**Lampiran 1.** Hasil Identifikasi Tumbuhan



**Lampiran 2.** Bahan Uji

  
 Kecombrang



Kecombrang kering



Ekstrak Kecombrang

**Lampiran 3.** Perhitungan Persen Pemulihan

* **Kenaikan Kadar Air *(Moisture)***

Kondisi Akhir – Kondisi awal

Persen Pemulihan = X 100%

Kondisi awal

* **Penurunan Pori *(pore)***

Kondisi Awal – Kondisi Akhir

Persen Pemulihan = X 100%

Kondisi awal

* **Penurunan Noda *(spot)***

Kondisi Awal – Kondisi Akhir

Persen Pemulihan = X 100%

Kondisi awal

* **Penurunan Keriput *(wrinkle)***

Kondisi Awal – Kondisi Akhir

Persen Pemulihan = X 100%

Kondisi awal

**Lampiran 4.** Bagan alir pembuatan ekstrak kecombrang

Kecombrang

Kecombrang 15 Kg

Kecombrang halus 500 g

Filtrat I

Residu

Filtrat I + Filtrat II 5 L

Ekstrak kental 35,5g

Disortasi dan dicuci

Ditiriskan

Ditimbang

Dikeringkan dan dihaluskan

Ditimbang

Dimaserasi dengan etanol 96% selama 5 hari

Disaring

Diremaserasi dengan etanol 96% selama 2 hari

Dipekatkan dengan *rotary evaporator*

**Lampiran 5.** Bagan alir pembuatan Sediaan Krim *Body Scrub* ekstrak etanol kecombrang

Fase Air

Fase Minyak

Asam stearate + Cetil alkohol

Metil paraben + Propilen glikol

+ Tea

Larutkan dengan aquadest panas ad 100 ml pada suhu 70 °C

(Massa II)

Lebur, Pertahankan suhu 70 °C (Massa I)

Massa I + Massa II (digerus konstan dalam lumpang panas)

Tambahkan *Polyethylene scrub*

Diaduk

Ekstrak kecombrang konsentrasi 1%, 3%, 5% dan 7%

Dasar krim *Body Scrub*

Diaduk hingga homogen

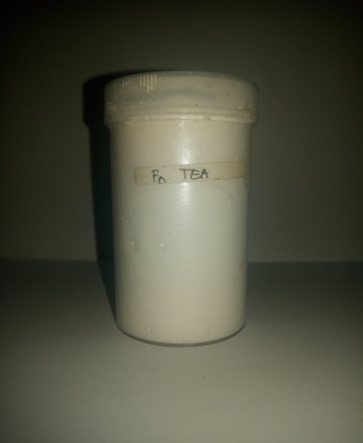
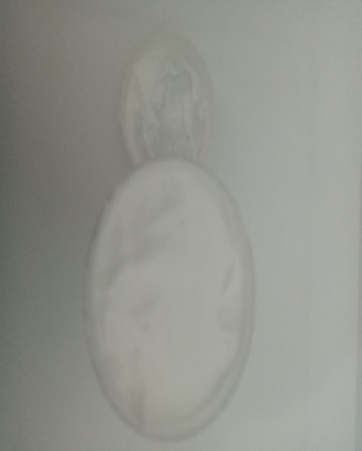
Krim *Body Scrub* ekstrak etanol kecombrang

Uji iritasi

Pemeriksaan mutu fisik sediaan

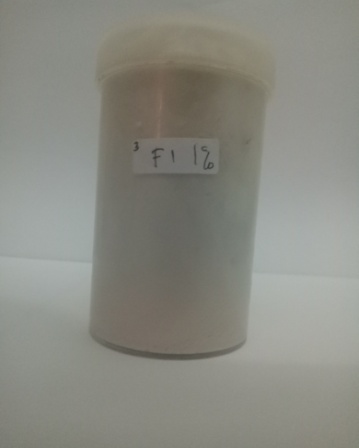
Uji kemampuan sebagai *body scrub*

**Lampiran 6**. Hasil Uji Stabilitas Sediaan Krim *Body Scrub* Ekstrak Etanol Kecombrang

Keterangan:

* *Body scrub* F0
* *EEK* (Blanko)
* Tanpa Ekstrak kecombrang
* Warna putih

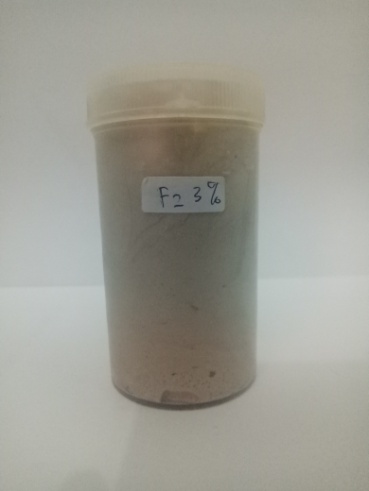
 

Keterangan:

* *Body scrub* F1
* *EEK* 1%
* Ekstrak kecombrang

di dalamnya 1 gram

* Warna cream

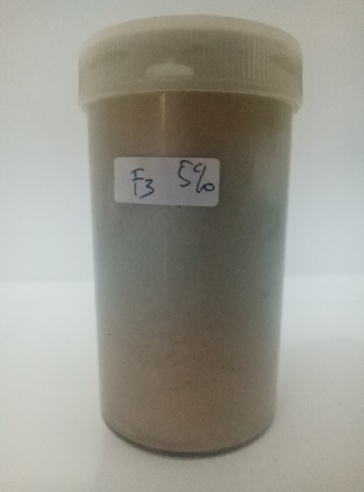
Keterangan:

* *Body scrub* F2
* *EEK* 3%
* Ekstrak kecombrang

di dalamnya 3 gram

* Warna coklat muda

**Lampiran 6.(**Lanjutan)

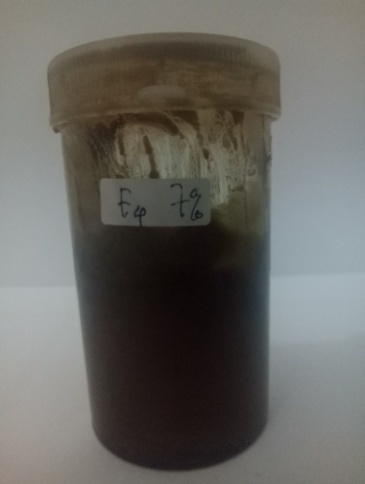
 

Keterangan:

* *Body scrub* F3
* *EEK* 5%
* Ekstrak kecombrang

di dalamnya 5 gram

* Warna coklat tua

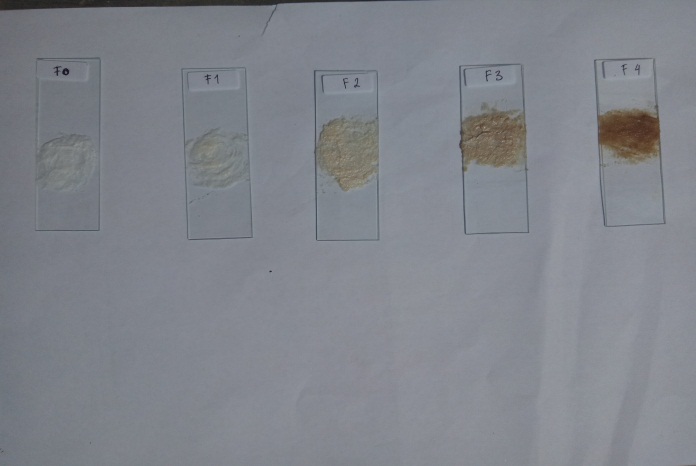
Keterangan:

* *Body scrub* F4
* *EEK* 7%
* Ekstrak kecombrang

di dalamnya 7 gram

* Warna coklat pekat

**Lampiran 6.** (lanjutan)



Keterangan:

EEK: Ekstrak Etanol Kecombrang

F0:Blanko (dasar krim)

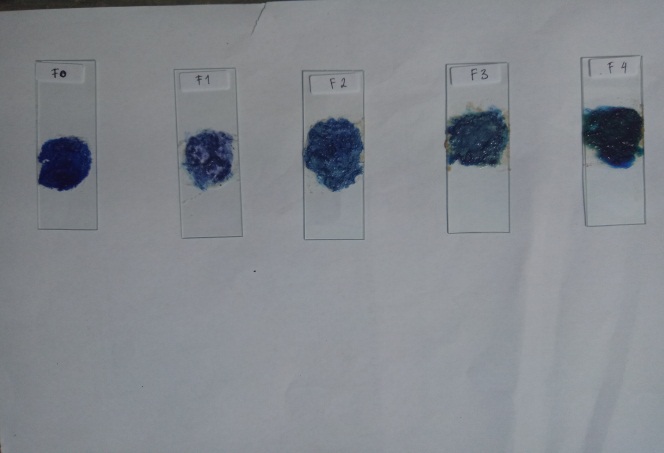
F1:Formula EEBK 1%

F2:Formula EEBK 3%

F3:Formula EEBK 5%

F4:Formula EEBK 7%

**Lampiran 7.** Hasil Uji Tipe Emulsi



Keterangan:

EEK: Ekstrak Etanol Kecombrang

F0:Blanko (dasar krim)

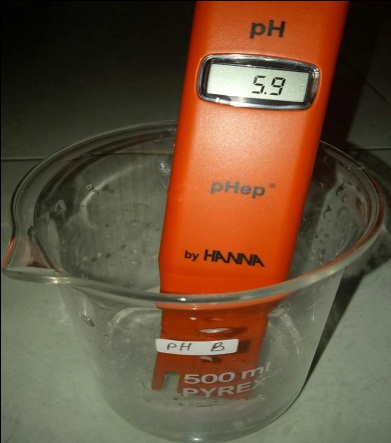
F1:Formula EEBK 1%

F2:Formula EEBK 3%

F3:Formula EEBK 5%

F4:Formula EEBK 7%

**Lampiran 8**. Hasil Uji pH

a.Uji pH Blanko b. Uji pH Konsentrasi 1%

1. Uji pH Konsentrasi 3% d. Uji pH Konsentrasi 5%



e. Uji pH Konsentrasi 7%

**Lampiran 9**. Hasil Uji Iritasi



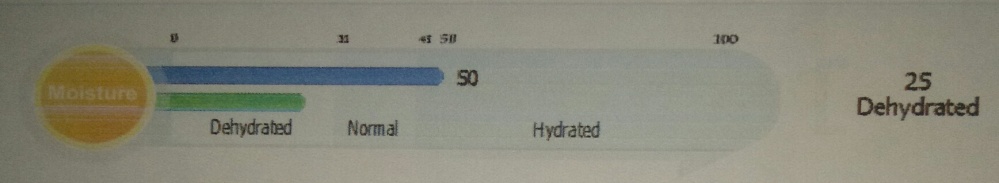
Pada Waktu Uji Iritasi



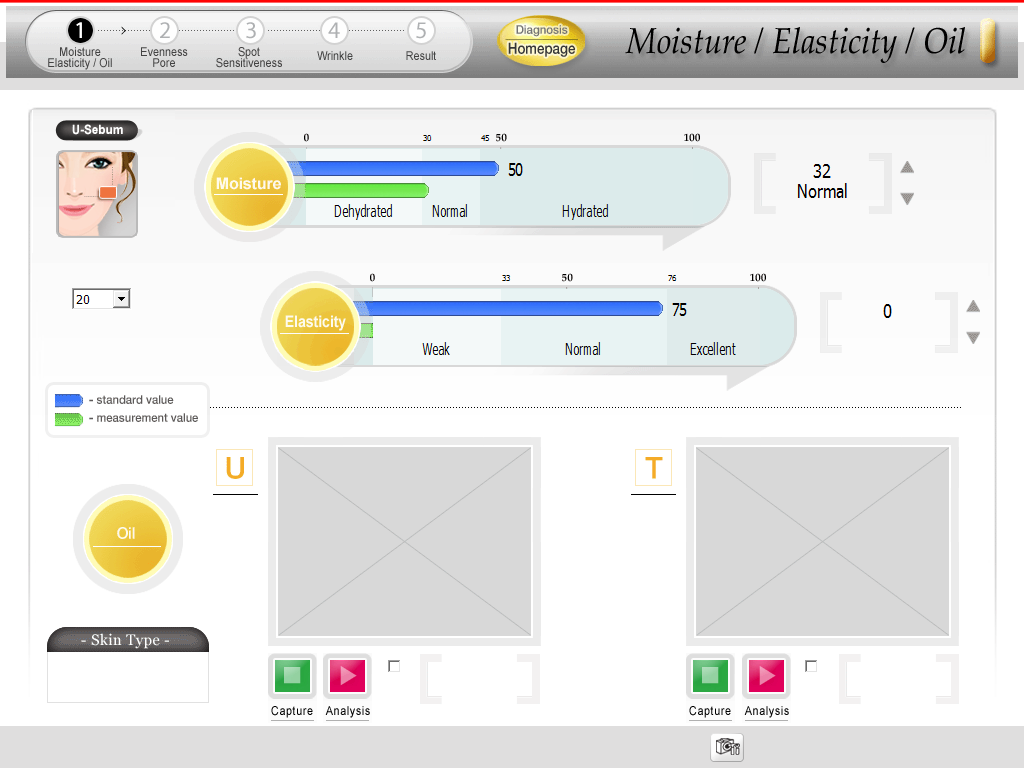
Sesudah Uji Iritasi

**Lampiran 10.** Hasil Pengukuran Kadar Air *(Moisture)* dan Hasil Uji Pori *(Pore)* Dengan Alat *Skin Analyzer* Aramo-SG Pada Kulit Punggung Tangan Sukarelawan.

* Hasil Pengukuran Kadar Air *(Moisture)*



Sebelum Pemakaian Sediaan



Setelah Pemakaian Sediaan

**Lampiran 10.** (Lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Formula** | **Sukarelawan** | **% Kadar Air (*Moisture*)** | | | | | **Persen Pemulihan (%)** |
| **Pemakaian (Minggu)** | | | | |
| **Awal** | **1** | **2** | **3** | **4** |
| F0 | 1 | 25 | 25 | 25 | 26 | 26 | 4 |
| 2 | 25 | 26 | 26 | 25 | 27 | 8 |
| 3 | 25 | 26 | 26 | 26 | 26 | 4 |
| Rata-Rata | | 25 | 25,6 | 25,6 | 25,6 | 26,3 | 5,2 |
| F1 (1%) | 4 | 31 | 31 | 32 | 33 | 33 | 6,5 |
| 5 | 31 | 32 | 32 | 32 | 33 | 6,5 |
| 6 | 31 | 32 | 32 | 32 | 33 | 6,5 |
| Rata-Rata | | 31 | 31,7 | 32 | 32,3 | 33 | 6,5 |
| F2 (3%) | 7 | 31 | 32 | 33 | 34 | 35 | 12,9 |
| 8 | 31 | 33 | 34 | 35 | 35 | 12,9 |
| 9 | 30 | 32 | 34 | 34 | 35 | 16,7 |
| Rata-Rata | | 30,7 | 32,3 | 33,7 | 34,3 | 35 | 14 |
| F3 (5%) | 10 | 32 | 34 | 37 | 38 | 39 | 21,9 |
| 11 | 33 | 35 | 36 | 38 | 40 | 21,2 |
| 12 | 33 | 36 | 36 | 39 | 39 | 18,1 |
| Rata-Rata | | 32,7 | 35 | 36,3 | 38,3 | 39 | 20 |
| F4 (7%) | 13 | 33 | 36 | 37 | 39 | 41 | 24,2 |
| 14 | 33 | 37 | 38 | 40 | 42 | 27,7 |
| 15 | 34 | 36 | 38 | 41 | 43 | 26,4 |
| Rata-Rata | | 33,3 | 36,3 | 37,6 | 40 | 42 | 26,1 |

Keterangan:

Dehidrasi 0-29; Normal 30-40; Hidrasi 45-100; (Aramo, 2018).

F1: Formula EEK 1%

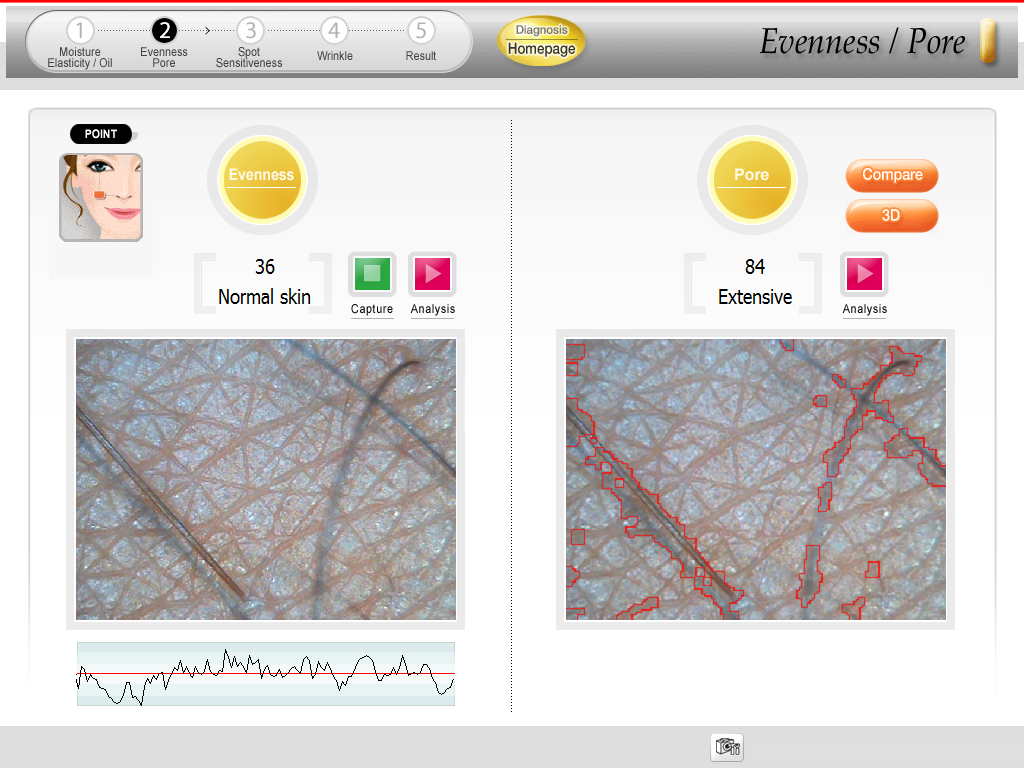
F2: Formula EEK 3%

F3: Formula EEK 5%

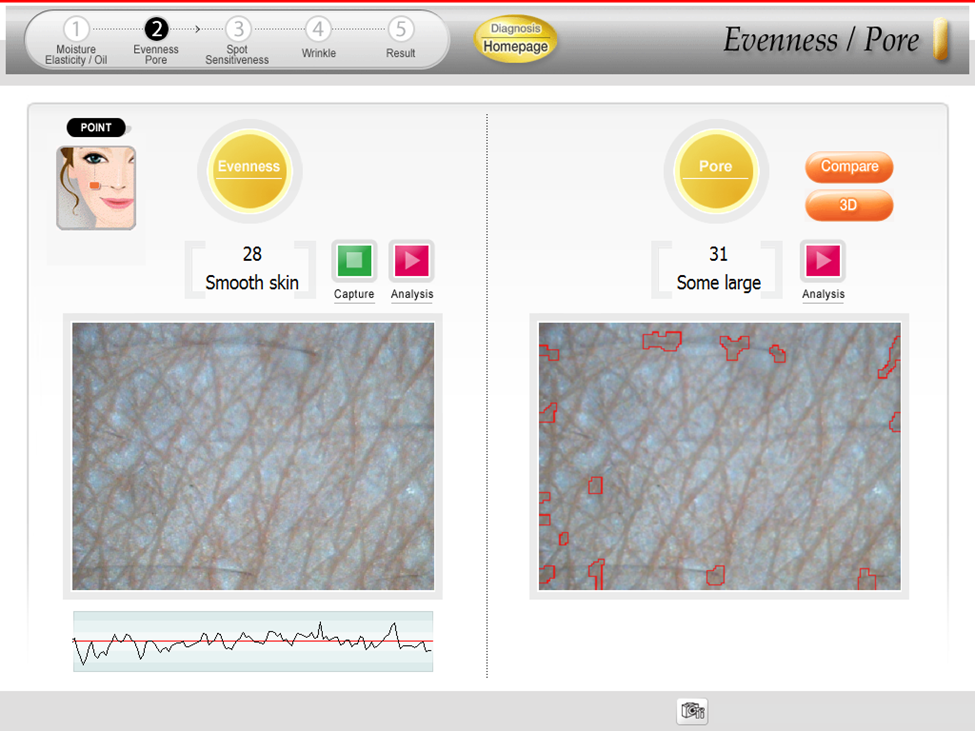
F4: Formula EEK 7%

**Lampiran 10.** (Lanjutan)

* Hasil Uji Pori



Sebelum Pemakaian Sediaan



Setelah Pemakaian Sediaan

**Lampiran 10.** (Lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Formula** | **Sukarelawan** | **Pori *(Pore)*** | | | | | **Persen Pemulihan (%)** |
| **Pemakaian (Minggu)** | | | | |
| **Awal** | **1** | **2** | **3** | **4** |
| F0 | 1 | 37 | 37 | 37 | 36 | 36 | 2,7 |
| 2 | 37 | 37 | 36 | 36 | 36 | 2,7 |
| 3 | 37 | 37 | 37 | 36 | 37 | 0 |
| Rata-Rata | | 37 | 37 | 36,7 | 36 | 36,3 | 1,9 |
| F1 (1%) | 4 | 37 | 37 | 34 | 34 | 32 | 13,5 |
| 5 | 41 | 37 | 35 | 33 | 35 | 14,6 |
| 6 | 38 | 39 | 36 | 33 | 35 | 8 |
| Rata-Rata | | 38,7 | 37,3 | 35 | 33,3 | 34 | 12,1 |
| F2 (3%) | 7 | 38 | 38 | 36 | 36 | 34 | 10,5 |
| 8 | 40 | 36 | 38 | 36 | 34 | 15 |
| 9 | 36 | 36 | 34 | 34 | 31 | 13,9 |
| Rata-Rata | | 38 | 36,7 | 36 | 35,3 | 33 | 13 |
| F3 (5%) | 10 | 37 | 37 | 35 | 35 | 32 | 13,5 |
| 11 | 40 | 37 | 39 | 37 | 34 | 15 |
| 12 | 41 | 41 | 37 | 37 | 34 | 17 |
| Rata-Rata | | 39,1 | 38,3 | 37 | 36,3 | 33,3 | 15,3 |
| F4 (7%) | 13 | 40 | 36 | 34 | 32 | 25 | 37 |
| 14 | 40 | 36 | 32 | 28 | 26 | 37 |
| 15 | 44 | 38 | 34 | 28 | 26 | 40,9 |
| Rata-Rata | | 41,3 | 36,7 | 33,3 | 30 | 25,3 | 38,3 |

Keterangan:

Kecil 0-19, Beberapa besar 20-39, Sangat besar 40-100 (Aramo 2017)

F0: Blanko

F1: Formula EEK 1%

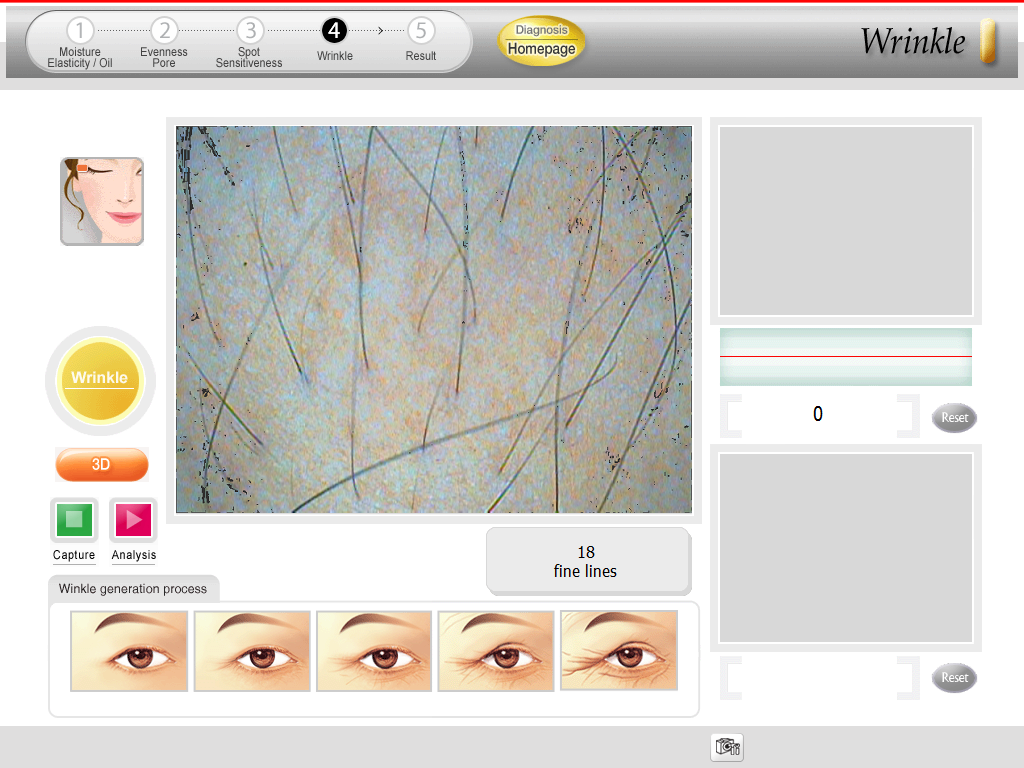
F2: Formula EEK 3%

F3: Formula EEK 5%

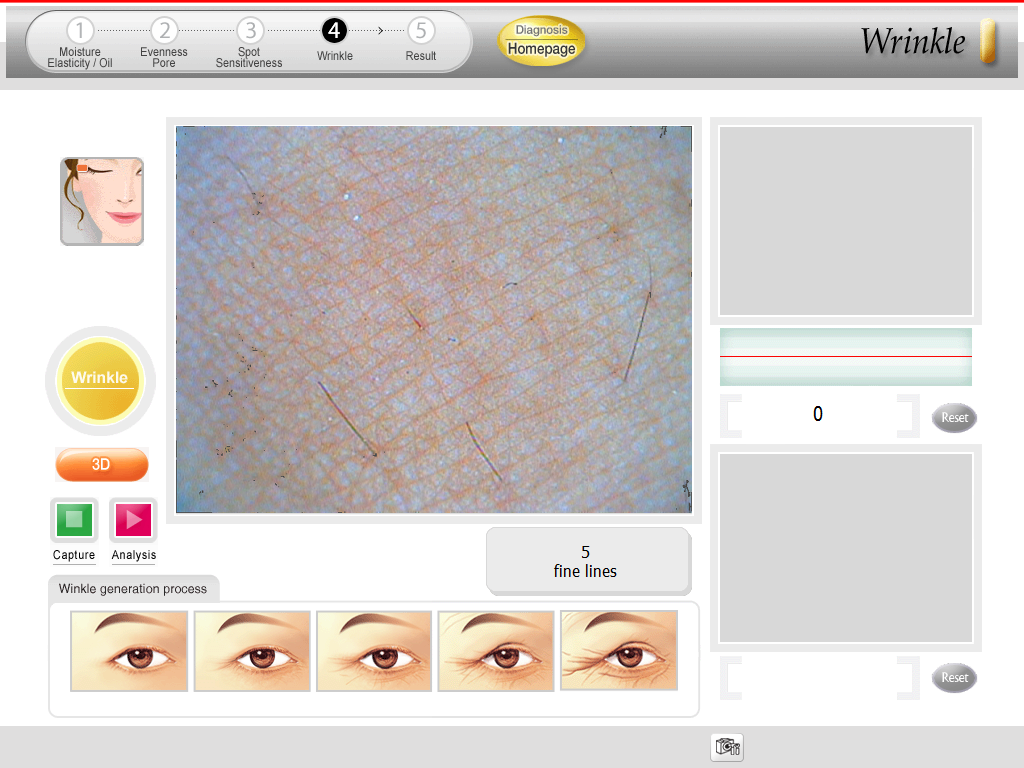
F4: Formula EEK 7%

**Lampiran 10.** (Lanjutan)

* Hasil Uji Keriput *(Wrinkle)*



Sebelum Pemakaian Sediaan



Setelah Pemakaian Sediaan

**Lampiran 10.** (Lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Formula** | **Sukarelawan** | **Keriput *(Wrinkle)*** | | | | | **Persen Pemulihan (%)** |
| **Pemakaian (Minggu)** | | | | |
| **Awal** | **1** | **2** | **3** | **4** |
| F0 | 1 | 16 | 16 | 15 | 15 | 14 | 12,5 |
| 2 | 16 | 16 | 15 | 14 | 14 | 12,5 |
| 3 | 16 | 16 | 16 | 15 | 15 | 6,3 |
| Rata-Rata | | 16 | 16 | 15,3 | 14,7 | 14,4 | 10 |
| F1 (1%) | 4 | 17 | 17 | 16 | 16 | 15 | 11,8 |
| 5 | 16 | 16 | 16 | 15 | 15 | 6,2 |
| 6 | 17 | 16 | 16 | 15 | 14 | 17,6 |
| Rata-Rata | | 16,7 | 16,3 | 16 | 15,3 | 14,7 | 12 |
| F2 (3%) | 7 | 18 | 18 | 17 | 17 | 16 | 11,1 |
| 8 | 18 | 18 | 18 | 17 | 17 | 5,6 |
| 9 | 18 | 18 | 17 | 17 | 17 | 5,6 |
| Rata-Rata | | 18 | 18 | 17,3 | 17 | 16,7 | 17,2 |
| F3 (5%) | 10 | 15 | 14 | 14 | 13 | 13 | 13 |
| 11 | 15 | 14 | 13 | 13 | 12 | 20 |
| 12 | 15 | 13 | 13 | 13 | 11 | 26,7 |
| Rata-Rata | | 15 | 13,7 | 13,3 | 12,7 | 12 | 20 |
| F4 (7%) | 13 | 13 | 13 | 12 | 12 | 11 | 15,4 |
| 14 | 13 | 12 | 11 | 11 | 10 | 23 |
| 15 | 13 | 12 | 11 | 10 | 9 | 30,8 |
| Rata-Rata | | 13 | 12,3 | 11,3 | 11 | 10 | 23,1 |

Keterangan:

Tidak berkeriput 0-19, berkeriput 20-52, berkeriput parah 53-100, (Aramo,2018)

F0: Blanko

F1: Formula EEK 1%

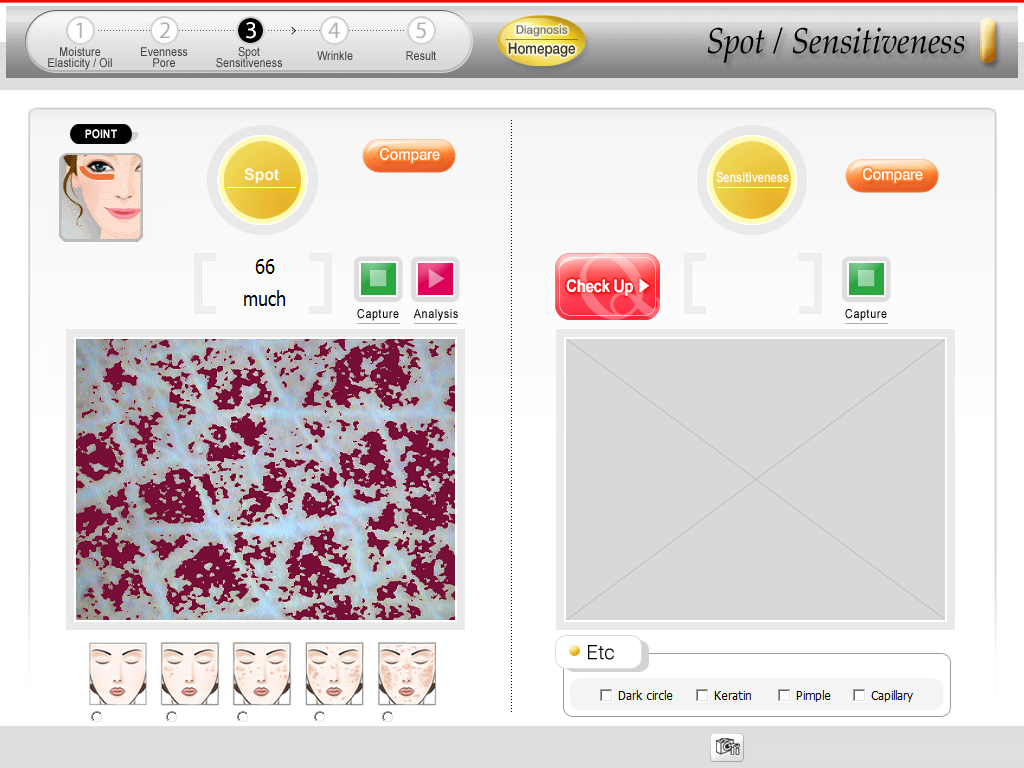
F2: Formula EEK 3%

F3: Formula EEK 5%

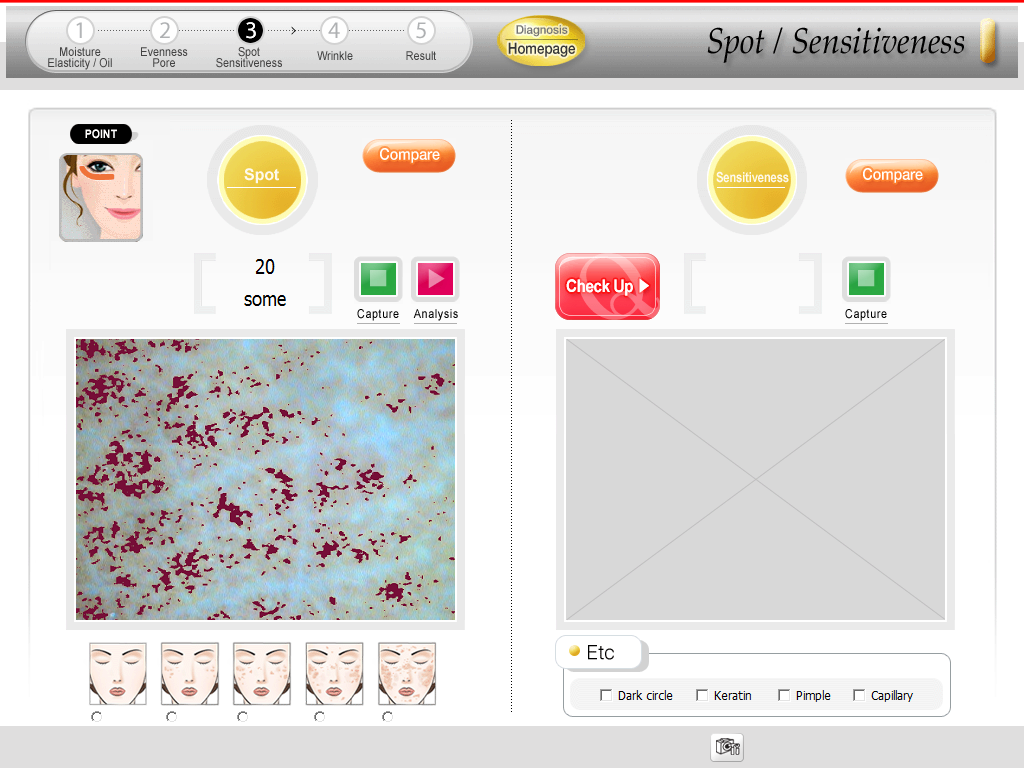
F4: Formula EEK 7%

**Lampiran 10.** (Lanjutan)

* Hasil Uji Noda *(Spot)*



Sebelum Pemakaian Sediaan



Setelah Pemakaian Sediaan

**Lampiran 10.** (Lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Formula** | **Sukarelawan** | **Noda *(Spot)*** | | | | | **Persen Pemulihan (%)** |
| **Pemakaian (Minggu)** | | | | |
| **Awal** | **1** | **2** | **3** | **4** |
| F0 | 1 | 58 | 57 | 56 | 55 | 55 | 5,1 |
| 2 | 55 | 55 | 54 | 54 | 54 | 1,8 |
| 3 | 56 | 56 | 55 | 55 | 54 | 3,6 |
| Rata-Rata | | 56,3 | 56 | 55 | 54,7 | 54,3 | 3,6 |
| F1 (1%) | 4 | 56 | 56 | 55 | 54 | 53 | 5,4 |
| 5 | 55 | 55 | 54 | 53 | 52 | 5,4 |
| 6 | 54 | 54 | 53 | 52 | 50 | 7,4 |
| Rata-Rata | | 55 | 55 | 54 | 53 | 51,7 | 6 |
| F2 (3%) | 7 | 51 | 49 | 47 | 45 | 43 | 15,7 |
| 8 | 50 | 48 | 37 | 46 | 44 | 12 |
| 9 | 49 | 46 | 45 | 44 | 40 | 18,4 |
| Rata-Rata | | 50 | 47,7 | 46,3 | 45 | 42,3 | 15,4 |
| F3 (5%) | 10 | 42 | 40 | 39 | 37 | 35 | 16,7 |
| 11 | 40 | 38 | 36 | 34 | 32 | 20 |
| 12 | 38 | 37 | 35 | 33 | 30 | 21 |
| Rata-Rata | | 40 | 38,3 | 36,7 | 34,7 | 32,7 | 19,2 |
| F4 (7%) | 13 | 35 | 33 | 32 | 30 | 20 | 42,9 |
| 14 | 32 | 28 | 24 | 22 | 20 | 37,5 |
| 15 | 30 | 28 | 25 | 23 | 20 | 33 |
| Rata-Rata | | 31,7 | 29,7 | 27 | 25 | 20 | 37 |

Keterangan

Sedikit 0-19, beberapa noda 20-52, banyak noda 53-100, (Aramo,2018)

F0: Blanko

F1: Formula EEBK 1%

F2: Formula EEBK 3%

F3: Formula EEBK 5%

F4: Formula EEBK 7%

**Lampiran 11.**.Hasil Uji Statistik Kadar Air *(Moisture),* Noda *(Spot),* Pori *(Pore),* Keriput *(Wrinkle)*

**Kruskal-Wallis Test**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Statisticsa,b** | | | | |
|  | Kadar\_air | Pori | keriput | noda |
| Chi-Square | 4.809 | 13.550 | 1.428 | 4.044 |
| Df | 4 | 4 | 4 | 4 |
| Asymp. Sig. | .307 | .009 | .839 | .400 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Statisticsa,b** | | | | |
|  | Kadar\_air | Pori | keriput | noda |
| Chi-Square | 55.369 | 40.973 | 53.645 | 49.015 |
| Df | 4 | 4 | 4 | 4 |
| Asymp. Sig. | .000 | .000 | .000 | .000 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Statisticsa** | | | | |
|  | Kadar\_air | pori | keriput | noda |
| Mann-Whitney U | 68.500 | 77.500 | 103.000 | 96.500 |
| Wilcoxon W | 188.500 | 197.500 | 223.000 | 216.500 |
| Z | -1.903 | -1.454 | -.468 | -.664 |
| Asymp. Sig. (2-tailed) | .057 | .146 | .640 | .506 |
| Exact Sig. [2\*(1-tailed Sig.)] | .067b | .148b | .713b | .512b |