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## Lampiran 1. Hasil determinasi



### UPT-LABORATORIUM

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Nomor : 191/DET/UPT-LAB/21.03.2021

Hal : Hasil determinasi tumbuhan

Lamp. : -

Nama Pemesan : Anggie Khusuma Wati

NIM : 23175133A

Alamat : Program Studi S1 Farmasi, Universitas Setia Budi, Surakarta

Nama Sampel : *Caesalpinia sappan*, L

### HASIL DETERMINASI TUMBUHAN

#### **Klasifikasi**

Kingdom : Plantae  
Super Divisi : Spermatophyta  
Divisi : Magnoliophyta  
Kelas : Magnoliopsida/Dicotyledoneae  
Ordo : Fabales  
Famili : Caesalpiniaceae  
Genus : *Caesalpinia*  
Species : *Caesalpinia sappan*, L

Hasil Determinasi menurut C.A. Backer & R.C. Bakhuizen van den Brink Jr. (1963) dan She *et al.* (2005); Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :

1b – 2b – 3b – 4b – 12b – 13b – 14a – 15b - Familia 106. Caesalpiniaceae. 1a – 2b – 3b – 4a – 5b – 7b. genus 28. *Caesalpinia* – 1a – 2b – 3b – 4a – 5b – 7b -8a. *Caesalpinia sappan*, L

Deskripsi:

- Habitus : Habitus berupa pohon atau perdu dengan tinggi 5-10 m.
- Batang : Batang kasar dengan duri tersebar. Ranting-ranting biasanya dengan duri-duri yang melengkung ke bawah. Ranting muda dan kuncup berambut halus kecekatan
- Daun : Daun majemuk menyirip ganda, Tulang daun utama sepanjang 25-40 cm; dengan 9-14 pasang tulang daun samping. Anak daun 10—20 pasang di tiap tulang daun samping, berhadapan, duduk atau hampur duduk, bentuk lonjong,  $10-25 \times 3-11$  mm, pangkal rompang miring, dan ujung melekuk atau membundar, bertepi rata, lokos atau berambut pendek jarang-jarang.
- Bunga : Bunga majemuk dalam malai di ujung batang atau di ketiak atas, panjang 10-40 cm; daun pelindung  $5-12 \times 2-5$  mm, berambut, lekas rontok; tangkai bunga (*pedicels*) sepanjang 15-20 mm. Warna bunga kuning, berbilangan-5; kelopak gundul, taju kelopak  $7-10 \times 4$  mm; mahkota berambut balig,  $9-11,5 \times 6-10$  mm, yang teratas berukuran paling kecil, berkuku lk. 5 mm; tangkai sari lk. 15 mm, putik lk. 18 mm.
- Buah : Buah polong bentuk lonjong atau jorong senjang (asimetris),  $6-10 \times 3-4$  cm, ujung seperti paruh, berisi 2-4 biji, hijau kekuningan menjadi cokelat kemerahan jika masak.
- Biji : Biji bulat panjang (elipsoida),  $15-18$  mm  $\times$   $8-11$  mm, cokelat hitam.
- Akar : Akar tunggang.

Kepala UPT-LAB  
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 21 Maret 2021  
Penanggung jawab  
Determinasi Tumbuhan

Dra. Dewi Sulistyawati. M.Sc.

## Lampiran 2. Ethical clearance

4/6/2021

KEPK-RSDM



**HEALTH RESEARCH ETHICS COMMITTEE**  
**KOMISI ETIK PENELITIAN KESEHATAN**

***Dr. Moewardi General Hospital***  
**RSUD Dr. Moewardi**

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***ETHICAL CLEARANCE***  
**KELAIKAN ETIK**

Nomor : 359 / III / HREC / 2021

*The Health Research Ethics Committee Dr. Moewardi*  
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

*after reviewing the proposal design, herewith to certify*  
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

*That the research proposal with topic :*  
Bahwa usulan penelitian dengan judul


**Pengaruh Sediaan Gel Ekstrak Etanol Kayu Secang (*Caesalpinia sappan* L.) Terhadap Penyembuhan Luka Bakar Pada Kelinci New Zealand**

*Principal investigator*  
Peneliti Utama : Anggie Khusuma Wati  
23175133A

*Location of research*  
Lokasi Tempat Penelitian : Laboratorium Fitokimia, Laboratorium Formulasi dan Teknologi, dan Laboratorium Farmakologi Fakultas Farmasi Universitas Setia Budi Surakarta

*Is ethically approved*  
Dinyatakan layak etik

Issued on : 06 April 2021

*Chairman*  
Ketua  
  
**Dr. Wahyu Dwi Atmoko, Sp.F**  
19770224 201001 1 004



<https://komisi-etika.rsmoewardi.com/kenk/ethicalclearance/23175133A-0487>

1/1

### Lampiran 3. Perhitungan hasil rendemen serbuk kayu secang

Bobot kering (gram)	Bobot serbuk (gram)	Rendemen (% b/b)
1200	1000	83

$$\begin{aligned} \text{Rendemen} &= \frac{\text{bobot serbuk kayu secang(gram)}}{\text{bobot kering kayu secang(gram)}} \times 100\% \\ &= \frac{1000}{1200} \times 100\% = 83\% \end{aligned}$$



### Lampiran 4. Perhitungan hasil rendemen ekstrak etanol 70% kayu secang

Bobot serbuk kayu secang (gram)	Bobot botol kaca kosong (gram)	Bobot botol kaca + ekstrak (gram)	Bobot ekstrak (gram)	Rendemen (%)
1000	320,12	445,04	124,92	12,492

$$\begin{aligned} \text{Rendemen} &= \frac{\text{bobot ekstrak kayu secang(gram)}}{\text{bobot serbuk kayu secang(gram)}} \times 100\% \\ &= \frac{124,92}{1000} \times 100\% = 12,492\% \end{aligned}$$



**Lampiran 5. Perhitungan hasil penetapan susut pengeringan serbuk kayu secang**

Berat serbuk (gram)	Replikasi	Susut pengeringan (%)	Rata-rata (%)	Pustaka (Depkes RI, 2017)
2,00	1	4,5		
2,00	2	4,5	4,333	5%
2,00	3	4		

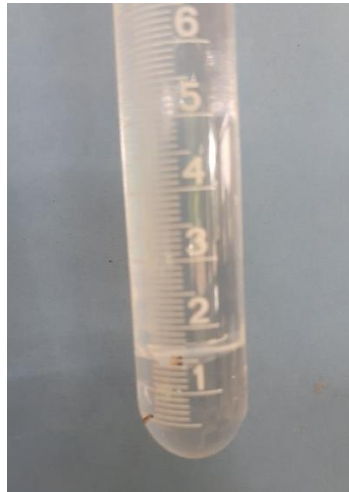
$$\begin{aligned}
 \text{Susut pengeringan} &= \frac{\epsilon \text{ replikasi susut pengeringan}}{3} \\
 &= \frac{(4,5 + 4,5 + 4)}{3} \\
 &= 4,33 \%
 \end{aligned}$$







### Lampiran 6. Perhitungan hasil penetapan kadar air ekstrak kayu secang

Bobot ekstrak (gram)	Volume terbaca (ml)	Kadar air (% v/b)	Pustaka (Depkes RI, 2017)
20	1,4	7	10 %


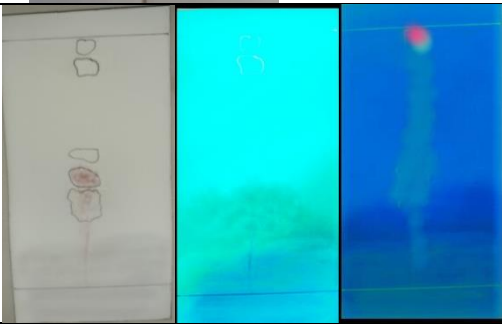
$$\begin{aligned}\text{Kadar air} &= \frac{\text{volume terbaca (ml)}}{\text{bobot ekstrak (gram)}} \times 100\% \\ &= \frac{1,4}{20} \times 100\% \\ &= 7\%\end{aligned}$$



**Lampiran 7. Hasil identifikasi kandungan senyawa kimia ekstrak kayu secang**

Senyawa	Hasil
Flavonoid	
Saponin	
Alkaloid	<p>Dragendroff (endapan merah)</p> 
	<p>Mayer (endapan putih kekuningan)</p> 

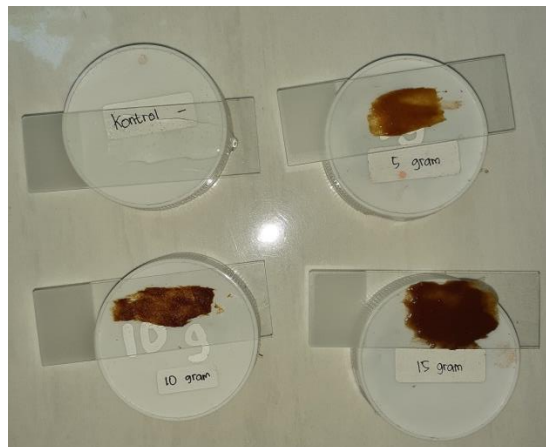


<p>Tanin</p>	
<p>Brazilin</p>	

**Lampiran 8. Hasil uji organoleptis gel ekstrak kayu secang**



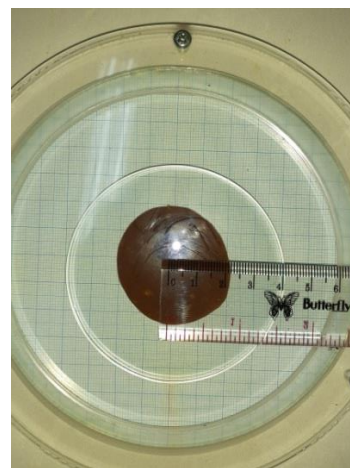
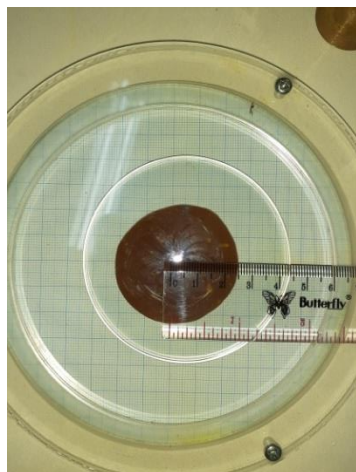
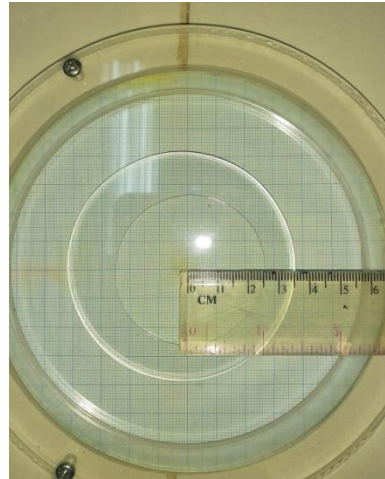
**Lampiran 9. Hasil uji homogenitas gel ekstrak kayu secang**



**Lampiran 10. Hasil uji viskositas gel ekstrak kayu secang**



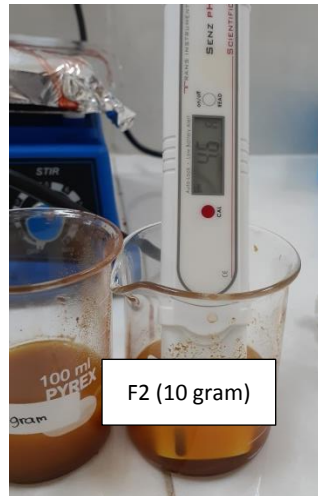
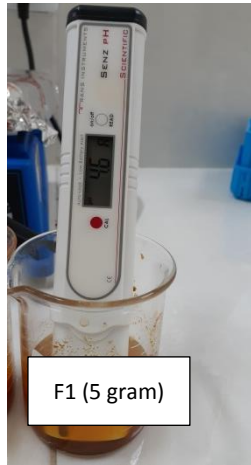
**Lampiran 11. Hasil uji daya sebar gel**



**Lampiran 12. Hasil uji daya lekat gel**







### Lampiran 13. Hasil Uji pH gel







**Lampiran 16. Gambaran penyembuhan luka bakar pada kelinci**

Fase/Hari	Hasil	
Hari ke-1		
Inflamasi		
Proliferasi		
Re-modelling		

## Lampiran 17. Hasil analisis SPSS

### a. Viskositas

### b. Tests of Normality

Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Viskositas Kontrol negatif	,203	12	,183	,929	12	,366
Formula 1	,144	12	,200 <sup>*</sup>	,907	12	,197
Formula 2	,145	12	,200 <sup>*</sup>	,950	12	,641
Formula 3	,237	12	,062	,916	12	,255

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

a. Lilliefors Significance Correction

## T-Test (Kontrol negatif)

### Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Visko_1	313,33	3	25,166	14,530
Visko_7	310,00	3	10,000	5,774
Pair 2 Visko_1	313,33	3	25,166	14,530
Visko_14	316,67	3	5,774	3,333
Pair 3 Visko_1	313,33	3	25,166	14,530
Visko_21	320,00	3	20,000	11,547

### Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Visko_1 & Visko_7	3	,993	,073
Pair 2 Visko_1 & Visko_14	3	,803	,407
Pair 3 Visko_1 & Visko_21	3	,993	,073

### Paired Samples Test

	Mean	Std. Deviation	Paired Differences	
			Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1 Visko_1 - Visko_7	3,333	15,275	8,819	-34,612
Pair 2 Visko_1 - Visko_14	-3,333	20,817	12,019	-55,045
Pair 3 Visko_1 - Visko_21	-6,667	5,774	3,333	-21,009



### Paired Samples Test

		Paired Differences 95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Visko_1 - Visko_7	41,279	,378	2	,742
Pair 2	Visko_1 - Visko_14	48,378	-,277	2	,808
Pair 3	Visko_1 - Visko_21	7,676	-2,000	2	,184

### T-Test (Formula 1)

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	353,33	3	5,774	3,333
	Visko_7	360,00	3	10,000	5,774
Pair 2	Visko_1	353,33 <sup>a</sup>	3	5,774	3,333
	Visko_14	373,33 <sup>a</sup>	3	5,774	3,333
Pair 3	Visko_1	353,33	3	5,774	3,333
	Visko_21	386,67	3	5,774	3,333

a. The correlation and t cannot be computed because the standard error of the difference is 0.

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_7	3	,866	,333
Pair 3	Visko_1 & Visko_21	3	,500	,667

### Paired Samples Test

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Visko_1 - Visko_7	-6,667	5,774	3,333	-21,009
Pair 3	Visko_1 - Visko_21	-33,333	5,774	3,333	-47,676

### Paired Samples Test

		Paired Differences			
		95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Visko_1 - Visko_7	7,676	-2,000	2	,184
Pair 3	Visko_1 - Visko_21	-18,991	-10,000	2	,010

## T-Test (Formula 2)

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	393,33	3	5,774	3,333
	Visko_7	406,67	3	5,774	3,333
Pair 2	Visko_1	393,33	3	5,774	3,333
	Visko_14	420,00	3	10,000	5,774
Pair 3	Visko_1	393,33	3	5,774	3,333
	Visko_21	430,00	3	10,000	5,774

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_7	3	-,000	,000
Pair 2	Visko_1 & Visko_14	3	,866	,333
Pair 3	Visko_1 & Visko_21	3	,866	,333

### Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	
Pair 1	Visko_1 - Visko_7	-13,333	11,547	6,667	Lower -42,018
Pair 2	Visko_1 - Visko_14	-26,667	5,774	3,333	-41,009
Pair 3	Visko_1 - Visko_21	-36,667	5,774	3,333	-51,009

### Paired Samples Test

		Paired Differences			Sig. (2-tailed)
		95% Confidence Interval of the Difference			
		Upper	t	df	

Pair 1	Visko_1 - Visko_7	15,351	-2,000	2	,184
Pair 2	Visko_1 - Visko_14	-12,324	-8,000	2	,015
Pair 3	Visko_1 - Visko_21	-22,324	-11,000	2	,008

## T-Test (Formula 3)

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	446,67	3	15,275	8,819
	Visko_7	456,67	3	20,817	12,019
Pair 2	Visko_1	446,67	3	15,275	8,819
	Visko_14	463,33	3	15,275	8,819
Pair 3	Visko_1	446,67	3	15,275	8,819
	Visko_21	483,33	3	5,774	3,333

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_7	3	,891	,300
Pair 2	Visko_1 & Visko_14	3	,929	,242
Pair 3	Visko_1 & Visko_21	3	,756	,454

### Paired Samples Test

		Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	Visko_1 - Visko_7	-10,000	10,000	5,774	-34,841
Pair 2	Visko_1 - Visko_14	-16,667	5,774	3,333	-31,009
Pair 3	Visko_1 - Visko_21	-36,667	11,547	6,667	-65,351

### Paired Samples Test

		Paired Differences		t	df	Sig. (2-tailed)
		95% Confidence Interval of the Difference				
		Upper				
Pair 1	Visko_1 - Visko_7	14,841	-1,732	2	,225	
Pair 2	Visko_1 - Visko_14	-2,324	-5,000	2	,038	
Pair 3	Visko_1 - Visko_21	-7,982	-5,500	2	,032	

## Oneway

### Descriptives

Viskositas

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol negatif	12	315,00	15,076	4,352	305,42	324,58		
Formula 1	12	368,33	14,668	4,234	359,01	377,65	290	340
Formula 2	12	412,50	16,026	4,626	402,32	422,68	350	390
Formula 3	12	462,50	19,129	5,522	450,35	474,65	390	440
Total	48	389,58	57,240	8,262	372,96	406,20	430	490

### Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Viskositas	Based on Mean	,732	3	44	,539
	Based on Median	,554	3	44	,648
	Based on Median and with adjusted df	,554	3	43,194	,648
	Based on trimmed mean	,747	3	44	,530

### ANOVA

Viskositas

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	142275,000	3	47425,000	178,097	,000
Within Groups	11716,667	44	266,288		
Total	153991,667	47			

### Post Hoc Tests

#### Multiple Comparisons

Dependent Variable: Viskositas

Tukey HSD

(I) Formula	(J) Formula	Mean Difference	Std.	Sig.	95% Confidence Interval
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		(I-J)	Error		Lower Bound	Upper Bound
Kontrol negatif	Formula 1	-53,333 <sup>*</sup>	6,662	,000	-71,12	-35,55
	Formula 2	-97,500 <sup>*</sup>	6,662	,000	-115,29	-79,71
	Formula 3	-147,500 <sup>*</sup>	6,662	,000	-165,29	-129,71
Formula 1	Kontrol negatif	53,333 <sup>*</sup>	6,662	,000	35,55	71,12
	Formula 2	-44,167 <sup>*</sup>	6,662	,000	-61,95	-26,38
	Formula 3	-94,167 <sup>*</sup>	6,662	,000	-111,95	-76,38
Formula 2	Kontrol negatif	97,500 <sup>*</sup>	6,662	,000	79,71	115,29
	Formula 1	44,167 <sup>*</sup>	6,662	,000	26,38	61,95
	Formula 3	-50,000 <sup>*</sup>	6,662	,000	-67,79	-32,21
Formula 3	Kontrol negatif	147,500 <sup>*</sup>	6,662	,000	129,71	165,29
	Formula 1	94,167 <sup>*</sup>	6,662	,000	76,38	111,95
	Formula 2	50,000 <sup>*</sup>	6,662	,000	32,21	67,79

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

## Homogeneous Subsets

### Viskositas

Tukey HSD<sup>a</sup>

Formula	N	Subset for alpha = 0.05			
		1	2	3	4
Kontrol negatif	12	315,00			
Formula 1	12		368,33		
Formula 2	12			412,50	
Formula 3	12				462,50
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,000.

**b. Viskositas stabilitas**

**c. Tests of Normality**

	Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Visko	K-	,212	6	,200*	,933	6	,607
	F1	,207	6	,200*	,892	6	,331
	F2	,282	6	,148	,812	6	,075
	F3	,251	6	,200*	,869	6	,223

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

a. Lilliefors Significance Correction

**T-Test ( Kontrol negatif )**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	320,00	3	17,321	10,000
	Visko_21	326,67	3	5,774	3,333

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_21	3	,500	,667

**Paired Samples Test**

		Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	Visko_1 - Visko_21	-6,667	15,275	8,819	-44,612

**Paired Samples Test**

		Paired Differences			95% Confidence Interval of the Difference			
		Upper			t	df	Sig. (2-tailed)	
Pair 1	Visko_1 - Visko_21	31,279			-,756	2	,529	

**T-Test ( Formula 1 )**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	353,33	3	5,774	3,333
	Visko_21	390,00	3	10,000	5,774

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_21	3	,000	1,000

**Paired Samples Test**

		Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	Lower
Pair 1	Visko_1 - Visko_21	-36,667	11,547	6,667	-65,351

**Paired Samples Test**

		Paired Differences			95% Confidence Interval of the Difference	
		Upper	t	df	Sig. (2-tailed)	
Pair 1	Visko_1 - Visko_21	-7,982	-5,500	2	,032	

**T-Test (Formula 2)**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	393,33	3	5,774	3,333
	Visko_21	443,33	3	5,774	3,333

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_21	3	-,500	,667

**Paired Samples Test**

Paired Differences

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Visko_1 - Visko_21	-50,000	10,000	5,774	-74,841

### Paired Samples Test

		Paired Differences 95% Confidence Interval of the Difference Upper	t	df	Sig. (2-tailed)
Pair 1	Visko_1 - Visko_21	-25,159	-8,660	2	,013

## T-Test ( Formula 3 )

### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Visko_1	446,67	3	15,275	8,819
	Visko_21	506,67	3	5,774	3,333

### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Visko_1 & Visko_21	3	-,189	,879

### Paired Samples Test

		Paired Differences Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Visko_1 - Visko_21	-60,000	17,321	10,000	-103,027

### Paired Samples Test

		Paired Differences 95% Confidence Interval of the Difference Upper	t	df	Sig. (2-tailed)
Pair 1	Visko_1 - Visko_21	-16,973	-6,000	2	,027



### c. Daya Sebar

#### One-Sample Kolmogorov-Smirnov Test

		Daya_sebar
N		80
Normal Parameters <sup>a,b</sup>	Mean	5,3113
	Std. Deviation	,33677
Most Extreme Differences	Absolute	,088
	Positive	,088
	Negative	-,067
Test Statistic		,088
Asymp. Sig. (2-tailed)		,191 <sup>c</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

### Univariate Analysis of Variance

#### Levene's Test of Equality of Error Variances<sup>a,b</sup>

		Levene Statistic	df1	df2	Sig.
Daya_sebar	Based on Mean	,387	19	60	,988
	Based on Median	,338	19	60	,995
	Based on Median and with adjusted df	,338	19	48,866	,994
	Based on trimmed mean	,382	19	60	,989

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.<sup>a,b</sup>

- a. Dependent variable: Daya\_sebar
- b. Design: Intercept + Beban + Waktu + Beban \* Waktu

#### Tests of Between-Subjects Effects

Dependent Variable: Daya\_sebar

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5,572 <sup>a</sup>	19	,293	5,195	,000
Intercept	2256,750	1	2256,750	39971,958	,000
Beban	4,637	4	1,159	20,532	,000
Waktu	,889	3	,296	5,251	,003

Beban * Waktu	,046	12	,004	,068	1,000
Error	3,387	60	,056		
Total	2265,710	80			
Corrected Total	8,960	79			

a. R Squared = ,622 (Adjusted R Squared = ,502)

## Post Hoc Tests

### Beban (gram)

#### Multiple Comparisons

Dependent Variable: Daya\_sebar

Tukey HSD

(I) gram	(J) gram	Mean Difference			95% Confidence Interval	
		(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
50 gram	100 gram	-,1938	,08401	,157	-,4300	,0425
	150 gram	-,3687*	,08401	,000	-,6050	-,1325
	200 gram	-,4750*	,08401	,000	-,7113	-,2387
	300 gram	-,7062*	,08401	,000	-,9425	-,4700
100 gram	50 gram	,1938	,08401	,157	-,0425	,4300
	150 gram	-,1750	,08401	,241	-,4113	,0613
	200 gram	-,2812*	,08401	,012	-,5175	-,0450
	300 gram	-,5125*	,08401	,000	-,7488	-,2762
150 gram	50 gram	,3687*	,08401	,000	,1325	,6050
	100 gram	,1750	,08401	,241	-,0613	,4113
	200 gram	-,1063	,08401	,713	-,3425	,1300
	300 gram	-,3375*	,08401	,002	-,5738	-,1012
200 gram	50 gram	,4750*	,08401	,000	,2387	,7113
	100 gram	,2812*	,08401	,012	,0450	,5175
	150 gram	,1063	,08401	,713	-,1300	,3425
	300 gram	-,2313	,08401	,058	-,4675	,0050
300 gram	50 gram	,7062*	,08401	,000	,4700	,9425
	100 gram	,5125*	,08401	,000	,2762	,7488
	150 gram	,3375*	,08401	,002	,1012	,5738
	200 gram	,2313	,08401	,058	-,0050	,4675

Based on observed means.

The error term is Mean Square(Error) = ,056.

\*. The mean difference is significant at the ,05 level.

## Homogeneous Subsets

### Daya\_sebar

Tukey HSD<sup>a,b</sup>

gram	N	Subset			
		1	2	3	4
50 gram	16	4,9625			
100 gram	16	5,1563	5,1563		
150 gram	16		5,3313	5,3313	
200 gram	16			5,4375	5,4375
300 gram	16				5,6688
Sig.		,157	,241	,713	,058

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,056.

a. Uses Harmonic Mean Sample Size = 16,000.

b. Alpha = ,05.

## Waktu

### Multiple Comparisons

Dependent Variable: Daya\_sebar

Tukey HSD

(I) Waktu	(J) Waktu	Mean Difference			95% Confidence Interval	
		(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Hari ke-1	Hari ke-7	,1300	,07514	,317	-,0686	,3286
	Hari ke-14	,1950	,07514	,056	-,0036	,3936
	Hari ke-21	,2900*	,07514	,002	,0914	,4886
Hari ke-7	Hari ke-1	-,1300	,07514	,317	-,3286	,0686
	Hari ke-14	,0650	,07514	,823	-,1336	,2636
	Hari ke-21	,1600	,07514	,156	-,0386	,3586
Hari ke-14	Hari ke-1	-,1950	,07514	,056	-,3936	,0036
	Hari ke-7	-,0650	,07514	,823	-,2636	,1336
	Hari ke-21	,0950	,07514	,589	-,1036	,2936
Hari ke-21	Hari ke-1	-,2900*	,07514	,002	-,4886	-,0914
	Hari ke-7	-,1600	,07514	,156	-,3586	,0386
	Hari ke-14	-,0950	,07514	,589	-,2936	,1036

Based on observed means.

The error term is Mean Square(Error) = ,056.

\*. The mean difference is significant at the ,05 level.

## Homogeneous Subsets

### Daya\_sebar

Tukey HSD<sup>a,b</sup>

Waktu	N	Subset	
		1	2
Hari ke-21	20	5,1750	
Hari ke-14	20	5,2700	5,2700
Hari ke-7	20	5,3350	5,3350
Hari ke-1	20		5,4650
Sig.		,156	,056

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = ,056.

a. Uses Harmonic Mean Sample Size = 20,000.

b. Alpha = ,05.

#### d. Daya lekat

#### Tests of Normality

Formula	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Daya_lekat Kontrol negatif	,237	12	,061	,891	12	,123
F1	,191	12	,200*	,935	12	,440
F2	,206	12	,170	,931	12	,386
F3	,279	12	,011	,784	12	,006

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

a. Lilliefors Significance Correction

#### T-Test ( Kontrol negatif )

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Dayalekat_1	6,88167	3	,081267	,046920
	Dayalekat_7	7,08600	3	,252595	,145836
Pair 2	Dayalekat_1	6,88167	3	,081267	,046920
	Dayalekat_14	7,22467	3	,040501	,023383
Pair 3	Dayalekat_1	6,88167	3	,081267	,046920
	Dayalekat_21	7,32733	3	,029872	,017247

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Dayalekat_1 & Dayalekat_7	3	-,436	,713
Pair 2	Dayalekat_1 & Dayalekat_14	3	-,022	,986
Pair 3	Dayalekat_1 & Dayalekat_21	3	-,534	,641

#### Paired Samples Test

		Mean	Paired Differences		
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Dayalekat_1 - Dayalekat_7	-,204333	,297177	,171575	-,942563
Pair 2	Dayalekat_1 - Dayalekat_14	-,343000	,091591	,052880	-,570526
Pair 3	Dayalekat_1 - Dayalekat_21	-,445667	,100451	,057995	-,695200

### Paired Samples Test

		Paired Differences 95% Confidence Interval of the Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Dayalekat_1 - Dayalekat_7	,533896	-1,191	2	,356
Pair 2	Dayalekat_1 - Dayalekat_14	-,115474	-6,486	2	,023
Pair 3	Dayalekat_1 - Dayalekat_21	-,196133	-7,685	2	,017

### T-Test ( Formula 1 )

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Dayalekat_1	7,43533	3	,215929	,124667
	Dayalekat_7	7,57733	3	,174371	,100673
Pair 2	Dayalekat_1	7,43533	3	,215929	,124667
	Dayalekat_14	7,86433	3	,131592	,075974
Pair 3	Dayalekat_1	7,43533	3	,215929	,124667
	Dayalekat_21	8,04933	3	,140222	,080957

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Dayalekat_1 & Dayalekat_7	3	-,490	,674
Pair 2	Dayalekat_1 & Dayalekat_14	3	,884	,310
Pair 3	Dayalekat_1 & Dayalekat_21	3	,793	,417

### Paired Samples Test

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Dayalekat_1 - Dayalekat_7	-,142000	,337538	,194878	-,980491
Pair 2	Dayalekat_1 - Dayalekat_14	-,429000	,117051	,067580	-,719771
Pair 3	Dayalekat_1 - Dayalekat_21	-,614000	,135244	,078083	-,949965

### Paired Samples Test

		Paired Differences			
		95% Confidence			
		Interval of the			
		Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Dayalekat_1 - Dayalekat_7	,696491	-,729	2	,542
Pair 2	Dayalekat_1 - Dayalekat_14	-,138229	-6,348	2	,024
Pair 3	Dayalekat_1 - Dayalekat_21	-,278035	-7,863	2	,016

### T-Test ( Formula 2 )

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Dayalekat_1	7,63333	3	,145717	,084130
	Dayalekat_7	7,81800	3	,147976	,085434
Pair 2	Dayalekat_1	7,63333	3	,145717	,084130
	Dayalekat_14	8,02733	3	,119249	,068848
Pair 3	Dayalekat_1	7,63333	3	,145717	,084130
	Dayalekat_21	8,21267	3	,021825	,012601

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Dayalekat_1 & Dayalekat_7	3	-,448	,704
Pair 2	Dayalekat_1 & Dayalekat_14	3	-,965	,168
Pair 3	Dayalekat_1 & Dayalekat_21	3	-,591	,598

### Paired Samples Test

		Paired Differences		
		Mean	Std. Deviation	Std. Error Mean
		95% Confidence Interval of the Difference		
		Lower		
Pair 1	Dayalekat_1 - Dayalekat_7	-,184667	,249901	,144280
Pair 2	Dayalekat_1 - Dayalekat_14	-,394000	,262692	,151665
Pair 3	Dayalekat_1 - Dayalekat_21	-,579333	,159582	,092135

### Paired Samples Test

		Paired Differences			
		95% Confidence			
		Interval of the			
		Difference			
		Upper	t	df	Sig. (2-tailed)
Pair 1	Dayalekat_1 - Dayalekat_7	,436121	-1,280	2	,329
Pair 2	Dayalekat_1 - Dayalekat_14	,258563	-2,598	2	,122
Pair 3	Dayalekat_1 - Dayalekat_21	-,182910	-6,288	2	,024

### T-Test ( Formula 3 )

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Dayalekat_1	7,78967	3	,097634	,056369
	Dayalekat_7	7,84600	3	,073014	,042154
Pair 2	Dayalekat_1	7,78967	3	,097634	,056369
	Dayalekat_14	8,21767	3	,326053	,188247
Pair 3	Dayalekat_1	7,78967	3	,097634	,056369
	Dayalekat_21	8,42833	3	,260753	,150546

#### Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Dayalekat_1 & Dayalekat_7	3	,423	,722
Pair 2	Dayalekat_1 & Dayalekat_14	3	,521	,651
Pair 3	Dayalekat_1 & Dayalekat_21	3	-,319	,793

### Paired Samples Test

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	Dayalekat_1 - Dayalekat_7	-,056333	,094007	,054275	-,289860
Pair 2	Dayalekat_1 - Dayalekat_14	-,428000	,287520	,166000	-1,142240
Pair 3	Dayalekat_1 - Dayalekat_21	-,638667	,306244	,176810	-1,399419



### Paired Samples Test

		Paired Differences 95% Confidence Interval of the Difference	t	df	Sig. (2-tailed)
		Upper			
Pair 1	Dayalekat_1 - Dayalekat_7	,177193	-1,038	2	,408
Pair 2	Dayalekat_1 - Dayalekat_14	,286240	-2,578	2	,123
Pair 3	Dayalekat_1 - Dayalekat_21	,122085	-3,612	2	,069

### Oneway

#### Descriptives

Daya\_lekat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol negatif	12	3,1667	,93744	,27061	2,5710	3,7623	2,00	5,00
F1	12	5,8333	1,11464	,32177	5,1251	6,5415	4,00	8,00
F2	12	6,6667	1,23091	,35533	5,8846	7,4488	5,00	9,00
F3	12	8,3333	,65134	,18803	7,9195	8,7472	7,00	9,00
Total	48	6,0000	2,12383	,30655	5,3833	6,6167	2,00	9,00

#### Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Daya_lekat	Based on Mean	1,385	3	44	,260
	Based on Median	1,333	3	44	,276
	Based on Median and with adjusted df	1,333	3	42,067	,276
	Based on trimmed mean	1,365	3	44	,266

#### ANOVA

Daya\_lekat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	167,333	3	55,778	54,945	,000
Within Groups	44,667	44	1,015		
Total	212,000	47			

## Post Hoc Tests

### Multiple Comparisons

Dependent Variable: Daya\_lekat

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol negatif	F1	-2,66667 <sup>*</sup>	,41133	,000	-3,7649	-1,5684
	F2	-3,50000 <sup>*</sup>	,41133	,000	-4,5983	-2,4017
	F3	-5,16667 <sup>*</sup>	,41133	,000	-6,2649	-4,0684
F1	Kontrol negatif	2,66667 <sup>*</sup>	,41133	,000	1,5684	3,7649
	F2	-,83333	,41133	,194	-1,9316	,2649
	F3	-2,50000 <sup>*</sup>	,41133	,000	-3,5983	-1,4017
F2	Kontrol negatif	3,50000 <sup>*</sup>	,41133	,000	2,4017	4,5983
	F1	,83333	,41133	,194	-,2649	1,9316
	F3	-1,66667 <sup>*</sup>	,41133	,001	-2,7649	-,5684
F3	Kontrol negatif	5,16667 <sup>*</sup>	,41133	,000	4,0684	6,2649
	F1	2,50000 <sup>*</sup>	,41133	,000	1,4017	3,5983
	F2	1,66667 <sup>*</sup>	,41133	,001	,5684	2,7649

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

## Homogeneous Subsets

### Daya\_lekat

Tukey HSD<sup>a</sup>

Formula	N	Subset for alpha = 0.05		
		1	2	3
Kontrol negatif	12	3,1667		
F1	12		5,8333	
F2	12		6,6667	
F3	12			8,3333
Sig.		1,000	,194	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,000.

**e. Diameter luka bakar**

**One-Sample Kolmogorov-Smirnov Test**

		Diameter	Waktu	Formula
N		525	525	525
Normal Parameters <sup>a,b</sup>	Mean	,9186	11,00	3,00
	Std. Deviation	,64217	6,061	1,416
Most Extreme Differences	Absolute	,150	,081	,160
	Positive	,150	,081	,160
	Negative	-,098	-,081	-,160
Test Statistic		,150	,081	,160
Asymp. Sig. (2-tailed)		,000 <sup>c</sup>	,000 <sup>c</sup>	,000 <sup>c</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

**NPar Tests**

**Kruskal-Wallis Test**

**Ranks**

	Formula	N	Mean Rank
Diameter	K (-)	105	321,03
	K (+)	105	216,55
	F1	105	276,47
	F2	105	266,71
	F3	105	234,24
	Total		525

**Test Statistics<sup>a,b</sup>**

		Diameter
Kruskal-Wallis H		30,235
df		4
Asymp. Sig.		,000

- a. Kruskal Wallis Test
- b. Grouping Variable: Formula

## NPar Tests

		Ranks	
	Waktu	N	Mean Rank
Diameter	Hari ke-1	25	503,42
	Hari ke-2	25	483,88
	Hari ke-3	25	462,60
	Hari ke-4	25	435,06
	Hari ke-5	25	407,02
	Hari ke-6	25	382,24
	Hari ke-7	25	357,40
	Hari ke-8	25	330,64
	Hari ke-9	25	300,38
	Hari ke-10	25	271,72
	Hari ke-11	25	246,42
	Hari ke-12	25	220,22
	Hari ke-13	25	193,22
	Hari ke-14	25	169,92
	Hari ke-15	25	150,40
	Hari ke-16	25	136,60
	Hari ke-17	25	119,52
	Hari ke-18	25	100,86
	Hari ke-19	25	86,76
	Hari ke-20	25	83,40
	Hari ke-21	25	81,32
	Total	525	

### Test Statistics<sup>a,b</sup>

Diameter	
Kruskal-Wallis H	454,567
df	20
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: Waktu

## NPar Tests

### Mann-Whitney Test

	Formula	Ranks		
		N	Mean Rank	Sum of Ranks
Diameter	K (-)	105	114,89	12063,00
	F1	105	96,11	10092,00
	Total	210		

#### Test Statistics<sup>a</sup>

	Diameter
Mann-Whitney U	4527,000
Wilcoxon W	10092,000
Z	-2,239
Asymp. Sig. (2-tailed)	,025

a. Grouping Variable: Formula

## NPar Tests

### Mann-Whitney Test

	Formula	Ranks		
		N	Mean Rank	Sum of Ranks
Diameter	K (-)	105	116,54	12236,50
	F2	105	94,46	9918,50
	Total	210		

#### Test Statistics<sup>a</sup>

	Diameter
Mann-Whitney U	4353,500
Wilcoxon W	9918,500
Z	-2,634
Asymp. Sig. (2-tailed)	,008

a. Grouping Variable: Formula

## NPar Tests

### Mann-Whitney Test

	Formula	Ranks		
		N	Mean Rank	Sum of Ranks
Diameter	K (-)	105	122,63	12876,50
	F3	105	88,37	9278,50
	Total	210		

### Test Statistics<sup>a</sup>

	Diameter
Mann-Whitney U	3713,500
Wilcoxon W	9278,500
Z	-4,098
Asymp. Sig. (2-tailed)	,000

a. Grouping Variable: Formula

**f. Persentase luka bakar**

**One-Sample Kolmogorov-Smirnov Test**

Persentase  
rata-rata  
penyembuhan  
luka bakar

N		525
Normal Parameters <sup>a,b</sup>	Mean	62,8679
	Std. Deviation	33,10381
Most Extreme Differences	Absolute	,131
	Positive	,131
	Negative	-,129
Test Statistic		,131
Asymp. Sig. (2-tailed)		,000 <sup>c</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

**NPar Tests**

**Kruskal-Wallis Test**

	Ranks		
	Formula gel	N	Mean Rank
Persentase rata-rata penyembuhan luka bakar	K (-)	105	180,12
	K (+)	105	315,08
	F1	105	252,10
	F2	105	266,90
	F3	105	300,80
	Total	525	

**Test Statistics<sup>a,b</sup>**

Persentase rata-rata penyembuhan luka bakar

Kruskal-Wallis H	51,441
df	4
Asymp. Sig.	,000

- a. Kruskal Wallis Test
- b. Grouping Variable: Formula gel

## NPar Tests Mann-Whitney Test

	Ranks			
	Formula gel	N	Mean Rank	Sum of Ranks
Persentase rata-rata penyembuhan luka bakar	K (-)	105	90,22	9473,50
	F1	105	120,78	12681,50
	Total	210		

### Test Statistics<sup>a</sup>

	Persentase rata-rata penyembuhan luka bakar
Mann-Whitney U	3908,500
Wilcoxon W	9473,500
Z	-3,644
Asymp. Sig. (2-tailed)	,000

a. Grouping Variable: Formula gel

## NPar Tests Mann-Whitney Test

	Ranks			
	Formula gel	N	Mean Rank	Sum of Ranks
Persentase rata-rata penyembuhan luka bakar	K (-)	105	87,39	9176,00
	F2	105	123,61	12979,00
	Total	210		

### Test Statistics<sup>a</sup>

	Persentase rata-rata penyembuhan luka bakar
Mann-Whitney U	3611,000
Wilcoxon W	9176,000
Z	-4,322
Asymp. Sig. (2-tailed)	,000

a. Grouping Variable: Formula gel



## NPar Tests

### Mann-Whitney Test

	Ranks			
	Formula gel	N	Mean Rank	Sum of Ranks
Persentase rata-rata	K (-)	105	81,70	8579,00
penyembuhan luka bakar	F3	105	129,30	13576,00
	Total	210		

### Test Statistics<sup>a</sup>

	Persentase rata-rata penyembuhan luka bakar
Mann-Whitney U	3014,000
Wilcoxon W	8579,000
Z	-5,691
Asymp. Sig. (2-tailed)	,000

a. Grouping Variable: Formula gel