frac{38,21 \text{ g}}{250 \text{ g}} \times 100 \% \\ &= 15,28 \text{ g}\end{aligned}$$

Lampiran 4. Hasil perhitungan serbuk bunga rosella

Berat bobot awal (g)	Bobot Serbuk (g)	Presentase (%)
2,0	1,89	8
2,0	1,89	7,5
2,0	1,90	8,5
Rata - rata	1,89	8

Lampiran 5. Hasil uji daya sebar lip balm minyak zaitun

a. Data pengujian hari ke 0

Formulasi	Beban (gram)	Replikasi Hari ke 0			Mean \pm SD
		1	2	3	
F1	50	1,9	1,9	2	1,93 \pm 0,05
	100	2	2,1	2,2	2,1 \pm 0,1
	150	2,1	2,2	2,3	2,2 \pm 0,1
	200	2,3	2,4	2,4	2,36 \pm 0,05
	250	2,4	2,5	2,5	2,46 \pm 0,05
F2	50	1,9	1,9	2	1,93 \pm 0,05
	100	1,9	2	2	1,96 \pm 0,05
	150	2	2	2,1	2,03 \pm 0,05
	200	2,2	2,1	2,2	2,16 \pm 0,05
	250	2,2	2,1	2,1	2,13 \pm 0,05
F3	50	1,8	1,9	1,8	1,83 \pm 0,05
	100	1,8	2	1,9	1,9 \pm 0,1
	150	1,8	2	2	1,93 \pm 0,11
	200	1,9	2	2	1,96 \pm 0,05
	250	2	2	2,1	2,03 \pm 0,05

b. Data pengujian hari ke 7

Formulasi	Beban (gram)	Replikasi Hari ke 7			Mean \pm SD
		1	2	3	
F1	50	1,8	1,9	1,8	1,83 \pm 0,05
	100	2	2	1,9	1,96 \pm 0,05
	150	2	2,1	2	2,03 \pm 0,05
	200	2,2	2,2	2,1	2,16 \pm 0,05
	250	2,2	2,4	2,2	2,26 \pm 0,11
F2	50	2	1,8	1,8	1,86 \pm 0,11
	100	2	2	2	2 \pm 0
	150	2,1	2,1	2,1	2,1 \pm 0
	200	2,2	2,2	2,2	2,2 \pm 0
	250	2,3	2,3	2,3	2,3 \pm 0
F3	50	1,7	1,9	1,8	1,8 \pm 0,1
	100	1,8	2	1,9	1,9 \pm 0,1
	150	1,9	2,1	2	2 \pm 0,1
	200	2	2,1	2,1	2,0 \pm 0,05
	250	2,2	2,3	2,2	2,23 \pm 0,05

c. Data pengujian hari ke 14

Formulasi	Beban (gram)	Replikasi hari ke 14			Mean \pm SD
		1	2	3	
F1	50	1,7	1,7	1,9	1,76 \pm 0,11
	100	1,8	1,9	1,9	1,86 \pm 0,05
	150	1,9	2	2	1,96 \pm 0,05
	200	1,9	2,1	2,1	2,03 \pm 0,11
	250	2,1	2,2	2,2	2,16 \pm 0,05
F2	50	1,7	1,8	1,7	1,73 \pm 0,05
	100	1,8	1,9	1,8	1,83 \pm 0,05
	150	1,9	2	1,9	1,93 \pm 0,05
	200	2,1	2,1	2	2,06 \pm 0,05
	250	2,2	2,2	2,1	2,16 \pm 0,05
F3	50	1,7	1,7	1,7	1,7 \pm 0
	100	1,8	1,8	1,8	1,8 \pm 0
	150	1,9	1,9	2	1,93 \pm 0,05
	200	2	2,1	2,1	2,06 \pm 0,05
	250	2,1	2,2	2,1	2,13 \pm 0,05

Lampiran 6. Hasil uji daya lekat lip balm minyak zaitun

a. Data hasil pengujian hari ke 0

Replikasi	Daya lekat Hari ke 0		
	F1	F2	F3
1	13,06	15,1	19,45
2	14,51	14,54	12,5
3	19,55	15,04	22,24
Mean \pm SD	15,70 \pm 3,40	14,89 \pm 0,30	18,06 \pm 5,01

b. Data hasil pengujian hari ke 7

Replikasi	Daya lekat hari ke 7		
	F1	F2	F3
1	14,16	12,3	23,13
2	18,09	16,04	15,45
2	10,29	13,51	11,56
Mean \pm SD	14,18 \pm 3,90	13,95 \pm 1,90	16,71 \pm 5,88

c. Data hasil pengujian hari ke 14

Replikasi	Daya lekat Hari ke 14		
	F1	F2	F3
1	25,54	18,05	24,16
2	21,25	20,29	19,28
3	23,16	21,56	22,01
Mean \pm SD	23,31 \pm 2,14	19,96 \pm 1,77	21,81 \pm 2,44

Lampiran 7. Hasil uji viskositas lip balm minyak zaitun

a. Data hasil pengujian hari ke 0

penyimpanan	Replikasi	Viskositas		
		F1	F2	F3
Hari ke 0	1	510	580	570
	2	510	550	590
	3	510	520	580
Mean \pm SD		510 \pm 0	550 \pm 30	580 \pm 10

b. Data hasil pengujian hari ke 7

Penyimpanan	replikasi	Viskositas		
		F1	F2	F3
Hari ke 7	1	600	610	665
	2	600	600	620
	3	600	620	605
Mean \pm SD		600 \pm 0	610 \pm 10	630 \pm 31,22

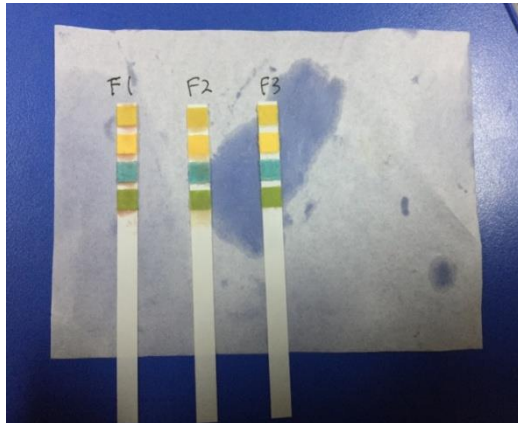
c. Data Hasil pengujian Hari ke 14

penyimpanan	replikasi	Viskositas		
		F1	F2	F3
Hari ke 14	1	690	740	780
	2	710	730	790
	3	700	750	770
Mean \pm SD		700 \pm 10	740 \pm 10	780 \pm 10

Lampiran 8. Hasil uji pH lip balm minyak zaitun

Formulasi	Minggu	pH
1	Hari ke 0	4
	Hari ke 7	4
	Hari ke 14	4
2	Hari ke 0	4
	Hari ke 7	4
	Hari ke 14	4
3	Hari ke 0	4
	Hari ke 7	4
	Hari ke 14	4

Lampiran 9. Gambar lip balm minyak zaitun**Hari Ke 0****Hari Ke 7****Hari ke 14**

Lampiran 10. Gambar uji pH sediaan lip balm minyak zaitun

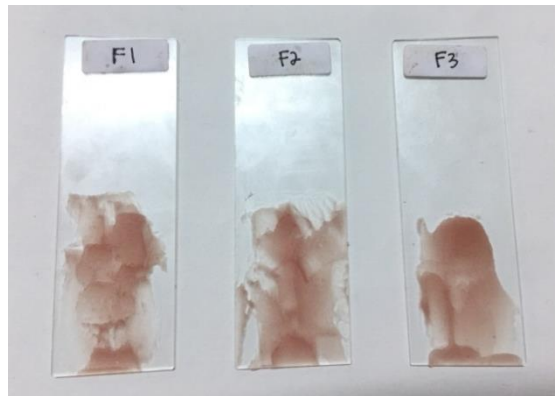
Hari ke 0



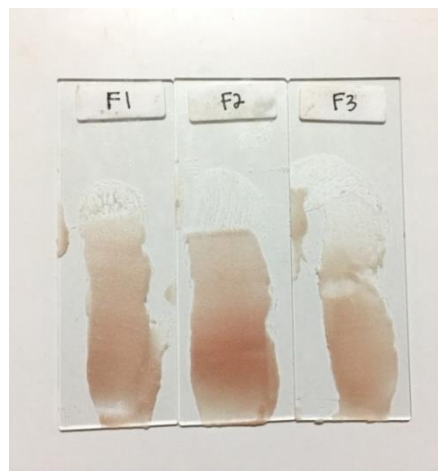
Hari ke 7



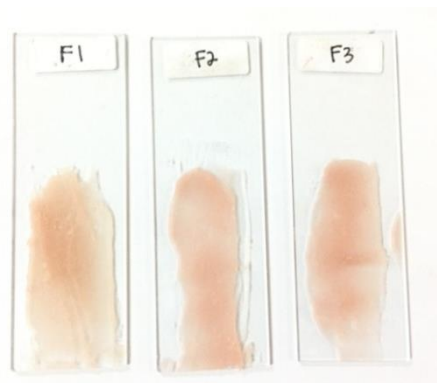
Hari ke 14

Lampiran 11. Gambar Hasil Uji Homogenitas lip balm minyak zaitun

Hari ke 0



Hari ke 7



Hari ke 14

Lampiran 12. Gambar alat uji yang digunakan

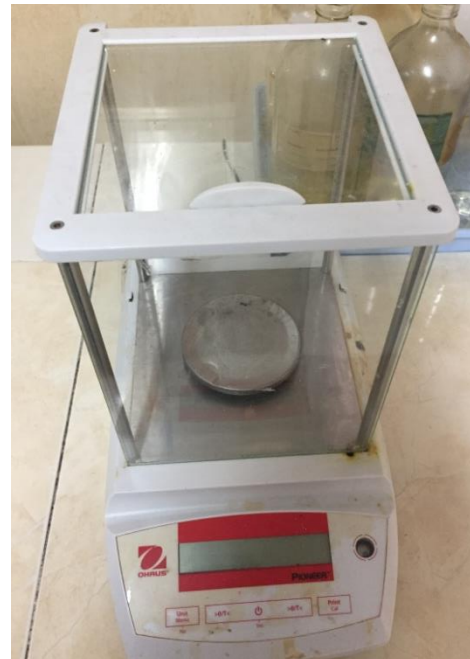
Alat uji daya sebar



Alat uji daya lekat



Alat uji susut pengeringan



Timbangan digital

Lampiran 13. Hasil daya lekat menggunakan uji one way Anova

Daya Lekat

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji Daya Lekat	9	17,6189	3,40719	13,95	23,31

One-Sample Kolmogorov-Smirnov Test

		Uji Daya Lekat
N		9
Normal Parameters ^{a,b}	Mean	17,6189
	Std. Deviation	3,40719
	Absolute	,161
Most Extreme Differences	Positive	,161
	Negative	-,141
Kolmogorov-Smirnov Z		,482
Asymp. Sig. (2-tailed)		,974

a. Test distribution is Normal.

b. Calculated from data.

Descriptives

Uji Daya Lekat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Formula 1	3		
Formula 2	3	14,9467	1,53142	,88416	11,1424	18,7509	13,95	16,71
Formula 3	3	21,6933	1,67804	,96882	17,5248	25,8618	19,96	23,31
Total	9	17,6189	3,40719	1,13573	14,9999	20,2379	13,95	23,31

Oneway

Test of Homogeneity of Variances

Uji Daya Lekat

Levene Statistic	df1	df2	Sig.
,008	2	6	,992

ANOVA

Uji Daya Lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	77,124	2	38,562	14,693	,005
Within Groups	15,747	6	2,625		
Total	92,871	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Uji Daya Lekat

Tukey HSD

(I) Formulasi lipbalm	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	1,27000	1,32275	,626	-2,7886	5,3286
	Formula 3	-5,47667*	1,32275	,014	-9,5352	-1,4181
Formula 2	Formula 1	-1,27000	1,32275	,626	-5,3286	2,7886
	Formula 3	-6,74667*	1,32275	,005	-10,8052	-2,6881
Formula 3	Formula 1	5,47667*	1,32275	,014	1,4181	9,5352
	Formula 2	6,74667*	1,32275	,005	2,6881	10,8052

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

Homogeneous Subsets

Uji Daya Lekat

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05	
		1	2
Formula 2	3	14,9467	
Formula 1	3	16,2167	
Formula 3	3		21,6933
Sig.		,626	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 14. Hasil uji viskositas menggunakan uji one way ANOVA

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Uji Viskositas	9	631,11	87,813	510	770

One-Sample Kolmogorov-Smirnov Test

		Uji Viskositas
N		9
Normal Parameters ^{a,b}	Mean	631,11
	Std. Deviation	87,813
	Absolute	,194
Most Extreme Differences	Positive	,194
	Negative	-,117
Kolmogorov-Smirnov Z		,582
Asymp. Sig. (2-tailed)		,887

a. Test distribution is Normal.

b. Calculated from data.

Descriptives

Uji Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Formulasi 1	3	546,67	35,119	20,276	459,43	633,91	510	580
Formulasi 2	3	610,00	17,321	10,000	566,97	653,03	600	630
Formulasi 3	3	736,67	35,119	20,276	649,43	823,91	700	770
Total	9	631,11	87,813	29,271	563,61	698,61	510	770

Oneway

Test of Homogeneity of Variances

Uji Viskositas

Levene Statistic	df1	df2	Sig.
,524	2	6	,617

ANOVA

Uji Viskositas

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	56155,556	2	28077,778	30,446	,001
Within Groups	5533,333	6	922,222		
Total	61688,889	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Uji Viskositas

Tukey HSD

(I) Formulasi lipbalm	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formulasi 1	Formulasi 2	-63,333	24,795	,095	-139,41	12,75
	Formulasi 3	-190,000*	24,795	,001	-266,08	-113,92
Formulasi 2	Formulasi 1	63,333	24,795	,095	-12,75	139,41
	Formulasi 3	-126,667*	24,795	,005	-202,75	-50,59
Formulasi 3	Formulasi 1	190,000*	24,795	,001	113,92	266,08
	Formulasi 2	126,667*	24,795	,005	50,59	202,75

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

Homogeneous Subsets

Uji Viskositas

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05	
		1	2
Formulasi 1	3	546,67	
Formulasi 2	3	610,00	
Formulasi 3	3		736,67
Sig.		,095	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 15. Hasil uji daya sebar menggunakan uji one way ANOVA

a. Daya sebar 50g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Daya sebar lipbalm 50g	9	1,8156	,07634	1,70	1,93

One-Sample Kolmogorov-Smirnov Test

		Daya sebar lipbalm 50g
N		9
Normal Parameters ^{a,b}	Mean	1,8156
	Std. Deviation	,07634
	Absolute	,131
Most Extreme Differences	Positive	,100
	Negative	-,131
Kolmogorov-Smirnov Z		,392
Asymp. Sig. (2-tailed)		,998

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Daya sebar lipbalm 50g

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Formula 1	3		
Formula 2	3	1,8300	,08888	,05132	1,6092	2,0508	1,73	1,90
Formula 3	3	1,7767	,06807	,03930	1,6076	1,9458	1,70	1,83
Total	9	1,8156	,07634	,02545	1,7569	1,8742	1,70	1,93

Test of Homogeneity of Variances

Daya sebar lipbalm 50g

Levene Statistic	df1	df2	Sig.
,142	2	6	,870

ANOVA

Daya sebar lipbalm 50g

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,007	2	,003	,526	,616
Within Groups	,040	6	,007		
Total	,047	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Daya sebar lipbalm 50g

Tukey HSD

(I)	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	,01000	,06639	,988	-,1937	,2137
	Formula 3	,06333	,06639	,629	-,1404	,2670
Formula 2	Formula 1	-,01000	,06639	,988	-,2137	,1937
	Formula 3	,05333	,06639	,715	-,1504	,2570
Formula 3	Formula 1	-,06333	,06639	,629	-,2670	,1404
	Formula 2	-,05333	,06639	,715	-,2570	,1504

Homogeneous Subsets

Daya sebar lipbalm 50g

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05
		1
Formula 3	3	1,7767
Formula 2	3	1,8300
Formula 1	3	1,8400
Sig.		,629

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

b. Daya sebarbeban 100g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Daya lekat 100g	9	1,9267	,09233	1,80	2,10

One-Sample Kolmogorov-Smirnov Test

		Daya lekat 100g
N		9
Normal Parameters ^{a,b}	Mean	1,9267
	Std. Deviation	,09233
	Absolute	,137
Most Extreme Differences	Positive	,137
	Negative	-,085
Kolmogorov-Smirnov Z		,410
Asymp. Sig. (2-tailed)		,996

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Daya lekat 100g

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Formula 1	3		
Formula 2	3	1,9300	,08888	,05132	1,7092	2,1508	1,83	2,00
Formula 3	3	1,8767	,06807	,03930	1,7076	2,0458	1,80	1,93
Total	9	1,9267	,09233	,03078	1,8557	1,9976	1,80	2,10

Test of Homogeneity of Variances

Daya lekat 100g

Levene Statistic	df1	df2	Sig.
,433	2	6	,667

ANOVA

Daya lekat 100g

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,014	2	,007	,780	,500
Within Groups	,054	6	,009		
Total	,068	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Daya lekat 100g

Tukey HSD

(I) Formulasi lipbalm	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	,04333	,07756	,846	-,1946	,2813
	Formula 3	,09667	,07756	,472	-,1413	,3346
Formula 2	Formula 1	-,04333	,07756	,846	-,2813	,1946
	Formula 3	,05333	,07756	,779	-,1846	,2913
Formula 3	Formula 1	-,09667	,07756	,472	-,3346	,1413
	Formula 2	-,05333	,07756	,779	-,2913	,1846

Homogeneous Subsets

Daya lekat 100g

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05
		1
Formula 3	3	1,8767
Formula 2	3	1,9300
Formula 1	3	1,9733
Sig.		,472

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

c. Daya sebar 150g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Daya sebar beban 150g	9	2,0156	,09262	1,93	2,20

One-Sample Kolmogorov-Smirnov Test

		Daya sebar beban 150g
N		9
Normal Parameters ^{a,b}	Mean	2,0156
	Std. Deviation	,09262
	Absolute	,178
Most Extreme Differences	Positive	,170
	Negative	-,178
Kolmogorov-Smirnov Z		,533
Asymp. Sig. (2-tailed)		,938

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Daya sebar beban 150g

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Formula 1	3	2,0633	,12342	,07126	1,7567	2,3699	1,96	2,20
Formula 2	3	2,0300	,08888	,05132	1,8092	2,2508	1,93	2,10
Formula 3	3	1,9533	,04041	,02333	1,8529	2,0537	1,93	2,00
Total	9	2,0156	,09262	,03087	1,9444	2,0867	1,93	2,20

Test of Homogeneity of Variances

Daya sebar beban 150g

Levene Statistic	df1	df2	Sig.
1,952	2	6	,222

ANOVA

Daya sebar beban 150g

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,019	2	,010	1,156	,376
Within Groups	,050	6	,008		
Total	,069	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Daya sebar beban 150g

Tukey HSD

(I) Formulasi lipbalm	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	,03333	,07419	,897	-,1943	,2610
	Formula 3	,11000	,07419	,363	-,1176	,3376
Formula 2	Formula 1	-,03333	,07419	,897	-,2610	,1943
	Formula 3	,07667	,07419	,585	-,1510	,3043
Formula 3	Formula 1	-,11000	,07419	,363	-,3376	,1176
	Formula 2	-,07667	,07419	,585	-,3043	,1510

Homogeneous Subsets

Daya sebar beban 150g

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05
		1
Formula 3	3	1,9533
Formula 2	3	2,0300
Formula 1	3	2,0633
Sig.		,363

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

d. Daya sebar 200g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Dayasebarbeban200g	9	2,1022	,08899	1,96	2,23

One-Sample Kolmogorov-Smirnov Test

		Dayasebarbeba n200g
N		9
Normal Parameters ^{a,b}	Mean	2,1022
	Std. Deviation	,08899
	Absolute	,238
Most Extreme Differences	Positive	,238
	Negative	-,186
Kolmogorov-Smirnov Z		,714
Asymp. Sig. (2-tailed)		,688

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Dayasebarbeban200g

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Formula 1	3	2,1400	,10149	,05859	1,8879	2,3921	2,03	2,23
Formula 2	3	2,1400	,07211	,04163	1,9609	2,3191	2,06	2,20
Formula 3	3	2,0267	,05774	,03333	1,8832	2,1701	1,96	2,06
Total	9	2,1022	,08899	,02966	2,0338	2,1706	1,96	2,23

Test of Homogeneity of Variances

Dayasebarbeban200g

Levene Statistic	df1	df2	Sig.
,557	2	6	,600

ANOVA

Dayasebarbeban200g

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,026	2	,013	2,046	,210
Within Groups	,038	6	,006		
Total	,063	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Dayasebarbeban200g

Tukey HSD

(I) Formulasi lipbalm	(J) Formulasi lipbalm	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula 1	Formula 2	,00000	,06469	1,000	-,1985	,1985
	Formula 3	,11333	,06469	,263	-,0852	,3118
Formula 2	Formula 1	,00000	,06469	1,000	-,1985	,1985
	Formula 3	,11333	,06469	,263	-,0852	,3118
Formula 3	Formula 1	-,11333	,06469	,263	-,3118	,0852
	Formula 2	-,11333	,06469	,263	-,3118	,0852

Homogeneous Subsets

Dayasebarbeban200g

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05
		1
Formula 3	3	2,0267
Formula 1	3	2,1400
Formula 2	3	2,1400
Sig.		,263

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

e. Daya sebar 250g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Daya sebar beban 250g	9	2,2067	,12430	2,03	2,46

One-Sample Kolmogorov-Smirnov Test

		Daya sebar beban 250g
N		9
Normal Parameters ^{a,b}	Mean	2,2067
	Std. Deviation	,12430
	Absolute	,202
Most Extreme Differences	Positive	,202
	Negative	-,158
Kolmogorov-Smirnov Z		,606
Asymp. Sig. (2-tailed)		,857

a. Test distribution is Normal.

b. Calculated from data.

Oneway

Descriptives

Daya sebar beban 250g

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Formula 1	3	2,2933	,15275	,08819	1,9139	2,6728	2,16	2,46
Formula 2	3	2,1967	,09074	,05239	1,9713	2,4221	2,13	2,30
Formula 3	3	2,1300	,10000	,05774	1,8816	2,3784	2,03	2,23
Total	9	2,2067	,12430	,04143	2,1111	2,3022	2,03	2,46

Test of Homogeneity of Variances

Daya sebar beban 250g

Levene Statistic	df1	df2	Sig.
,609	2	6	,574

ANOVA

Daya sebar beban 250g

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	,040	2	,020	1,460	,304
Within Groups	,083	6	,014		
Total	,124	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Daya sebar beban 250g

Tukey HSD

(I) Formulasi (J)		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
lipbalm	Formulasi lipbalm				Lower Bound	Upper Bound
Formula 1	Formula 2	,09667	,09611	,600	-,1982	,3916
	Formula 3	,16333	,09611	,280	-,1316	,4582
Formula 2	Formula 1	-,09667	,09611	,600	-,3916	,1982
	Formula 3	,06667	,09611	,776	-,2282	,3616
Formula 3	Formula 1	-,16333	,09611	,280	-,4582	,1316
	Formula 2	-,06667	,09611	,776	-,3616	,2282

Homogeneous Subsets

Daya sebar beban 250g

Tukey HSD^a

Formulasi lipbalm	N	Subset for alpha = 0.05
		1
3	3	2,1300
2	3	2,1967
1	3	2,2933
Sig.		,280

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 16. Uji Paired sample t-test viskositas lipbalm

Viskositas

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0	3	616,67	115,902	510	740
Haei ke 14	3	663,33	104,083	580	780

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0	Haei ke 14
N		3	3
Normal Parameters ^{a,b}	Mean	616,67	663,33
	Std. Deviation	115,902	104,083
Most Extreme Differences	Absolute	,224	,292
	Positive	,224	,292
	Negative	-,190	-,212
Kolmogorov-Smirnov Z		,388	,506
Asymp. Sig. (2-tailed)		,998	,960

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Pair 1	Mean	616,67	-,82	54,25	510,00	740,00
	N	3				
	Std. Deviation	115,902	-31,132	42,188	,000	132,791
	Std. Error Mean	66,916				
Haei ke 14	Mean	663,33	-,77	48,54	580,00	780,00
	N	3				
	Std. Deviation	104,083	-29,514	41,021	,000	115,470
	Std. Error Mean	60,093				

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 & Hari ke 14	3	,988	,099	,009 ^c	,005 ^c	,988 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 888 samples

Paired Samples Test^a

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair1	Hari ke 0 – Hari ke 14	-46,667	20,817	12,019	-98,378	5,045	-3,883	2	,060

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 - Hari ke 14	-46,667	,049 ^b	8,647 ^b	,138 ^b	-60,000 ^b	-33,333 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 888 samples

Lampiran 17. Uji Paired sample t-test daya lekat lipbalm

Daya Lekat NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0	3	15,7667	,91183	14,89	16,71
Hari ke 14	3	21,6933	1,67804	19,96	23,31

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0	Hari ke 14
N		3	3
Normal Parameters ^{a,b}	Mean	15,7667	21,6933
	Std. Deviation	,91183	1,67804
	Absolute	,196	,194
Most Extreme Differences	Positive	,196	,183
	Negative	-,183	-,194
Kolmogorov-Smirnov Z		,339	,337
Asymp. Sig. (2-tailed)		1,000	1,000

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b				
			Bias	Std. Error	95% Confidence Interval		
					Lower	Upper	
Pair 1	Hari ke 0	Mean	15,7667	-,0060	,4279	14,8900	16,7100
		N	3				
		Std. Deviation	,91183	-,24318	,32645	,00000	1,05078
		Std. Error Mean	,52645				
Pair 1	Hari ke 14	Mean	21,6933	-,0002	,8126	19,9600	23,3100
		N	3				
		Std. Deviation	1,67804	-,45830	,59741	,00000	1,93412
		Std. Error Mean	,96882				

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 & Hari ke 14	3	,497	,669	-,134 ^c	,831 ^c	-1,000 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 888 samples

Paired Samples Test^a

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Hari ke 0 – Hari ke 14	-5,92667	1,45789	,84171	-9,54826	-2,30508	-7,041	2	,020

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2- tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 – Hari ke 14	-5,92667	,00378 ^b	,60233 ^b	,259 ^b	-6,77333 ^b	-5,08000 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 888 samples

Lampiran 18. Uji Paired sample t-test daya sebar lipbalm

a. t-test daya sebar 50g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0 beban 50g	3	1,8867	,05132	1,83	1,93
hari ke 14 beban 50g	3	1,7300	,03000	1,70	1,76

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0 beban 50g	hari ke 14 beban 50g
N		3	3
Normal Parameters ^{a,b}	Mean	1,8867	1,7300
	Std. Deviation	,05132	,03000
	Absolute	,269	,175
Most Extreme Differences	Positive	,199	,175
	Negative	-,269	-,175
Kolmogorov-Smirnov Z		,466	,303
Asymp. Sig. (2-tailed)		,982	1,000

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b				
			Bias	Std. Error	95% Confidence Interval		
					Lower	Upper	
Pair 1	Mean	1,8867	,0004	,0240	1,8300	1,9300	
	N	3					
	Hari ke 0 beban 50g	Std. Deviation	,05132	-,01421	,01957	,00000	,05774
		Std. Error	,02963				
		Mean					
		Mean	1,7300	,0002	,0141	1,7000	1,7600
		N	3				
	hari ke 14 beban 50g	Std. Deviation	,03000	-,00797	,01069	,00000	,03464
	Std. Error	,01732					
	Mean						

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 beban 50g & hari ke 14 beban 50g	3	,974	,144	,018 ^c	,012 ^c	,974 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 669 samples

Paired Samples Test^a

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Hari ke 0 beban 50g - hari ke 14 beban 50g	,15667	,02309	,01333	,09930	,21404	11,750	2	,007

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 beban 50g – hari ke 14 beban 50g	,15667	-,00442 ^b	,00628 ^b	,001 ^b	,14333 ^b	,15667 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 669 samples

b. t-test daya sebar 100g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0 beban 100g	3	1,9967	,09074	1,93	2,10
Hari ke 14 beban 100g	3	1,8300	,03000	1,80	1,86

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0 beban 100g	Hari ke 14 beban 100g
N		3	3
Normal Parameters ^{a,b}	Mean	1,9967	1,8300
	Std. Deviation	,09074	,03000
	Absolute	,324	,175
Most Extreme Differences	Positive	,324	,175
	Negative	-,231	-,175
Kolmogorov-Smirnov Z		,560	,303
Asymp. Sig. (2-tailed)		,912	1,000

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Pair 1	Mean	1,9967	,0005	,0432	1,9300	2,1000
	N	3				
	Std. Deviation	,09074	-,02744	,03793	,00000	,09815
	Std. Error	,05239				
	Mean	1,8300	,0002	,0141	1,8000	1,8600
	N	3				
	Std. Deviation	,03000	-,00797	,01069	,00000	,03464
	Std. Error	,01732				
	Mean					

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 beban 100g & Hari ke 14 beban 100g	3	,937	,228	,043 ^c	,029 ^c	,937 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 659 samples

Paired Samples Test^a

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Hari ke 0 beban 100g - Hari ke 14 beban 100g	,16667	,06351	,03667	,00890	,32443	4,545	2	,045

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 beban 100g - Hari ke 14 beban 100g	,16667	,01252 ^b	,01740 ^b	,002 ^b	,16667 ^b	,20333 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 659 samples

c. t test daya sebar 150g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0 beban 150g	3	2,0633	,13503	1,93	2,20
Hari ke 14 beban 150g	3	1,9400	,01732	1,93	1,96

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0 beban 150g	Hari ke 14 beban 150g
N		3	3
Normal Parameters ^{a,b}	Mean	2,0633	1,9400
	Std. Deviation	,13503	,01732
	Absolute	,178	,385
Most Extreme Differences	Positive	,177	,385
	Negative	-,178	-,282
Kolmogorov-Smirnov Z		,308	,667
Asymp. Sig. (2-tailed)		1,000	,766

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Pair 1	Mean	2,0633	,0009	,0635	1,9300	2,2000
	N	3				
	Std. Deviation	,13503	-,03593	,04817	,00000	,15588
	Std. Error Mean	,07796				
Hari ke 14 beban 150g	Mean	1,9400	,0001	,0083	1,9300	1,9600
	N	3				
	Std. Deviation	,01732	-,00591	,00821	,00000	,01732
	Std. Error Mean	,01000				

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 beban 150g & Hari ke 14 beban 150g	3	,877	,320	,084 ^c	,058 ^c	,877 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 659 samples

Paired Samples Test^a

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Hari ke 0 beban 150g - Hari ke 14 beban 150g	,12333	,12014	,06936	-,17511	,42177	1,778	2	,217

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 beban 150g – Hari ke 14 beban 150g	,12333	-,00031 ^b	,04898 ^b	,245 ^b	,04333 ^b	,20333 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 888 samples

d. t test daya sebar 200g**NPar Tests****Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0 beban 200g	3	2,1600	,20000	1,96	2,36
Hari ke 14 beban 200g	3	2,0500	,01732	2,03	2,06

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0 beban 200g	Hari ke 14 beban 200g
N		3	3
Normal Parameters ^{a,b}	Mean	2,1600	2,0500
	Std. Deviation	,20000	,01732
	Absolute	,175	,385
Most Extreme Differences	Positive	,175	,282
	Negative	-,175	-,385
Kolmogorov-Smirnov Z		,303	,667
Asymp. Sig. (2-tailed)		1,000	,766

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Pair 1	Mean	2,1600	,0013	,0940	1,9600	2,3600
	N	3				
	Std. Deviation	,20000	-,05315	,07128	,00000	,23094
	Std. Error Mean	,11547				
Hari ke 14 beban 200g	Mean	2,0500	-,0001	,0083	2,0300	2,0600
	N	3				
	Std. Deviation	,01732	-,00591	,00821	,00000	,01732
	Std. Error Mean	,01000				

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 beban 200g & Hari ke 14 beban 200g	3	-,866	,333	-,091 ^c	,062 ^c	-1,000 ^c	-,866 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 659 samples

Paired Samples Test^a

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 - Hari ke 0 beban 200g - Hari ke 14 beban 200g	,11000	,21517	,12423	-,42452	,64452	,885	2	,469

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 - Hari ke 0 beban 200g - Hari ke 14 beban 200g	,11000	-,00057 ^b	,08786 ^b	,382 ^b	-,03333 ^b	,25333 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 888 samples

e. t test daya sebar 250g

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Hari ke 0 beban 250g	3	2,2067	,22502	2,03	2,46
Hari ke 14 beban 250g	3	2,1500	,01732	2,13	2,16

One-Sample Kolmogorov-Smirnov Test

		Hari ke 0 beban 250g	Hari ke 14 beban 250g
N		3	3
Normal Parameters ^{a,b}	Mean	2,2067	2,1500
	Std. Deviation	,22502	,01732
	Absolute	,300	,385
Most Extreme Differences	Positive	,300	,282
	Negative	-,216	-,385
Kolmogorov-Smirnov Z		,520	,667
Asymp. Sig. (2-tailed)		,950	,766

a. Test distribution is Normal.

b. Calculated from data.

Bootstrap

Bootstrap Specifications

Sampling Method	Simple
Number of Samples	1000
Confidence Interval Level	95,0%
Confidence Interval Type	Percentile

T-Test

Paired Samples Statistics

		Statistic	Bootstrap ^b			
			Bias	Std. Error	95% Confidence Interval	
					Lower	Upper
Pair 1	Mean	2,2067	,0012	,1070	2,0300	2,4600
	N	3				
	Std. Deviation	,22502	-,06572	,09030	,00000	,24826
	Std. Error Mean	,12991				
Hari ke 14 beban 250g	Mean	2,1500	,0001	,0081	2,1300	2,1600
	N	3				
	Std. Deviation	,01732	-,00573	,00815	,00000	,01732
	Std. Error Mean	,01000				

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Paired Samples Correlations^a

		N	Correlation	Sig.	Bootstrap for Correlation ^b			
					Bias	Std. Error	95% Confidence Interval	
							Lower	Upper
Pair 1	Hari ke 0 beban 250g & Hari ke 14 beban 250g	3	,680	,524	,220 ^c	,149 ^c	,680 ^c	1,000 ^c

a. No statistics are computed for one or more split files

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

c. Based on 669 samples

Paired Samples Test^a

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Hari ke 0 beban 250g – Hari ke 14 beban 250g	,05667	,21362	,12333	-,47399	,58733	,459	2	,691

a. No statistics are computed for one or more split files

Bootstrap for Paired Samples Test

	Mean	Bootstrap ^a				
		Bias	Std. Error	Sig. (2- tailed)	95% Confidence Interval	
					Lower	Upper
Pair 1 Hari ke 0 beban 250g – Hari ke 14 beban 250g	,05667	-,00057 ^b	,08786 ^b	,512 ^b	-,07667 ^b	,19000 ^b

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

b. Based on 888 samples