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# nazlia.jpgLampiran 1. Hasil Identifikasi Sampel Daun Belimbing Wuluh (*Averrhoa bilimbi* L.)

# Lampiran 2. Pengolahan Sampel



Sampel Segar Daun Belimbing Wuluh (*Averrhoa bilimbi L.*)



Simplisia Daun Belimbing Wuluh (*Averrhoa bilimbi L.*)

**Lampiran 2**. (lanjutan)



Serbuk simplisia Daun Belimbing Wuluh (*Averrhoa bilimbi L.*)



Ekstrak Etanol Daun Belimbing Wuluh (*Averrhoa bilimbi L.*)

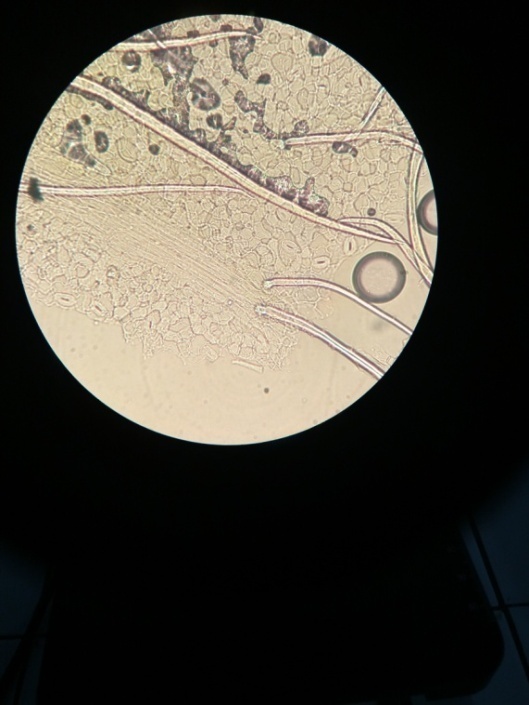
# Lampiran 3. Gambar makroskopis dan mikroskopis daun belimbing wuluh (*Averrhoa bilimbi L.*)

1. Uji Makroskopis

**Lampiran 3**. (Lanjutan)

1. Uji Mikroskopis

Daun belimbing wuluh segar



Perbesaran 40x Perbesaran 40x

Serbuk simplisia daun belimbing wuluh



Perbesaran 40x

# Lampiran 4. Perhitungan penetapan kadar air simplisia daun belimbing wuluh (*Averrhoa bilimbi L.*)

%Kadar air = x 100%

|  |  |  |
| --- | --- | --- |
| **No** | **Berat Sampel (gr)** | **Volume akhir - Volume awal (ml)** |
| 1. | 5 | 0,2 |
| 2. | 5 | 0,15 |
| 3. | 5 | 0,1 |

1. %Kadar air = x 100% = 4%
2. %Kadar air = x 100% = 3%
3. %Kadar air = x 100%= 2%

Rata-Rata = = = 3%

Syarat: Tidak boleh dari 10%

# Lampiran 5. Perhitungan penetapan kadar sari larut dalam air simplisia daun belimbing wuluh (*Averrhoa bilimbi L.*)

%Kadar = x 100%

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Berat Sampel (gr)** | **Berat Cawan Kosong** | **Berat Setelah Diuapkan (gr)** |
| 1. | 5 | 59,75 | 59,92 |
| 2. | 5 | 64,50 | 64,68 |
| 3. | 5 | 29,11 | 29,30 |

1. %Kadar = x 100% = 17 %
2. %Kadar = x 100% = 18 %
3. %Kadar = x 100% = 19 %

Rata-rata = = 18 %

Syarat: Tidak kurang dari 8%

# Lampiran 6. Perhitungan penetapan kadar sari larut dalam etanol simplisia daun belimbing wuluh (*Averrhoa bilimbi L.*)

%Kadar = x 100%

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Berat Sampel (gr)** | **Berat Cawan Kosong** | **Berat Setelah Diuapkan (gr)** |
| 1. | 5 | 55,21 | 55,41 |
| 2. | 5 | 64,49 | 64,72 |
| 3. | 5 | 53,46 | 53,61 |

1. %Kadar = x 100% = 20 %
2. %Kadar = x 100% = 23 %
3. %Kadar = x 100% = 15 %

Rata-rata = = 19,33 %

Syarat: Tidak kurang dari 6,5 %

# Lampiran 7. Perhitungan penetapan kadar abu total simplisia daun belimbing wuluh (*Averrhoa bilimbi L.*)

%Kadar = x 100%

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Berat Sampel (gr)** | **Berat Cawan Kosong** | **Berat Setelah Dipijar (gr)** |
| 1. | 2 | 60,99 | 61,16 |
| 2. | 2 | 68,55 | 68,65 |
| 3. | 2 | 67,21 | 67,31 |

1. %Kadar = x 100% = 8,5%

1. %Kadar = x 100% = 5%
2. %Kadar = x 100% = 5%

Rata-rata = = 6,16%

Syarat: Tidak lebih dari 8%

# Lampiran 8. Perhitungan penetapan kadar abu tidak larut asam simplisia daun belimbing wuluh (*Averrhoa bilimbi L.*)

%Kadar = x 100%

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Berat Sampel (gr)** | **Berat Cawan Kosong** | **Berat Setelah Diuapkan (gr)** |
| 1. | 2 | 60,99 | 61,00 |
| 2. | 2 | 68,55 | 68,60 |
| 3. | 2 | 67,21 | 67,23 |

1. %Kadar = x 100% = 0,5%
2. %Kadar = x 100% = 2,5%
3. %Kadar = x 100% = 1%

Rata-rata = = 1,33 %

Syarat: Tidak lebih dari 2 %

# Lampiran 9. Perhitungan susut pengeringan dan persen rendemen

|  |  |
| --- | --- |
| Berat segar | 6,5 kg |
| Berat kering | 2,9 kg |
| Berat serbuk | 2,3 kg |
| Berat ekstrak | 132,97 g |

Susut pengeringan = x 100%

= x 100%

= 55,38 %

% Rendemen = x 100%

% Rendemen = x 100% = 14,77 %

# Lampiran 10. Bagan alir pembuatan ekstrak etanol daun belimbing wuluh (*Averrhoa bilimbi L.*)

Daun belimbing wuluh segar

Disortasi dan dicuci

Ditiriskan

Ditimbang

Daun belimbing wuluh 6,5 kg

Dikeringkan dan dihaluskan

Ditimbang

Serbuk simplisia 2,3 kg

Dimaserasi dengan 6.750 mL etanol 96% selama 5 hari

Disaring

Residu

Filtrat I

Dimaserasi dengan 2.250 mL etanol 96% selama 2 hari, lalu disaring

Filtrat I + Filtrat II 7000 mL

Dipekatkan dengan *rotary evaporator*

Ekstrak kental 132,97 gram

# Lampiran 11. Bagan alir pembuatan sediaan masker gel peel-off ekstrak daun belimbing wuluh (*Averrhoa bilimbi L.*)

Hidroksipropilmetilcellulosa (HPMC)

Polivinil alkohol (PVA)

Ditimbang

Ditambahkan air panas

Digerus sampai homogen

Ditimbang

Ditambahkan air panas

Dipanaskan hingga larut

# Lampiran 12. Sediaan masker gel peel-off ekstrak etanol daun belimbing wuluh (Averrhoa bilimbi L.)

Dilarutkan

Masker gel peel-off ekstrak daun belimbing wuluh

Ditambahkan ekstrak daun belimbing wuluh konsentrasi 6%, 9% dan 12%

Basis masker gel *peel-off*

Digerus sampai tercampur dan homogen

Campuran

Massa 3

Propilenglikol, propil paraben dan metil paraben

Massa 2

Massa 1

****

Keterangan:

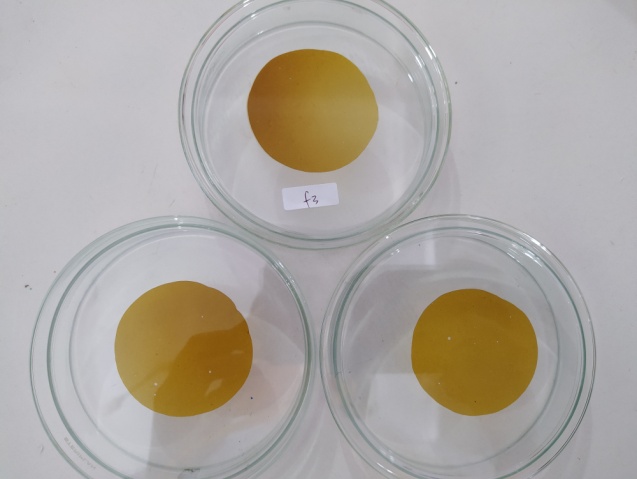
F0: Blanko

F1: Konsentrasi EEDBW 6%

F2: Konsentrasi EEDBW 9%

F3: Konsentrasi EEDBW 12%

# Lampiran 13. Uji Homogenitas



a

c

b

Keterangan: a. Pengulangan 1

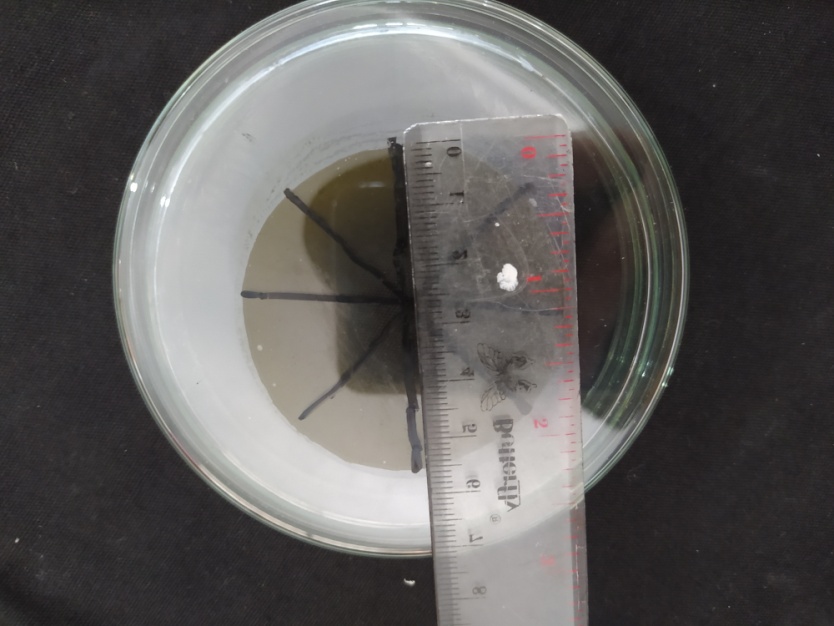
b. Pengulangan 2

c. Pengulangan 3

# Lampiran 14. Hasil Uji pH



# Lampiran 15. Hasil Uji Daya Sebar



# Lampiran 16. Hasil Uji Viskositas

****

# Lampiran 17. Hasil Uji iritasi terhadap sediaan Masker Gel *Peel-off* Ekstrak Etanol Daun Belimbing Wuluh



Saat dioleskan pada bagian belakang telinga



Hasil setelah pengolesan uji iritas

# Lampiran 18. Hasil Uji Waktu Kering

****

F1 6%

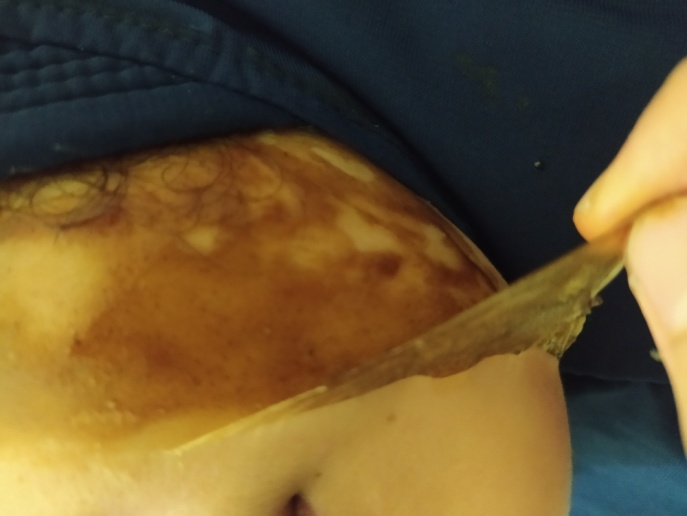
F2 9%

F4 12%

F0 Blanko

# Lampiran19. Penggunaan Masker Pada Penelis



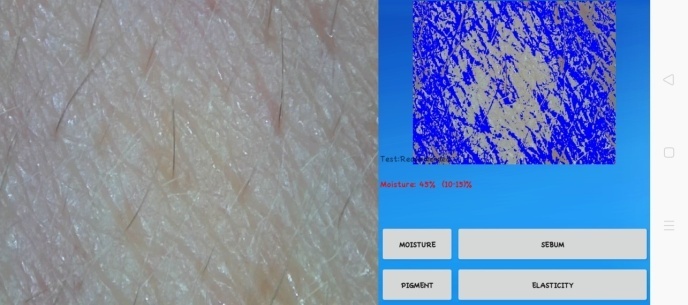


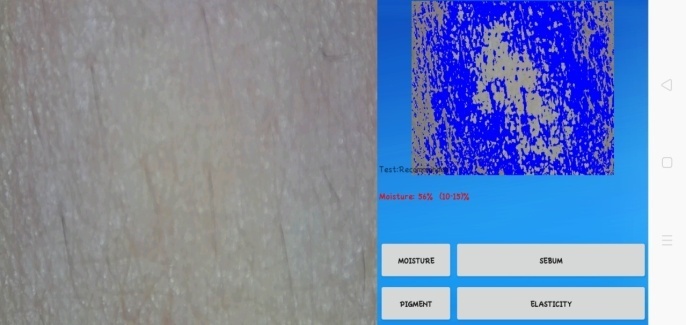
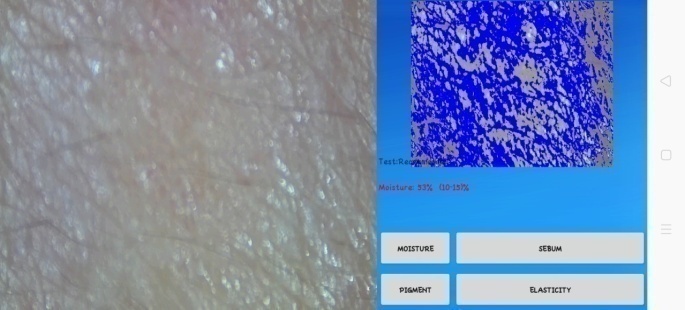
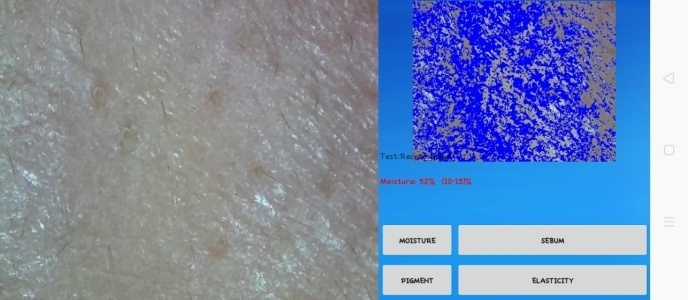
# Lampiran 20. Hasil uji Masker gel *peel-off* dengan alat skin *analyzer* pada kulit wajah sukarelawan

1. Moisture (Kelembaban)

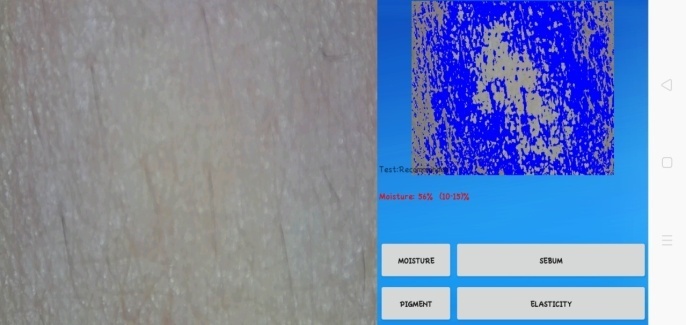


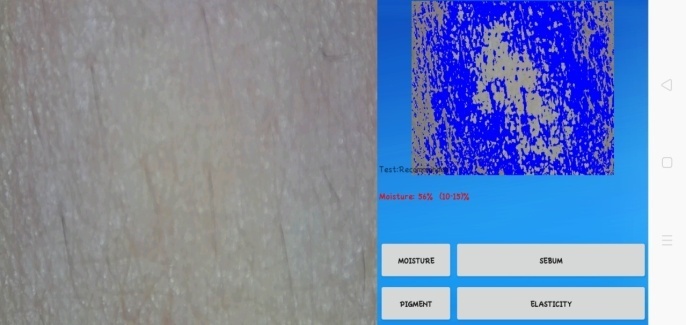
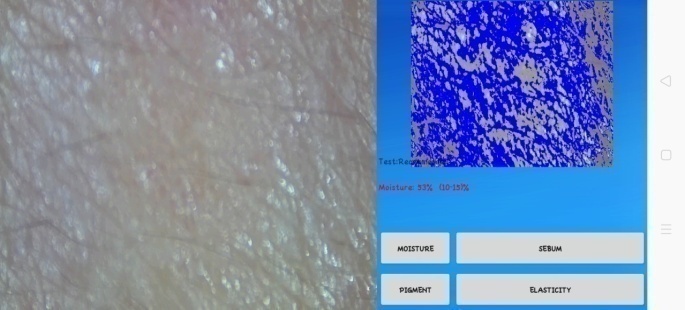
Minggu awal



Minggu 1

Minggu 2

Minggu 3

Minggu 4

**Lampiran 20**. (Lanjutan)

1. Elastisitas



Minggu awal

Minggu 1



Minggu 2



Minggu 3



Minggu 4

**Lampiran 20**. (Lanjutan)

1. Pigment



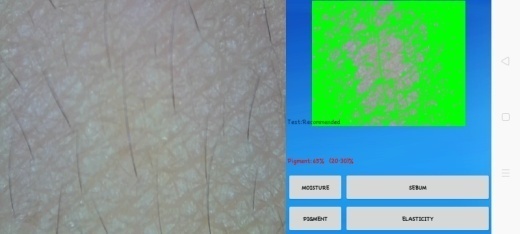
Minggu awal



Minggu 1



Minggu 2



Minggu 3



Minggu 4

# Lampiran 21. Contoh format surat pernyataan sukarelawan

**Surat Pernyataan**

Saya yang bertanda tangan di bawah ini:

Nama :

Umur :

Alamat :

Telah mendapat penjelasan secukupnya bahwa wajah saya akan digunakan sebagai daerah yang akan dianalisis. Setelah mendapat penjelasan secukupnya tentang manfaat penelitian ini maka saya menyatakan setuju untuk ikut serta dalam penelitian dari Nazlia dengan judul “Formulasi Dan Uji Efektivitas *Anti-Aging* Masker Gel *Peel-off* Dari Ekstrak Etanol Daun Belimbing Wuluh (*Averrhoa Bilimbi L.*)*”* sebagai usaha untuk mengetahui apakah sediaan masker gel *peel-off* yang dihasilkan mampu memberikan efek *anti-aging*. Saya menyatakan sukarela dan bersedian untuk mengikuti prosedur penelitian yang telah ditetapkan

Persetujuan ini saya buat dengan penuh kesadaran dan tanpa paksaan dari pihak manapun. Demikian surat pernyataan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Peneliti, Sukarelawan,

# Lampiran 22. Data SPSS

* + - * 1. Kelembaban (*Moisture*)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | | |
|  | KELEMBABAN | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| F0 | M0 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M1 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M2 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M3 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M4 | ,253 | 3 | . | ,964 | 3 | ,637 |
| F1 | M0 | ,219 | 3 | . | ,987 | 3 | ,780 |
| M1 | ,328 | 3 | . | ,871 | 3 | ,298 |
| M2 | ,328 | 3 | . | ,871 | 3 | ,298 |
| M3 | ,314 | 3 | . | ,893 | 3 | ,363 |
| M4 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| F2 | M0 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M1 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M2 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| F3 | M0 | ,276 | 3 | . | ,942 | 3 | ,537 |
| M1 | ,314 | 3 | . | ,893 | 3 | ,363 |
| M2 | ,328 | 3 | . | ,871 | 3 | ,298 |
| M3 | ,337 | 3 | . | ,855 | 3 | ,253 |
| M4 | ,337 | 3 | . | ,855 | 3 | ,253 |
| a. Lilliefors Significance Correction | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | | |
|  | Levene Statistic | df1 | df2 | Sig. |
| F0 | ,286 | 4 | 10 | ,881 |
| F1 | ,500 | 4 | 10 | ,737 |
| F2 | ,450 | 4 | 10 | ,770 |
| F3 | ,315 | 4 | 10 | ,861 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Lampiran 22**. (Lanjutan)  **ANOVA** | | | | | | |
|  | | Sum of Squares | df | Mean Square | F | Sig. |
| F0 | Between Groups | 26,933 | 4 | 6,733 | 2,806 | ,045 |
| Within Groups | 24,000 | 10 | 2,400 |  |  |
| Total | 50,933 | 14 |  |  |  |
| F1 | Between Groups | 89,733 | 4 | 22,433 | 2,952 | ,035 |
| Within Groups | 76,000 | 10 | 7,600 |  |  |
| Total | 165,733 | 14 |  |  |  |
| F2 | Between Groups | 88,400 | 4 | 22,100 | 10,359 | ,001 |
| Within Groups | 21,333 | 10 | 2,133 |  |  |
| Total | 109,733 | 14 |  |  |  |
| F3 | Between Groups | 210,267 | 4 | 52,567 | 5,087 | ,017 |
| Within Groups | 103,333 | 10 | 10,333 |  |  |
| Total | 313,600 | 14 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **F0** | | | |
| Duncana | | | |
| KELEMBABAN | N | Subset for alpha = 0.05 | |
| 1 | 2 |
| M0 | 3 | 37,67 |  |
| M1 | 3 | 38,00 |  |
| M2 | 3 | 39,33 | 39,33 |
| M3 | 3 | 40,00 | 40,00 |
| M4 | 3 |  | 41,33 |
| Sig. |  | ,116 | ,162 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | |

**Lampiran 22**. (Lanjutan)

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| --- | --- | --- | --- |
| **F1** | | | |
| Duncana | | | |
| KELEMBABAN | N | Subset for alpha = 0.05 | |
| 1 | 2 |
| M1 | 3 | 40,33 |  |
| M0 | 3 | 40,67 |  |
| M2 | 3 | 41,33 |  |
| M3 | 3 | 43,00 | 43,00 |
| M4 | 3 |  | 47,00 |
| Sig. |  | ,295 | ,106 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | |

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| --- | --- | --- | --- | --- | --- |
| **F2** | | | | | |
| Duncana | | | | | |
| KELEMBABAN | N | Subset for alpha = 0.05 | | | |
| 1 | 2 | 3 | 4 |
| M0 | 3 | 44,00 |  |  |  |
| M1 | 3 |  | 46,67 |  |  |
| M2 | 3 |  | 48,00 | 48,00 |  |
| M3 | 3 |  |  | 49,67 | 49,67 |
| M4 | 3 |  |  |  | 51,00 |
| Sig. |  | 1,000 | ,290 | ,192 | ,290 |
| Means for groups in homogeneous subsets are displayed. | | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | | |

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| --- | --- | --- | --- | --- |
| **F3** | | | | |
| Duncana | | | | |
| KELEMBABAN | N | Subset for alpha = 0.05 | | |
| 1 | 2 | 3 |
| M0 | 3 | 44,00 |  |  |
| M1 | 3 | 47,00 | 47,00 |  |
| M2 | 3 | 49,67 | 49,67 | 49,67 |
| M3 | 3 |  | 51,33 | 51,33 |
| M4 | 3 |  |  | 55,00 |
| Sig. |  | ,066 | ,146 | ,081 |
| Means for groups in homogeneous subsets are displayed. | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | |

**Lampiran 22**. (Lanjutan)

* + - * 1. Elastisitas (*elasticity*)

|  |  |  |  |  |  |  |  |
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| **Tests of Normality** | | | | | | | |
|  | ELASTISITAS | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| F0 | M0 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M1 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M2 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,253 | 3 | . | ,964 | 3 | ,637 |
| F1 | M0 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M1 | ,292 | 3 | . | ,923 | 3 | ,463 |
| M2 | ,219 | 3 | . | ,987 | 3 | ,780 |
| M3 | ,292 | 3 | . | ,923 | 3 | ,463 |
| M4 | ,292 | 3 | . | ,923 | 3 | ,463 |
| F2 | M0 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M1 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M2 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| F3 | M0 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M1 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M2 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| a. Lilliefors Significance Correction | | | | | | | |

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| --- | --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | | |
|  | Levene Statistic | df1 | df2 | Sig. |
| F0 | ,262 | 4 | 10 | ,896 |
| F1 | ,212 | 4 | 10 | ,926 |
| F2 | ,327 | 4 | 10 | ,854 |
| F3 | 3,130 | 4 | 10 | ,065 |

**Lampiran 22**. (Lanjutan)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | | |
|  | | Sum of Squares | df | Mean Square | F | Sig. |
| F0 | Between Groups | 24,933 | 4 | 6,233 | 3,016 | ,041 |
| Within Groups | 20,667 | 10 | 2,067 |  |  |
| Total | 45,600 | 14 |  |  |  |
| F1 | Between Groups | 62,000 | 4 | 15,500 | 3,577 | ,046 |
| Within Groups | 43,333 | 10 | 4,333 |  |  |
| Total | 105,333 | 14 |  |  |  |
| F2 | Between Groups | 214,667 | 4 | 53,667 | 42,368 | ,000 |
| Within Groups | 12,667 | 10 | 1,267 |  |  |
| Total | 227,333 | 14 |  |  |  |
| F3 | Between Groups | 306,267 | 4 | 76,567 | 13,837 | ,000 |
| Within Groups | 55,333 | 10 | 5,533 |  |  |
| Total | 361,600 | 14 |  |  |  |

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| --- | --- | --- | --- |
| **F0** | | | |
| Duncana | | | |
| ELASTISITAS | N | Subset for alpha = 0.05 | |
| 1 | 2 |
| M0 | 3 | 77,00 |  |
| M1 | 3 | 77,67 |  |
| M2 | 3 | 78,33 | 78,33 |
| M3 | 3 | 79,33 | 79,33 |
| M4 | 3 |  | 80,67 |
| Sig. |  | ,093 | ,087 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | |

**Lampiran 22**. (Lanjutan)

|  |  |  |  |
| --- | --- | --- | --- |
| **F1** | | | |
| Duncana | | | |
| ELASTISITAS | N | Subset for alpha = 0.05 | |
| 1 | 2 |
| M0 | 3 | 79,33 |  |
| M1 | 3 | 79,67 |  |
| M2 | 3 | 80,33 |  |
| M3 | 3 | 82,67 | 82,67 |
| M4 | 3 |  | 84,67 |
| Sig. |  | ,097 | ,267 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | |
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| --- | --- | --- | --- | --- | --- |
| **F2** | | | | | |
| Duncana | | | | | |
| ELASTISITAS | N | Subset for alpha = 0.05 | | | |
| 1 | 2 | 3 | 4 |
| M0 | 3 | 79,00 |  |  |  |
| M1 | 3 |  | 82,00 |  |  |
| M2 | 3 |  | 84,00 |  |  |
| M3 | 3 |  |  | 86,67 |  |
| M4 | 3 |  |  |  | 90,00 |
| Sig. |  | 1,000 | ,055 | 1,000 | 1,000 |
| Means for groups in homogeneous subsets are displayed. | | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | | |

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| --- | --- | --- | --- | --- |
| **F3** | | | | |
| Duncana | | | | |
| ELASTISITAS | N | Subset for alpha = 0.05 | | |
| 1 | 2 | 3 |
| M0 | 3 | 81,67 |  |  |
| M1 | 3 | 85,00 | 85,00 |  |
| M2 | 3 | 86,00 | 86,00 |  |
| M3 | 3 |  | 89,33 |  |
| M4 | 3 |  |  | 95,00 |
| Sig. |  | ,056 | ,056 | 1,000 |
| Means for groups in homogeneous subsets are displayed. | | | | |

**Lampiran 22**. (Lanjutan)

* + - * 1. Kecerahan (*Pigment*)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | | |
|  | PIGMENT | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| F0 | M0 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M1 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M2 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,253 | 3 | . | ,964 | 3 | ,637 |
| F1 | M0 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M1 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M2 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M3 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M4 | ,253 | 3 | . | ,964 | 3 | ,637 |
| F2 | M0 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M1 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M2 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M3 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M4 | ,253 | 3 | . | ,964 | 3 | ,637 |
| F3 | M0 | ,343 | 3 | . | ,842 | 3 | ,220 |
| M1 | ,253 | 3 | . | ,964 | 3 | ,637 |
| M2 | ,292 | 3 | . | ,923 | 3 | ,463 |
| M3 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| M4 | ,175 | 3 | . | 1,000 | 3 | 1,000 |
| a. Lilliefors Significance Correction | | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | | |
|  | Levene Statistic | df1 | df2 | Sig. |
| F0 | ,453 | 4 | 10 | ,769 |
| F1 | ,045 | 4 | 10 | ,995 |
| F2 | ,421 | 4 | 10 | ,790 |
| F3 | 2,313 | 4 | 10 | ,129 |

**Lampiran 22**. (Lanjutan)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ANOVA** | | | | | | |
|  | | Sum of Squares | df | Mean Square | F | Sig. |
| F0 | Between Groups | 22,400 | 4 | 5,600 | 3,652 | ,044 |
| Within Groups | 15,333 | 10 | 1,533 |  |  |
| Total | 37,733 | 14 |  |  |  |
| F1 | Between Groups | 71,067 | 4 | 17,767 | 6,662 | ,007 |
| Within Groups | 26,667 | 10 | 2,667 |  |  |
| Total | 97,733 | 14 |  |  |  |
| F2 | Between Groups | 186,400 | 4 | 46,600 | 25,889 | ,000 |
| Within Groups | 18,000 | 10 | 1,800 |  |  |
| Total | 204,400 | 14 |  |  |  |
| F3 | Between Groups | 321,600 | 4 | 80,400 | 10,673 | ,001 |
| Within Groups | 75,333 | 10 | 7,533 |  |  |
| Total | 396,933 | 14 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **F0** | | | |
| Duncana | | | |
| PIGMENT | N | Subset for alpha = 0.05 | |
| 1 | 2 |
| M0 | 3 | 66,00 |  |
| M1 | 3 | 66,00 |  |
| M2 | 3 | 68,00 | 68,00 |
| M3 | 3 |  | 68,67 |
| M4 | 3 |  | 68,67 |
| Sig. |  | ,088 | ,543 |
| Means for groups in homogeneous subsets are displayed. | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | |

**Lampiran 22**. (Lanjutan)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F1** | | | | |
| Duncana | | | | |
| PIGMENT | N | Subset for alpha = 0.05 | | |
| 1 | 2 | 3 |
| M0 | 3 | 65,33 |  |  |
| M1 | 3 | 67,00 | 67,00 |  |
| M2 | 3 |  | 68,67 | 68,67 |
| M3 | 3 |  |  | 70,33 |
| M4 | 3 |  |  | 71,33 |
| Sig. |  | ,240 | ,240 | ,085 |
| Means for groups in homogeneous subsets are displayed. | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **F2** | | | | | |
| Duncana | | | | | |
| PIGMENT | N | Subset for alpha = 0.05 | | | |
| 1 | 2 | 3 | 4 |
| M0 | 3 | 70,33 |  |  |  |
| M1 | 3 | 72,33 | 72,33 |  |  |
| M2 | 3 |  | 74,00 |  |  |
| M3 | 3 |  |  | 77,00 |  |
| M4 | 3 |  |  |  | 80,33 |
| Sig. |  | ,098 | ,159 | 1,000 | 1,000 |
| Means for groups in homogeneous subsets are displayed. | | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **F3** | | | | | |
| Duncana | | | | | |
| PIGMENT | N | Subset for alpha = 0.05 | | | |
| 1 | 2 | 3 | 4 |
| M0 | 3 | 72,00 |  |  |  |
| M1 | 3 | 75,33 | 75,33 |  |  |
| M2 | 3 |  | 79,33 | 79,33 |  |
| M3 | 3 |  |  | 82,00 | 82,00 |
| M4 | 3 |  |  |  | 85,00 |
| Sig. |  | ,168 | ,105 | ,262 | ,210 |
| Means for groups in homogeneous subsets are displayed. | | | | | |
| a. Uses Harmonic Mean Sample Size = 3,000. | | | | | |