

7. LAMPIRAN

Lampiran 1. Kuisisioner *Hedonic Test* Secara Ranking dan Rating

Nama : _____ Tanggal : _____
Produk : *Soft Ice Cream Rosella*
Atribut : Rasa, Warna, Tekstur, *Overall*

INSTRUKSI

Berkumur – kumurlah dulu sebelum menguji tiap sampel.

Dihadapan anda terdapat 4 sampel. Tulislah terlebih dahulu kode sampel secara berurutan dari kiri ke kanan. Cicipi dan amati sampel secara berturutan dari kiri ke kanan, rasakan masing – masing. Anda boleh mengulang sesering yang diperlukan. Urutkan sampel dari yang paling kurang Anda sukai (ranking = 1) hingga sampel yang paling Anda sukai (ranking = 4).

Kode sampel	Ranking (tidak boleh dobel)
_____	_____
_____	_____
_____	_____
_____	_____

Nama : _____ Tanggal : _____
Produk : *Soft Ice Cream Rosella*
Atribut : Rasa, Warna, Tekstur, *Overall*

INSTRUKSI

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Kode sampel	Rating (boleh dobel)
_____	_____
_____	_____
_____	_____
_____	_____

Lampiran 2. Tabel Korelasi Antar Perlakuan

Correlations

			hardness	melting_rate	overrun	air	lemak	antioksidan
Kendall's tau_b	Hardness	Correlation Coefficient	1,000	-,523(**)	,513(**)	,190	,333	,359(*)
		Sig. (2-tailed)	.	,003	,003	,272	,053	,037
		N	18	18	18	18	18	18
	melting_rate	Correlation Coefficient	-,523(**)	1,000	-,723(**)	-,086	-,364(*)	-,589(**)
		Sig. (2-tailed)	,003	.	,000	,621	,037	,001
		N	18	18	18	18	18	18
	Overrun	Correlation Coefficient	,513(**)	-,723(**)	1,000	,260	,527(**)	,700(**)
		Sig. (2-tailed)	,003	,000	.	,138	,003	,000
		N	18	18	18	18	18	18
	Air	Correlation Coefficient	,190	-,086	,260	1,000	,255	,333
		Sig. (2-tailed)	,272	,621	,138	.	,140	,053
		N	18	18	18	18	18	18
	Lemak	Correlation Coefficient	,333	-,364(*)	,527(**)	,255	1,000	,634(**)
		Sig. (2-tailed)	,053	,037	,003	,140	.	,000
		N	18	18	18	18	18	18
	Antioksidan	Correlation Coefficient	,359(*)	-,589(**)	,700(**)	,333	,634(**)	1,000
		Sig. (2-tailed)	,037	,001	,000	,053	,000	.
		N	18	18	18	18	18	18

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Lampiran 3. SNI Es Krim 01-3713-1995

No	Kriteria Uji	Satuan	Persyaratan
1	Keadaan :		
	Penampakan	-	Normal
	Bau	-	Normal
	Rasa	-	Normal
2	Lemak	%b/b	Minimum 5,0
3	Gula dihitung sebagai sukrosa	%b/b	Minimum 8,0
4	Protein	%b/b	Minimum 2,7
5	Jumlah padatan	%b/b	Minimum 3,4
6	Bahan tambahan makanan :		
	Pewarna tambahan	-	Negatif
	Pemanis buatan	-	
	Pemantap dan pengemulsi	-	
7	Cemaran logam:		
	Timbal (Pb)	mg/kg	Maksimum 1,0
	Temabaga (Cu)	mg/kg	Maksimum 20,0
8	Cemaran arsen (As)	mg/kg	Maksimum 0,5
9	Cemaran mikroba :		
	Angka lempeng total	Koloni/g	Maksimum 2,0
	MPN Coliform	APM/g	x10 ⁵
	Salmonella	Koloni/25g	<3
	Listeria SPP	Koloni/25g	Negative
			Negative

Sumber : BSN 1995



Lampiran 4. Uji Statistik *Hedonic Test* Secara *Ranking* Terhadap Warna, Tekstur, Rasa, dan *Overall* pada Es krim Rosella

Uji Statistik Non Parametrik Warna dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,27	30	
A2	2,10	Chi-Square	15,880
A4	2,13	df	3
A3	2,50	Asy mp. Sig.	,001

a. Friedman Test

Uji Statistik Non Parametrik Tekstur dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,10	30	
A2	2,73	Chi-Square	13,960
A3	2,17	df	3
A4	2,00	Asy mp. Sig.	,003

a. Friedman Test

Uji Statistik Non Parametrik Rasa dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,27	30	
A2	2,73	Chi-Square	23,120
A3	2,27	df	3
A4	1,73	Asy mp. Sig.	,000

a. Friedman Test

Uji Statistik Non Parametrik *Overall* dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,13	30	
A2	2,97	Chi-Square	24,920
A3	2,23	df	3
A4	1,67	Asy mp. Sig.	,000

a. Friedman Test

Lampiran 5. Uji Statistik *Hedonic Test* Secara *Rating* Terhadap Warna, Tekstur, Rasa, dan *Overall* pada Es krim Rosella

Uji Statistik Non Parametrik Warna dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,10	30	
A2	2,58	Chi-Square	14,524
A3	2,33	df	3
A4	1,98	Asy mp. Sig.	,002

a. Friedman Test

Uji Statistik Non Parametrik Tekstur dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	2,93	30	
A2	2,77	Chi-Square	10,767
A3	2,17	df	3
A4	2,13	Asy mp. Sig.	,013

a. Friedman Test

Uji Statistik Non Parametrik Rasa dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,07	30	
A2	3,12	Chi-Square	34,107
A3	2,22	df	3
A4	1,60	Asy mp. Sig.	,000

a. Friedman Test

Uji Statistik Non Parametrik *Overall* dengan *Friedman Test*.

Ranks		Test Statistics ^a	
	Mean Rank	N	
A1	3,15	30	
A2	2,95	Chi-Square	27,430
A3	2,10	df	3
A4	1,80	Asy mp. Sig.	,000

a. Friedman Test

Lampiran 6. Uji Statistik *Mann Whitney* Kadar Air

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Air Es krim karaginan 1%	6	5,50	33,00
Es krim karaginan 1% dan rosella 2%	6	7,50	45,00
Total	12		

Test Statistics^b

	Air
Mann-Whitney U	12,000
Wilcoxon W	33,000
Z	-,961
Asy mp. Sig. (2-tailed)	,337
Exact Sig. [2*(1-tailed Sig.)]	,394 ^a

a. Not corrected for ties.

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Air Es krim karaginan 1%	6	5,00	30,00
Es krim karaginan 1% dan rosella 3%	6	8,00	48,00
Total	12		

Test Statistics^b

	Air
Mann-Whitney U	9,000
Wilcoxon W	30,000
Z	-1,441
Asy mp. Sig. (2-tailed)	,150
Exact Sig. [2*(1-tailed Sig.)]	,180 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Air Es krim karaginan 1% dan rosella 2%	6	5,83	35,00
Es krim karaginan 1% dan rosella 3%	6	7,17	43,00
Total	12		

Test Statistics^b

	Air
Mann-Whitney U	14,000
Wilcoxon W	35,000
Z	-,641
Asy mp. Sig. (2-tailed)	,522
Exact Sig. [2*(1-tailed Sig.)]	,589 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 7. Uji Statistik *One Way Anova* Kadar Air

ANOVA

air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12,813	2	6,406	2,166	,149
Within Groups	44,357	15	2,957		
Total	57,170	17			

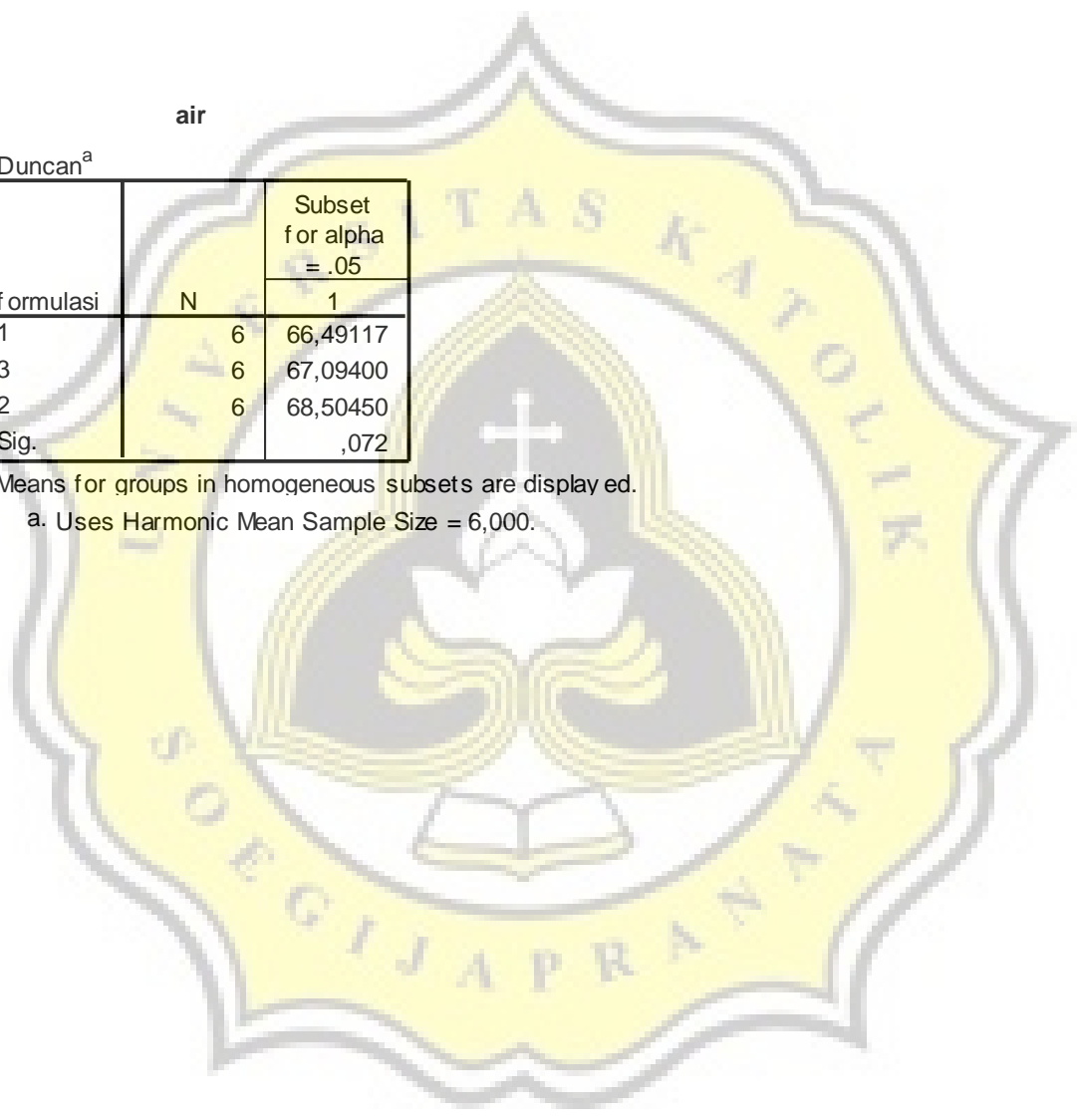
air

Duncan^a

formulasi	N	Subset for alpha = .05	
			1
1	6	66,49117	
3	6	67,09400	
2	6	68,50450	
Sig.			,072

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 8. Uji Statistik *Mann Whitney* Kadar Lemak

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
Lemak	Es krim karaginan 1%	6	4,50	27,00
	Es krim karaginan 1% dan rosella 2%	6	8,50	51,00
	Total	12		

Test Statistics^b

	Lemak
Mann-Whitney U	6,000
Wilcoxon W	27,000
Z	-1,922
Asy mp. Sig. (2-tailed)	,055
Exact Sig. [2*(1-tailed Sig.)]	,065 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
Lemak	Es krim karaginan 1%	6	3,50	21,00
	Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
	Total	12		

Test Statistics^b

	Lemak
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
Lemak	Es krim karaginan 1% dan rosella 2%	6	4,50	27,00
	Es krim karaginan 1% dan rosella 3%	6	8,50	51,00
	Total	12		

Test Statistics^b

	Lemak
Mann-Whitney U	6,000
Wilcoxon W	27,000
Z	-1,922
Asy mp. Sig. (2-tailed)	,055
Exact Sig. [2*(1-tailed Sig.)]	,065 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 9. Uji Statistik *One Way Anova* Kadar Lemak

ANOVA

lemak

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36,171	2	18,085	11,185	,001
Within Groups	24,255	15	1,617		
Total	60,426	17			

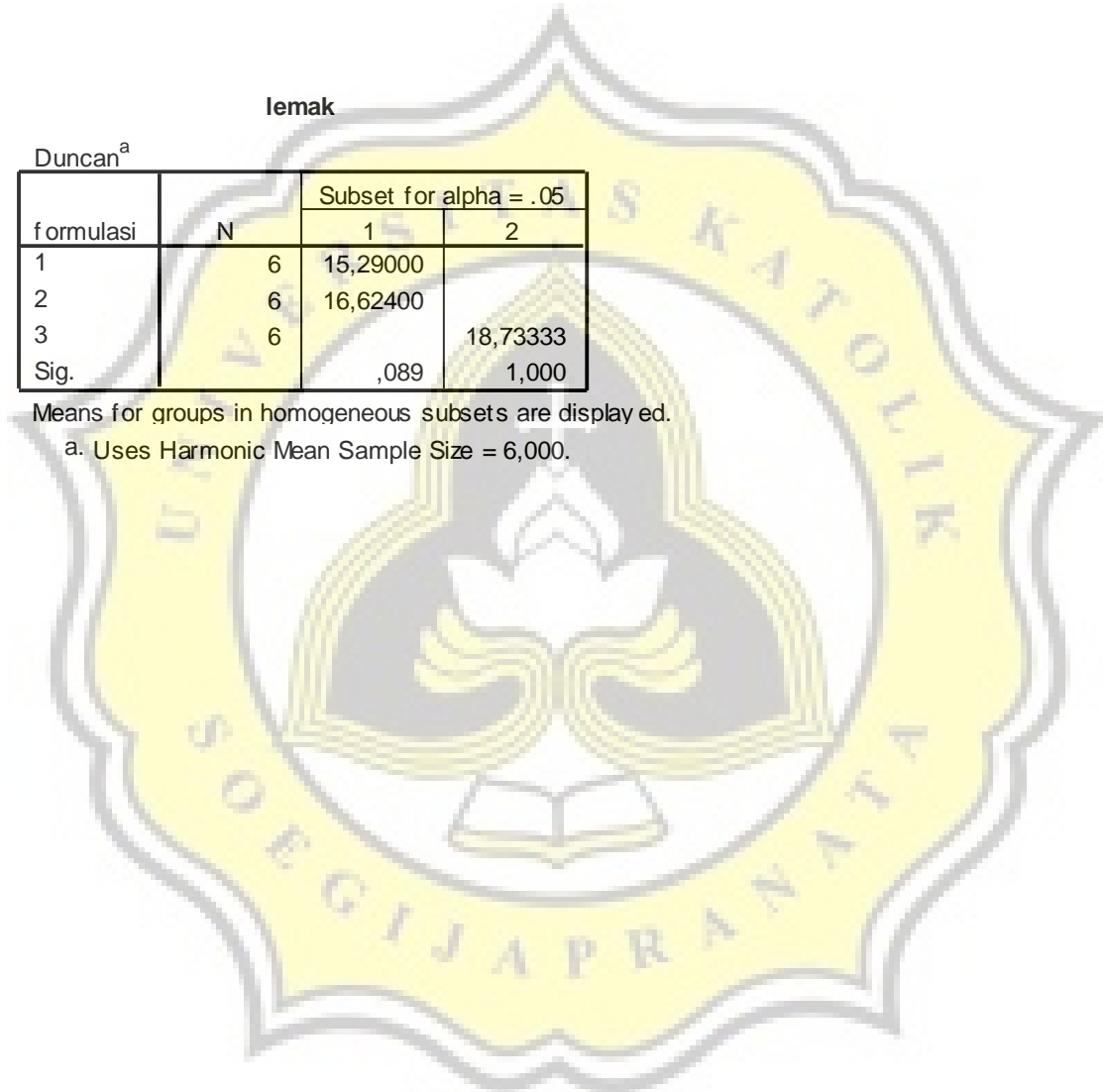
lemak

Duncan^a

f ormulasi	N	Subset for alpha = .05	
		1	2
1	6	15,29000	
2	6	16,62400	
3	6		18,73333
Sig.		,089	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 10. Uji Statistik *Mann Whitney* Aktivitas Antioksidan

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Antioksidan Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 2%	6	9,50	57,00
Total	12		

Test Statistics^b

	Antioksidan
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Antioksidan Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	Antioksidan
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
Antioksidan Es krim karaginan 1% dan rosella 2%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	Antioksidan
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 11. Uji Statistik *One Way Anova* Aktivitas Antioksidan

ANOVA

antioksidan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	652,435	2	326,218	347,981	,000
Within Groups	14,062	15	,937		
Total	666,497	17			

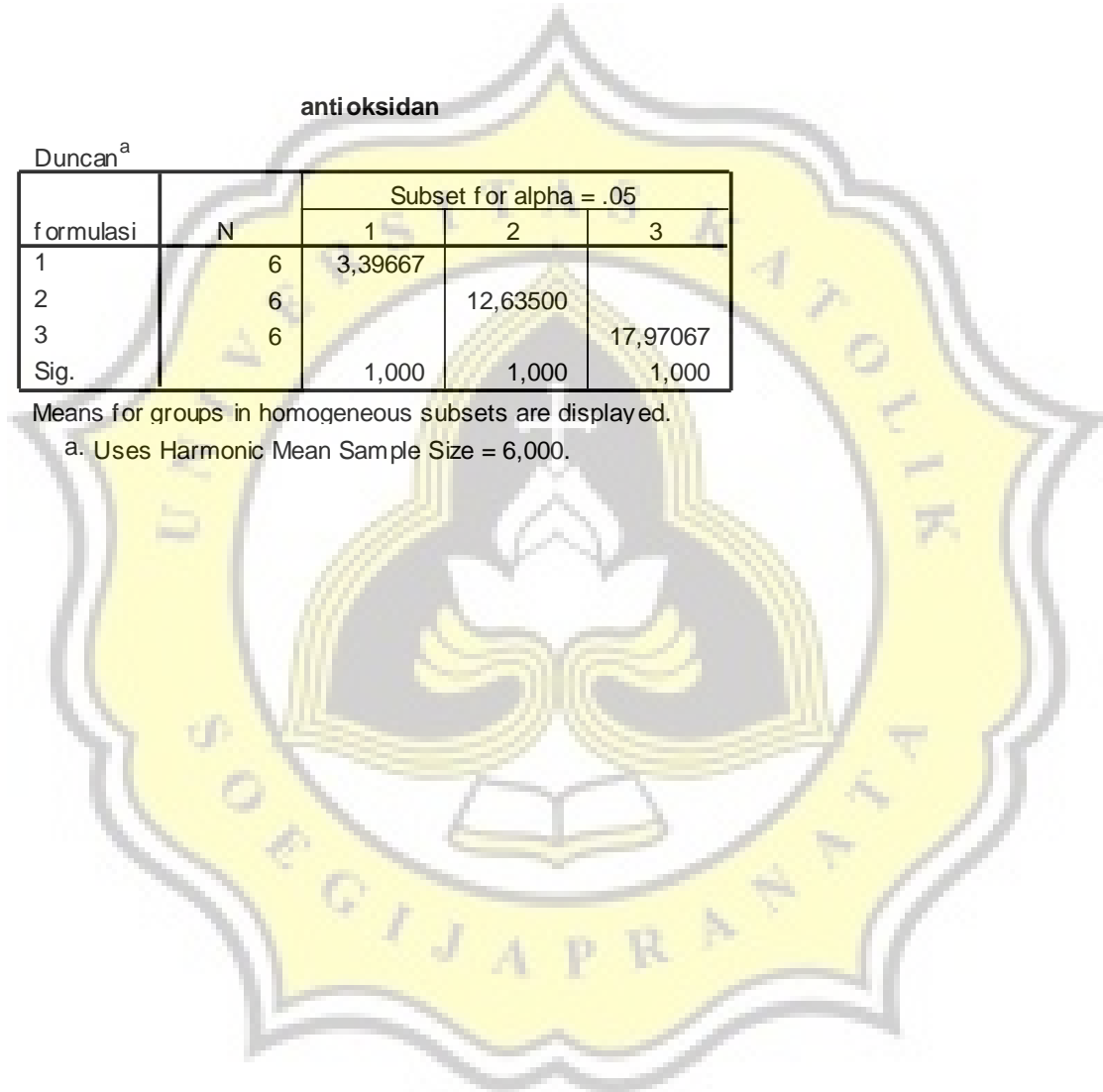
antioksidan

Duncan^a

f ormulasi	N	Subset f or alpha = .05		
		1	2	3
1	6	3,39667		
2	6		12,63500	
3	6			17,97067
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 12. Uji Statistik Mann Whitney Hardness

Ranks

Formulasi		N	Mean Rank	Sum of Ranks
Hardness	Es krim karaginan 1%	6	5,00	30,00
	Es krim karaginan 1% dan rosella 2%	6	8,00	48,00
Total		12		

Test Statistics^b

	Hardness
Mann-Whitney U	9,000
Wilcoxon W	30,000
Z	-1,441
Asy mp. Sig. (2-tailed)	,150
Exact Sig. [2*(1-tailed Sig.)]	,180 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi		N	Mean Rank	Sum of Ranks
Hardness	Es krim karaginan 1%	6	3,50	21,00
	Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total		12		

Test Statistics^b

	Hardness
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi		N	Mean Rank	Sum of Ranks
Hardness	Es krim karaginan 1% dan rosella 2%	6	4,50	27,00
	Es krim karaginan 1% dan rosella 3%	6	8,50	51,00
Total		12		

Test Statistics^b

	Hardness
Mann-Whitney U	6,000
Wilcoxon W	27,000
Z	-1,922
Asy mp. Sig. (2-tailed)	,055
Exact Sig. [2*(1-tailed Sig.)]	,065 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 13. Uji Statistik *One Way Anova Hardness*

ANOVA

hardness

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7312983	2	3656491,605	6,923	,007
Within Groups	7922831	15	528188,714		
Total	15235814	17			

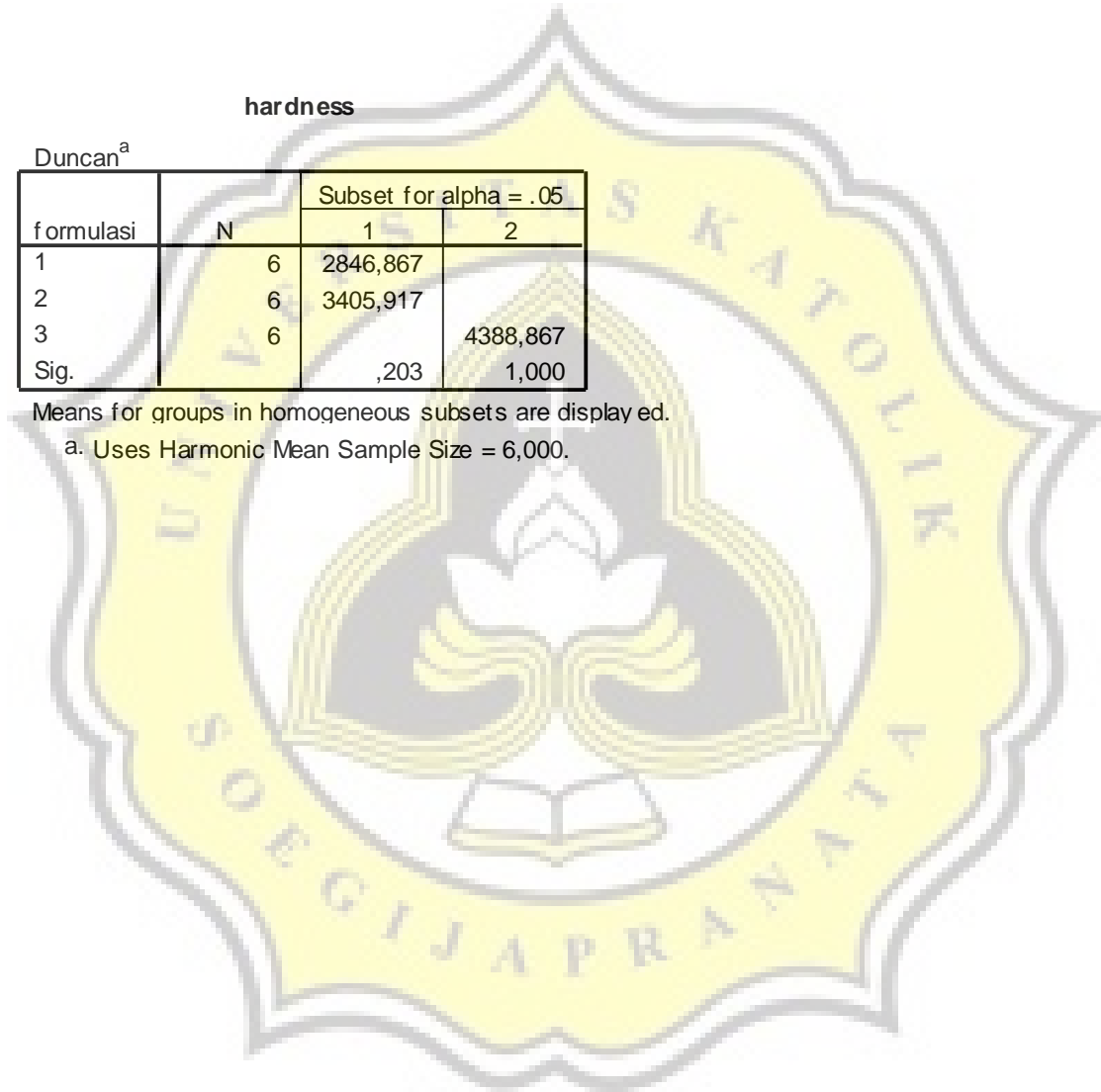
hardness

Duncan^a

f ormulasi	N	Subset for alpha = .05	
		1	2
1	6	2846,867	
2	6	3405,917	
3	6		4388,867
Sig.		,203	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 14. Uji Statistik Mann Whitney Melting Rate

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
melting_rate	Es krim karaginan 1%	6	9,50	57,00
	Es krim karaginan 1% dan rosella 2%	6	3,50	21,00
	Total	12		

Test Statistics^b

	melting_rate
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
melting_rate	Es krim karaginan 1%	6	9,50	57,00
	Es krim karaginan 1% dan rosella 3%	6	3,50	21,00
	Total	12		

Test Statistics^b

	melting_rate
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
melting_rate	Es krim karaginan 1% dan rosella 2%	6	8,75	52,50
	Es krim karaginan 1% dan rosella 3%	6	4,25	25,50
	Total	12		

Test Statistics^b

	melting_rate
Mann-Whitney U	4,500
Wilcoxon W	25,500
Z	-2,173
Asy mp. Sig. (2-tailed)	,030
Exact Sig. [2*(1-tailed Sig.)]	,026 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 15. Uji Statistik *One Way Anova Melting Rate*

ANOVA

melting_rate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,758	2	,379	132,087	,000
Within Groups	,043	15	,003		
Total	,801	17			

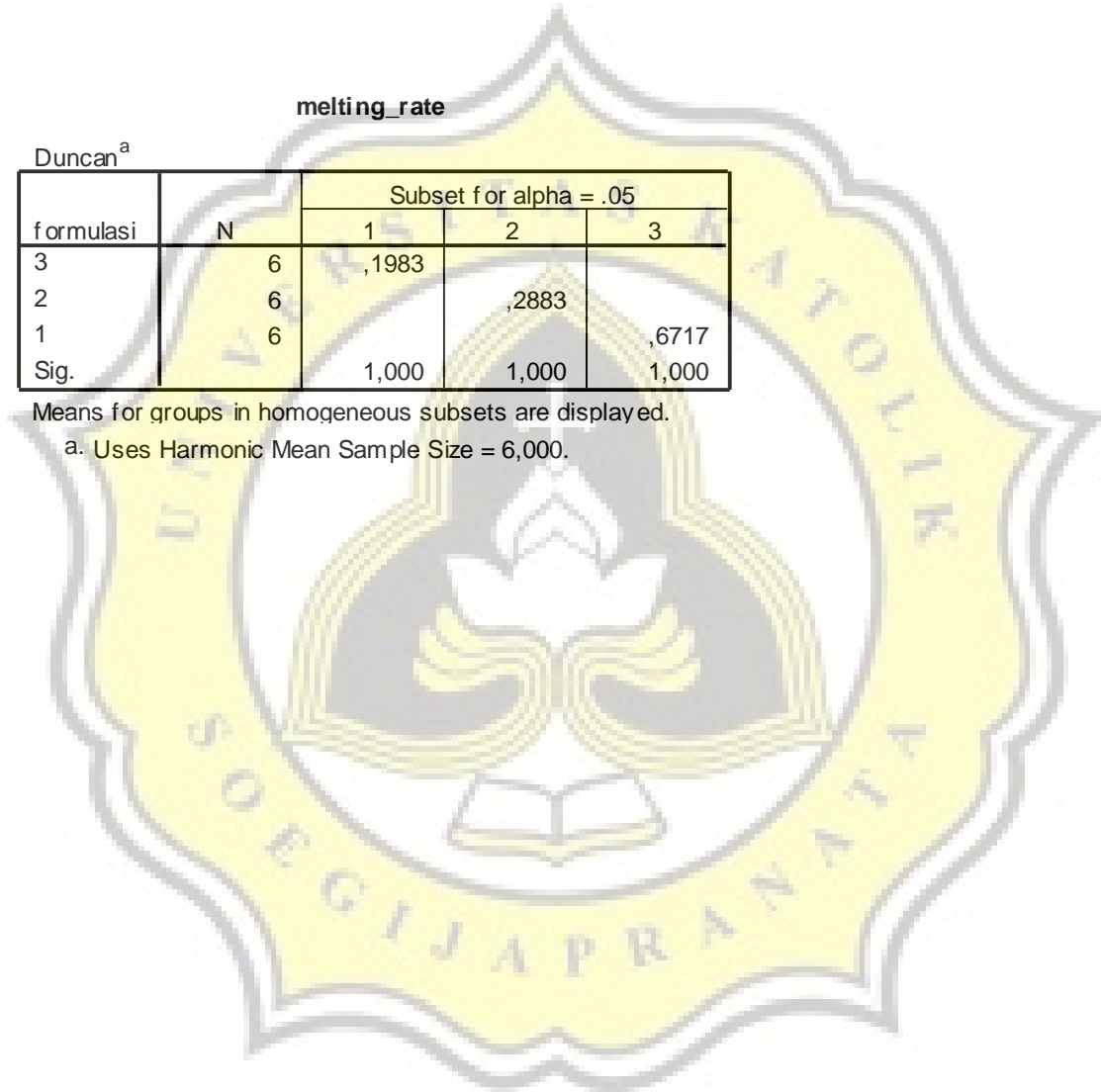
melting_rate

Duncan^a

f formulasi	N	Subset f or alpha = .05		
		1	2	3
3	6	,1983		
2	6		,2883	
1	6			,6717
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 16. Uji Statistik Mann Whitney Overrun

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
overrun Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 2%	6	9,50	57,00
Total	12		

Test Statistics^b

	overrun
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,903
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
overrun Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	overrun
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,903
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
overrun Es krim karaginan 1% dan rosella 2%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	overrun
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,903
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 17. Uji Statistik *One Way Anova Overrun*

ANOVA

overrun

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	66,677	2	33,338	2726,253	,000
Within Groups	,183	15	,012		
Total	66,860	17			

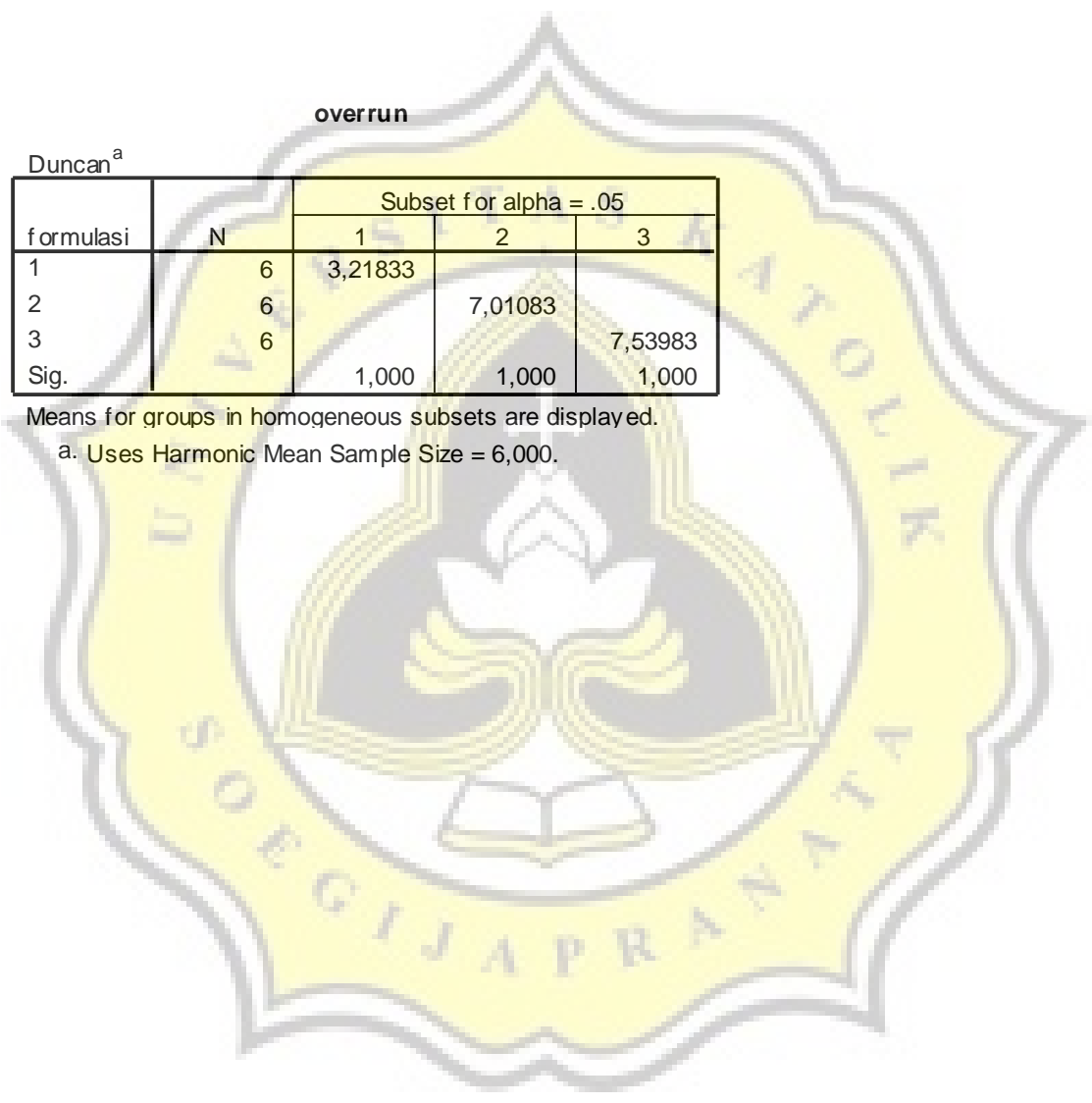
overrun

Duncan^a

f ormulasi	N	Subset f or alpha = .05		
		1	2	3
1	6	3,21833		
2	6		7,01083	
3	6			7,53983
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.



Lampiran 18. Uji Statistik Mann Whitney Viskositas Sebelum Dibekukan dan Sesudah Dibekukan

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sebelum	Es krim karaginan 1%	6	3,67	22,00
	Es krim karaginan 1% dan rosella 2%	6	9,33	56,00
	Total	12		

Test Statistics^b

	viskositas_sebelum
Mann-Whitney U	1,000
Wilcoxon W	22,000
Z	-2,756
Asy mp. Sig. (2-tailed)	,006
Exact Sig. [2*(1-tailed Sig.)]	,004 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sebelum	Es krim karaginan 1%	6	3,50	21,00
	Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
	Total	12		

Test Statistics^b

	viskositas_sebelum
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,898
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sebelum	Es krim karaginan 1% dan rosella 2%	6	3,83	23,00
	Es krim karaginan 1% dan rosella 3%	6	9,17	55,00
	Total	12		

Test Statistics^b

	viskositas_sebelum
Mann-Whitney U	2,000
Wilcoxon W	23,000
Z	-2,585
Asy mp. Sig. (2-tailed)	,010
Exact Sig. [2*(1-tailed Sig.)]	,009 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sesudah	Es krim karaginan 1%	6	3,50	21,00
	Es krim karaginan 1% dan rosella 2%	6	9,50	57,00
	Total	12		

Test Statistics^b

	viskositas_sesudah
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,903
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sesudah	Es krim karaginan 1%	6	3,50	21,00
	Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
	Total	12		

Test Statistics^b

	viskositas_sesudah
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,903
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

	Formulasi	N	Mean Rank	Sum of Ranks
viskositas_sesudah	Es krim karaginan 1% dan rosella 2%	6	3,67	22,00
	Es krim karaginan 1% dan rosella 3%	6	9,33	56,00
	Total	12		

Test Statistics^b

	viskositas_sesudah
Mann-Whitney U	1,000
Wilcoxon W	22,000
Z	-2,756
Asy mp. Sig. (2-tailed)	,006
Exact Sig. [2*(1-tailed Sig.)]	,004 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 19. Uji Statistik *One Way Anova* Viskositas Sebelum Dibekukan dan Sesudah Dibekukan

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
viskositas_sebelum	Between Groups	147,000	2	73,500	32,910	,000
	Within Groups	33,500	15	2,233		
	Total	180,500	17			
Viskositas_sesudah	Between Groups	154,778	2	77,389	40,971	,000
	Within Groups	28,333	15	1,889		
	Total	183,111	17			

viskositas_sebelum

Duncan^a

formulasi	N	Subset for alpha = .05		
		1	2	3
1	6	16,33		
2	6		19,83	
3	6			23,33
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Viskositas_sesudah

Duncan^a

formulasi	N	Subset for alpha = .05		
		1	2	3
1	6	23,50		
2	6		27,50	
3	6			30,67
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Lampiran 20. Uji Statistik Mann Whitney Time to Melt

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
time_melt Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 2%	6	9,50	57,00
Total	12		

Test Statistics^b

	time_melt
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
time_melt Es krim karaginan 1%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	time_melt
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Ranks

Formulasi	N	Mean Rank	Sum of Ranks
time_melt Es krim karaginan 1% dan rosella 2%	6	3,50	21,00
Es krim karaginan 1% dan rosella 3%	6	9,50	57,00
Total	12		

Test Statistics^b

	time_melt
Mann-Whitney U	,000
Wilcoxon W	21,000
Z	-2,882
Asy mp. Sig. (2-tailed)	,004
Exact Sig. [2*(1-tailed Sig.)]	,002 ^a

a. Not corrected for ties.

b. Grouping Variable: Formulasi

Lampiran 21. Uji Statistik *One Way Anova* *Time to Melt*

ANOVA

timetomelt

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1506,284	2	753,142	105,413	,000
Within Groups	107,170	15	7,145		
Total	1613,454	17			

timetomelt

Duncan^a

f ormulasi	N	Subset f or alpha = .05		
		1	2	3
1	6	40,9583		
2	6		49,9333	
3	6			63,2267
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

