

**FORMULASI DAN UJI AKTIVITAS ANTIOKSIDAN SEDIAAN  
EYESHADOW KRIM EKSTRAK DAUN JATI MUDA  
(*Tectona grandis* L.) DENGAN VARIASI ASAM  
STEARAT DAN TRIETANOLAMIN**



**Oleh:**

**Aulia Putri Romadhoni  
23175283A**

**FAKULTAS FARMASI  
UNIVERSITAS SETIA BUDI  
SURAKARTA  
2021**

**Lampiran 1. Hasil determinasi tanaman jati merah (*Tectona grandis* L.f)**



**UPT-LABORATORIUM**

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

Nomor : 134/DET/UPT-LAB/18.01.2021

Hal : Hasil determinasi tumbuhan

Lamp. : -

Nama Pemesan : Aulia Putri Romadhoni  
NIM : 23175283A  
Alamat : Fakultas Farmasi, Universitas Setia Budi, Surakarta  
Nama Sampel : Jati/*Tectona grandis* L.

**HASIL DETERMINASI TUMBUHAN**

**Klasifikasi**

Kingdom : Plantae  
Super Divisi : Spermatophyta  
Divisi : Magnoliophyta  
Kelas : Magnoliopsida/Dicotyledoneae  
Ordo : Lamiales  
Famili : Lamiaceae  
Genus : *Tectona*  
Species : *Tectona grandis* L.

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 - 14b - 16a. golongan 10. 239b - 243b - 244b - 248b - 249b - 250a - 251b - 253b - 254b - 255b - 256a - 257b - 259b - 260b. familia 109. Verbenaceae. 1b - 2b - 3b - 6a.6. *Tectona*. *Tectona grandis* L.

Deskripsi:

Habitus : Pohon, tinggi sampai 40 m.

Batang : Berkayu, tegak, bulat, percabangan simpodial; batang jauh di atas tanah baru bercabang.

Akar : Akar tunggang.

Daun : Tunggal, duduk daun berhadapan, bertangkai pendek, elips atau bulat telur, ujung berbentuk baji, pangkal menyempit, panjang 36,1 – 44,5 cm, lebar 19 – 22 cm, tepi rata, tulang daun menyirip, kasar. Daun yang muda sering coklat kemerah-merahan, tak ada stipula.

Bunga : Majemuk, anak payung menggarpu, di ujung, berambut serupa tepung, ditutupi dengan kelenjar. Bunga garis tengah lk 1 cm, jarang berbilangan 5, biasanya berbilangan 6 – 7. Kelopak bentuk lonceng, pada waktu menjadi buah membesar dan melembung. Mahkota bentuk jantera corong, dengan tabung pendek, putih, kadang-kadang agak ros, leher tidak berambut. Benang sari sebanyak taju mahkota, menjulang jauh. Bakal buah beruang 4, bakal biji 4. Tangkai putik dengan ujung terbelah dua pendek.

Buah : Buah berambut kasar, inti tebal, berbiji 2 – 4.

Biji : Bulat, berbulu, waktu muda hijau, setelah tua kuning muda.

Kepala UPT-LAB  
Universitas Setia Budi



Asik Gunawan, Amdk

Surakarta, 18 Januari 2021

Penanggung jawab  
Determinasi Tumbuhan

Dra. Dewi Sulistyawati. M.Sc.

## Lampiran 2. Surat keterangan *Eticle Clearance*

2/17/2021

KEPK-RSDM



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

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

***ETHICAL CLEARANCE  
KELAIKAN ETIK***

**Nomor : 79 / II / 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

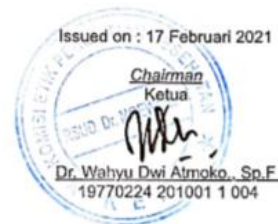
**FORMULASI DAN UJI AKTIVITAS ANTIOKSIDAN SEDIAAN EYESHADOW KRIM EKSTRAK DAUN JATI MUDA (*Tectona grandis* L. f) DENGAN VARIASI ASAM STEARAT DAN TRIETANOLAMIN**

*Principal investigator*  
Peneliti Utama : AULIA PUTRI ROMADHONI  
23175283A

*Location of research*  
Lokasi Tempat Penelitian : Universitas Setia Budi Surakarta

*Is ethically approved*  
Dinyatakan layak etik

Issued on : 17 Februari 2021



<https://komisi-etika.rsudmoewardi.com/kek/ethicalclearance/23175283A-0096>

**Lampiran 3. Gambar bahan penelitian**

**Gambar daun jati merah segar**



**Gambar daun jati merah kering**



**Gambar serbuk daun jati merah**



**Gambar ekstrak daun jati merah**

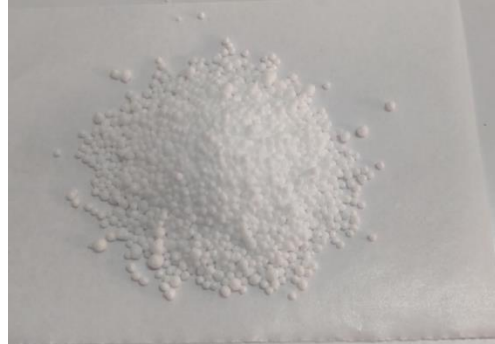




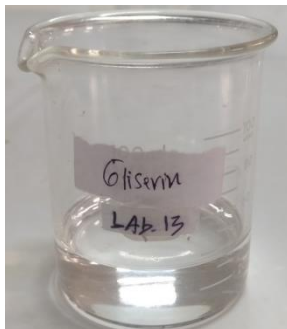
**Gambar tween 80 dan span 80**



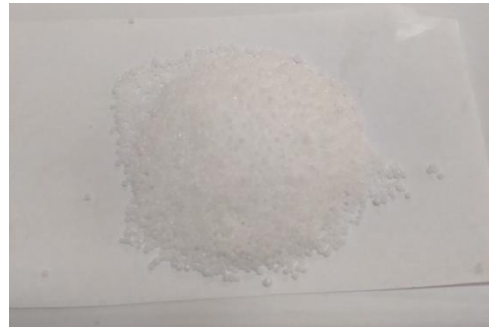
**Gambar setil alkohol**



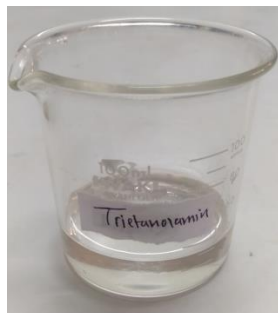
**Gambar gliserin**



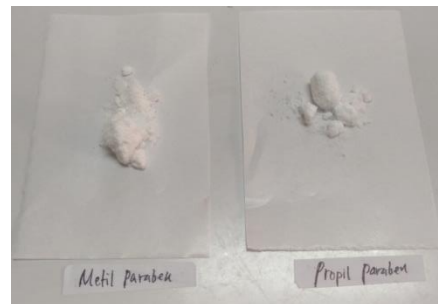
**Gambar asam stearat**



**Gambar Trietanolamin**



**Gambar metil dan propil paraben**



**Lampiran 4. Perhitungan rendemen dan susut pengeringan serbuk daun jati merah**

**Perhitungan rendemen simplisia kering daun jati merah**

| Sampel          | Bobot basah (g) | Bobot kering (g) | Rendemen (%) |
|-----------------|-----------------|------------------|--------------|
| Daun Jati merah | 12.000          | 2.299            | 19,15        |

$$\text{Rendemen simplisia kering daun jati merah} = \frac{\text{Bobot kering}}{\text{Bobot basah}} \times 100\%$$

$$= \frac{2.299}{12.000} \times 100\% = 19,15\%$$

**Perhitungan rendemen serbuk terhadap berat kering daun jati muda**

| Sampel          | Bobot kering (g) | Bobot serbuk(g) | Rendemen (%) |
|-----------------|------------------|-----------------|--------------|
| Daun jati merah | 2.299            | 1.850           | 80,46        |

$$\text{Rendemen serbuk daun jati merah} = \frac{\text{Bobot serbuk}}{\text{Bobot kering}} \times 100\%$$

$$= \frac{1.850}{2.299} \times 100\% = 80,46\%$$

**Perhitungan susut pengeringan serbuk daun jati merah**

| Replikasi | Berat serbuk | Susut pengeringan (%) |
|-----------|--------------|-----------------------|
| 1         | 2            | 9,8                   |
| 2         | 2            | 4,4                   |
| 3         | 2            | 4,7                   |
| Rata-rata |              | 6,3                   |
| SD        |              | 3.035                 |

$$\text{Persentase rata-rata susut pengeringan} = \frac{9,8+4,4+4,7}{3} = 6,3$$

**Lampiran 5. Perhitungan rendemen dan susut pengeringan ekstrak daun jati merah**

**Perhitungan rendemen ekstrak daun jati merah**

| Sampel          | Bobot serbuk (g) | Bobot ekstrak (g) | Rendemen (%) |
|-----------------|------------------|-------------------|--------------|
| Daun jati merah | 1200             | 247,72            | 20,64        |

$$\text{Rendemen ekstrak} = \frac{\text{Bobot ekstrak (g)}}{\text{Bobot serbuk (g)}} \times 100\%$$

$$= \frac{247,72}{1.200} \times 100\% = 20,64\%$$

**Perhitungan susut pengeringan ekstrak daun jati merah**

| Penimbangan                              | Replikasi |          |         | Rata-rata | SD   |
|--|-----------|----------|---------|-----------|------|
|  | 1         | 2        | 3       |           |      |
| Bobot ekstrak                            | 2         | 2        | 2       |           |      |
| Bobot kurs + ekstrak (sebelum pemanasan) | 64,9786   | 65,8021  | 65,8277 | 3.78      | 1.67 |
| Bobot kurs + ekstrak (setelah pemanasan) | 64,9011   | 65,76609 | 65,7197 |           |      |
| Susut pengeringan (%)                    | 3,87      | 2,06     | 5,40    |           |      |

$$\text{Susut pengeringan} = \frac{A-B}{C} \times 100\%$$

$$\text{Replikasi 1} = \frac{64,9786-64,9011}{2} \times 100\% = 3,87\%$$

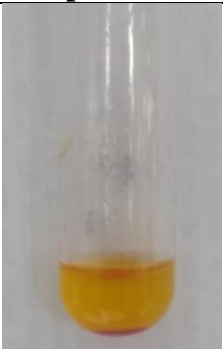
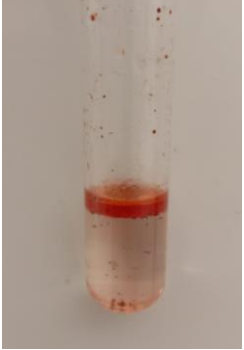


$$\text{Replikasi 2} = \frac{65,8021-65,7609}{2} \times 100\% = 2,06\%$$

$$\text{Replikasi 3} = \frac{65,8277-65,7197}{2} \times 100\% = 5,40\%$$

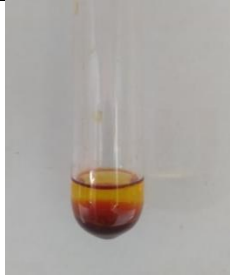
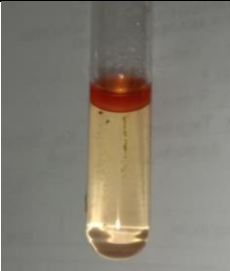
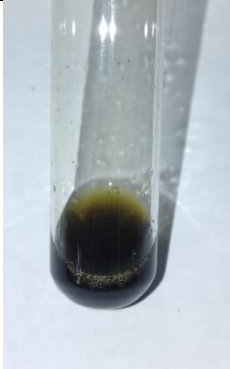



**Lampiran 6. Hasil identifikasi kandungan kimia serbuk dan ekstrak daun jati merah**




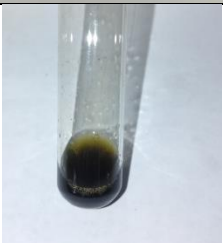
**Hasil identifikasi kandungan kimia serbuk daun jati merah**

| <b>Kandungan kimia</b> | <b>Hasil</b>                                    | <b>Interpretasi data</b>  |
|------------------------|---|---|
| Alkaloid               | Terbentuk endapan berwarna kuning jingga        |    |
| Flavonoid              | Terbentuk warna merah pada lapisan amil alkohol |   |
| Tanin                  | Larutan menjadi hijau kehitaman                 |  |
| Triterpenoid           | Terbentuk warna merah                           |  |


### Hasil identifikasi kandungan kimia ekstrak daun jati merah

| Kandungan kimia | Hasil   | Interpretasi data   |
|-----------------|---|---|
| Alkaloid        | Terbentuk endapan berwarna kuning jingga        |    |
| Flavonoid       | Terbentuk warna merah pada lapisan amil alkohol |    |
| Tanin           | Larutan menjadi hijau kehitaman                 |   |
| Triterpenoid    | Terbentuk warna merah                           |  |

**Lampiran 7. Identifikasi kandungan senyawa antosianin serbuk dan ekstrak daun jati merah**

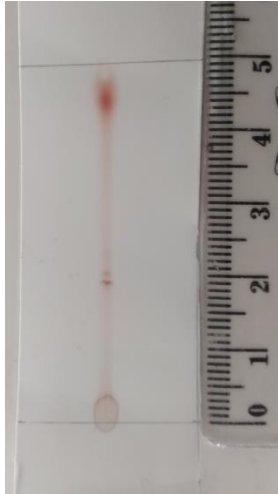
| <b>Bahan</b> | <b>Pereaksi</b> | <b>Hasil</b> | <b>Interpretasi data</b>  |
|--------------|-----------------|--------------|---|
| Serbuk       | HCL             | Merah (+)    |    |
|              | NaOH            | Hijau (+)    |   |
| Ekstrak      | HCL             | Merah (+)    |  |
|              | NaOH            | Hijau (+)    |  |

**Lampiran 8. Hasil pengujian bebas etanol ekstrak daun jati**

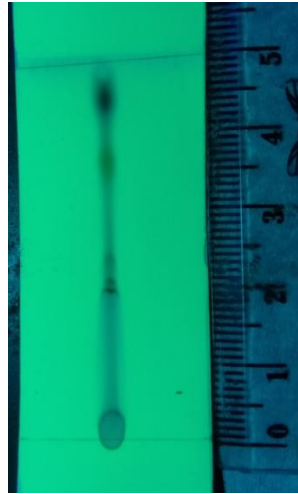
| <b>Perlakuan</b>  | <b>Hasil</b> | <b>Pustaka</b>   | <b>Interpretasi data</b>  |
|---|--------------|--|---|
| Ekstrak + H <sub>2</sub> SO <sub>4</sub><br>+ CH <sub>3</sub> COOH<br>→Dipanaskan | -            | Tidak tercium bau ester setelah dipanaskan (Raymon <i>et al.</i> , 2016) |  |

## Lampiran 9. Hasil uji KLT ekstrak daun jati

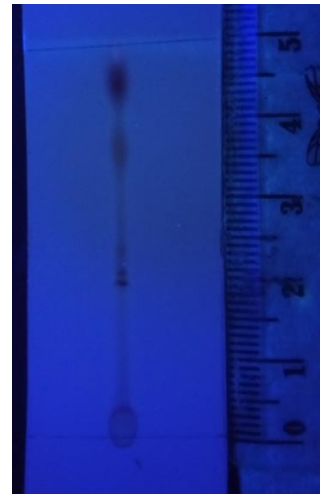
### Gambar lempeng KLT



Sinar tampak



Sinar UV 254 nm



Sinar 365 nm

Perhitungan Rf :

$$\begin{aligned} \text{Rf 1} &= \frac{a}{b} = \frac{1,9}{5} \\ &= 0,38 \end{aligned}$$

$$\begin{aligned} \text{Rf 3} &= \frac{a}{b} = \frac{2,4}{5} \\ &= 0,48 \end{aligned}$$

$$\begin{aligned} \text{Rf 5} &= \frac{a}{b} = \frac{4,6}{5} \\ &= 0,92 \end{aligned}$$

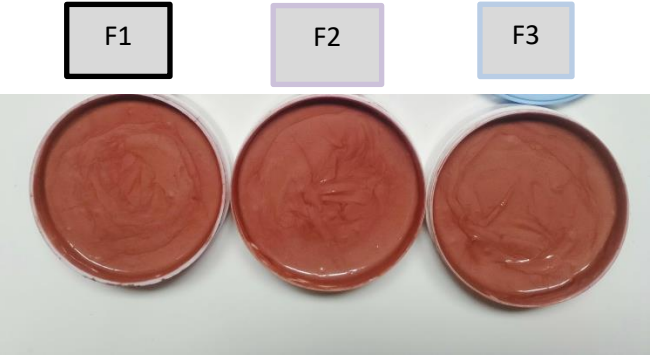
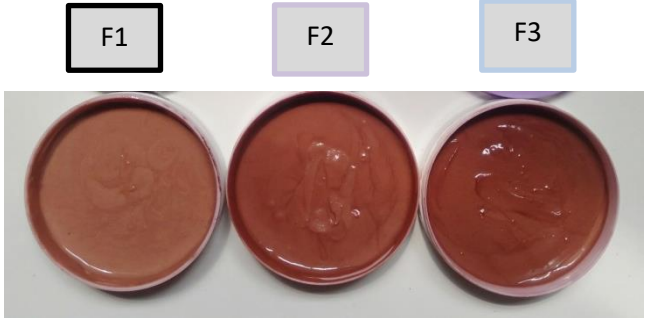
$$\begin{aligned} \text{Rf 2} &= \frac{a}{b} = \frac{2,1}{5} \\ &= 0,42 \end{aligned}$$

$$\begin{aligned} \text{Rf 4} &= \frac{a}{b} = \frac{4}{5} \\ &= 0,8 \end{aligned}$$

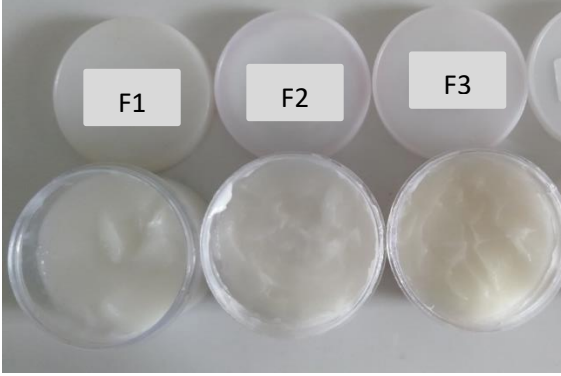
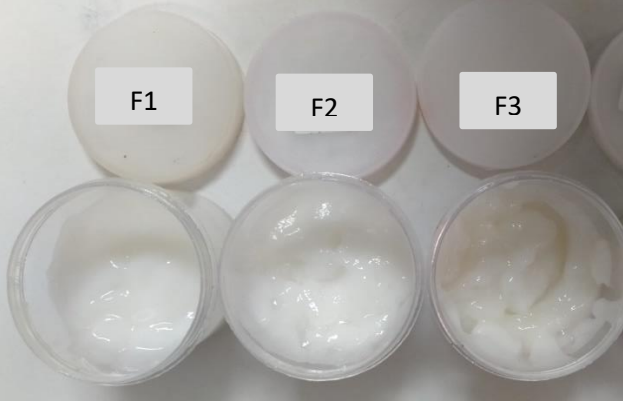
| Spot | Rf   | Warna           |                 |                | Pendugaan            | Literatur                                  |
|------|------|-----------------|-----------------|----------------|----------------------|--|
|      |      | Visual          | UV 254          | UV 365         |                      |  |
| a.1  | 0,38 | Merah lembayung | Merah gelap     | Merah          | Sianidin 3-glukosida | FHI, 2017<br>Lestario <i>et al.</i> , 2011 |
| a.2  | 0,42 | Merah lembayung | Merah gelap     | Merah          | Delfinidin           | Fitriyani <i>et al.</i> , 2018             |
| a.3  | 0,48 | Merah pudar     | Merah           | Berfluoresensi | Petunidin            | Fitriyani <i>et al.</i> , 2018             |
| a.4  | 0,8  | Merah kehijauan | Kebiruan        | Berfluoresensi | Flavonoid            | Rompas <i>et al.</i> , 2012                |
| a.5  | 0,92 | Merah           | Merah kehijauan | Merah gelap    | Pelargonidin         | Lestario <i>et al.</i> , 2011              |

**Lampiran 10. sediaan *eyeshadow* krim ekstrak daun jati merah**

**Hasil dokumentasi sediaan *eyeshadow* krim ekstrak daun jati**

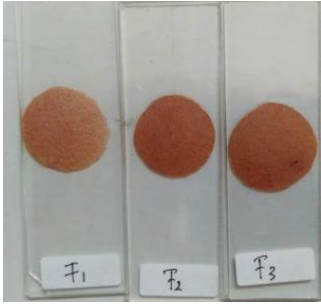
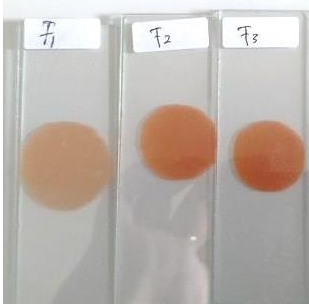
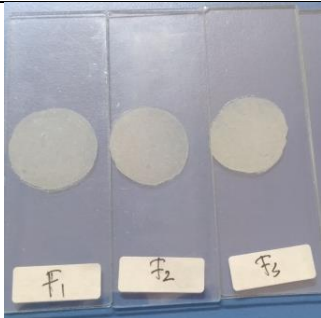
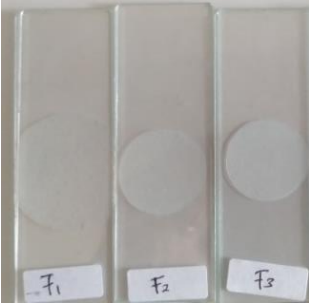
| Waktu      | Sediaan  |
|------------|--|
| Hari ke-1  |  <p>The image shows three petri dishes labeled F1, F2, and F3. Each dish contains a reddish-brown, semi-transparent cream. The cream in F1 is slightly thicker and more opaque than in F2 and F3. The dishes are arranged horizontally with their labels above them.</p>   |
| Hari ke-21 |  <p>The image shows three petri dishes labeled F1, F2, and F3. Each dish contains a reddish-brown, semi-transparent cream. The cream in F1 is slightly thicker and more opaque than in F2 and F3. The dishes are arranged horizontally with their labels above them.</p> |

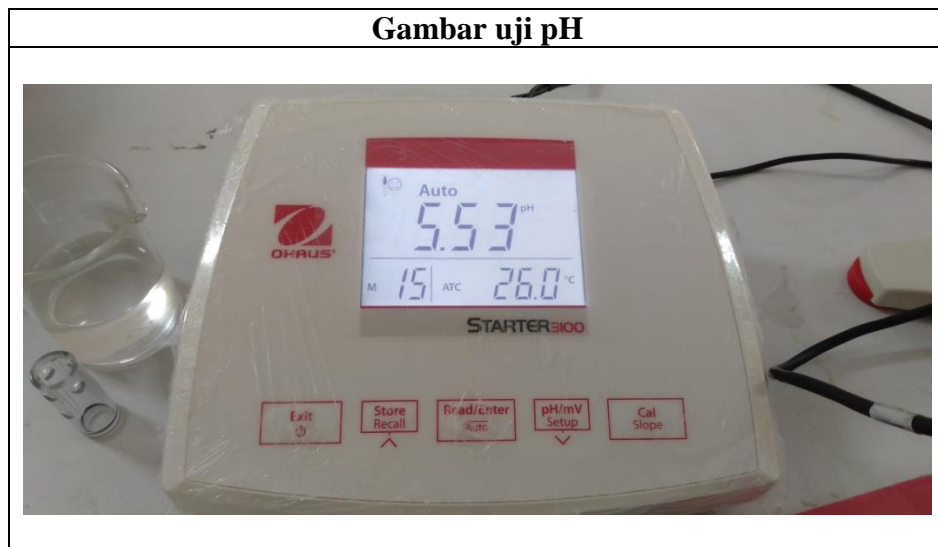
**Hasil dokumentasi kontrol negatif *eyeshadow* krim ekstrak daun jati**

| Waktu      | Sediaan   |
|------------|---|
| Hari ke-1  |   |
| Hari ke-21 |  |



**Lampiran 11. Hasil mutu fisik sediaan *eyeshadow* krim ekstrak daun jati merah**

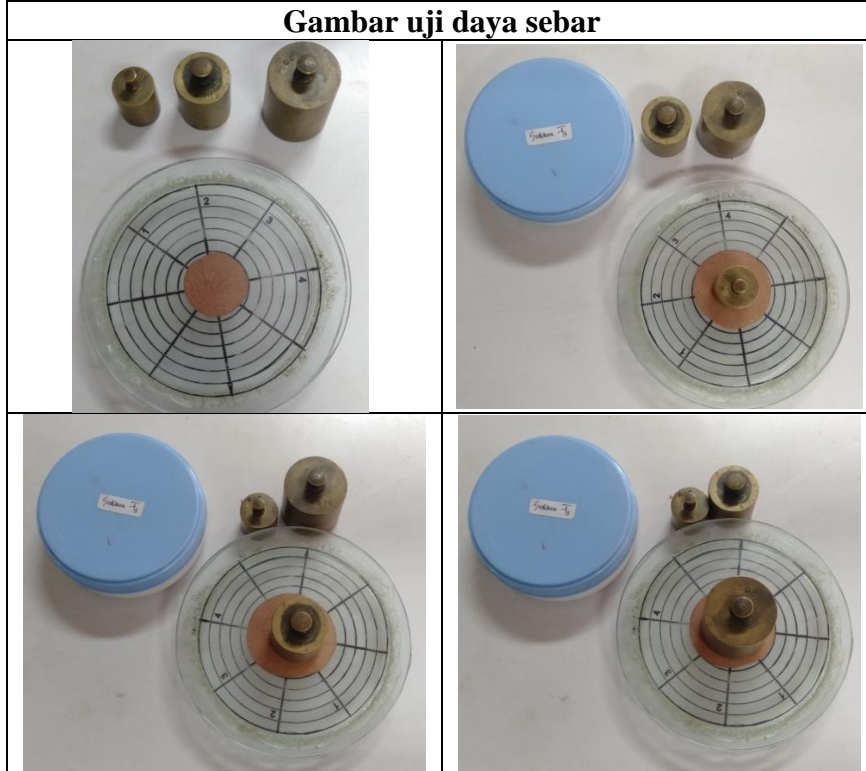
| Gambar uji homogenitas |  |   |
|------------------------|--|---|
| Bahan                  | Hari ke-1  | Hari ke-21  |
| Sediaan krim           |   |   |
| Basis                  |  |  |



**Gambar uji viskositas**



**Gambar uji daya sebar**



**Gambar uji daya lekat**



**Gambar uji daya oles**

**Sediaan krim dengan zat aktif**

**Formula 1**



**Formula 2**

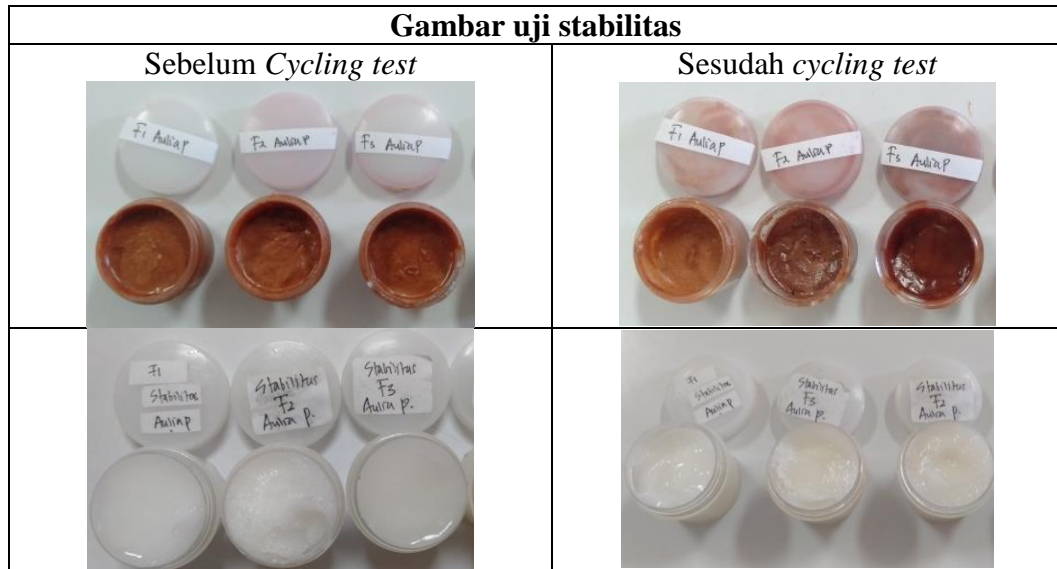


**Formula 3**

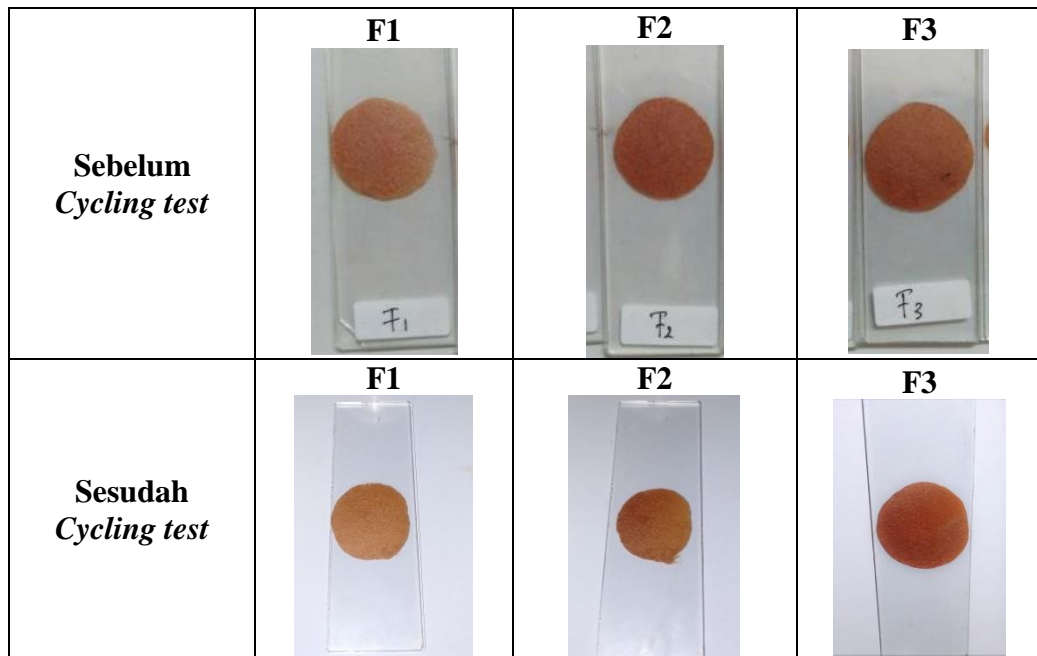







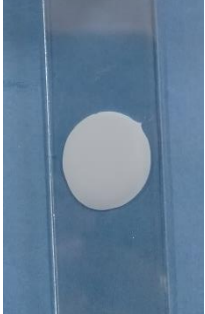
**Lampiran 12. Dokumentasi hasil uji stabilitas sediaan *eyeshadow* krim**

**Dokumentasi uji stabilitas sebelum dan sesudah *cycling test***



**Dokumentasi homogenitas sediaan krim sebelum dan sesudah *cycling test***



|  |   |  |   |
|--|---|--|---|
| <p><b>Sebelum<br/>Cycling test</b></p> | <p><b>F1</b></p>  <p>F<sub>1</sub></p> | <p><b>F2</b></p>  <p>F<sub>2</sub></p> | <p><b>F3</b></p>  <p>F<sub>3</sub></p> |
| <p><b>Sesudah<br/>Cycling test</b></p> | <p><b>F1</b></p>                      | <p><b>F2</b></p>                      | <p><b>F3</b></p>                      |

**Lampiran 13. Data hasil uji mutu fisik pH**

| Waktu      | Formula   | Replikasi |      |      | Rata - rata | SD    |
|------------|-----------|-----------|------|------|-------------|-------|
|            |           | 1         | 2    | 3    |             |       |
| Hari ke-1  | Knegatif  | 6.70      | 6.47 | 6.38 | 6.5         | 0.165 |
|            | 1         | 7.28      | 7.11 | 6.86 | 7.1         | 0.211 |
|            | 2         | 6.32      | 6.21 | 6.11 | 6.2         | 0.105 |
|            | 3         | 5.84      | 5.51 | 5.31 | 5.6         | 0.268 |
| Hari ke-21 | K.Negatif | 6.68      | 6.73 | 6.26 | 6.0         | 0.258 |
|            | 1         | 6.80      | 6.87 | 6.98 | 6.9         | 0.087 |
|            | 2         | 5.64      | 5.63 | 5.63 | 5.6         | 0.006 |
|            | 3         | 4.47      | 4.32 | 4.21 | 4.3         | 0.131 |

Keterangan :

Kontrol negatif : Basis krim tanpa penambahan ekstrak

F1 : Sediaan krim dengan perbandingan asam stearat : TEA (10 : 6,67)

F2 : Sediaan krim dengan perbandingan asam stearat : TEA (13,33 : 5)

F3 : Sediaan krim dengan perbandingan asam stearat : TEA (16,67 : 3,33)

## Lampiran 14. Hasil analisis SPSS uji mutu fisik pH

### Uji One Way ANOVA

#### ANOVA

Nilai pH

|                | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|----------------|----|-------------|--------|------|
| Between Groups | 17.372         | 3  | 5.791       | 33.807 | .000 |
| Within Groups  | 3.426          | 20 | .171        |        |      |
| Total          | 20.798         | 23 |             |        |      |

#### Tests of Normality

|          | Formula         | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|----------|-----------------|---------------------------------|----|-------------------|--------------|----|------|
|          |                 | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| Nilai pH | Kontrol negatif | .269                            | 6  | .200 <sup>*</sup> | .887         | 6  | .300 |
|          | F1              | .194                            | 6  | .200 <sup>*</sup> | .947         | 6  | .719 |
|          | F2              | .309                            | 6  | .077              | .797         | 6  | .055 |
|          | F3              | .252                            | 6  | .200 <sup>*</sup> | .880         | 6  | .269 |

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

a. Lilliefors Significance Correction

### Post Hoc Tests

#### Multiple Comparisons

Dependent Variable: Nilai pH

Tukey HSD

| (I) Formula     | (J) Formula     | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-----------------|-----------------|-----------------------|------------|------|-------------------------|-------------|
|                 |                 |                       |            |      | Lower Bound             | Upper Bound |
| Kontrol negatif | F1              | -.72667 <sup>*</sup>  | .23895     | .030 | -1.3955                 | -.0579      |
|                 | F2              | .61333                | .23895     | .080 | -.0555                  | 1.2821      |
|                 | F3              | 1.59333 <sup>*</sup>  | .23895     | .000 | .9245                   | 2.2621      |
| F1              | Kontrol negatif | .72667 <sup>*</sup>   | .23895     | .030 | .0579                   | 1.3955      |
|                 | F2              | 1.34000 <sup>*</sup>  | .23895     | .000 | .6712                   | 2.0088      |
|                 | F3              | 2.32000 <sup>*</sup>  | .23895     | .000 | 1.6512                  | 2.9888      |



|    |                 |           |        |      |         |         |
|----|-----------------|-----------|--------|------|---------|---------|
| F2 | Kontrol negatif | -.61333*  | .23895 | .080 | -1.2821 | .0555   |
|    | F1              | -1.34000* | .23895 | .000 | -2.0088 | -.6712  |
|    | F3              | .98000*   | .23895 | .003 | .3112   | 1.6488  |
| F3 | Kontrol negatif | -1.59333* | .23895 | .000 | -2.2621 | -.9245  |
|    | F1              | -2.32000* | .23895 | .000 | -2.9888 | -1.6512 |
|    | F2              | -.98000*  | .23895 | .003 | -1.6488 | -.3112  |

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

### Nilai pH

Tukey HSD<sup>a</sup>

| Formula         | N | Subset for alpha = 0.05 |        |        |
|-----------------|---|-------------------------|--------|--------|
|                 |   | 1                       | 2      | 3      |
| F3              | 6 | 4.9433                  |        |        |
| F2              | 6 |                         | 5.9233 |        |
| Kontrol negatif | 6 |                         | 6.5367 |        |
| F1              | 6 |                         |        | 7.2633 |
| Sig.            |   | 1.000                   | .080   | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

### Uji Independent T-Test

#### Tests of Normality

|       | pH         | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|-------|------------|---------------------------------|----|-------|--------------|----|------|
|       |            | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Nilai | Hari ke-1  | .100                            | 12 | .200* | .978         | 12 | .975 |
|       | Hari ke-21 | .146                            | 12 | .200* | .909         | 12 | .205 |

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

a. Lilliefors Significance Correction

**Independent Samples Test**

|       |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|-------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|       |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|       |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| Nilai | Equal variances assumed     | 7.476                                   | .012 | .898                         | 22     | .379            | .35000          | .38986                | -.45852                                   | 1.15852 |
|       | Equal variances not assumed |   |      | .898                         | 16.109 | .383            | .35000          | .38986                | -.47601                                   | 1.17601 |

**Lampiran 15. Data hasil pengujian viskositas**

| <b>Viskositas</b> |                |                  |          |          |                    |           |
|-------------------|----------------|------------------|----------|----------|--------------------|-----------|
| <b>Waktu</b>      | <b>Formula</b> | <b>Replikasi</b> |          |          | <b>Rata – rata</b> | <b>SD</b> |
|                   |                | <b>1</b>         | <b>2</b> | <b>3</b> |                    |           |
| Hari ke-1         | Knegatif       | 250              | 300      | 250      | 266,7              | 28,868    |
|                   | 1              | 100              | 120      | 140      | 120,0              | 20,000    |
|                   | 2              | 200              | 190      | 180      | 190,0              | 10,000    |
|                   | 3              | 270              | 250      | 240      | 253,3              | 15,275    |
| Hari ke-21        | K.Negatif      | 350              | 300      | 310      | 320,0              | 26,458    |
|                   | 1              | 150              | 180      | 220      | 183,3              | 35,119    |
|                   | 2              | 210              | 250      | 220      | 226,7              | 20,817    |
|                   | 3              | 330              | 300      | 310      | 313,3              | 15,275    |

Keterangan :

Kontrol negatif : Basis krim tanpa penambahan ekstrak

F1 : Sediaan krim dengan perbandingan asam stearat : TEA (10 : 6,67)

F2 : Sediaan krim dengan perbandingan asam stearat : TEA (13,33 : 5)

F3 : Sediaan krim dengan perbandingan asam stearat : TEA (16,67 : 3,33)

## Lampiran 16. Hasil analisis SPSS uji viskositas sediaan krim

### One Way ANOVA

#### ANOVA

Nilai

|                | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|----------------|----|-------------|--------|------|
| Between Groups | 80350.000      | 3  | 26783.333   | 20.576 | .000 |
| Within Groups  | 26033.333      | 20 | 1301.667    |        |      |
| Total          | 106383.333     | 23 |             |        |      |

#### Tests of Normality

|       | Viskositas      | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|-------|-----------------|---------------------------------|----|-------|--------------|----|------|
|       |                 | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Nilai | Kontrol negatif | .236                            | 6  | .200* | .898         | 6  | .361 |
|       | F1              | .182                            | 6  | .200* | .970         | 6  | .891 |
|       | F2              | .153                            | 6  | .200* | .957         | 6  | .794 |
|       | F3              | .180                            | 6  | .200* | .945         | 6  | .699 |

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

a. Lilliefors Significance Correction

### Post Hoc Tests

#### Multiple Comparisons

Dependent Variable: Nilai

Tukey HSD

| (I) Viskositas  | (J) Viskositas  | Mean Difference (I-J)   | Std. Error | Sig. | 95% Confidence Interval |             |
|-----------------|-----------------|-------------------------|------------|------|-------------------------|-------------|
|                 |                 |                         |            |      | Lower Bound             | Upper Bound |
| Kontrol negatif | F1              | 141.66667 <sup>*</sup>  | 20.83000   | .000 | 83.3648                 | 199.9685    |
|                 | F2              | 85.00000 <sup>*</sup>   | 20.83000   | .003 | 26.6982                 | 143.3018    |
|                 | F3              | 10.00000                | 20.83000   | .963 | -48.3018                | 68.3018     |
| F1              | Kontrol negatif | -141.66667 <sup>*</sup> | 20.83000   | .000 | -199.9685               | -83.3648    |
|                 | F2              | -56.66667               | 20.83000   | .059 | -114.9685               | 1.6352      |
|                 | F3              | -131.66667 <sup>*</sup> | 20.83000   | .000 | -189.9685               | -73.3648    |

|    |                 |            |          |      |           |          |
|----|-----------------|------------|----------|------|-----------|----------|
| F2 | Kontrol negatif | -85.00000* | 20.83000 | .003 | -143.3018 | -26.6982 |
|    | F1              | 56.66667   | 20.83000 | .059 | -1.6352   | 114.9685 |
|    | F3              | -75.00000* | 20.83000 | .009 | -133.3018 | -16.6982 |
| F3 | Kontrol negatif | -10.00000  | 20.83000 | .963 | -68.3018  | 48.3018  |
|    | F1              | 131.66667* | 20.83000 | .000 | 73.3648   | 189.9685 |
|    | F2              | 75.00000*  | 20.83000 | .009 | 16.6982   | 133.3018 |

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

### Nilai

Tukey HSD<sup>a</sup>

| Viskositas      | N | Subset for alpha = 0.05 |          |
|-----------------|---|-------------------------|----------|
|                 |   | 1                       | 2        |
| F1              | 6 | 151.6667                |          |
| F2              | 6 | 208.3333                |          |
| F3              | 6 |                         | 283.3333 |
| Kontrol negatif | 6 |                         | 293.3333 |
| Sig.            |   | .059                    | .963     |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

### Uji Independent T-Test

#### Tests of Normality

|       | Viskositas | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|-------|------------|---------------------------------|----|-------|--------------|----|------|
|       |            | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Nilai | Hari ke-1  | .197                            | 12 | .200* | .941         | 12 | .508 |
|       | Hari ke-21 | .229                            | 12 | .083  | .933         | 12 | .415 |

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

a. Lilliefors Significance Correction

**Independent Samples Test**

|       |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |        |
|-------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|--------|
|       |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |        |
|       |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper  |
| Nilai | Equal variances assumed     | .078                                    | .783 | -2.050                       | 22     | .052            | -53.33333       | 26.01233              | -107.27961                                | .61294 |
|       | Equal variances not assumed |   |      | -2.050                       | 21.992 | .052            | -53.33333       | 26.01233              | -107.28070                                | .61403 |

### Lampiran 17. Data hasil uji daya lekat sediaan krim

| Daya Lekat |           |           |       |       |             |       |
|------------|-----------|-----------|-------|-------|-------------|-------|
| Waktu      | Formula   | Replikasi |       |       | Rata - rata | SD    |
|            |           | 1         | 2     | 3     |             |       |
| Hari ke-1  | Knegatif  | 23,18     | 23,35 | 23,56 | 23,4        | 0,190 |
|            | 1         | 13,22     | 14,34 | 13,42 | 13,7        | 0,597 |
|            | 2         | 18,04     | 17,57 | 18,26 | 18,0        | 0,352 |
|            | 3         | 22,17     | 21,34 | 21,47 | 21,7        | 0,446 |
| Hari ke-21 | K.Negatif | 23,53     | 24,12 | 24,27 | 24,0        | 0,391 |
|            | 1         | 15,43     | 14,36 | 15,33 | 15,0        | 0,591 |
|            | 2         | 20,42     | 21,19 | 20,48 | 20,7        | 0,428 |
|            | 3         | 22,56     | 23,34 | 22,43 | 22,8        | 0,492 |

Keterangan :

Kontrol negatif : Basis krim tanpa penambahan ekstrak

F1 : Sediaan krim dengan perbandingan asam stearat : TEA (10 : 6,67)

F2 : Sediaan krim dengan perbandingan asam stearat : TEA (13,33 : 5)

F3 : Sediaan krim dengan perbandingan asam stearat : TEA (16,67 : 3,33)



## Lampiran 18. Hasil analisis SPSS uji daya lekat sediaan krim

### One Way ANOVA

#### ANOVA

Daya Lekat

|                | Sum of Squares | df | Mean Square | F       | Sig. |
|----------------|----------------|----|-------------|---------|------|
| Between Groups | 304.235        | 3  | 101.412     | 102.252 | .000 |
| Within Groups  | 19.836         | 20 | .992        |         |      |
| Total          | 324.071        | 23 |             |         |      |

#### Tests of Normality

|            | Formula         | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|------------|-----------------|---------------------------------|----|-------------------|--------------|----|------|
|            |                 | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| Daya Lekat | Kontrol negatif | .265                            | 6  | .200 <sup>*</sup> | .903         | 6  | .391 |
|            | F1              | .189                            | 6  | .200 <sup>*</sup> | .899         | 6  | .368 |
|            | F2              | .261                            | 6  | .200 <sup>*</sup> | .864         | 6  | .203 |
|            | F3              | .177                            | 6  | .200 <sup>*</sup> | .947         | 6  | .717 |

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

a. Lilliefors Significance Correction

### 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              | 9.31833 <sup>*</sup>  | .57497     | .000 | 7.7090                  | 10.9276     |
|                 | F2              | 4.34167 <sup>*</sup>  | .57497     | .000 | 2.7324                  | 5.9510      |
|                 | F3              | 1.45000               | .57497     | .087 | -.1593                  | 3.0593      |
| F1              | Kontrol negatif | -9.31833 <sup>*</sup> | .57497     | .000 | -10.9276                | -7.7090     |
|                 | F2              | -4.97667 <sup>*</sup> | .57497     | .000 | -6.5860                 | -3.3674     |
|                 | F3              | -7.86833 <sup>*</sup> | .57497     | .000 | -9.4776                 | -6.2590     |

|    |                 |           |        |      |         |         |
|----|-----------------|-----------|--------|------|---------|---------|
| F2 | Kontrol negatif | -4.34167* | .57497 | .000 | -5.9510 | -2.7324 |
|    | F1              | 4.97667*  | .57497 | .000 | 3.3674  | 6.5860  |
|    | F3              | -2.89167* | .57497 | .000 | -4.5010 | -1.2824 |
| F3 | Kontrol negatif | -1.45000  | .57497 | .087 | -3.0593 | .1593   |
|    | F1              | 7.86833*  | .57497 | .000 | 6.2590  | 9.4776  |
|    | F2              | 2.89167*  | .57497 | .000 | 1.2824  | 4.5010  |

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

### Daya Lekat

Tukey HSD<sup>a</sup>

| Formula         | N | Subset for alpha = 0.05 |         |         |
|-----------------|---|-------------------------|---------|---------|
|                 |   | 1                       | 2       | 3       |
| F1              | 6 | 14.3500                 |         |         |
| F2              | 6 |                         | 19.3267 |         |
| F3              | 6 |                         |         | 22.2183 |
| Kontrol negatif | 6 |                         |         | 23.6683 |
| Sig.            |   | 1.000                   | 1.000   | .087    |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

### Mann-Whitney Test

#### Tests of Normality

|       | Daya Lekat | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|-------|------------|---------------------------------|----|------|--------------|----|------|
|       |            | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Nilai | Hari ke-1  | .211                            | 12 | .145 | .881         | 12 | .091 |
|       | Hari ke-21 | .228                            | 12 | .086 | .837         | 12 | .026 |

a. Lilliefors Significance Correction

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

|                                | Nilai             |
|--------------------------------|-------------------|
| Mann-Whitney U                 | 54.000            |
| Wilcoxon W                     | 132.000           |
| Z                              | -1.039            |
| Asymp. Sig. (2-tailed)         | .299              |
| Exact Sig. [2*(1-tailed Sig.)] | .319 <sup>b</sup> |

a. Grouping Variable: Daya Lekat

b. Not corrected for ties.

**Lampiran 19. Data hasil pengujian daya sebar sediaan krim**

| Waktu      | Formula    | Beban | Replikasi |     |     | Rata-rata | SD   |
|------------|------------|-------|-----------|-----|-----|-----------|------|
|            |            |       | 1         | 2   | 3   |           |      |
| Hari ke-1  | K. Negatif | 0     | 6,6       | 6,4 | 6,2 | 6,40      | 0,20 |
|            |            | 50    | 6,6       | 6,8 | 7   | 6,80      | 0,20 |
|            |            | 100   | 7         | 7,3 | 6,8 | 7,03      | 0,25 |
|            |            | 200   | 7,5       | 7,2 | 7,3 | 7,33      | 0,15 |
|            | 1          | 0     | 7,6       | 7,6 | 7,4 | 7,53      | 0,12 |
|            |            | 50    | 8         | 7,7 | 7,6 | 7,77      | 0,21 |
|            |            | 100   | 8,5       | 7,5 | 8,1 | 8,03      | 0,50 |
|            |            | 200   | 8,6       | 8,3 | 8   | 8,30      | 0,30 |
|            | 2          | 0     | 6,8       | 6,5 | 6,3 | 6,53      | 0,25 |
|            |            | 50    | 6,8       | 7   | 7,4 | 7,06      | 0,28 |
|            |            | 100   | 7,4       | 7,8 | 7,6 | 7,60      | 0,20 |
|            |            | 200   | 8,1       | 8,7 | 8,1 | 8,30      | 0,35 |
|            | 3          | 0     | 6,1       | 6,4 | 6,2 | 6,23      | 0,15 |
|            |            | 50    | 6,6       | 6,9 | 6,4 | 6,63      | 0,25 |
|            |            | 100   | 7,1       | 7,3 | 6,9 | 7,10      | 0,20 |
|            |            | 200   | 7,5       | 7,6 | 7,1 | 7,40      | 0,26 |
| Hari ke-21 | K. Negatif | 0     | 6,7       | 6,4 | 6,5 | 4,81      | 0,15 |
|            |            | 50    | 6,3       | 6,8 | 6,6 | 5,20      | 0,25 |
|            |            | 100   | 6,4       | 6,7 | 7   | 5,60      | 0,30 |
|            |            | 200   | 6,3       | 7,2 | 7,5 | 6,92      | 0,62 |
|            | 1          | 0     | 7         | 6,8 | 7,2 | 7,00      | 0,14 |
|            |            | 50    | 7,6       | 7,5 | 6,7 | 7,27      | 0,49 |
|            |            | 100   | 8         | 7,9 | 7,6 | 7,83      | 0,21 |
|            |            | 200   | 7,5       | 8,4 | 8,3 | 8,07      | 0,49 |
|            | 2          | 0     | 5,6       | 5,8 | 5,7 | 5,70      | 0,10 |
|            |            | 50    | 5,9       | 6,2 | 5,9 | 6,00      | 0,17 |
|            |            | 100   | 6         | 5,8 | 5,7 | 5,83      | 0,15 |
|            |            | 200   | 6,1       | 6   | 6,3 | 6,13      | 0,15 |
|            | 3          | 0     | 5,7       | 5,4 | 5,5 | 5,53      | 0,15 |
|            |            | 50    | 5,2       | 5,9 | 5,8 | 5,63      | 0,38 |
|            |            | 100   | 5,5       | 5,8 | 6   | 5,77      | 0,25 |
|            |            | 200   | 5,9       | 6,2 | 6   | 6,03      | 0,15 |

Keterangan :

Kontrol negatif : Basis krim tanpa penambahan ekstrak

F1 : Sediaan krim dengan perbandingan asam stearat : TEA (10 : 6,67)

F2 : Sediaan krim dengan perbandingan asam stearat : TEA (13,33 : 5)

F3 : Sediaan krim dengan perbandingan asam stearat : TEA (16,67 : 3,33)

## Lampiran 20. Hasil analisis SPSS uji daya sebar sediaan krim

### One Way ANOVA

#### ANOVA

Daya Sebar

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 8.993          | 3  | 2.998       | 7.343 | .001 |
| Within Groups  | 11.429         | 28 | .408        |       |      |
| Total          | 20.422         | 31 |             |       |      |

#### Tests of Normality

|            | Formula         | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|------------|-----------------|---------------------------------|----|-------|--------------|----|------|
|            |                 | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Daya Sebar | Kontrol negatif | .142                            | 8  | .200* | .960         | 8  | .814 |
|            | F1              | .166                            | 8  | .200* | .964         | 8  | .844 |
|            | F2              | .209                            | 8  | .200* | .902         | 8  | .303 |
|            | F3              | .160                            | 8  | .200* | .921         | 8  | .434 |

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

a. Lilliefors Significance Correction

### Post Hoc Test

#### Multiple Comparisons

Dependent Variable: Daya Sebar

Tukey HSD

| (I) Formula     | (J) Formula     | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-----------------|-----------------|-----------------------|------------|------|-------------------------|-------------|
|                 |                 |                       |            |      | Lower Bound             | Upper Bound |
| Kontrol negatif | F1              | -.93000*              | .31945     | .033 | -1.8022                 | -.0578      |
|                 | F2              | .15125                | .31945     | .964 | -.7209                  | 1.0234      |
|                 | F3              | .50500                | .31945     | .405 | -.3672                  | 1.3772      |
| F1              | Kontrol negatif | .93000*               | .31945     | .033 | .0578                   | 1.8022      |
|                 | F2              | 1.08125*              | .31945     | .011 | .2091                   | 1.9534      |
|                 | F3              | 1.43500*              | .31945     | .001 | .5628                   | 2.3072      |

|    |                 |           |        |      |         |        |
|----|-----------------|-----------|--------|------|---------|--------|
| F2 | Kontrol negatif | -1.15125  | .31945 | .964 | -1.0234 | .7209  |
|    | F1              | -1.08125* | .31945 | .011 | -1.9534 | -.2091 |
|    | F3              | .35375    | .31945 | .688 | -.5184  | 1.2259 |
| F3 | Kontrol negatif | -.50500   | .31945 | .405 | -1.3772 | .3672  |
|    | F1              | -1.43500* | .31945 | .001 | -2.3072 | -.5628 |
|    | F2              | -.35375   | .31945 | .688 | -1.2259 | .5184  |

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

### Daya Sebar

Tukey HSD<sup>a</sup>

| Formula         | N | Subset for alpha = 0.05 |        |
|-----------------|---|-------------------------|--------|
|                 |   | 1                       | 2      |
| F3              | 8 | 6.2900                  |        |
| F2              | 8 | 6.6438                  |        |
| Kontrol negatif | 8 | 6.7950                  |        |
| F1              | 8 |                         | 7.7250 |
| Sig.            |   | .405                    | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.000.

### Uji Independent T-Tests

#### Tests of Normality

|       | Daya Sebar | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|-------|------------|---------------------------------|----|-------|--------------|----|------|
|       |            | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Nilai | Hari ke-1  | .093                            | 16 | .200* | .964         | 16 | .727 |
|       | Hari ke-21 | .169                            | 16 | .200* | .919         | 16 | .164 |

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

a. Lilliefors Significance Correction



**Independent Samples Test**

|       |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|-------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|       |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|       |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| Nilai | Equal variances assumed     | .747                                    | .394 | 3.054                        | 30     | .005            | .77813          | .25477                | .25781                                    | 1.29844 |
|       | Equal variances not assumed |   |      | 3.054                        | 28.927 | .005            | .77813          | .25477                | .25700                                    | 1.29925 |

## Lampiran 21. Data hasil uji stabilitas sediaan *eyeshadow* krim

### 1. Uji stabilitas terhadap pH

| Waktu                | Formula   | Replikasi |      |      | Rata - rata | SD   |
|----------------------|-----------|-----------|------|------|-------------|------|
|                      |           | 1         | 2    | 3    |             |      |
| Sebelum cycling test | K.negatif | 6,7       | 6,47 | 6,38 | 6,4         | 0,06 |
|                      | 1         | 7,28      | 7,11 | 6,86 | 7,1         | 0,21 |
|                      | 2         | 6,32      | 6,21 | 6,11 | 6,2         | 0,11 |
|                      | 3         | 5,84      | 5,51 | 5,31 | 5,6         | 0,27 |
| Sesudah cycling test | K.Negatif | 5,30      | 5,60 | 5,50 | 5,5         | 0,15 |
|                      | 1         | 7,21      | 7,32 | 7,47 | 7,3         | 0,13 |
|                      | 2         | 5,69      | 5,86 | 5,77 | 5,8         | 0,09 |
|                      | 3         | 4,78      | 5,27 | 4,63 | 4,9         | 0,33 |

### 2. Uji stabilitas terhadap nilai viskositas sediaan

| Waktu                | Formula   | Replikasi |     |     | Rata – rata | SD    |
|----------------------|-----------|-----------|-----|-----|-------------|-------|
|                      |           | 1         | 2   | 3   |             |       |
| Sebelum cycling test | K.negatif | 250       | 300 | 250 | 266,7       | 28,87 |
|                      | 1         | 100       | 120 | 140 | 120,0       | 20,00 |
|                      | 2         | 200       | 190 | 180 | 190,0       | 10,00 |
|                      | 3         | 270       | 250 | 240 | 253,3       | 15,28 |
| Sesudah cycling test | K.Negatif | 310       | 350 | 310 | 323,3       | 23,09 |
|                      | 1         | 100       | 120 | 100 | 106,7       | 11,55 |
|                      | 2         | 250       | 200 | 220 | 223,3       | 25,17 |
|                      | 3         | 300       | 320 | 300 | 306,7       | 11,55 |

**Lampiran 22. Hasil analisis SPSS terhadap uji stabilitas sediaan krim**

**1. Analisis SPSS terhadap nilai pH sediaan krim**

| Tests of Normality |                      |                                 |    |       |              |    |      |
|--------------------|----------------------|---------------------------------|----|-------|--------------|----|------|
| pH                 |                      | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|                    |                      | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Nilai              | Sebelum Cycling test | .100                            | 12 | .200* | .978         | 12 | .975 |
|                    | Sesudah Cycling test | .253                            | 12 | .033  | .872         | 12 | .070 |

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

a. Lilliefors Significance Correction

| Independent Samples Test |                             |   |      |                              |        |                 |                 |                       |   |         |
|--------------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|---------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |        |                 |                 |                       |   |         |
|                          |                             | F                                       | Sig. | t                            | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |         |
|                          |                             |   |      |                              |        |                 |                 |                       | Lower                                     | Upper   |
| Nilai                    | Equal variances assumed     | 1.953                                   | .176 | 1.454                        | 22     | .160            | .47500          | .32667                | -20246                                    | 1.15246 |
|                          | Equal variances not assumed |   |      | 1.454                        | 18.472 | .163            | .47500          | .32667                | -.21005                                   | 1.16005 |

## 2. Analisis SPSS terhadap nilai viskositas sediaan krim

**Tests of Normality**

|       | Viskositas           | Kolmogorov-Smirnov <sup>a</sup> |    |                   | Shapiro-Wilk |    |      |
|-------|----------------------|---------------------------------|----|-------------------|--------------|----|------|
|       |                      | Statistic                       | df | Sig.              | Statistic    | df | Sig. |
| Nilai | Sebelum Cycling test | .197                            | 12 | .200 <sup>*</sup> | .941         | 12 | .508 |
|       | Sesudah Cycling test | .245                            | 12 | .045              | .866         | 12 | .058 |

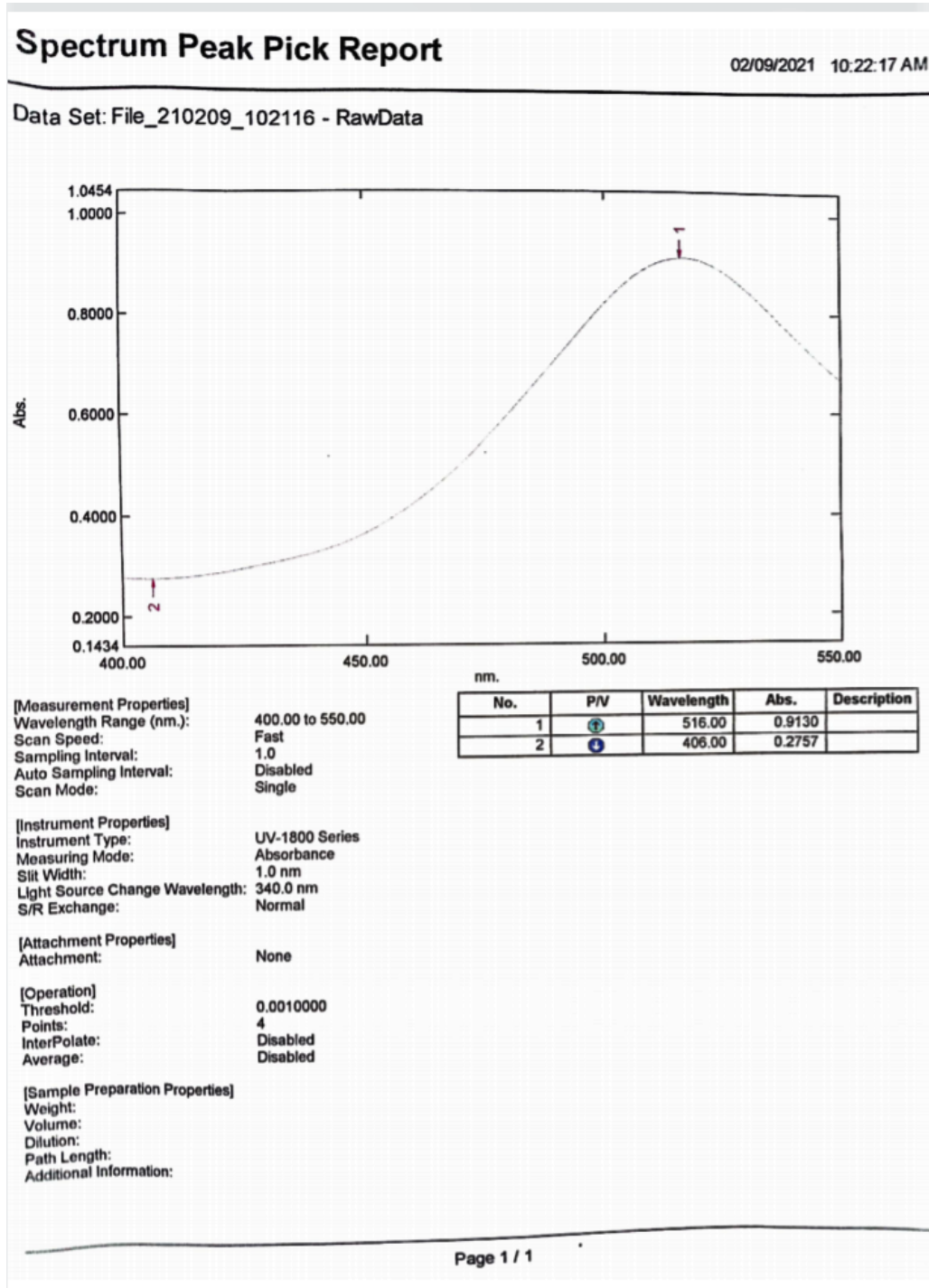
\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

**Independent Samples Test**

|       | Levene's Test for Equality of Variances | t-test for Equality of Means |      |        |        |                 |                 |                       |   |          |
|-------|---|------------------------------|------|--------|--------|-----------------|-----------------|-----------------------|---|----------|
|       |   | F                            | Sig. | t      | df     | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |          |
|       |   |                              |      |        |        |                 |                 |                       | Lower                                     | Upper    |
| Nilai | Equal variances assumed                 | 2.454                        | .132 | -1.016 | 22     | .321            | -32.50000       | 31.98307              | -98.82882                                 | 33.82882 |
|       | Equal variances not assumed             |                              |      | -1.016 | 19.589 | .322            | -32.50000       | 31.98307              | -99.30545                                 | 34.30545 |

## Lampiran 23. Penentuan panjang gelombang maksimum DPPH



## Lampiran 24. Penentuan *operating time*

### 1. *Operating time* ekstrak

#### Kinetics Data Print Report

02/09/2021 03:13:41 P

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 0.000           | 0.895       |
| 1.000           | 0.888       |
| 2.000           | 0.881       |
| 3.000           | 0.877       |
| 4.000           | 0.874       |
| 5.000           | 0.872       |
| 6.000           | 0.870       |
| 7.000           | 0.867       |
| 8.000           | 0.866       |
| 9.000           | 0.862       |
| 10.000          | 0.860       |
| 11.000          | 0.858       |
| 12.000          | 0.857       |
| 13.000          | 0.855       |
| 14.000          | 0.853       |
| 15.000          | 0.852       |
| 16.000          | 0.850       |
| 17.000          | 0.849       |
| 18.000          | 0.847       |
| 19.000          | 0.846       |
| 20.000          | 0.845       |
| 21.000          | 0.843       |
| 22.000          | 0.842       |
| 23.000          | 0.841       |
| 24.000          | 0.840       |
| 25.000          | 0.839       |
| 26.000          | 0.837       |
| 27.000          | 0.837       |
| 28.000          | 0.835       |
| 29.000          | 0.834       |
| 30.000          | 0.833       |
| 31.000          | 0.833       |
| 32.000          | 0.831       |
| 33.000          | 0.830       |
| 34.000          | 0.829       |
| 35.000          | 0.828       |
| 36.000          | 0.827       |
| 37.000          | 0.826       |
| 38.000          | 0.825       |
| 39.000          | 0.824       |
| 40.000          | 0.823       |
| 41.000          | 0.822       |
| 42.000          | 0.822       |
| 43.000          | 0.821       |
| 44.000          | 0.820       |
| 45.000          | 0.819       |
| 46.000          | 0.819       |
| 47.000          | 0.818       |
| 48.000          | 0.817       |
| 49.000          | 0.816       |
| 50.000          | 0.816       |

OT ekstrak Daun jati 100 ppm  
minut 26 + 4 = 30 menit.

#### Kinetics Data Print Report

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 51.000          | 0.815       |
| 52.000          | 0.814       |
| 53.000          | 0.814       |
| 54.000          | 0.813       |
| 55.000          | 0.812       |
| 56.000          | 0.812       |
| 57.000          | 0.811       |
| 58.000          | 0.810       |
| 59.000          | 0.810       |
| 60.000          | 0.809       |

## 2. Operating time Vitamin C

### Kinetics Data Print Report

02/09/2021 01:49:03 PM

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 0.000           | 0.831       |
| 1.000           | 0.832       |
| 2.000           | 0.829       |
| 3.000           | 0.824       |
| 4.000           | 0.824       |
| 5.000           | 0.823       |
| 6.000           | 0.822       |
| 7.000           | 0.822       |
| 8.000           | 0.822       |
| 9.000           | 0.821       |
| 10.000          | 0.821       |
| 11.000          | 0.821       |
| 12.000          | 0.820       |
| 13.000          | 0.820       |
| 14.000          | 0.820       |
| 15.000          | 0.820       |
| 16.000          | 0.819       |
| 17.000          | 0.819       |
| 18.000          | 0.819       |
| 19.000          | 0.819       |
| 20.000          | 0.819       |
| 21.000          | 0.819       |
| 22.000          | 0.819       |
| 23.000          | 0.819       |
| 24.000          | 0.819       |
| 25.000          | 0.819       |
| 26.000          | 0.819       |
| 27.000          | 0.818       |
| 28.000          | 0.819       |
| 29.000          | 0.819       |
| 30.000          | 0.819       |
| 31.000          | 0.819       |
| 32.000          | 0.819       |
| 33.000          | 0.818       |
| 34.000          | 0.818       |
| 35.000          | 0.819       |
| 36.000          | 0.819       |
| 37.000          | 0.819       |
| 38.000          | 0.819       |
| 39.000          | 0.819       |
| 40.000          | 0.819       |
| 41.000          | 0.818       |
| 42.000          | 0.819       |
| 43.000          | 0.819       |
| 44.000          | 0.819       |
| 45.000          | 0.819       |
| 46.000          | 0.819       |
| 47.000          | 0.819       |
| 48.000          | 0.819       |
| 49.000          | 0.819       |
| 50.000          | 0.819       |

OT Vit C 1 ppm  
 Menit ke 16 + 2 = 18 menit.

### Kinetics Data Print Report

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 51.000          | 0.819       |
| 52.000          | 0.819       |
| 53.000          | 0.819       |
| 54.000          | 0.819       |
| 55.000          | 0.819       |
| 56.000          | 0.819       |
| 57.000          | 0.819       |
| 58.000          | 0.819       |
| 59.000          | 0.819       |
| 60.000          | 0.820       |

### 3. Operating time sediaan eyeshadow krim

Kinetics Data Print Report

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 60.000          | 0.664       |
| 59.000          | 0.665       |
| 58.000          | 0.664       |
| 57.000          | 0.664       |
| 56.000          | 0.664       |
| 55.000          | 0.664       |
| 54.000          | 0.664       |
| 53.000          | 0.664       |
| 52.000          | 0.664       |
| 51.000          | 0.664       |
| 50.000          | 0.664       |
| 49.000          | 0.664       |
| 48.000          | 0.663       |
| 47.000          | 0.664       |
| 46.000          | 0.664       |
| 45.000          | 0.663       |
| 44.000          | 0.664       |
| 43.000          | 0.664       |
| 42.000          | 0.664       |
| 41.000          | 0.664       |
| 40.000          | 0.663       |
| 39.000          | 0.663       |
| 38.000          | 0.663       |
| 37.000          | 0.663       |
| 36.000          | 0.663       |
| 35.000          | 0.663       |
| 34.000          | 0.663       |
| 33.000          | 0.663       |
| 32.000          | 0.663       |
| 31.000          | 0.663       |
| 30.000          | 0.663       |
| 29.000          | 0.663       |
| 28.000          | 0.663       |
| 27.000          | 0.663       |
| 26.000          | 0.664       |
| 25.000          | 0.663       |
| 24.000          | 0.663       |
| 23.000          | 0.663       |
| 22.000          | 0.663       |
| 21.000          | 0.662       |
| 20.000          | 0.663       |
| 19.000          | 0.662       |
| 18.000          | 0.663       |
| 17.000          | 0.664       |
| 16.000          | 0.664       |
| 15.000          | 0.663       |
| 14.000          | 0.663       |
| 13.000          | 0.663       |
| 12.000          | 0.663       |
| 11.000          | 0.662       |
| 10.000          | 0.663       |

Kinetics Data Print Report

| Time ( Minute ) | RawData ... |
|-----------------|-------------|
| 9.000           | 0.663       |
| 8.000           | 0.663       |
| 7.000           | 0.663       |
| 6.000           | 0.664       |
| 5.000           | 0.663       |
| 4.000           | 0.665       |
| 3.000           | 0.664       |
| 2.000           | 0.664       |
| 1.000           | 0.663       |
| 0.000           | 0.664       |



## Lampiran 25. Penimbangan dan pembuatan larutan stok DPPH

Serbuk DPPH untuk uji aktivitas antioksidan ditimbang dengan perhitungan sebagai berikut :

$$\begin{aligned}\text{Penimbangan DPPH} &= \text{BM DPPH} \times \text{volume larutan} \times \text{molaritas DPPH} \\ &= 394,32 \text{ g/mol} \times 0,100 \text{ liter} \times 0,0004 \text{ M} \\ &= 15,78 \text{ mg} \approx 15,8 \text{ mg}\end{aligned}$$

Serbuk DPPH sebanyak 15,8 mg dilarutkan dengan etanol *p.a* sebanyak 100 mL dalam labu takar.

### Pembuatan larutan stok Vitamin C

Serbuk vitamin C ditimbang sebanyak 10 mg dan dilarutkan dengan etanol *p.a* dalam labu takar 100 mL sampai tanda batas sehingga diperoleh konsentrasi 100 ppm.

$$\begin{aligned}\text{Konsentrasi Vitamin C} &= 10 \text{ mg}/100\text{mL} \\ &= 100 \text{ mg}/1000\text{mL} \\ &= 100 \text{ ppm}\end{aligned}$$

Larutan stok vitamin C 100 ppm diencerkan menjadi 5 seri pengenceran yaitu 10 ppm, 20 ppm, 30 ppm, 40 ppm, dan 50 ppm dalam labu takar 10 mL.

$$\begin{aligned}\text{Konsentrasi 10 ppm} \rightarrow & V_1 \times C_1 = V_2 \times C_2 \\ & V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 10 \text{ ppm} \\ & V_1 = 1 \text{ mL}.\end{aligned}$$

$$\begin{aligned}\text{Konsentrasi 20 ppm} \rightarrow & V_1 \times C_1 = V_2 \times C_2 \\ & V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 20 \text{ ppm} \\ & V_1 = 2 \text{ mL}.\end{aligned}$$

$$\begin{aligned}\text{Konsentrasi 30 ppm} \rightarrow & V_1 \times C_1 = V_2 \times C_2 \\ & V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 30 \text{ ppm}\end{aligned}$$

$$V1 = 3 \text{ mL.}$$

**Konsentrasi 40 ppm** →  $V1 \times C1 = V2 \times C2$

$$V1 \times 100 \text{ ppm} = 10 \text{ mL} \times 40 \text{ ppm}$$

$$V1 = 4 \text{ mL.}$$

**Konsentrasi 50 ppm** →  $V1 \times C1 = V2 \times C2$

$$V1 \times 100 \text{ ppm} = 10 \text{ mL} \times 50 \text{ ppm}$$

$$V1 = 5 \text{ mL.}$$

### **Pembuatan larutan stok ekstrak etanol daun jati merah**

Ekstrak daun jati merah ditimbang sebanyak 10 mg dan dilarutkan dengan etanol p.a dalam labu takar 100 mL sampai tanda batas sehingga diperoleh konsentrasi 100 ppm.

$$\begin{aligned} \text{Konsentrasi ekstrak} &= 10 \text{ mg}/100\text{mL} \\ &= 100 \text{ mg}/1000\text{mL} \\ &= 100 \text{ ppm} \end{aligned}$$

Larutan stok ekstrak daun jati merah 100 ppm diencerkan menjadi 5 seri pengenceran yaitu 10 ppm, 20 ppm, 30 ppm, 40 ppm, dan 50 ppm dalam labu takar 10 mL.

**Konsentrasi 10 ppm** →  $V1 \times C1 = V2 \times C2$

$$V1 \times 100 \text{ ppm} = 10 \text{ mL} \times 10 \text{ ppm}$$

$$V1 = 1 \text{ mL.}$$

**Konsentrasi 20 ppm** →  $V1 \times C1 = V2 \times C2$

$$V1 \times 100 \text{ ppm} = 10 \text{ mL} \times 20 \text{ ppm}$$

$$V1 = 2 \text{ mL.}$$

**Konsentrasi 30 ppm** →  $V_1 \times C_1 = V_2 \times C_2$   
 $V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 30 \text{ ppm}$   
 $V_1 = 3 \text{ mL}.$

**Konsentrasi 40 ppm** →  $V_1 \times C_1 = V_2 \times C_2$   
 $V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 40 \text{ ppm}$   
 $V_1 = 4 \text{ mL}.$

**Konsentrasi 50 ppm** →  $V_1 \times C_1 = V_2 \times C_2$   
 $V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 50 \text{ ppm}$   
 $V_1 = 5 \text{ mL}.$

#### **Pembuatan larutan stok sediaan *eyeshadow* krim ekstrak daun jati**

Sediaan krim masing-masing ditimbang sebanyak 10 mg dan dilarutkan dengan etanol p.a dalam labu takar 100 mL sampai tanda batas sehingga diperoleh konsentrasi 100 ppm.

Konsentrasi sediaan krim = 10 mg/100mL  
= 100 mg/1000mL  
= 100 ppm

Larutan stok ekstrak daun jati merah 100 ppm diencerkan menjadi 4 seri pengenceran yaitu 60 ppm, 70 ppm, 80 ppm, dan 90 ppm dalam labu takar 10 mL.

**Konsentrasi 60 ppm** →  $V_1 \times C_1 = V_2 \times C_2$   
 $V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 60 \text{ ppm}$   
 $V_1 = 6 \text{ mL}.$

**Konsentrasi 70 ppm** →  $V_1 \times C_1 = V_2 \times C_2$   
 $V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 70 \text{ ppm}$

$$V_1 = 7 \text{ mL.}$$

**Konsentrasi 80 ppm** →  $V_1 \times C_1 = V_2 \times C_2$

$$V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 80 \text{ ppm}$$

$$V_1 = 8 \text{ mL.}$$

**Konsentrasi 90 ppm** →  $V_1 \times C_1 = V_2 \times C_2$

$$V_1 \times 100 \text{ ppm} = 10 \text{ mL} \times 90 \text{ ppm}$$

$$V_1 = 9 \text{ mL.}$$

**Lampiran 26. Perhitungan aktivitas antioksidan dan IC<sub>50</sub>**

**1. Perhitungan aktivitas antioksidan dan IC<sub>50</sub> ekstrak daun jati (ABS DPPH = 0,893)**

| <b>Replikasi I</b> |            |                   |
|--------------------|------------|-------------------|
| <b>Kons (ppm)</b>  | <b>Abs</b> | <b>% inhibisi</b> |
| 10                 | 0,534      | 40,202            |
| 20                 | 0,512      | 42,665            |
| 30                 | 0,481      | 46,137            |
| 40                 | 0,447      | 49,944            |
| 50                 | 0,402      | 54,983            |

a 35,734  
b 0,368  
r 0,992  
IC<sub>50</sub> 38,766

| <b>Replikasi II</b> |            |                   |
|---------------------|------------|-------------------|
| <b>Kons (ppm)</b>   | <b>Abs</b> | <b>% inhibisi</b> |
| 10                  | 0,542      | 39,306            |
| 20                  | 0,514      | 42,441            |
| 30                  | 0,481      | 46,137            |
| 40                  | 0,446      | 50,056            |
| 50                  | 0,405      | 54,647            |

a 35,028  
b 0,383  
r 0,998  
IC<sub>50</sub> 39,091

| <b>Replikasi III</b> |            |                   |
|----------------------|------------|-------------------|
| <b>Kons (ppm)</b>    | <b>Abs</b> | <b>% inhibisi</b> |
| 10                   | 0,542      | 39,306            |
| 20                   | 0,512      | 42,665            |
| 30                   | 0,483      | 45,913            |
| 40                   | 0,445      | 50,168            |
| 50                   | 0,405      | 54,647            |

a 35,084  
b 0,382  
r 0,997  
IC<sub>50</sub> 39,047

**Rata-rata IC<sub>50</sub> ekstrak daun jati = 38,968 ± 0,1763**

2. Perhitungan aktivitas antioksidan dan IC<sub>50</sub> Vitamin C (ABS DPPH = 0,894)

| Replikasi I |       |            |                  |         |
|-------------|-------|------------|------------------|---------|
| Kons (ppm)  | Abs   | % inhibisi | a                | 40,5928 |
| 10          | 0,485 | 45,749     | b                | 0,5000  |
| 20          | 0,451 | 49,553     | r                | 0,9946  |
| 30          | 0,388 | 56,600     | IC <sub>50</sub> | 18,8143 |
| 40          | 0,348 | 61,074     |                  |         |
| 50          | 0,313 | 64,989     |                  |         |

| Replikasi II |        |            |                  |         |
|--------------|--------|------------|------------------|---------|
| Kons (ppm)   | Abs    | % inhibisi | a                | 41,5548 |
| 10           | 0,48 1 | 46,197     | b                | 0,4664  |
| 20           | 0,442  | 50,559     | r                | 0,9951  |
| 30           | 0,398  | 55,481     | IC <sub>50</sub> | 18,1055 |
| 40           | 0,345  | 61,409     |                  |         |
| 50           | 0,321  | 64,094     |                  |         |

| Replikasi III |       |            |                  |         |
|---------------|-------|------------|------------------|---------|
| Kons (ppm)    | Abs   | % inhibisi | a                | 40,4810 |
| 10            | 0,483 | 45,973     | b                | 0,4955  |
| 20            | 0,454 | 49,217     | r                | 0,9952  |
| 30            | 0,396 | 55,705     | IC <sub>50</sub> | 19,2099 |
| 40            | 0,349 | 60,962     |                  |         |
| 50            | 0,314 | 64,877     |                  |         |

Rata-rata IC<sub>50</sub> Vitamin C= 18,7099 ± 0,5595

3. Perhitungan aktivitas antioksidan dan IC<sub>50</sub> Kontrol negatif (ABS DPPH = 0,825)

| Replikasi I |       |            |                  |         |
|-------------|-------|------------|------------------|---------|
| Kons (ppm)  | abs   | % Inhibisi |                  |         |
| 60          | 0,804 | 2,545      | a                | -9,479  |
| 70          | 0,799 | 3,152      | b                | 0,184   |
| 80          | 0,791 | 4,121      | r                | 0,940   |
| 90          | 0,773 | 6,303      | IC <sub>50</sub> | 323,255 |
| 100         | 0,741 | 10,182     |                  |         |

| Replikasi II |       |            |                  |         |
|--------------|-------|------------|------------------|---------|
| Kons (ppm)   | abs   | % Inhibisi |                  |         |
| 60           | 0,817 | 0,970      | a                | -11,636 |
| 70           | 0,796 | 3,515      | b                | 0,210   |
| 80           | 0,789 | 4,364      | r                | 0,990   |
| 90           | 0,765 | 7,273      | IC <sub>50</sub> | 293,505 |
| 100          | 0,746 | 9,576      |                  |         |

| Replikasi III |       |            |                  |         |
|---------------|-------|------------|------------------|---------|
| Kons (ppm)    | abs   | % Inhibisi |                  |         |
| 60            | 0,816 | 1,091      | a                | -13,066 |
| 70            | 0,799 | 3,152      | b                | 0,233   |
| 80            | 0,782 | 5,212      | r                | 0,998   |
| 90            | 0,759 | 8,000      | IC <sub>50</sub> | 270,670 |
| 100           | 0,740 | 10,303     |                  |         |

Rata-rata IC<sub>50</sub> Kontrol negatif sediaan = 278,404 ± 23,693

4. Perhitungan aktivitas antioksidan dan IC<sub>50</sub> Formula 1 (ABS DPPH = 0,856)

| Replikasi I |       |            |
|-------------|-------|------------|
| Kons (ppm)  | abs   | % Inhibisi |
| 60          | 0,854 | 0,234      |
| 70          | 0,804 | 6,075      |
| 80          | 0,683 | 20,210     |
| 90          | 0,552 | 35,514     |
| 100         | 0,427 | 50,117     |

a -80,934  
b 1,292  
r 0,990  
IC<sub>50</sub> 101,342

| Replikasi II |       |            |
|--------------|-------|------------|
| Kons(ppm)    | abs   | % Inhibisi |
| 60           | 0,854 | 0,234      |
| 70           | 0,805 | 5,958      |
| 80           | 0,683 | 20,210     |
| 90           | 0,554 | 35,280     |
| 100          | 0,427 | 50,117     |

a -80,911  
b 1,291  
r 0,990  
IC<sub>50</sub> 101,403

| Replikasi III |       |            |
|---------------|-------|------------|
| Kons(ppm)     | abs   | % Inhibisi |
| 60            | 0,852 | 0,467      |
| 70            | 0,805 | 5,958      |
| 80            | 0,684 | 20,093     |
| 90            | 0,553 | 35,397     |
| 100           | 0,428 | 50,000     |

a -80,421  
b 1,285  
r 0,989  
IC<sub>50</sub> 101,495

Rata-rata IC<sub>50</sub> formula 2 sediaan *eyeshadow* krim = 101,413 ± 0,077



5. Perhitungan aktivitas antioksidan dan IC<sub>50</sub> Formula 2 (ABS DPPH = 0,856)

| Replikasi I |       |            |                  |         |
|-------------|-------|------------|------------------|---------|
| Kons (ppm)  | abs   | % Inhibisi | a                |         |
| 60          | 0,841 | 1,752      | b                | 1,192   |
| 70          | 0,752 | 12,150     | r                | 0,990   |
| 80          | 0,649 | 24,182     | IC <sub>50</sub> | 101,534 |
| 90          | 0,582 | 32,009     |                  |         |
| 100         | 0,416 | 51,402     |                  |         |

| Replikasi II |       |            |                  |         |
|--------------|-------|------------|------------------|---------|
| Kons (ppm)   | abs   | % Inhibisi | a                |         |
| 60           | 0,843 | 1,519      | b                | 1,194   |
| 70           | 0,752 | 12,150     | r                | 0,990   |
| 80           | 0,647 | 24,416     | IC <sub>50</sub> | 101,539 |
| 90           | 0,582 | 32,009     |                  |         |
| 100          | 0,417 | 51,285     |                  |         |

| Replikasi III |       |        |                  |         |
|---------------|-------|--------|------------------|---------|
| PPM           | abs   | % Inh  | a                |         |
| 60            | 0,842 | 1,636  | b                | 1,189   |
| 70            | 0,751 | 12,266 | r                | 0,990   |
| 80            | 0,649 | 24,182 | IC <sub>50</sub> | 101,672 |
| 90            | 0,583 | 31,893 |                  |         |
| 100           | 0,417 | 51,285 |                  |         |

Rata-rata IC<sub>50</sub> formula 1 sediaan *eyeshadow* krim = 101,582 ± 0,078

6. Perhitungan aktivitas antioksidan dan  $IC_{50}$  Formula 3 (ABS DPPH = 0,856)

| Replikasi I |       |            |           |         |
|-------------|-------|------------|-----------|---------|
| Kons (ppm)  | abs   | % Inhibisi | a         | -27,079 |
| 60          | 0,699 | 18,341     | b         | 0,754   |
| 70          | 0,634 | 25,935     | r         | 0,990   |
| 80          | 0,567 | 33,762     | $IC_{50}$ | 102,227 |
| 90          | 0,531 | 37,967     |           |         |
| 100         | 0,428 | 50,000     |           |         |

| Replikasi II |       |            |           |         |
|--------------|-------|------------|-----------|---------|
| Kons (ppm)   | abs   | % Inhibisi | a         | -26,658 |
| 60           | 0,697 | 18,575     | b         | 0,750   |
| 70           | 0,634 | 25,935     | r         | 0,990   |
| 80           | 0,564 | 34,112     | $IC_{50}$ | 102,211 |
| 90           | 0,530 | 38,084     |           |         |
| 100          | 0,428 | 50,000     |           |         |

| Replikasi III |       |            |           |         |
|---------------|-------|------------|-----------|---------|
| Kons (ppm)    | abs   | % Inhibisi | a         | -26,986 |
| 60            | 0,698 | 18,458     | b         | 0,754   |
| 70            | 0,635 | 25,818     | r         | 0,991   |
| 80            | 0,564 | 34,112     | $IC_{50}$ | 102,103 |
| 90            | 0,530 | 38,084     |           |         |
| 100           | 0,428 | 50,000     |           |         |

Rata-rata  $IC_{50}$  formula 3 sediaan *eyeshadow* krim = 102,180 ± 0,067

## Lampiran 27. Analisis hasil SPSS terhadap aktivitas antioksidan

### Tests of Normality

|      | Formula           | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|------|-------------------|---------------------------------|----|------|--------------|----|------|
|      |                   | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| IC50 | Ekstrak Daun Jati | .240                            | 3  | .    | .974         | 3  | .693 |
|      | Vitamin C         | .340                            | 3  | .    | .849         | 3  | .239 |
|      | Kontrol negatif   | .201                            | 3  | .    | .994         | 3  | .855 |
|      | F1                | .220                            | 3  | .    | .987         | 3  | .778 |
|      | F2                | .374                            | 3  | .    | .777         | 3  | .061 |
|      | F3                | .342                            | 3  | .    | .845         | 3  | .227 |

a. Lilliefors Significance Correction

### ANOVA

IC50

|                | Sum of Squares | df | Mean Square | F       | Sig. |
|----------------|----------------|----|-------------|---------|------|
| Between Groups | 144330.277     | 5  | 28866.055   | 248.974 | .000 |
| Within Groups  | 1391.281       | 12 | 115.940     |         |      |
| Total          | 145721.559     | 17 |             |         |      |

### IC50



















Tukey HSD<sup>a</sup>













| Formula           | N | Subset for alpha = 0.05 |          |          |
|-------------------|---|-------------------------|----------|----------|
|                   |   | 1                       | 2        | 3        |
| Ekstrak Daun Jati | 3 | 18.7107                 |          |          |
| Vitamin C         | 3 | 38.9680                 |          |          |
| F1                | 3 |                         | 101.4133 |          |
| F2                | 3 |                         | 101.5817 |          |
| F3                | 3 |                         | 102.1803 |          |
| Kontrol negatif   | 3 |                         |          | 295.8100 |
| Sig.              |   | .264                    | 1.000    | 1.000    |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

**Lampiran 28. Hasil evaluasi keamanan *eyeshadow* krim ekstrak daun jati dengan metode *patch test***

| Probandus | Hasil   |  |   |
|-----------|---|--|---|
|           | Jam ke-24   | Jam ke-48  | Jam ke-72   |
| 1         |    |    |    |
| 2         |    |    |    |
| 3         |   |   |   |
| 4         |  |  |  |
| 5         |  |  |  |
| 6         |  |  |  |

| Probandus | Hasil   |  |   |
|-----------|---|--|---|
|           | Jam ke-24   | Jam ke-48  | Jam ke-72   |
| 7         |    |    |    |
| 8         |    |    |    |
| 9         |   |   |   |
| 10        |  |  |  |

| Uji iritasi sediaan eyeshadow krim |             |         |       |         |       |         |
|------------------------------------|-------------|---------|-------|---------|-------|---------|
| Probandus                          | Waktu (jam) |         |       |         |       |         |
|                                    | 24          |         | 72    |         | 48    |         |
|                                    | Edema       | Eritema | Edema | Eritema | Edema | Eritema |
| 1                                  | 0           | 0       | 0     | 0       | 0     | 0       |
| 2                                  | 0           | 0       | 0     | 0       | 0     | 0       |
| 3                                  | 0           | 0       | 0     | 0       | 0     | 0       |
| 4                                  | 0           | 0       | 0     | 0       | 0     | 0       |
| 5                                  | 0           | 0       | 0     | 0       | 0     | 0       |

|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 6  | 0 | 0 | 0 | 0 | 0 | 0 |
| 7  | 0 | 0 | 0 | 0 | 0 | 0 |
| 8  | 0 | 0 | 0 | 0 | 0 | 0 |
| 9  | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 |

$$\text{Derajat iritasi} = \frac{\text{Skor eritema (24+48+72 jam)} + (\text{Skor edema (24+48+72 jam)})}{\text{Jumlah relawan}}$$

$$= \frac{(0+0+0) + (0+0+0)}{10}$$

$$= 0$$

**Lampiran 30. Hasil uji kesukaan responden terhadap sediaan *eyeshadow* krim ekstrak daun jati (Formula 3)**

| <b>Uji kesukaan responden terhadap formula 3 sediaan<br/>eyeshadow krim ekstrak daun jati</b> |                        |              |              |
|---|------------------------|--------------|--------------|
| <b>Panelis</b>  | <b>Jenis penilaian</b> |              |              |
|   | <b>Tekstur</b>         | <b>Aroma</b> | <b>Warna</b> |
| 1   | 5                      | 5            | 5            |
| 2   | 5                      | 5            | 5            |
| 3   | 4                      | 5            | 4            |
| 4   | 5                      | 5            | 4            |
| 5   | 4                      | 5            | 5            |
| 6   | 5                      | 5            | 3            |
| 7   | 5                      | 5            | 5            |
| 8   | 5                      | 5            | 5            |
| 9   | 4                      | 5            | 4            |
| 10  | 5                      | 5            | 4            |
| Total   | 47                     | 50           | 44           |
| Rata - rata   | 4,7                    | 5            | 4,4          |

Keterangan (1) bila sangat tidak suka

(2) bila tidak suka

(3) bila sedikit suka

(4) bila suka

(5) bila sangat suka