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## Lampiran 1. Hasil determinasi tanaman daun nangka



### UPT-LABORATORIUM

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

Nomor : 292/DET/UPT-LAB/25.10.2021  
 Hal : Hasil determinasi tumbuhan  
 Lamp. : -

Nama Pemesan : Dinda Catur Cahyani  
 NIM : 23175198A  
 Alamat : Program Studi S1 Farmasi,  
 Universitas Setia Budi, Surakarta  
 Nama sampel : *Artocarpus heterophyllus* Lamk.

#### HASIL DETERMINASI TUMBUHAN

##### **Klasifikasi**

Kingdom : Plantae  
 Super Divisi : Spermatophyta  
 Divisi : Magnoliophyta  
 Kelas : Magnoliopsida  
 Ordo : Rosales  
 Famili : Moraceae  
 Genus : *Artocarpus*  
 Species : *Artocarpus heterophyllus* Lamk.

Hasil Determinasi menurut Steenis, C.G.G.J.V, Bloembergen, H, Eyma, P.J. 1992 :

1b – 2b – 3b – 4b – 6b – 7b – 9b – 10b – 11b – 12b – 13b – 14a – 15a. golongan 8. 109b – 119b – 120a – 121b – 124a. Familia 38. Moraceae. b. 2. *Artocarpus*. a. *Artocarpus heterophyllus* Lamk.

##### Deskripsi :

Habitus : Pohon berumah satu, dengan getah yang rekat, tinggi 10 – 25 m.  
 Akar : Sistem akar tunggang.

- Batang** : Batang berkayu, percabangan monopodial, permukaan memperlihatkan bekas-bekas daun penumpu, permukaan luar coklat, kasar, kayu bagian dalam putih kekuningan.
- Daun** : Daun tunggal, memanjang atau bulat telur terbalik, panjang 12,1 – 17,5 cm, lebar 8,1 – 9,7 cm, pangkal menyempit sedikit demi sedikit, tepi rata, serupa kulit, permukaan atas hijau tua mengkilat, permukaan bawah hijau muda. Daun penumpu segitiga bulat telur.
- Bunga** : Bunga berumah satu (monoecious). Bunga majemuk bulir. Bulir betina berbentuk pipih dan silindris, anak bunga tenggelam dalam poros, bagian yang bebas panjangnya lk 0,5 cm, pada ujung berpori muncul kepala putik yang tunggal, pipih pada sisinya. Bulir jantan bentuk gada agak bengkok, kerap kali bengkok, hijau tua; anak bunga sangat kecil, tenda bertaju 2, benangsari 1.
- Buah** : Buah semu bergantung pada ranting yang pendek dari batang atau cabang utama, bentuk telur, memanjang atau lk bentuk ginjal dengan duri tempel pendek yang runcing segi 3-6, berbau menusuk; daging ketat disekeliling biji.
- Biji** : Biji bulat lonjong, panjang 3,5 cm.

Kepala UPT-LAB  
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 25 Oktober 2021

Penanggung jawab  
Determinasi Tumbuhan

Dra. Dewi Sulistyawati. M.Sc.

**Lampiran 2. Pengambilan bahan dan pembuatan serbuk daun nangka**



Daun Nangka



Daun Nangka Kering



Serbuk Daun Nangka

**Lampiran 3. Perhitungan rendemen pengeringan daun nangka**

Berat daun nangka basah = 13.000 kg

Berat daun nangka kering = 5.000 kg

$$\begin{aligned} \% \text{ Rendemen} &= \frac{\text{berat daun nangka kering}}{\text{berat daun nangka basah}} \times 100\% \\ &= \frac{5.000 \text{ kg}}{13.000 \text{ kg}} \times 100\% \\ &= 38,46\% \end{aligned}$$

**Lampiran 4. Perhitungan rendemen serbuk**

Berat daun nangka kering = 3.600 kg

Berat serbuk daun nangka = 1.700 kg

$$\begin{aligned} \% \text{ Rendemen} &= \frac{\text{berat serbuk daun nangka}}{\text{berat daun nangka kering}} \times 100\% \\ &= \frac{1.700 \text{ kg}}{3.600 \text{ kg}} \times 100\% \\ &= 47,2\% \end{aligned}$$

**Lampiran 5. Hasil perhitungan penetapan susut pengeringan serbuk daun nangka**

Susut pengeringan serbuk

- Susut pengering 1 = 4,5%
- Susut pengering 2 = 5,5%
- Susut pengering 3 = 5,5%

Rata-rata presentase susut pengeringan serbuk daun nangka

$$\begin{aligned} \% \text{ Rendemen} &= \frac{4,5+5,5+5,5}{3} \\ &= 5,16\% \end{aligned}$$

### Lampiran 6. Perhitungan rendemen ekstrak

| Botol               | Berat botol kosong (gram) | Berat botol + ekstrak (gram) | Berat ekstrak (gram) |
|---------------------|---------------------------|------------------------------|----------------------|
| 1                   | 163 g                     | 279 g                        | 116 g                |
| Berat total ekstrak |                           |                              | 116 g                |

Berat serbuk simplisia = 500 gram

Berat ekstrak kental = 116 gram

% Rendemen =  $\frac{\text{berat ekstrak kental}}{\text{berat serbuk simplisia}} \times 100\%$

$$= \frac{116 \text{ gram}}{500 \text{ gram}} \times 100\%$$

= 23,2%

### Lampiran 7. Hasil uji penetapan susut pengering serbuk daun nangka



**Lampiran 8. Hasil uji skrining fitokimia ekstrak daun nangka**



Saponin



Tanin



Flavonoid

**Lampiran 9. Penimbangan formula**

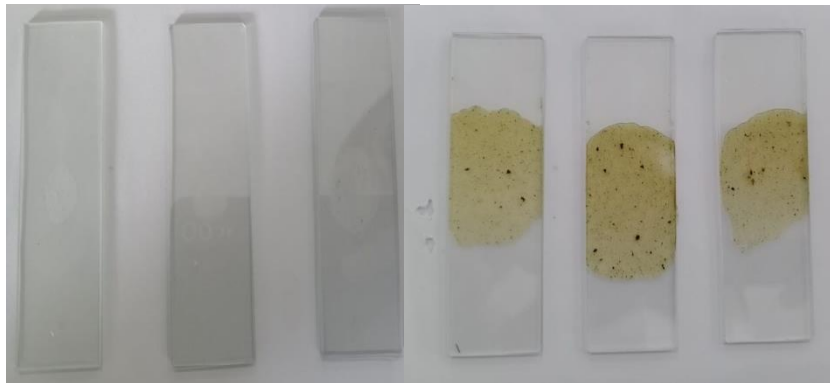


## Lampiran 10. Hasil uji mutu fisik sediaan gel

### 1. Uji organoleptis



### 2. Uji homogenitas



### 3. Uji pH

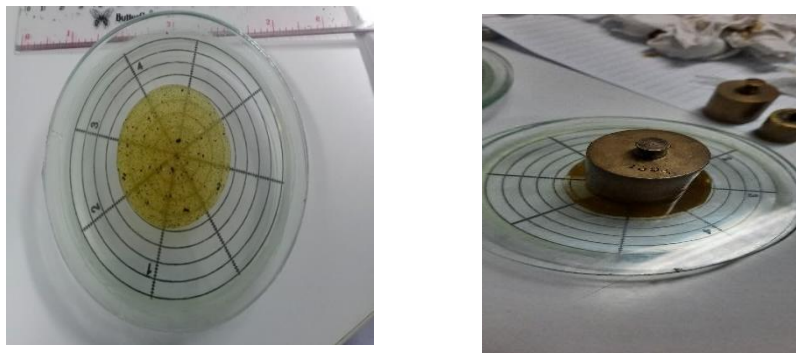




4. Uji viskositas



5. Uji daya sebar



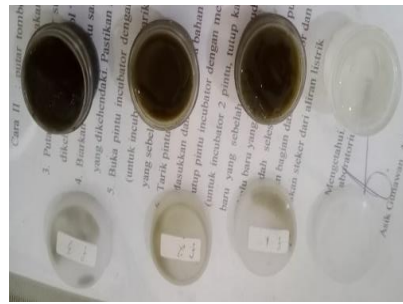
6. Uji daya lekat



7. Uji stabilitas



Sebelum uji stabilitas



Sesudah uji stabilitas

**Lampiran 11. Penyiapan hewan uji dan pembuatan luka**



Pencukuran bulu kelinci



Pembuatan luka bakar pada kelinci



Kelinci setelah dilukai

**Lampiran 12. Hasil uji aktivitas penyembuhan luka**



Hari Ke-1



Hari Ke-7



Hari Ke-14



Hari Ke-21

## Lampiran 13. Ethical clearance

9/6/2021

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 : 824 / VIII / 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

**FORMULASI DAN UJI AKTIVITAS GEL EKSTRAK ETANOL DAUN NANGKA (*Artocarpus heterophyllus* Lam.) SEBAGAI PENYEMBUH LUKA BAKAR PADA PUNGGUNG KELINCI PUTIH New Zealand.**

Principal investigator : Dinda Catur Cahyani  
Peneliti Utama 23175198A

Location of research : Universitas Setia Budi  
Lokasi Tempat Penelitian

Is ethically approved  
Dinyatakan layak etik

Issued on : 06 September 2021

Chairman  
Ketua

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

<https://komisietika.rsmdrwardi.com/kep/ethicalclearance/23175198A-1149>

1/1

## Lampiran 14. Surat keterangan hewan uji kelinci

"ABIMANYU FARM"  
 ✓ Mencit putih jantan    ✓ Tikus Wistar    ✓ Swis Webster    ✓ Cacing  
 ✓ Mencit Balb/C    ✓ Kelinci New Zealand  
 Ngampon RT 04 / RW 04, Mojosongo Kec. Jebres Surakarta. Phone 085 629 994 33 / Lab USB Ska

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Yang bertanda tangan di bawah ini:  
 Nama : Sigit Pramono

Selaku pengelola Abimanyu Farm, menerangkan bahwa hewan uji yang digunakan untuk penelitian, oleh:


Nama : Dinda Catur Cahyani  
 NIM : 23175198A  
 Institusi : Universitas Setia Budi Surakarta

Merupakan hewan uji dengan spesifikasi sebagai berikut:

Jenis hewan : Kelinci New Zealand  
 Umur : 2-3 bulan  
 Jenis kelamin : Jantan  
 Jumlah : 5 ekor  
 Keterangan : Sehat  
 Asal-usul : Unit Pengembangan Hewan Percobaan Boyolali

Yang pengembangan dan pengelolaannya disesuaikan standar baku penelitian. Demikian surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Surakarta, 7 Januari 2022  
 Hormat kami

  
Sigit Pramono  
 "ABIMANYU FARM"

### Lampiran 15. Data pengujian sifat fisik gel ekstrak daun nangka

#### a. Hasil uji pH

| <b>Waktu</b> | <b>Replikasi</b> | <b>FI</b> | <b>FII</b> | <b>FIII</b> | <b>FIV</b> |
|--------------|------------------|-----------|------------|-------------|------------|
| Hari 1       | 1                | 5,91      | 5,75       | 5,38        | 5,33       |
|              | 2                | 5,72      | 5,47       | 5,45        | 5,27       |
|              | 3                | 5,56      | 5,34       | 5,28        | 5,12       |
|              | Rata-rata        | 5,73      | 5,52       | 5,37        | 5,24       |
| Hari 21      | 1                | 5,21      | 5,18       | 5,21        | 4,76       |
|              | 2                | 5,17      | 5,15       | 4,91        | 4,59       |
|              | 3                | 5,04      | 5,04       | 4,83        | 4,5        |
|              | Rata-rata        | 5,14      | 5,12       | 4,98        | 4,62       |

#### b. Hasil uji viskositas

| <b>Waktu</b> | <b>Replikasi</b> | <b>FI</b> | <b>FII</b> | <b>FIII</b> | <b>FIV</b> |
|--------------|------------------|-----------|------------|-------------|------------|
| Hari 1       | 1                | 200       | 190        | 170         | 160        |
|              | 2                | 200       | 185        | 160         | 165        |
|              | 3                | 190       | 185        | 175         | 165        |
|              | Rata-rata        | 197       | 187        | 168         | 163        |
| Hari 21      | 1                | 230       | 200        | 200         | 180        |
|              | 2                | 230       | 200        | 180         | 185        |
|              | 3                | 240       | 200        | 180         | 180        |
|              | Rata-rata        | 233       | 200        | 187         | 182        |

#### c. Hasil uji daya sebar

| <b>Waktu</b> | <b>Replikasi</b> | <b>Beban</b> | <b>FI</b> | <b>FII</b> | <b>FIII</b> | <b>FIV</b> |
|--------------|------------------|--------------|-----------|------------|-------------|------------|
| Hari 1       | 1                | 200          | 5,2       | 5,4        | 5,4         | 5,3        |
|              | 2                | 200          | 5,2       | 5,2        | 5,5         | 5,6        |
|              | 3                | 200          | 5,4       | 5,5        | 5,4         | 5,6        |
|              | Rata-rata        |              | 5,27      | 5,37       | 5,43        | 5,50       |
| Hari 21      | 1                | 200          | 5,2       | 5,3        | 5,4         | 5,6        |
|              | 2                | 200          | 5,3       | 5,4        | 5,5         | 5,6        |
|              | 3                | 200          | 5,5       | 5,4        | 5,5         | 5,6        |
|              | Rata-rata        |              | 5,33      | 5,40       | 5,47        | 5,6        |

## d. Hasil uji daya lekat

| <b>Waktu</b> | <b>Replikasi</b> | <b>FI</b> | <b>FII</b> | <b>FIII</b> | <b>FIV</b> |
|--------------|------------------|-----------|------------|-------------|------------|
|              | 1                | 5,35      | 5,28       | 5,12        | 5,14       |
| Hari 1       | 2                | 5,24      | 5,15       | 5,08        | 5,07       |
|              | 3                | 5,20      | 5,17       | 5,03        | 4,48       |
|              | Rata-rata        | 5,26      | 5,20       | 5,08        | 4,90       |
|              | 1                | 5,52      | 5,52       | 5,43        | 5,26       |
| Hari 21      | 2                | 5,44      | 5,35       | 5,34        | 5,24       |
|              | 3                | 5,32      | 5,29       | 5,28        | 5,18       |
|              | Rata-rata        | 5,43      | 5,39       | 5,35        | 5,23       |

## Lampiran 16. Data pengujian stabilitas gel ekstrak daun nangka

### a. Hasil pengujian stabilitas uji pH

| pH      | Replikasi | Formula 1 | Formula 2 | Formula 3 | Formula 4 |
|---------|-----------|-----------|-----------|-----------|-----------|
| Sebelum | 1         | 5,83      | 5,52      | 5,28      | 5,25      |
|         | 2         | 5,45      | 5,44      | 5,32      | 5,18      |
|         | 3         | 5,38      | 5,33      | 5,17      | 5,07      |
|         | Rata-rata | 5,55      | 5,43      | 5,26      | 5,17      |
| Sesudah | 1         | 5,64      | 5,26      | 5,18      | 5,13      |
|         | 2         | 5,38      | 5,35      | 5,16      | 5,05      |
|         | 3         | 5,15      | 5,23      | 5,09      | 5,02      |
|         | rata-rata | 5,39      | 5,28      | 5,14      | 5,07      |

### b. Hasil pengujian stabilitas uji viskositas

| Waktu   | Replikasi | Formula 1 | Formula 2 | Formul 3 | Formula 4 |
|---------|-----------|-----------|-----------|----------|-----------|
| Sebelum | 1         | 240       | 200       | 185      | 178       |
|         | 2         | 228       | 195       | 160      | 165       |
|         | 3         | 200       | 178       | 180      | 150       |
|         | Rata-rata | 223       | 191       | 175      | 164       |
| Sesudah | 1         | 285       | 250       | 225      | 210       |
|         | 2         | 275       | 245       | 215      | 200       |
|         | 3         | 280       | 230       | 215      | 200       |
|         | Rata-rata | 280       | 242       | 218      | 203       |



**Lampiran 17. Hasil rata-rata diameter luka bakar**

| Data Rata-Rata Diameter Luka Bakar |                 |           |           |            |            |
|------------------------------------|-----------------|-----------|-----------|------------|------------|
|                                    | Hari            | Hari Ke-1 | Hari Ke-7 | Hari Ke-14 | Hari Ke-21 |
| Kelinci 1                          | Formula 1       | 1,35      | 1,3       | 1          | 0,2        |
|                                    | Formula 2       | 1,3       | 1,25      | 1,05       | 0,25       |
|                                    | Formula 3       | 1,4       | 1,25      | 1,025      | 0,225      |
|                                    | Kontrol Positif | 1,35      | 1,2       | 1,175      | 0,375      |
|                                    | Kontrol Negatif | 1,4       | 1,2       | 1          | 0,2        |
| Kelinci 2                          | Formula 1       | 1,3       | 1,225     | 1          | 0,252      |
|                                    | Formula 2       | 1,375     | 1,285     | 1          | 0,225      |
|                                    | Formula 3       | 1,25      | 1,25      | 1,05       | 0,3        |
|                                    | Kontrol Positif | 1,35      | 1,3       | 1,15       | 0,325      |
|                                    | Kontrol Negatif | 1,4       | 1,327     | 1,145      | 0,225      |
| Kelinci 3                          | Formula 1       | 1,45      | 1,275     | 1,1        | 0,3        |
|                                    | Formula 2       | 1,425     | 1,3       | 1          | 0,325      |
|                                    | Formula 3       | 1,425     | 1,3       | 1,175      | 0,2        |
|                                    | Kontrol Positif | 1,425     | 1,35      | 1,125      | 0,225      |
|                                    | Kontrol Negatif | 1,45      | 1,325     | 1,075      | 0,25       |
| Kelinci 4                          | Formula 1       | 1,45      | 1,375     | 1,1        | 0,225      |
|                                    | Formula 2       | 1,425     | 1,35      | 1,075      | 0,3        |
|                                    | Formula 3       | 1,475     | 1,375     | 1,157      | 0,275      |
|                                    | Kontrol Positif | 1,45      | 1,3       | 1,175      | 0,35       |
|                                    | Kontrol Negatif | 1,5       | 1,4       | 1,195      | 0,375      |
| Kelinci 5                          | Formula 1       | 1,35      | 1,225     | 1,105      | 0,2        |
|                                    | Formula 2       | 1,275     | 1,2       | 1,025      | 0,3        |
|                                    | Formula 3       | 1,35      | 1,225     | 1,1        | 0,275      |
|                                    | Kontrol Positif | 1,3       | 1,2       | 1,125      | 0,35       |
|                                    | Kontrol Negatif | 1,325     | 1,2       | 0,925      | 0,2        |

**Lampiran 18. Hasil uji presentase kesembuhan luka bakar**

| Hasil persentase pengukuran diameter luka bakar |           |           |           |                 |                 |
|---|-----------|-----------|-----------|-----------------|-----------------|
| Kelompok  | Formula 1 | Formula 2 | Formula 3 | Kontrol Positif | Kontrol Negatif |
| kelinci 1                                       | 97,80%    | 93,30%    | 97,44%    | 92,30%          | 97,90%          |
| kelinci 2                                       | 96,44%    | 97,35%    | 94,23%    | 94,50%          | 97,44%          |
| kelinci 3                                       | 95,71%    | 95,07%    | 98,02%    | 97,53%          | 97,14%          |
| kelinci 4                                       | 97,61%    | 95,56%    | 96,77%    | 94,28%          | 93,77%          |
| kelinci 5                                       | 97,80%    | 94,44%    | 96,15%    | 92,89%          | 97,71%          |
| Rat-rata  | 97,07%    | 95,14%    | 96,52%    | 94,30%          | 96,79%          |

## Lampiran 19. Hasil Uji Statistik

## Spss Uji pH

## Tests of Normality

| FORMULA | Kolmogorov-Smirnov <sup>a</sup> |      |      | Shapiro-Wilk |    |      |
|---------|---------------------------------|------|------|--------------|----|------|
|         | Statistic                       | df   | Sig. | Statistic    | df | Sig. |
| pH_1    | FI                              | .189 | 3    | .998         | 3  | .906 |
|         | FII                             | .261 | 3    | .957         | 3  | .602 |
|         | FIII                            | .213 | 3    | .990         | 3  | .806 |
|         | FIV                             | .276 | 3    | .942         | 3  | .537 |
| pH_21   | FI                              | .299 | 3    | .915         | 3  | .433 |
|         | FII                             | .308 | 3    | .902         | 3  | .391 |
|         | FIII                            | .310 | 3    | .900         | 3  | .384 |
|         | FIV                             | .247 | 3    | .969         | 3  | .664 |

## Paired Samples Statistics

|             | Mean   | N  | Std. Deviation | Std. Error Mean |
|-------------|--------|----|----------------|-----------------|
| Pair 1 pH_1 | 5.4650 | 12 | .23079         | .06662          |
| pH_21       | 4.9658 | 12 | .24751         | .07145          |

## Paired Samples Correlations

|                     | N  | Correlation | Sig. |
|---------------------|----|-------------|------|
| Pair 1 pH_1 & pH_21 | 12 | .776        | .003 |

## Paired Samples Test

|                     | Paired Differences |                |                 |   | t      | df     | Sig. (2-tailed) |       |
|---------------------|--------------------|----------------|-----------------|---|--------|--------|-----------------|-------|
|                     | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |        |        |                 |       |
|                     |                    |                |                 | Lower                                     |        |        |                 | Upper |
| Pair 1 pH_1 - pH_21 | .49917             | .16093         | .04646          | .39692                                    | .60142 | 10.745 | 11              | .000  |

## Test of Homogeneity of Variances

|       | Levene Statistic | df1 | df2 | Sig. |
|-------|------------------|-----|-----|------|
| pH_1  | .957             | 3   | 8   | .458 |
| pH_21 | 1.879            | 3   | 8   | .211 |

## ANOVA

|       |                | Sum of Squares | df | Mean Square | F      | Sig. |
|-------|----------------|----------------|----|-------------|--------|------|
| pH_1  | Between Groups | .399           | 3  | .133        | 5.679  | .022 |
|       | Within Groups  | .187           | 8  | .023        |        |      |
|       | Total          | .586           | 11 |             |        |      |
| pH_21 | Between Groups | .532           | 3  | .177        | 10.006 | .004 |
|       | Within Groups  | .142           | 8  | .018        |        |      |
|       | Total          | .674           | 11 |             |        |      |

**pH\_1**

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for alpha = 0.05 |        |
|-----------------|---|-------------------------|--------|
|                 |   | 1                       | 2      |
| FIV             | 3 | 5.2400                  |        |
| FIII            | 3 | 5.3700                  | 5.3700 |
| FII             | 3 | 5.5200                  | 5.5200 |
| FI              | 3 |                         | 5.7300 |
| Sig.            |   | .192                    | .079   |

Means for groups in homogeneous subsets are displayed.

**pH\_21**

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for alpha = 0.05 |        |
|-----------------|---|-------------------------|--------|
|                 |   | 1                       | 2      |
| FIV             | 3 | 4.6167                  |        |
| FIII            | 3 |                         | 4.9833 |
| FII             | 3 |                         | 5.1233 |
| FI              | 3 |                         | 5.1400 |
| Sig.            |   | 1.000                   | .511   |

Means for groups in homogeneous subsets are displayed.

## SPSS Uji Viskositas

Tests of Normality<sup>b</sup>

| FORMULA       | Kolmogorov-Smirnov <sup>a</sup> |      |      | Shapiro-Wilk |    |      |
|---------------|---------------------------------|------|------|--------------|----|------|
|               | Statistic                       | df   | Sig. | Statistic    | df | Sig. |
| VISKOSITAS_1  | FI                              | .385 | 3    | .750         | 3  | .000 |
|               | FII                             | .385 | 3    | .750         | 3  | .000 |
|               | FIII                            | .253 | 3    | .964         | 3  | .637 |
|               | FIV                             | .385 | 3    | .750         | 3  | .000 |
| VISKOSITAS_21 | FI                              | .385 | 3    | .750         | 3  | .000 |
|               | FIII                            | .385 | 3    | .750         | 3  | .000 |
|               | FIV                             | .385 | 3    | .750         | 3  | .000 |

a. Lilliefors Significance Correction

b. VISKOSITAS\_21 is constant when FORMULA = FII. It has been omitted.

## Test of Homogeneity of Variances

|               | Levene Statistic | df1 | df2 | Sig. |
|---------------|------------------|-----|-----|------|
| VISKOSITAS_1  | 1.895            | 3   | 8   | .209 |
| VISKOSITAS_21 | 8.889            | 3   | 8   | .006 |

## ANOVA

|               |                | Sum of Squares | df | Mean Square | F      | Sig. |
|---------------|----------------|----------------|----|-------------|--------|------|
| VISKOSITAS_1  | Between Groups | 2189.583       | 3  | 729.861     | 26.949 | .000 |
|               | Within Groups  | 216.667        | 8  | 27.083      |        |      |
|               | Total          | 2406.250       | 11 |             |        |      |
| VISKOSITAS_21 | Between Groups | 4872.917       | 3  | 1624.306    | 37.127 | .000 |
|               | Within Groups  | 350.000        | 8  | 43.750      |        |      |
|               | Total          | 5222.917       | 11 |             |        |      |

## Kruskal-Wallis

## Ranks

|               | FO... | N  | Mean Rank |
|---------------|-------|----|-----------|
| VISKOSITAS_1  | FI    | 3  | 10.83     |
|               | FII   | 3  | 8.17      |
|               | FIII  | 3  | 4.17      |
|               | FIV   | 3  | 2.83      |
|               | Total | 12 |           |
| VISKOSITAS_21 | FI    | 3  | 11.00     |
|               | FII   | 3  | 7.50      |
|               | FIII  | 3  | 4.17      |
|               | FIV   | 3  | 3.33      |
|               | Total | 12 |           |

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

|             | VISKOSITAS_1 | VISKOSITAS_21 |
|-------------|--------------|---------------|
| Chi-Square  | 9.499        | 9.146         |
| df          | 3            | 3             |
| Asymp. Sig. | .023         | .027          |

a. Kruskal Wallis Test

b. Grouping Variable: FORMULA

## SPSS uji daya sebar

Tests of Normality<sup>b</sup>

| FORMULA       | Kolmogorov-Smirnov <sup>a</sup> |      |      | Shapiro-Wilk |    |       |
|---------------|---------------------------------|------|------|--------------|----|-------|
|               | Statistic                       | df   | Sig. | Statistic    | df | Sig.  |
| DAYA_SEBAR_1  | FI                              | .385 | 3    | .750         | 3  | .000  |
|               | FII                             | .253 | 3    | .964         | 3  | .637  |
|               | FIII                            | .385 | 3    | .750         | 3  | .000  |
|               | FIV                             | .385 | 3    | .750         | 3  | .000  |
| DAYA_SEBAR_21 | FI                              | .253 | 3    | .964         | 3  | .637  |
|               | FII                             | .175 | 3    | 1.000        | 3  | 1.000 |
|               | FIII                            | .385 | 3    | .750         | 3  | .000  |

a. Lilliefors Significance Correction

b. DAYA\_SEBAR\_21 is constant when FORMULA = FIV. It has been omitted.

## Test of Homogeneity of Variances

|               | Levene Statistic | df1 | df2 | Sig. |
|---------------|------------------|-----|-----|------|
| DAYA_SEBAR_1  | 1.728            | 3   | 8   | .238 |
| DAYA_SEBAR_21 | 3.014            | 3   | 8   | .094 |

## ANOVA

|               |                | Sum of Squares | df | Mean Square | F     | Sig. |
|---------------|----------------|----------------|----|-------------|-------|------|
| DAYA_SEBAR_1  | Between Groups | .089           | 3  | .030        | 1.698 | .244 |
|               | Within Groups  | .140           | 8  | .017        |       |      |
|               | Total          | .229           | 11 |             |       |      |
| DAYA_SEBAR_21 | Between Groups | .117           | 3  | .039        | 4.242 | .045 |
|               | Within Groups  | .073           | 8  | .009        |       |      |
|               | Total          | .190           | 11 |             |       |      |

## Kruskal-Wallis

## Ranks

|               | FORMULA | N  | Mean Rank |
|---------------|---------|----|-----------|
| DAYA_SEBAR_1  | FI      | 3  | 3.50      |
|               | FII     | 3  | 6.00      |
|               | FIII    | 3  | 7.50      |
|               | FIV     | 3  | 9.00      |
|               | Total   | 12 |           |
| DAYA_SEBAR_21 | FI      | 3  | 3.67      |
|               | FII     | 3  | 4.83      |
|               | FIII    | 3  | 6.50      |
|               | FIV     | 3  | 11.00     |
|               | Total   | 12 |           |

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

|             | DAYA_SEBAR_1 | DAYA_SEBAR_21 |
|-------------|--------------|---------------|
| Chi-Square  | 4.033        | 7.591         |
| df          | 3            | 3             |
| Asymp. Sig. | .258         | .055          |

a. Kruskal Wallis Test

b. Grouping Variable: FORMULA

## SPSS uji daya lekat

## Tests of Normality

| FORMULA       | Kolmogorov-Smirnov <sup>a</sup> |      |      | Shapiro-Wilk |    |      |
|---------------|---------------------------------|------|------|--------------|----|------|
|               | Statistic                       | df   | Sig. | Statistic    | df | Sig. |
| DAYA_LEKAT_1  | FI                              | .285 | 3    | .932         | 3  | .497 |
|               | FII                             | .333 | 3    | .862         | 3  | .274 |
|               | FIII                            | .196 | 3    | .996         | 3  | .878 |
|               | FIV                             | .350 | 3    | .829         | 3  | .185 |
| DAYA_LEKAT_21 | FI                              | .219 | 3    | .987         | 3  | .780 |
|               | FII                             | .287 | 3    | .929         | 3  | .485 |
|               | FIII                            | .219 | 3    | .987         | 3  | .780 |
|               | FIV                             | .292 | 3    | .923         | 3  | .463 |

## a. Lilliefors Significance Correction

## Paired Samples Statistics

|                     | Mean   | N  | Std. Deviation | Std. Error Mean |
|---------------------|--------|----|----------------|-----------------|
| Pair 1 DAYA_LEKAT_1 | 5,1092 | 12 | .21815         | .06297          |
| DAYA_LEKAT_21       | 5,3475 | 12 | .10906         | .03148          |

## Paired Samples Correlations

|                                     | N  | Correlation | Sig. |
|-------------------------------------|----|-------------|------|
| Pair 1 DAYA_LEKAT_1 & DAYA_LEKAT_21 | 12 | .728        | .007 |

## Paired Samples Test

|                                     | Mean    | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |         | t      | df | Sig. (2-tailed) |
|-------------------------------------|---------|----------------|-----------------|---|---------|--------|----|-----------------|
|                                     |         |                |                 | Lower                                     | Upper   |        |    |                 |
|                                     |         |                |                 | Paired Differences                        |         |        |    |                 |
| Pair 1 DAYA_LEKAT_1 - DAYA_LEKAT_21 | -.23833 | .15759         | .04549          | -.33846                                   | -.13821 | -5.239 | 11 | .000            |

## Test of Homogeneity of Variances

|               | Levene Statistic | df1 | df2 | Sig. |
|---------------|------------------|-----|-----|------|
| DAYA_LEKAT_1  | 8.969            | 3   | 8   | .056 |
| DAYA_LEKAT_21 | 1.103            | 3   | 8   | .403 |

## ANOVA

|               |                | Sum of Squares | df | Mean Square | F     | Sig. |
|---------------|----------------|----------------|----|-------------|-------|------|
| DAYA_LEKAT_1  | Between Groups | .235           | 3  | .078        | 2.167 | .170 |
|               | Within Groups  | .289           | 8  | .036        |       |      |
|               | Total          | .523           | 11 |             |       |      |
| DAYA_LEKAT_21 | Between Groups | .067           | 3  | .022        | 2.819 | .107 |
|               | Within Groups  | .064           | 8  | .008        |       |      |
|               | Total          | .131           | 11 |             |       |      |

## SPSS Uji Stabilitas pH

### Homogeneous

#### DAYA\_LEKAT\_1

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for<br>alpha = 0.05 |
|-----------------|---|----------------------------|
|                 |   | 1                          |
| FIV             | 3 | 4.8967                     |
| FIII            | 3 | 5.0767                     |
| FII             | 3 | 5.2000                     |
| FI              | 3 | 5.2633                     |
| Sig.            |   | .162                       |

Means for groups in homogeneous subsets are displayed.

#### DAYA\_LEKAT\_21

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for<br>alpha = 0.05 |
|-----------------|---|----------------------------|
|                 |   | 1                          |
| FIV             | 3 | 5.2267                     |
| FIII            | 3 | 5.3500                     |
| FII             | 3 | 5.3867                     |
| FI              | 3 | 5.4267                     |
| Sig.            |   | .095                       |

Means for groups in homogeneous subsets are displayed.

#### Tests of Normality

| FORMULA    |      | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|------------|------|---------------------------------|----|------|--------------|----|------|
|            |      | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| pH_SEBELUM | FI   | .332                            | 3  | .    | .863         | 3  | .277 |
|            | FII  | .208                            | 3  | .    | .992         | 3  | .826 |
|            | FIII | .285                            | 3  | .    | .932         | 3  | .497 |
|            | FIV  | .225                            | 3  | .    | .984         | 3  | .756 |
| pH_SESUDAH | FI   | .183                            | 3  | .    | .999         | 3  | .933 |
|            | FII  | .292                            | 3  | .    | .923         | 3  | .463 |
|            | FIII | .304                            | 3  | .    | .907         | 3  | .407 |
|            | FIV  | .282                            | 3  | .    | .936         | 3  | .510 |

a. Lilliefors Significance Correction

#### Paired Samples Statistics

|                   | Mean   | N  | Std. Deviation | Std. Error Mean |
|-------------------|--------|----|----------------|-----------------|
| Pair 1 pH_SEBELUM | 5.3517 | 12 | .19867         | .05735          |
| pH_SESUDAH        | 5.2200 | 12 | .17178         | .04959          |

#### Paired Samples Correlations

|                                | N  | Correlation | Sig. |
|--------------------------------|----|-------------|------|
| Pair 1 pH_SEBELUM & pH_SESUDAH | 12 | .948        | .000 |

#### Paired Samples Test

|                                | Paired Differences |                |                 |   |        | t     | df | Sig. (2-tailed) |
|--------------------------------|--------------------|----------------|-----------------|---|--------|-------|----|-----------------|
|                                | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |        |       |    |                 |
|                                |                    |                |                 | Lower                                     | Upper  |       |    |                 |
| Pair 1 pH_SEBELUM - pH_SESUDAH | .13167             | .06562         | .01894          | .08997                                    | .17336 | 6.951 | 11 | .000            |



**Test of Homogeneity of Variances**

|            | Levene Statistic | df1 | df2 | Sig. |
|------------|------------------|-----|-----|------|
| pH_SEBELUM | 3.401            | 3   | 8   | .074 |
| pH_SESUDAH | 2.368            | 3   | 8   | .147 |

**ANOVA**

|            |                | Sum of Squares | df | Mean Square | F     | Sig. |
|------------|----------------|----------------|----|-------------|-------|------|
| pH_SEBELUM | Between Groups | .270           | 3  | .090        | 4.393 | .042 |
|            | Within Groups  | .164           | 8  | .021        |       |      |
|            | Total          | .434           | 11 |             |       |      |
| pH_SESUDAH | Between Groups | .186           | 3  | .062        | 3.564 | .067 |
|            | Within Groups  | .139           | 8  | .017        |       |      |
|            | Total          | .325           | 11 |             |       |      |

**Homogeneous****pH\_SEBELUM**

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for alpha = 0.05 |        |
|-----------------|---|-------------------------|--------|
|                 |   | 1                       | 2      |
| FIV             | 3 | 5.1667                  |        |
| FIII            | 3 | 5.2567                  | 5.2567 |
| FII             | 3 | 5.4300                  | 5.4300 |
| FI              | 3 |                         | 5.5533 |
| Sig.            |   | .189                    | .128   |

Means for groups in homogeneous subsets are displayed.

**pH\_SESUDAH**

Tukey HSD

| FOR<br>MUL<br>A | N | Subset for<br>alpha = 0.05 |
|-----------------|---|----------------------------|
|                 |   | 1                          |
| FIV             | 3 | 5.0667                     |
| FIII            | 3 | 5.1433                     |
| FII             | 3 | 5.2800                     |
| FI              | 3 | 5.3900                     |
| Sig.            |   | .066                       |

Means for groups in homogeneous subsets are displayed.

## SPSS Uji Stabilitas Viskositas

### Tests of Normality

| FORMULA            |      | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |       |
|--------------------|------|---------------------------------|----|------|--------------|----|-------|
|                    |      | Statistic                       | df | Sig. | Statistic    | df | Sig.  |
| VISKOSITAS_SEBELUM | FI   | .269                            | 3  | .    | .949         | 3  | .567  |
|                    | FII  | .302                            | 3  | .    | .910         | 3  | .417  |
|                    | FIII | .314                            | 3  | .    | .893         | 3  | .363  |
|                    | FIV  | .186                            | 3  | .    | .998         | 3  | .921  |
| VISKOSITAS_SESUDAH | FI   | .175                            | 3  | .    | 1.000        | 3  | 1.000 |
|                    | FII  | .292                            | 3  | .    | .923         | 3  | .463  |
|                    | FIII | .385                            | 3  | .    | .750         | 3  | .000  |
|                    | FIV  | .385                            | 3  | .    | .750         | 3  | .000  |

a. Lilliefors Significance Correction

### Test of Homogeneity of Variances

|                    | Levene Statistic | df1 | df2 | Sig. |
|--------------------|------------------|-----|-----|------|
| VISKOSITAS_SEBELUM | .552             | 3   | 8   | .661 |
| VISKOSITAS_SESUDAH | 1.333            | 3   | 8   | .330 |

### ANOVA

|                    |                | Sum of Squares | df | Mean Square | F      | Sig. |
|--------------------|----------------|----------------|----|-------------|--------|------|
| VISKOSITAS_SEBELUM | Between Groups | 5818.917       | 3  | 1939.639    | 8.382  | .008 |
|                    | Within Groups  | 1851.333       | 8  | 231.417     |        |      |
|                    | Total          | 7670.250       | 11 |             |        |      |
| VISKOSITAS_SESUDAH | Between Groups | 10041.667      | 3  | 3347.222    | 66.944 | .000 |
|                    | Within Groups  | 400.000        | 8  | 50.000      |        |      |
|                    | Total          | 10441.667      | 11 |             |        |      |

## Kruskal-Wallis

### Ranks

|                    | FO... | N  | Mean Rank |
|--------------------|-------|----|-----------|
| VISKOSITAS_SEBELUM | FI    | 3  | 10.83     |
|                    | FII   | 3  | 7.33      |
|                    | FIII  | 3  | 5.00      |
|                    | FIV   | 3  | 2.83      |
|                    | Total | 12 |           |
| VISKOSITAS_SESUDAH | FI    | 3  | 11.00     |
|                    | FII   | 3  | 8.00      |
|                    | FIII  | 3  | 5.00      |
|                    | FIV   | 3  | 2.00      |
|                    | Total | 12 |           |

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

|             | VISKOSITAS_SEBELUM | VISKOSITAS_SESUDAH |
|-------------|--------------------|--------------------|
| Chi-Square  | 8.173              | 10.458             |
| df          | 3                  | 3                  |
| Asymp. Sig. | .043               | .015               |

a. Kruskal Wallis Test

b. Grouping Variable: FORMULA

## SPSS Penyembuhan Luka Bakar

### Tests of Normality

|                     | Kelompok        | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|---------------------|-----------------|---------------------------------|----|------|--------------|----|------|
|                     |                 | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Diameter luka bakar | Formula 1       | ,300                            | 5  | ,161 | ,813         | 5  | ,103 |
|                     | Formula 2       | ,255                            | 5  | ,200 | ,878         | 5  | ,302 |
|                     | Formula 3       | ,300                            | 5  | ,161 | ,833         | 5  | ,146 |
|                     | Kontrol Positif | ,250                            | 5  | ,200 | ,868         | 5  | ,260 |
|                     | Kontrol Negatif | ,187                            | 5  | ,200 | ,922         | 5  | ,540 |
|                     |                 |                                 |    |      |              |    |      |

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

a. Lilliefors Significance Correction

### Test of Homogeneity of Variances

Diameterlukabakar

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 2,114            | 4   | 20  | ,117 |

### ANOVA

Diameterlukabakar

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | ,036           | 4  | ,009        | 9,785 | ,000 |
| Within Groups  | ,018           | 20 | ,001        |       |      |
| Total          | ,054           | 24 |             |       |      |

### Multiple Comparisons

Dependent Variable: Diameterlukabakar

Tukey HSD

| (I) Kelompok    | (J) Kelompok    | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-----------------|-----------------|-----------------------|------------|------|-------------------------|-------------|
|                 |                 |                       |            |      | Lower Bound             | Upper Bound |
| Formula 1       | Formula 2       | -,01170               | ,01914     | ,972 | -,0690                  | ,0456       |
|                 | Formula 3       | -,05000               | ,01914     | ,106 | -,1073                  | ,0073       |
|                 | Kontrol Positif | -,09135               | ,01914     | ,001 | -,1486                  | -,0341      |
|                 | Kontrol Negatif | ,01225                | ,01914     | ,967 | -,0450                  | ,0695       |
| Formula 2       | Formula 1       | ,01170                | ,01914     | ,972 | -,0456                  | ,0690       |
|                 | Formula 3       | -,03830               | ,01914     | ,301 | -,0956                  | ,0190       |
|                 | Kontrol Positif | -,07965               | ,01914     | ,004 | -,1369                  | -,0224      |
|                 | Kontrol Negatif | ,02395                | ,01914     | ,722 | -,0333                  | ,0812       |
| Formula 3       | Formula 1       | ,05000                | ,01914     | ,106 | -,0073                  | ,1073       |
|                 | Formula 2       | ,03830                | ,01914     | ,301 | -,0190                  | ,0956       |
|                 | Kontrol Positif | -,04135               | ,01914     | ,235 | -,0986                  | ,0159       |
|                 | Kontrol Negatif | ,06225                | ,01914     | ,029 | ,0050                   | ,1195       |
| Kontrol Positif | Formula 1       | ,09135                | ,01914     | ,001 | ,0341                   | ,1486       |
|                 | Formula 2       | ,07965                | ,01914     | ,004 | ,0224                   | ,1369       |
|                 | Formula 3       | ,04135                | ,01914     | ,235 | -,0159                  | ,0986       |
|                 | Kontrol Negatif | ,10360                | ,01914     | ,000 | ,0463                   | ,1609       |
| Kontrol Negatif | Formula 1       | -,01225               | ,01914     | ,967 | -,0695                  | ,0450       |
|                 | Formula 2       | -,02395               | ,01914     | ,722 | -,0812                  | ,0333       |
|                 | Formula 3       | -,06225               | ,01914     | ,029 | -,1195                  | -,0050      |
|                 | Kontrol Positif | -,10360               | ,01914     | ,000 | -,1609                  | -,0463      |

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

### Diameterlukabakar

Tukey HSD<sup>a</sup>

| Kelompok        | N | Subset for alpha = 0.05 |        |        |
|-----------------|---|-------------------------|--------|--------|
|                 |   | 1                       | 2      | 3      |
| Kontrol Negatif | 5 | ,9628                   |        |        |
| Formula 1       | 5 | ,9750                   | ,9750  |        |
| Formula 2       | 5 | ,9867                   | ,9867  |        |
| Formula 3       | 5 |                         | 1,0250 | 1,0250 |
| Kontrol Positif | 5 |                         |        | 1,0664 |
| Sig.            |   | ,722                    | ,106   | ,235   |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.