**Lampiran 1.** Hasil Identifikasi Sampel Kulit Jeruk Manis



**Lampiran 2.** Sampel yang diuji pada penelitian



1. Sampel Segar Kulit Jeruk Manis



1. Sampel Kulit Jeruk Manis Dikeringkan

**Lampiran 2.** (lanjutan)



C. Serbuk Kulit Jeruk Manis



D. Ekstrak Etanol Kulit Jeruk Manis

**Lampiran 2. (**lanjutan**)**



E. Sediaan Setelah dibuat

Keterangan :

F0: Blanko

F1: Konsentrasi EEKJM 5%

F2: Konsentrasi EEKJM 10%



F. Sediaan setelah uji *cyclink test*

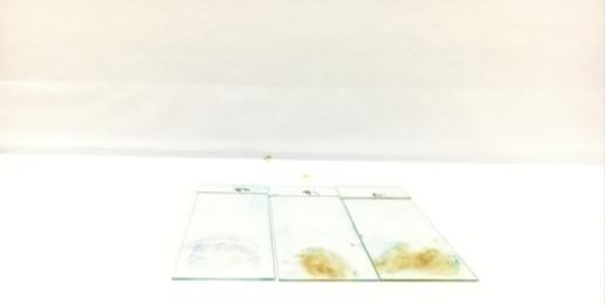
Keterangan :

F0: Blanko

F1: Konsentrasi EEKJM 5%

F2: Konsentrasi EEKJM 10%

**Lampiran 2.** (lanjutan)



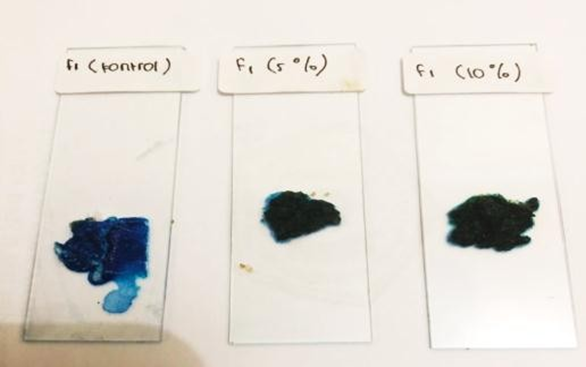
1. Uji Homogenitas

Keterangan:

F0: Blanko

F1: Konsentrasi EEKJM 5%

F2: Konsentrasi EEKJM 10%



1. Uji Tipe Emulsi

Keterangan :

F0: Blanko

F1: Konsentrasi EEKJM 5%

F2: Konsentrasi EEKJM 10%

**Lampiran 2.** (lanjutan)

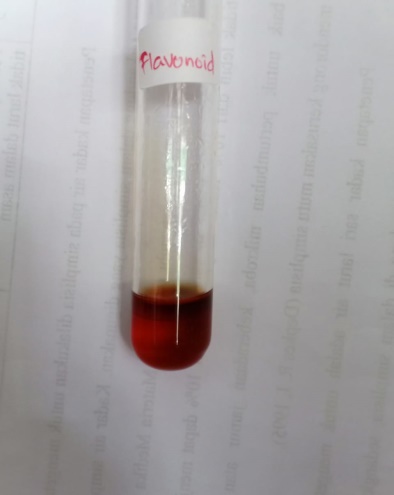
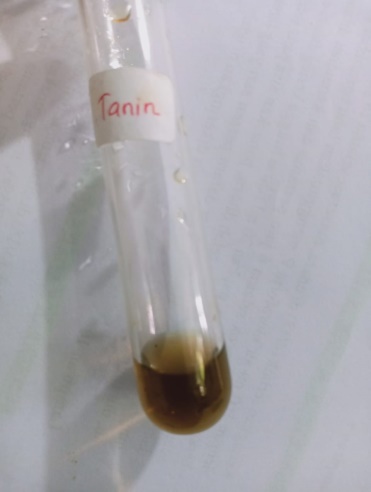


1. Hasil Uji pH

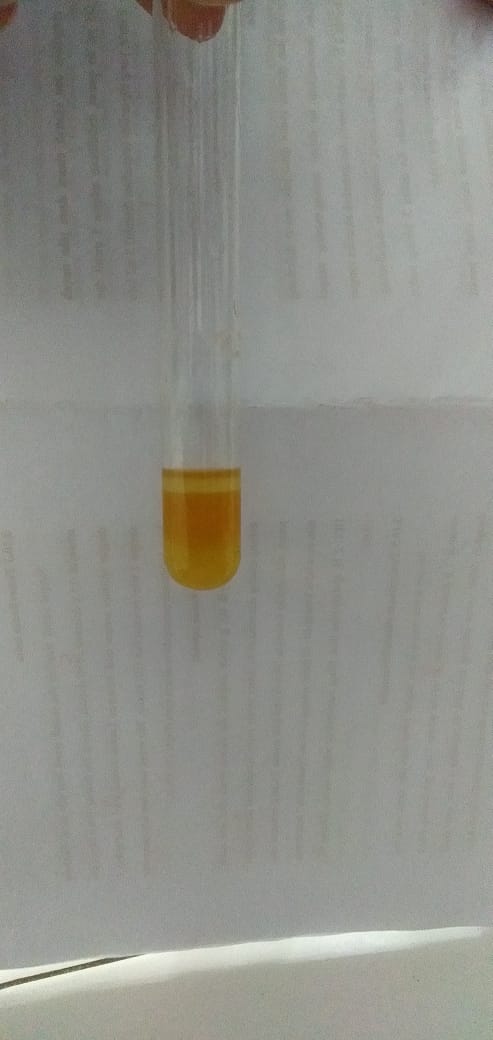


1. Alat Skin Analyzer

**Lampiran 2.** (lanjutan)

1. Flavonoid H. Alkaloid I. Tanin

****  ****

J. Steroid K. Saponin L. Glikosida

**Lampiran 2.** (lanjutan)

****  ****

M. Kadar Air N. Kadar Sari larut Air dan Kadar Sari Larut Etanol

****  ****

P. Kadar Abu Total dan Kadar Tidak Larut Asam

**Lampiran 3.** Perhitungan hasil pemeriksaan karakterisasi simplisia

1. Perhitungan penetapan kadar air simplisia

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Volume awal | Volume akhir | Volume air |
| 5 g | 1.3 ml | 1.7 ml | 0.4 ml |
| 5 g | 1.5 ml | 1.8 ml | 0.3 ml |
| 5 g | 1.3 ml | 1.5 ml | 0.2 ml |

% Kadar air simplisia = x 100%

1. Berat simplisia I = 5 g

Volume air = 0.4 ml

% Kadar air = x 100% = 8 %

1. Berat simplisia II = 5 g

Volume air = 0.3 ml

% Kadar air = x 100% = 6 %

1. Berat simplisia III = 5 g

Volume air = 0.2 ml

% Kadar air =  *x* 100% = 4%

% Kadar air rata-rata = = 6%

**Lampiran 4.** Perhitungan penetapan kadar sari larut dalam air

1. Penetapan kadar sari larut dalam air

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Berat cawan kosong | Berat cawan berisi | Berat sari |
| 5 g | 31.71 g | 31.98 g | 0.27 g |
| 5 g | 31.74 g | 31.97 g | 0.23 g |
| 5 g | 31.72 g | 31.98 g | 0.26 g |

% Kadar sari larut dalam air = x 100%

1. Berat simplisia I = 5 g

Berat sari = 0.27 g

% Kadar sari larut dalam air = x 100% = 27%

1. Berat simplisia I I = 5 g

Berat sari = 0.35 g

% Kadar sari larut dalam air = x 100% = 23%

1. Berat simplisia I II = 5 g

Berat sari = 0.38 g

% Kadar sari larut dalam air = x 100% = 26%

% Kadar sari rata-rata = = 25,3%

**Lampiran 5.** Perhitungan penetapan kadar sari larut dalam etanol

1. Penetapan kadar sari larut dalam etanol

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Berat cawan kosong | Berat cawan berisi | Berat sari |
| 5 g | 32.30 g | 32.41 g | 0.11 g |
| 5 g | 32.31 g | 32.40 g | 0.09 g |
| 5 g | 32.32 g | 32.40 g | 0.08 g |

% Kadar sari larut dalam etanol = x 100%

1. Berat simplisia I = 5 g

Berat sari = 0.11 g

% Kadar sari larut etanol = x 100% = 11%

1. Berat simplisia I I = 5 g

Berat sari = 0.11 g

% Kadar sari larut etanol = x 100% = 9%

1. Berat simplisia I II = 5 g

Berat sari = 0.11 g

% Kadar sari larut etanol = x 100% = 8%

% Kadar sari larut etanol rata-rata = = 9,33%

**Lampiran 6.** Perhitungan penetapan kadar abu total

1. Penetapan kadar abu total

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Berat cawan kosong | Berat cawan berisi | Berat abu total |
| 2 g | 60.04 g | 60.23 g | 0.19 g |
| 2 g | 60.16 g | 60.22 g | 0.06 g |
| 2 g | 59.19 g | 59.33 g | 0.04 g |

% Kadar abu total = x 100%

1. Berat simplisia I = 2 g

Berat sari = 0.19 g

% Kadar abu total = x 100% = 9.5%

1. Berat simplisia I I = 2 g

Berat sari = 0.06 g

% Kadar abu total = x 100% = 3%

1. Berat simplisia I II = 2 g

Berat sari = 0.04 g

% Kadar abu total = x 100% = 2%

% Kadar abu total rata-rata = = 4.83%

**Lampiran 7.** Perhitungan penetapan kadar abu tidak larut asam.

1. Penetapan kadar abu tidak larut dalam asam

|  |  |  |  |
| --- | --- | --- | --- |
| Berat sampel | Berat cawan kosong | Berat cawan berisi | Berat abu |
| 2 g | 60.22 g | 60.23 g | 0.01 g |
| 2 g | 60.21 g | 60.22 g | 0.01 g |
| 2 g | 59.22 g | 59.23 g | 0.01 g |

% Kadar abu tidak larut asam = x 100%

1. Berat simplisia I = 2 g

Berat sari = 0.01 g

% Kadar abu tidak larut asam = x 100% = 0.5%

1. Berat simplisia I I = 2 g

Berat sari = 0.01 g

% Kadar abu tidak larut asam = x 100% = 0.5%

1. Berat simplisia I II = 5 g

Berat sari = 0.01 g

% Kadar abu tidak larut asam = x 100% = 0.5%

% Kadar abu tidak larut asam rata-rata = = 0.5%

**Lampiran 8**. Perhitungan Persen Pemulihan

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

Persen Pemulihan = x 100%

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

Persen Pemulihan = x 100%

* **Kenaikan Kehalusan (*Evenness*)**

Persen Pemulihan = x 100%

* **Penurunan Noda (*Spot*)**

Persen Pemulihan = x 100%

**Lampiran 9.** Perhitungan % Rendemen

Rumus % Rendemen = Bobot Ekstrak (g)

x 100%

Bobot Simplisia (g)

% Rendemen = 65 (g)

x 100% **=** 13%

500 (g)

**Lampiran 10**. Surat Pernyataan Sukarelawan

SURAT PERNYATAAN

Saya yang bertanda tangan dibawah ini:

Nama :

Umur :

Alamat :

Menyatakan bersedia menjadi sukarelawan untuk uji iritasi yang dilakukan

dalam penelitian Marjannati dengan judul penelitian “ Formulasi Sediaan

Krim *Body Scrub* Kulit Jeruk Manis (*Citrus Sinensis*. L)(Osbeck) Dengan Basis kolang kaling Sebagai *Scrubbing.*  dan memenuhi kriteria

sebagai sukarelawan uji sebagai berikut (Ditjen POM, 1985).

1. Wanita berbadan sehat

2. Usia antara 20-30 tahun

3. Tidak ada riwayat penyakit yang berhubungan dengan alergi

4. Bersedia menjadi relawan

Apabila terjadi hal-hal yang tidak diinginkan selama uji uritasi, sukarelawan tidak akan menuntut kepada peneliti.

Demikian surat pernyataan ini dibuat atas partisipasinya peneliti

mengucapkan terima kasih.

**Lampiran 11.** Contoh Lembar Penilaian Kuisioner

Lembar Penilaian Kuisioner Untuk Uji Kesukaan (Hedonic test)

Mohon kesediaan sahabat/teman –teman untuk mengisikan jawaban sesuai dengan pendapatnya.

Nama :

Umur :

A. Perhatikan warna dari masing-masing formula dan mohon diberi jawaban pada pertanyaan :

1. Bagaimana penilaian sahabat/teman-teman terhadap warna sediaan krim *body scrub* “Blanko” ini

1. STS 2. TS 3. KS 4. S 5. SS

2. Bagaimana penilaian sahabat/teman-teman terhadap warna sediaan krim *body scrub* konsentrasi “5%” ini

1. STS 2. TS 3. KS 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap warna sediaan krim *body scrub* konsentrasi “10%” ini

1. STS 2. TS 3. KS 4. S 5. SS

Keterangan :

1. STS : Sangat tidak suka

2. TS : Tidak suka

3. KS : Kurang suka

4. S : Suka

5. SS : Sangat suka

**Lampiran 11.** (lanjutan)

B. Perhatikan Bau dari masing-masing formula dan mohon diberi jawaban pada pertanyaan :

1. Bagaimana penilaian sahabat/teman-teman terhadap Bau sediaan Krim *Body Scrub* “Blanko” ini

1. STS 2. TS 3. KS 4. S 5. SS

2. Bagaimana penilaian sahabat/teman-teman terhadap Bau sediaan Krim *Body Scrub* konsentrasi “5%” ini

1. STS 2. TS 3. KS 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap Bau sediaan Krim *Body Scrub* konsentrasi “10%” ini

1. STS 2. TS 3. KS 4. S 5. SS

Keterangan :

1. STS : Sangat tidak suka

2. TS : Tidak suka

3. KS : Kurang suka

4. S : Suka

5. SS : Sangat suka

**Lampiran 11.** (lanjutan)

C. Perhatikan Bentuk/konsistensi dari masing-masing formula dan mohon diberi jawaban pada pertanyaan :

1. Bagaimana penilaian sahabat/teman-teman terhadap Bentuk/konsistensi sediaan Krim *Body Scrub* “Blanko” ini

1. STS 2. TS 3. KS 4. S 5. SS

2. Bagaimana penilaian sahabat/teman-teman terhadap Bentuk/konsistensi sediaan Krim *Body Scrub* konsentrasi “5%” ini

1. STS 2. TS 3. KS 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap Bentuk/konsistensi sediaan Krim *Body Scrub* konsentrasi “10%” ini

1. STS 2. TS 3. KS 4. S 5. SS

Keterangan :

1. STS : Sangat tidak suka

2. TS : Tidak suka

3. KS : Kurang suka

4. S : Suka

5. SS : Sangat suka

**Lampiran 11.** (lanjutan)

D. Perhatikan Kemudahan/dioleskan dari masing-masing formula dan mohon diberi jawaban pada pertanyaan :

1. Bagaimana penilaian sahabat/teman-teman terhadap Kemudahan/dioleskan sediaan Krim *Body Scrub* “Blanko” ini

1. STS 2. TS 3. KS 4. S 5. SS

2. Bagaimana penilaian sahabat/teman-teman terhadap Kemudahan/dioleskan sediaan Krim *Body Scrub* konsentrasi “5%” ini

1. STS 2. TS 3. KS 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap Kemudahan/dioleskan sediaan Krim *Body Scrub* konsentrasi “10%” ini

1. STS 2. TS 3. KS 4. S 5. SS

Keterangan :

1. STS : Sangat tidak suka

2. TS : Tidak suka

3. KS : Kurang suka

4. S : Suka

5. SS : Sangat suka

**Lampiran 12.** Data dan perhitungan Rentang Kesukaan Warna Secara Organoleptis Terhadap Berbagai Formula Krim *body scrub* ekstrak kulit jeruk manis

Hasil Uji Kesukaan Warna Formula blangko

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | KS | 3 | -0,8 | 0,64 |
| 2 | KS | 3 | -0,8 | 0,64 |
| 3 | KS | 3 | -0,8 | 0,64 |
| 4 | KS | 3 | -0,8 | 0,64 |
| 5 | KS | 3 | -0,8 | 0,64 |
| 6 | KS | 3 | -0,8 | 0,64 |
| 7 | KS | 3 | -0,8 | 0,64 |
| 8 | S | 4 | 0,2 | 0,04 |
| 9 | S | 4 | 0,2 | 0,04 |
| 10 | S | 4 | 0,2 | 0,04 |
| 11 | S | 4 | 0,2 | 0,04 |
| 12 | S | 4 | 0,2 | 0,04 |
| 13 | S | 4 | 0,2 | 0,04 |
| 14 | S | 4 | 0,2 | 0,04 |
| 15 | S | 4 | 0,2 | 0,04 |
| 16 | S | 4 | 0,2 | 0,04 |
| 17 | S | 4 | 0,2 | 0,04 |
| 18 | SS | 5 | 1,2 | 1,44 |
| 19 | SS | 5 | 1,2 | 1,44 |
| 20 | SS | 5 | 1,2 | 1,44 |
| Nilai kesukaan rata-rata () = 3,8 | | | NIlai total (i-= 12,8 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,8207

Rentang nilai kesukaan warna dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,8207 Nilai rata-rata () + 0,8207

=3,8 – 0,8207

3,8 + 0,8207

=2,9793 4,6207

**Lampiran 12.** (lanjutan)

Uji Kesukaan Warna Formula 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | KS | 3 | -1,05 | 1,1025 |
| 2 | KS | 3 | -1,05 | 1,1025 |
| 3 | S | 4 | -0,05 | 0,0025 |
| 4 | S | 4 | -0,05 | 0,0025 |
| 5 | S | 4 | -0,05 | 0,0025 |
| 6 | S | 4 | -0,05 | 0,0025 |
| 7 | S | 4 | -0,05 | 0,0025 |
| 8 | S | 4 | -0,05 | 0,0025 |
| 9 | S | 4 | -0,05 | 0,0025 |
| 10 | S | 4 | -0,05 | 0,0025 |
| 11 | S | 4 | -0,05 | 0,0025 |
| 12 | S | 4 | -0,05 | 0,0025 |
| 13 | S | 4 | -0,05 | 0,0025 |
| 14 | S | 4 | -0,05 | 0,0025 |
| 15 | S | 4 | -0,05 | 0,0025 |
| 16 | S | 4 | -0,05 | 0,0025 |
| 17 | S | 4 | -0,05 | 0,0025 |
| 18 | SS | 5 | 0,95 | 0,9025 |
| 19 | SS | 5 | 0,95 | 0,9025 |
| 20 | SS | 5 | 0,95 | 0,9025 |
| Nilai kesukaan rata-rata () = 4,05 | | | NIlai total (i-= 4,95 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,5104

Rentang nilai kesukaan warna dari sediaan krim *body scrub* Kolang kaling

= Nilai rata-rata () – 0,5104 , Nilai rata-rata () + 0,5104

=4,05 – 0,5104

4,05 + 0,5104

=3,5396 4,5604

**Lampiran 12.** (lanjutan)

Uji Kesukaan Warna Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | KS | 3 | -1,6 | 2,56 |
| 2 | KS | 3 | -1,6 | 2,56 |
| 3 | S | 4 | -0,6 | 0,36 |
| 4 | S | 4 | -0,6 | 0,36 |
| 5 | S | 4 | -0,6 | 0,36 |
| 6 | S | 4 | -0,6 | 0,36 |
| 7 | SS | 5 | 0,4 | 0,16 |
| 8 | SS | 5 | 0,4 | 0,16 |
| 9 | SS | 5 | 0,4 | 0,16 |
| 10 | SS | 5 | 0,4 | 0,16 |
| 11 | SS | 5 | 0,4 | 0,16 |
| 12 | SS | 5 | 0,4 | 0,16 |
| 13 | SS | 5 | 0,4 | 0,16 |
| 14 | SS | 5 | 0,4 | 0,16 |
| 15 | SS | 5 | 0,4 | 0,16 |
| 16 | SS | 5 | 0,4 | 0,16 |
| 17 | SS | 5 | 0,4 | 0,16 |
| 18 | SS | 5 | 0,4 | 0,16 |
| 19 | SS | 5 | 0,4 | 0,16 |
| 20 | SS | 5 | 0,4 | 0,16 |
| Nilai kesukaan rata-rata () = 4,6 | | | NIlai total (i-= 8,8 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,6805

Rentang nilai kesukaan warna dari sediaan krim *body scrub* Kolang kaling

= Nilai rata-rata () – 0,5104, Nilai rata-rata () + 0,5104

=4,6 – 0,6805

4,6 + 0,6805

=3,9195 5,2805

**Lampiran 12.** (lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan warna dari berbagai formula sediaan krim  *body scrub* ekstrak kulit jeruk manis | | | | | |  |
| Formula 0 | | Formula 1 | | Formula II | |  |
| Kode | Nilai | Kode | Nilai | Kode | Nilai |
| 1 | KS | 3 | KS | 3 | KS | 3 |
| 2 | KS | 3 | KS | 3 | KS | 3 |
| 3 | KS | 3 | S | 4 | S | 4 |
| 4 | KS | 3 | S | 4 | S | 4 |
| 5 | KS | 3 | S | 4 | S | 4 |
| 6 | KS | 3 | S | 4 | S | 4 |
| 7 | KS | 3 | S | 4 | SS | 5 |
| 8 | KS | 3 | S | 4 | SS | 5 |
| 9 | S | 4 | S | 4 | SS | 5 |
| 10 | S | 4 | S | 4 | SS | 5 |
| 11 | S | 4 | S | 4 | SS | 5 |
| 12 | S | 4 | S | 4 | SS | 5 |
| 13 | S | 4 | S | 4 | SS | 5 |
| 14 | S | 4 | S | 4 | SS | 5 |
| 15 | S | 4 | S | 4 | SS | 5 |
| 16 | S | 4 | S | 4 | SS | 5 |
| 17 | S | 4 | S | 4 | SS | 5 |
| 18 | SS | 5 | SS | 5 | SS | 5 |
| 19 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II |  |
| Rata-rata nilai kesukaan = | 3,8 | 4,05 | 4,6 |
| Standar deviasi = | 0,8207 | 0,5104 | 0,6805 |
| Rentang nilai kesukaan = | 2,9793-  4,6207 | 3,5396-  4,5604 | 3,9195-  5,2805 |

**Lampiran 13.** Data dan perhitungan Rentang Kesukaan Bau Secara Organoleptis Terhadap Berbagai Formula Krim *Body scrub* ekstrak kulit jeruk manis

Hasil Uji Kesukaan Bau Formula Blangko

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | TS | 2 | -1,25 | 1,5625 |
| 2 | TS | 2 | -1,25 | 1,5625 |
| 3 | TS | 2 | -1,25 | 1,5625 |
| 4 | TS | 2 | -1,25 | 1,5625 |
| 5 | KS | 3 | -0,25 | 0,0625 |
| 6 | KS | 3 | -0,25 | 0,0625 |
| 7 | KS | 3 | -0,25 | 0,0625 |
| 8 | KS | 3 | -0,25 | 0,0625 |
| 9 | KS | 3 | -0,25 | 0,0625 |
| 10 | KS | 3 | -0,25 | 0,0625 |
| 11 | KS | 3 | -0,25 | 0,0625 |
| 12 | KS | 3 | -0,25 | 0,0625 |
| 13 | KS | 3 | -0,25 | 0,0625 |
| 14 | S | 4 | 0,75 | 0,5625 |
| 15 | S | 4 | 0,75 | 0,5625 |
| 16 | S | 4 | 0,75 | 0,5625 |
| 17 | S | 4 | 0,75 | 0,5625 |
| 18 | S | 4 | 0,75 | 0,5625 |
| 19 | SS | 5 | 1,75 | 3,0625 |
| 20 | SS | 5 | 1,75 | 3,0625 |
| Nilai kesukaan rata-rata () = 3,25 | | | NIlai total (i-= 15,75 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,9104

Rentang nilai kesukaan bau dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rataa () – 0,9104 Nilai rata-rata () + 0,9104

=3,25 – 0,9104

3,25 + 0,9104

=2,3396 - 4,1604

**Lampiran 13**. (lanjutan)

Hasil Uji Kesukaan Bau Formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | TS | 2 | -2,1 | 4,41 |
| 2 | KS | 3 | -1,1 | 1,21 |
| 3 | KS | 3 | -1,1 | 1,21 |
| 4 | S | 4 | -0,1 | 0,01 |
| 5 | S | 4 | -0,1 | 0,01 |
| 6 | S | 4 | -0,1 | 0,01 |
| 7 | S | 4 | -0,1 | 0,01 |
| 8 | S | 4 | -0,1 | 0,01 |
| 9 | S | 4 | -0,1 | 0,01 |
| 10 | S | 4 | -0,1 | 0,01 |
| 11 | S | 4 | -0,1 | 0,01 |
| 12 | S | 4 | -0,1 | 0,01 |
| 13 | S | 4 | -0,1 | 0,01 |
| 14 | S | 4 | -0,1 | 0,01 |
| 15 | SS | 5 | 0,9 | 0,81 |
| 16 | SS | 5 | 0,9 | 0,81 |
| 17 | SS | 5 | 0,9 | 0,81 |
| 18 | SS | 5 | 0,9 | 0,81 |
| 19 | SS | 5 | 0,9 | 0,81 |
| 20 | SS | 5 | 0,9 | 0,81 |
| Nilai kesukaan rata-rata () = 4,1 | | | NIlai total (i-= 11,8 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,7880

Rentang nilai kesukaan bau dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,7880 Nilai rata-rat () + 0,7880

=4,1 – 0,7880

4,1 + 0,7880

=3,321- 4,888

**Lampiran 13.** (lanjutan)

Hasil Uji Kesukaan Bau Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | TS | 2 | -2,5 | 6,25 |
| 2 | KS | 3 | -1,5 | 2,25 |
| 3 | S | 4 | -0,5 | 0,25 |
| 4 | S | 4 | -0,5 | 0,25 |
| 5 | S | 4 | -0,5 | 0,25 |
| 6 | S | 4 | -0,5 | 0,25 |
| 7 | S | 4 | -0,5 | 0,25 |
| 8 | SS | 5 | 0,5 | 0,25 |
| 9 | SS | 5 | 0,5 | 0,25 |
| 10 | SS | 5 | 0,5 | 0,25 |
| 11 | SS | 5 | 0,5 | 0,25 |
| 12 | SS | 5 | 0,5 | 0,25 |
| 13 | SS | 5 | 0,5 | 0,25 |
| 14 | SS | 5 | 0,5 | 0,25 |
| 15 | SS | 5 | 0,5 | 0,25 |
| 16 | SS | 5 | 0,5 | 0,25 |
| 17 | SS | 5 | 0,5 | 0,25 |
| 18 | SS | 5 | 0,5 | 0,25 |
| 19 | SS | 5 | 0,5 | 0,25 |
| 20 | SS | 5 | 0,5 | 0,25 |
| Nilai kesukaan rata-rata () = 4,5 | | | NIlai total (i-= 13 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,8271

Rentang nilai kesukaan bau dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,8271 Nilai rata-rata () + 0,8271

=4,5 – 0,8271

4,5 + 0,8271

=3,6729 - 5,3271

**Lampiran 13**. (lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan Bau dari berbagai formula sediaan krim *body scrub* ekstrak kulit jeruk manis | | | | | |  |
| Formula 0 | | Formula 1 | | Formula II | |  |
| Kode | Nilai | Kode | Nilai | Kode | Nilai |
| 1 | TS | 2 | TS | 2 | TS | 2 |
| 2 | TS | 2 | KS | 3 | KS | 3 |
| 3 | TS | 2 | KS | 3 | S | 4 |
| 4 | TS | 2 | S | 4 | S | 4 |
| 5 | KS | 3 | S | 4 | S | 4 |
| 6 | KS | 3 | S | 4 | S | 4 |
| 7 | KS | 3 | S | 4 | S | 4 |
| 8 | KS | 3 | S | 4 | SS | 5 |
| 9 | KS | 3 | S | 4 | SS | 5 |
| 10 | KS | 3 | S | 4 | SS | 5 |
| 11 | KS | 3 | S | 4 | SS | 5 |
| 12 | KS | 3 | S | 4 | SS | 5 |
| 13 | KS | 3 | S | 4 | SS | 5 |
| 14 | S | 4 | S | 4 | SS | 5 |
| 15 | S | 4 | SS | 5 | SS | 5 |
| 16 | S | 4 | SS | 5 | SS | 5 |
| 17 | S | 4 | SS | 5 | SS | 5 |
| 18 | S | 4 | SS | 5 | SS | 5 |
| 19 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II |  |
| Rata-rata nilai kesukaan = | 3,25 | 4,1 | 4,5 |
| Standar deviasi = | 0,9104 | 0,7880 | 0,8271 |
| Rentang nilai kesukaan = | 2,3396-  4,1604 | 3,321-  4,888 | 3,6729-  5,3271 |

**Lampiran 14.** Data dan Perhitungan Rentang Kesukaan Bentuk Secara Organoleotis Terhadap Berbagai Formula Krim *Body scrub* ekstrak kulit jeruk manis

Hasil Uji Kesukaan Bentuk Formula Blangko

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | TS | 2 | -1,95 | 3,8025 |
| 2 | KS | 3 | -0,95 | 0,9025 |
| 3 | KS | 3 | -0,95 | 0,9025 |
| 4 | KS | 3 | -0,95 | 0,9025 |
| 5 | KS | 3 | -0,95 | 0,9025 |
| 6 | S | 4 | 0,05 | 0,0025 |
| 7 | S | 4 | 0,05 | 0,0025 |
| 8 | S | 4 | 0,05 | 0,0025 |
| 9 | S | 4 | 0,05 | 0,0025 |
| 10 | S | 4 | 0,05 | 0,0025 |
| 11 | S | 4 | 0,05 | 0,0025 |
| 12 | S | 4 | 0,05 | 0,0025 |
| 13 | S | 4 | 0,05 | 0,0025 |
| 14 | S | 4 | 0,05 | 0,0025 |
| 15 | S | 4 | 0,05 | 0,0025 |
| 16 | SS | 5 | 1,05 | 1,1025 |
| 17 | SS | 5 | 1,05 | 1,1025 |
| 18 | SS | 5 | 1,05 | 1,1025 |
| 19 | SS | 5 | 1,05 | 1,1025 |
| 20 | SS | 5 | 1,05 | 1,1025 |
| Nilai kesukaan rata-rata () = 3,95 | | | NIlai total (i-= 12,95 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,8255

Rentang nilai kesukaan bau dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,8255 , Nilai rata-rata () + 0,8255

=3,95 – 0,8255

3,95 + 0,8255

=3,1245 - 4,7755

**Lampiran 14.** (lanjutan)

Hasil Uji Kesukaan Bentuk Formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | KS | 4 | 0,25 | 0,06 |
| 2 | KS | 4 | 0,25 | 0,06 |
| 3 | KS | 4 | 0,25 | 0,06 |
| 4 | KS | 4 | 0,25 | 0,06 |
| 5 | S | 4 | 0,25 | 0,06 |
| 6 | S | 4 | 0,25 | 0,06 |
| 7 | S | 4 | 0,25 | 0,06 |
| 8 | S | 4 | 0,25 | 0,06 |
| 9 | S | 4 | 0,25 | 0,06 |
| 10 | S | 4 | 0,25 | 0,06 |
| 11 | S | 4 | 0,25 | 0,06 |
| 12 | S | 4 | 0,25 | 0,06 |
| 13 | S | 4 | 0,25 | 0,06 |
| 14 | S | 4 | 0,25 | 0,06 |
| 15 | S | 4 | 0,25 | 0,06 |
| 16 | SS | 5 | 0,75 | 0,56 |
| 17 | SS | 5 | 0,75 | 0,56 |
| 18 | SS | 5 | 0,75 | 0,56 |
| 19 | SS | 5 | 0,75 | 0,56 |
| 20 | SS | 5 | 0,75 | 0,56 |
| Nilai kesukaan rata-rata () = 4,25 | | | NIlai total (i-= 3,7 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,1947

Rentang nilai kesukaan bentuk dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,1947, Nilai rata-rata () + 0,1947

=4,25 – 0,1947

4,25 + 0,1947

=4,0553 – 4,4447

**Lampiran 14.** (lanjutan)

Hasil Uji Kesukaan Bentuk Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Penelis | Hasil Uji Kesukaan Warna Pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi-) | (Xi- |
| 1 | TS | 5 | -0,3 | 0,09 |
| 2 | TS | 5 | -0,3 | 0,09 |
| 3 | KS | 5 | -0,3 | 0,09 |
| 4 | KS | 5 | -0,3 | 0,09 |
| 5 | S | 5 | -0,3 | 0,09 |
| 6 | S | 5 | -0,3 | 0,09 |
| 7 | S | 5 | -0,3 | 0,09 |
| 8 | S | 4 | 0,7 | 0,49 |
| 9 | S | 4 | 0,7 | 0,49 |
| 10 | S | 4 | 0,7 | 0,49 |
| 11 | S | 4 | 0,7 | 0,49 |
| 12 | S | 5 | -0,3 | 0,09 |
| 13 | S | 5 | -0,3 | 0,09 |
| 14 | S | 4 | 0,7 | 0,49 |
| 15 | S | 4 | 0,7 | 0,49 |
| 16 | SS | 5 | -0,3 | 0,09 |
| 17 | SS | 5 | -0,3 | 0,09 |
| 18 | SS | 5 | -0,3 | 0,09 |
| 19 | SS | 5 | -0,3 | 0,09 |
| 20 | SS | 5 | -0,3 | 0,09 |
| Nilai kesukaan rata-rata () = 4,7 | | | NIlai total (i-= 4,2 | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,2210

Rentang nilai kesukaan bentuk dari sediaan krim *body scrub* kolang kaling

= Nilai rata-rata () – 0,2210, Nilai rata-rata () + 0,2210

=4,7 – 0,2210

4,7 + 0,2210

=4,479 – 4,921

**Lampiran 14.** (lanjutan)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan Bentuk dari berbagai formula sediaan krim  *body scrub* ekstrak kulit jeruk manis | | | | | |  |
| Formula 0 | | Formula 1 | | Formula II | |  |
| Kode | Nilai | Kode | Nilai | Kode | Nilai |
| 1 | TS | 2 | KS | 4 | TS | 5 |
| 2 | KS | 3 | KS | 4 | TS | 5 |
| 3 | KS | 3 | KS | 4 | KS | 5 |
| 4 | KS | 3 | KS | 4 | KS | 5 |
| 5 | KS | 3 | S | 4 | S | 5 |
| 6 | S | 4 | S | 4 | S | 5 |
| 7 | S | 4 | S | 4 | S | 5 |
| 8 | S | 4 | S | 4 | S | 4 |
| 9 | S | 4 | S | 4 | S | 4 |
| 10 | S | 4 | S | 4 | S | 4 |
| 11 | S | 4 | S | 4 | S | 4 |
| 12 | S | 4 | S | 4 | S | 5 |
| 13 | S | 4 | S | 4 | S | 5 |
| 14 | S | 4 | S | 4 | S | 4 |
| 15 | S | 4 | S | 4 | S | 4 |
| 16 | SS | 5 | SS | 5 | SS | 5 |
| 17 | SS | 5 | SS | 5 | SS | 5 |
| 18 | SS | 5 | SS | 5 | SS | 5 |
| 19 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II |  |
| Rata-rata nilai kesukaan = | 3,95 | 4,25 | 4,7 |
| Standar deviasi = | 0,8255 | 0,1947 | 0,2210 |
| Rentang nilai kesukaan = | 3,1245-  4,7755 | 4,0553-  4,4447 | 4,479-  4,921 |

**Lampiran 15**. Hasil pengamatan organoleptis *body scrub* EEKJM setelah sediaan dibuat

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pemeriksaan** | **F0** | | | **F1** | | | **F2** | | |
| F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
| Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
| Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
| Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |

Keterangan:

F0 = Blangko

F1 = Konsentrasi ekstrak etanol kulit jeruk manis5%

F2 = Konsentrasi ekstrak etanol kulit jeruk manis 10%

P = Putih

Cm = Coklat muda

Ct = Coklat tua

Tb = Tidak berbau

Kj= Khas jeruk

SP = Semi Padat

Hasil pengamatan organoleptis body scrub EEKJM setelah pengujian stabilitas

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Siklus** | **Organoleptis** | **F0** | | | **F1** | | | **F2** | | |
| F0 | F0 | F0 | F1 | F1 | F1 | F2 | F2 | F2 |
| 1 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |
| 2 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |
| 3 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |

**Lampiran 15. (**lanjutan)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |
| 4 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |
| 5 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |
| 6 | Bentuk | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp | Sp |
|  | Bau | Tb | Tb | Tb | KJ | KJ | KJ | KJ | KJ | KJ |
|  | Warna | P | P | P | Cm | Cm | Cm | Ct | Ct | Ct |

Hasil pengamatan homogenitas krim *body scrub* EEKJM setelah sediaan dibuat

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pengujian** | **F0** | | | **F1** | | | **F2** | | |
| **Homogenitas** | F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
|  |  |  |  |  |  |  |  |  |

Keterangan:

F0 = Blangko

F1 = Konsentrasi ekstrak etanol kulit jeruk manis 5%

F2 = Konsentrasi ekstrak etanol kulit jeruk manis 10%

* = Homogen
* = Tidak homogen

Hasil pengamatan homogenitas *body scrub* EEKJM setelah pengujian stabilitas

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Siklus** | **F0** | | | **F1** | | | **F2** | | |
| F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |

**Lampiran 15. (**lanjutan)

Hasil pengamatan pH krim *body scrub* EEKJM setelah sediaan dibuat

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pengujian** | **F0** | | | **F1** | | | **F2** | | |
| **Ph** | F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
| 6,4 | 6,4 | 6,4 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 | 6,5 |

Keterangan:

F0 = Blangko

F1 = Konsentrasi ekstrak etanol kulit rambutan 5%

F2 = Konsentrasi ekstrak etanol kulit rambutan 10%

Hasil pengujian daya sebar krim *body scrub* EEKJM setelah sediaan dibuat

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pengujian** | **F0** | | | **F1** | | | **F2** | | |
| F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
| **Daya Sebar** | 5,0 | 4,9 | 4,9 | 5,0 | 5,0 | 4,9 | 5,0 | 4,9 | 4,9 |

Keterangan:

F0 = Blangko

F1 = Konsentrasi ekstrak etanol kulit jeruk manis 5%

F2 = Konsentrasi ekstrak etanol kulit jeruk manis 10%

Hasil pengamatan daya sebar *body scrub* EEKJM setelah pengujian stabilitas

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Siklus** | **F0** | | | **F1** | | | **F2** | | |
| F01 | F02 | F03 | F11 | F12 | F13 | F21 | F22 | F23 |
| 1 | 4,9 | 4,9 | 4,8 | 4,8 | 4,9 | 4,8 | 4,9 | 4,8 | 4,8 |
| 2 | 4,7 | 4,7 | 4,6 | 4,8 | 4,7 | 4,6 | 4,8 | 4,6 | 4,7 |
| 3 | 4,2 | 4,1 | 4,1 | 4,3 | 4,4 | 4,4 | 4,3 | 4,5 | 4,3 |
| 4 | 4,0 | 3,9 | 3,9 | 4,0 | 3,9 | 3,8 | 4,0 | 4,0 | 3,9 |
| 5 | 3,7 | 3,7 | 3,8 | 3,6 | 3,6 | 3,5 | 3,7 | 3,6 | 3,4 |
| 6 | 3,5 | 3,4 | 3,4 | 3,2 | 3,2 | 3,1 | 3,2 | 3,1 | 3,0 |

**Lampiran 16.** Contoh data perhitungan nila SD dan rentang nilai kadar air F2

|  |  |  |
| --- | --- | --- |
| () | (Xi-) | (Xi- |
| Kondisi awal |  |  |
| 18-21 | -3 | 9 |
| 24-21 | 3 | 9 |
| 21-21 | 0 | 0 |
| Minggu 1 |  | = 18 |
| 21-24,3 | -3,3 | 10,89 |
| 27-24,3 | 2,7 | 7,29 |
| 25-24,3 | 0,7 | 0,49 |
| Minggu 2 |  | =18,67 |
| 24-27 | -3 | 9 |
| 30-27 | 3 | 9 |
| 27-27 | 0 | 0 |
| Minggu 3 |  | =18 |
| 27-30 | -3 | 9 |
| 33-30 | 3 | 9 |
| 30-30 | 0 | 0 |
| Minggu 4 |  | =18 |
| 31-34 | -3 | 9 |
| 36-34 | 2 | 4 |
| 35-34 | 1 | 1 |
| Persentase Pemulihan |  | =14 |
| 72,22-62,96 | 9,26 | 85,74 |
| 50,00-62,96 | -12,96 | 167,96 |
| 66,66-62,96 | 3,7 | 13,69 |
| 267,39 | | |

**Kondisi awal**

(SD) =

=

=

= 3

Rentang nilai

21-3

21+3

= 18-24

**Minggu 1**

(SD) =

**Lampiran 16.** (lanjutan)

=

=

=3,05

Rentang nilai

24,3-3,05

24,3+3,05

=21,25-27,35

**Minggu 2**

(SD) =

=

=

= 3

Rentang nilai

27-3

27+3

= 24-30

**Minggu 3**

(SD) =

=

=

= 3

Rentang nilai

30-3

30+3

= 27-33

**Minggu 4**

(SD) =

=

=

= 2,64

Rentang nilai

34-2,64

34+2,64

= 31,36-36,64

**Lampiran 16.** (lanjutan)

**Persentase Pemulihan**

(SD) =

=

=

= 11,56

Rentang nilai

62,96-11,56

62,96+11,56

= 51,4-74,52

**Lampiran 17.** Bagan Alir Pembuatan Ekstrak Etanol Kulit Jeruk Manis

Kulit Jeruk Manis

Disortasi dan dicuci

Ditiriskan

Ditimbang

Kulit jeruk manis 6 kg

Dikeringkan dan dihaluskan

Ditimbang

Kulit jeruk manis halus 500 gr

Dimaserasi dengan 75 bagian cairan penyari etanol

96% selama 5 hari

Disaring

Residu

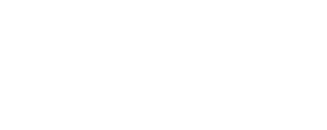
Filtrat I

Dimaserasi 25 bagian etanol 96% selama 2

hari

Filtrat I+Filtrat II

Dipekatkan dengan *rotary evaporator*

**Lampiran 18.** Bagan Alir Pembuatan Sediaan Krim *Body Scrub* Ekstrak Etanol

Ekstrak kental 65 gram

Kulit Jeruk Manis

Fases Minyak

Fases air

Krim *body scrub* ekstrak

Etanol kulit jeruk manis

Diaduk hingga homogen

EEKJM dengan variasi konsentrat 5% dan 10%

Dasar Krim Body scrub

Diaduk

Tambahkan scrubbing kolang kaling

Massa I+Massa II (digerus dalam

lumpang panas

Dileburan dan dipertahankan suhu 70oC (massa II)

Asam stearate, propil paraben, tokoferol, PEG

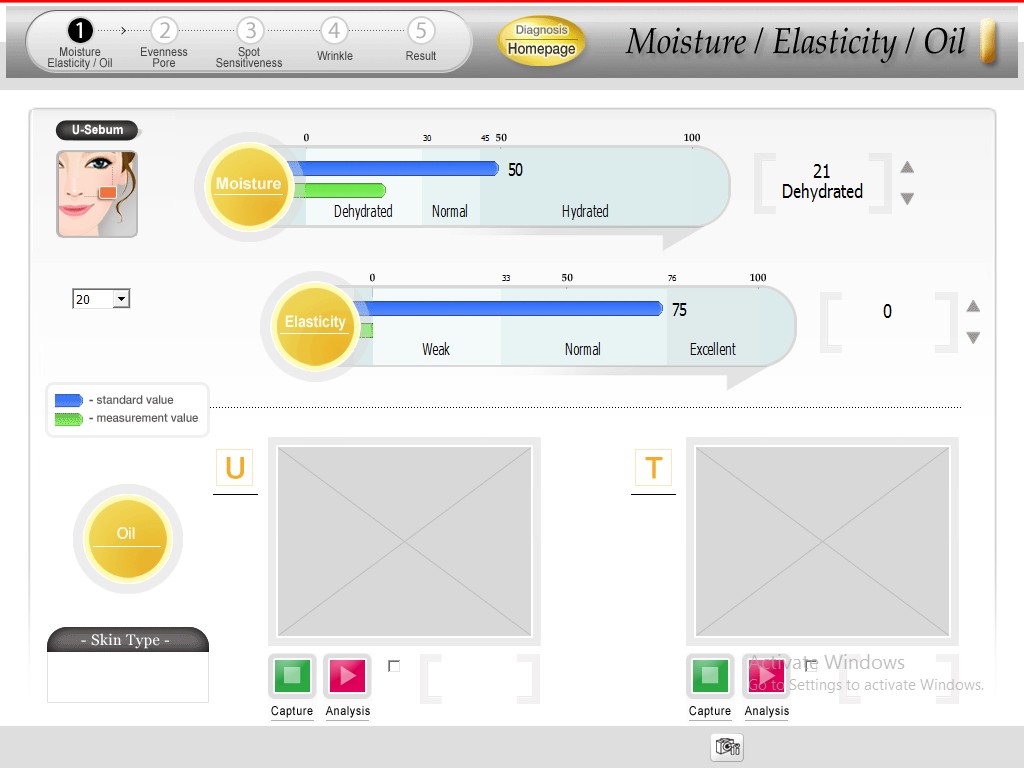
Dilarutkan + aquaest

Dan dipertahankan suhu 70oC (massa 1)

Tea, gliserin, metil paraben, sodium lauryl sulfat

**Lampiran 19.** Uji *Skin analyzer*

1. Kadar Air

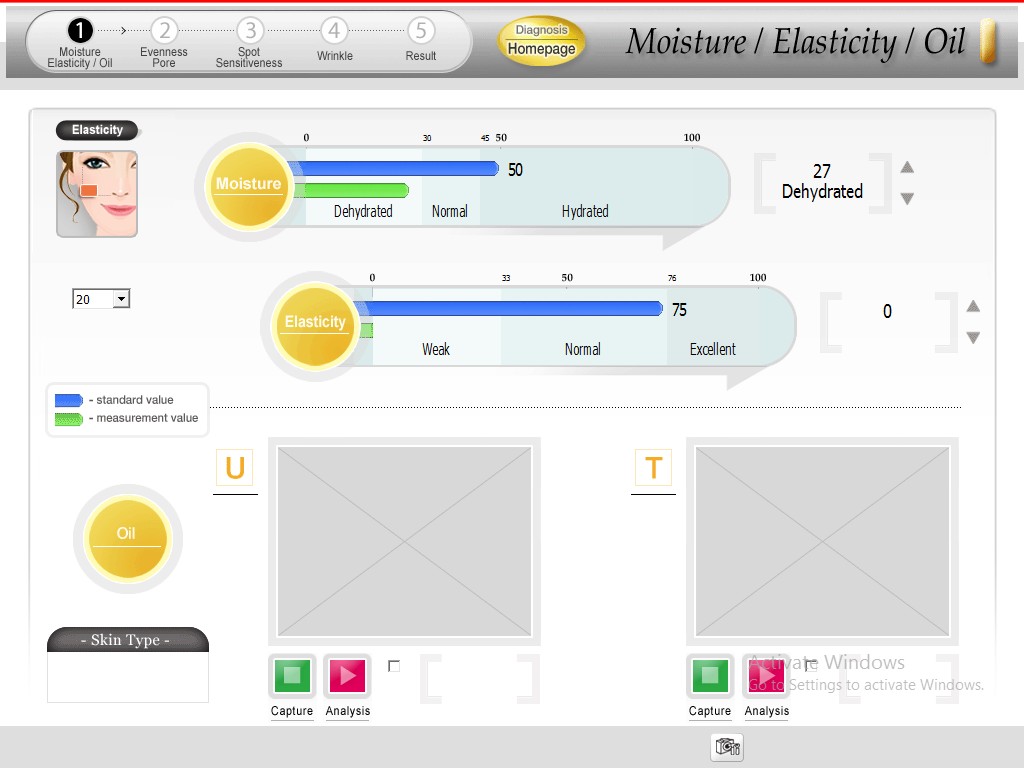


kondisi awal

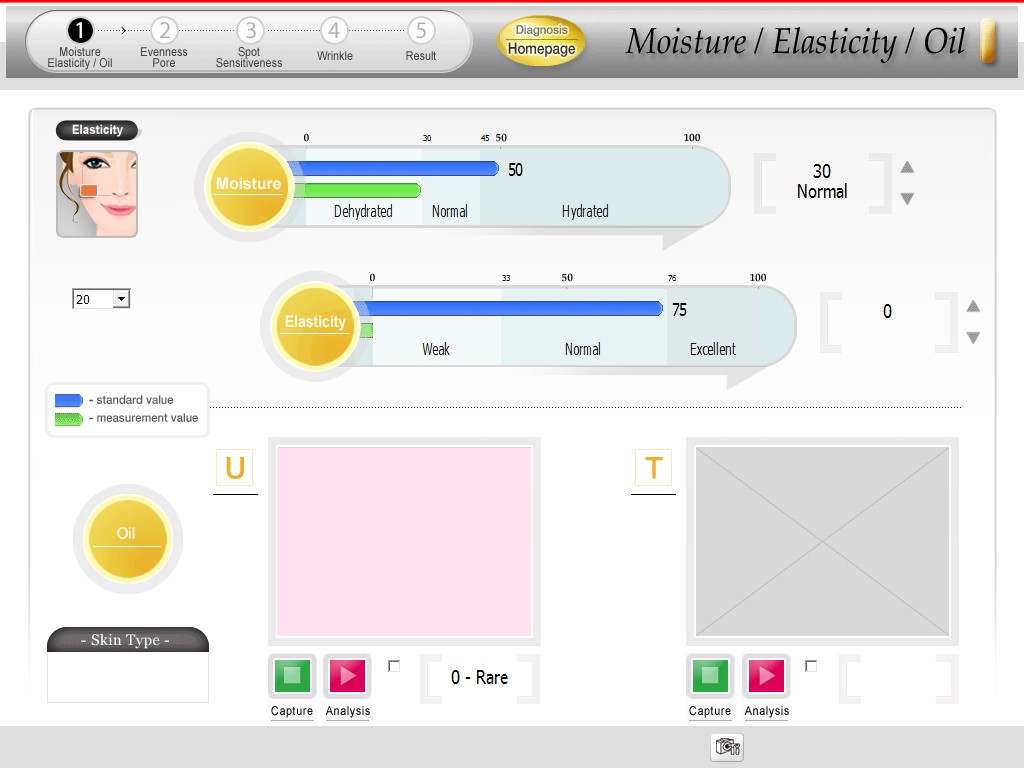


Minggu pertama

**Lampiran 19.** (lanjutan)

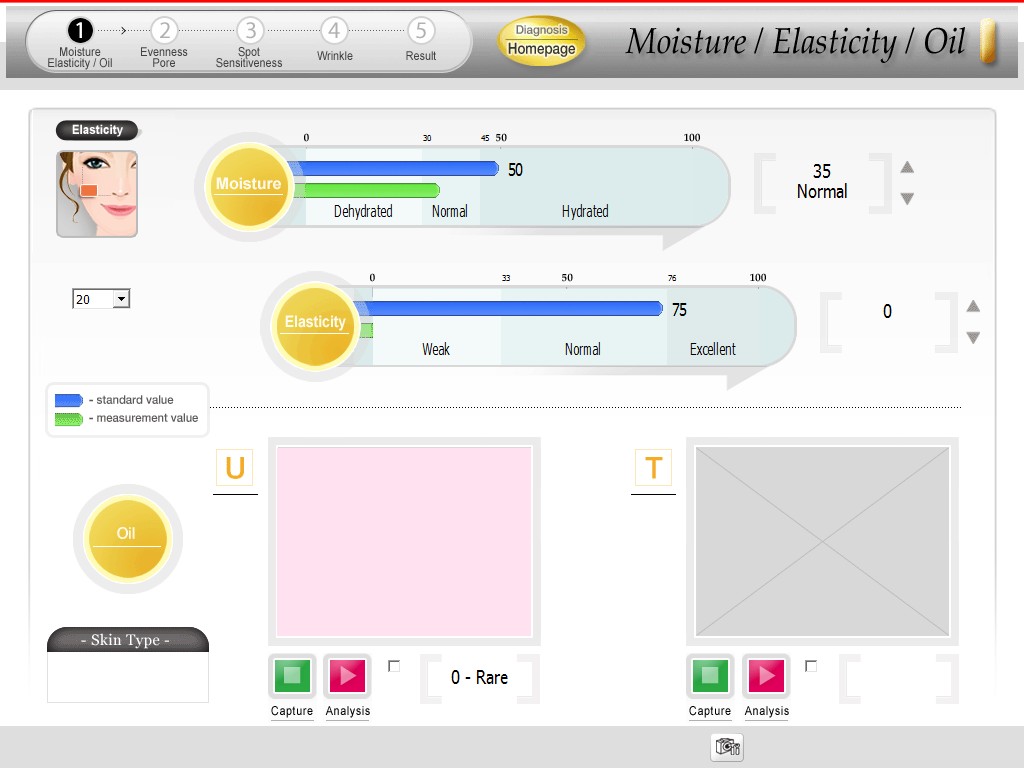


Minggu kedua



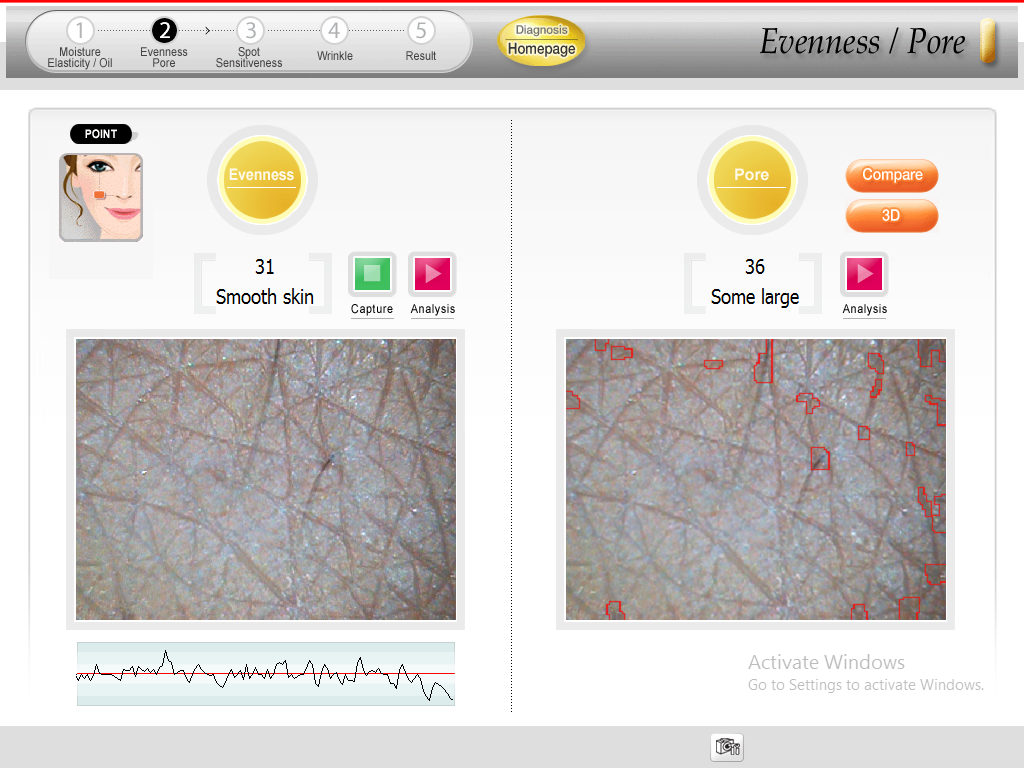
Minggu ketiga

**Lampiran 19**. (lanjutan)



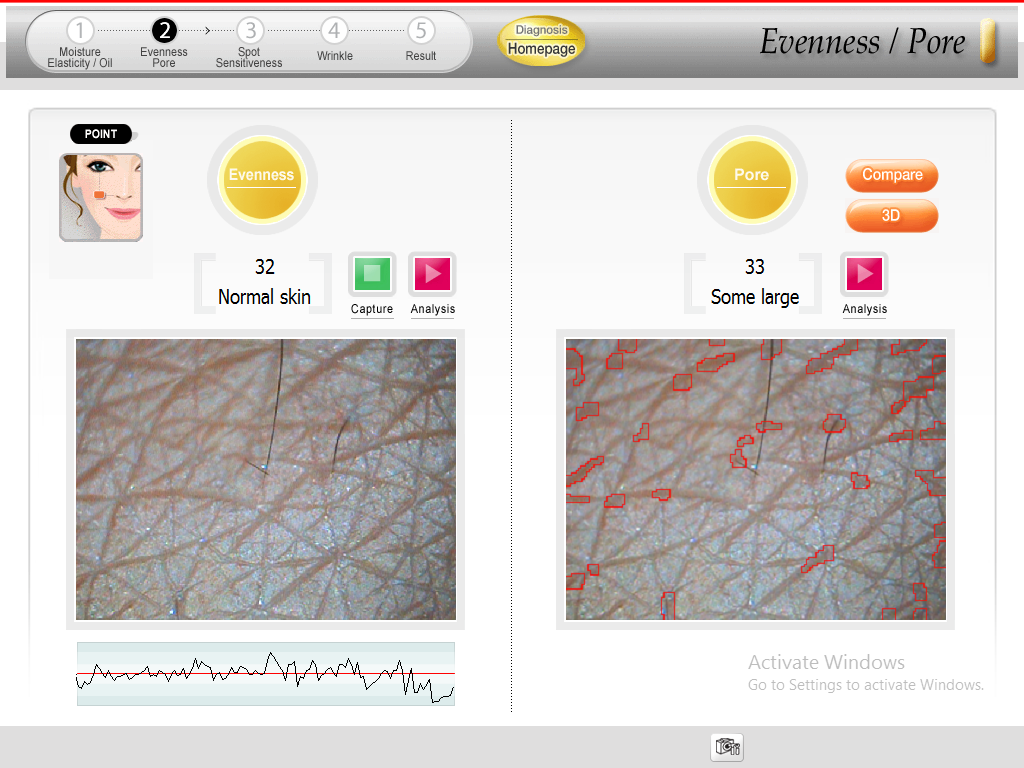
Minggu keempat

**2.** Pori (*pore*)

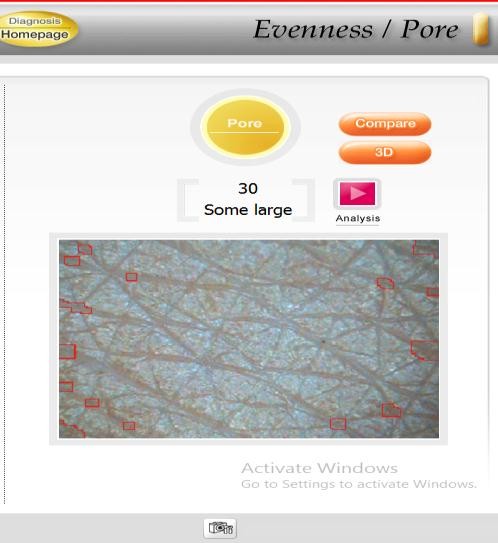


Kondisi awal

**Lampiran19**. (lanjutan)

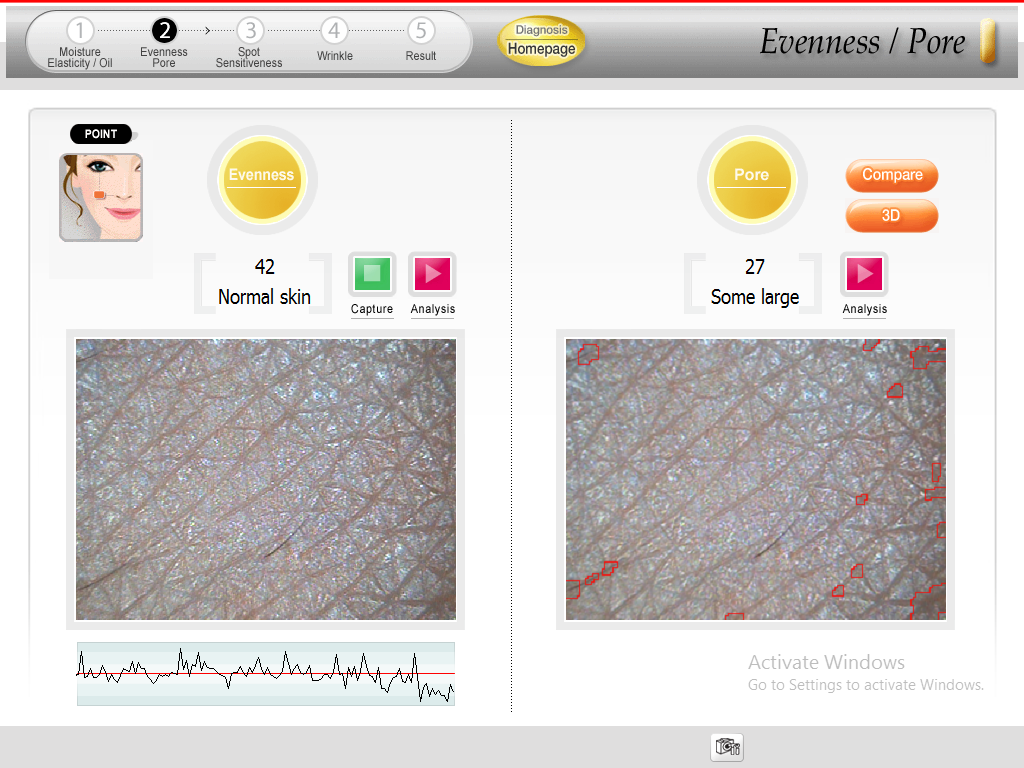


Minggu pertama

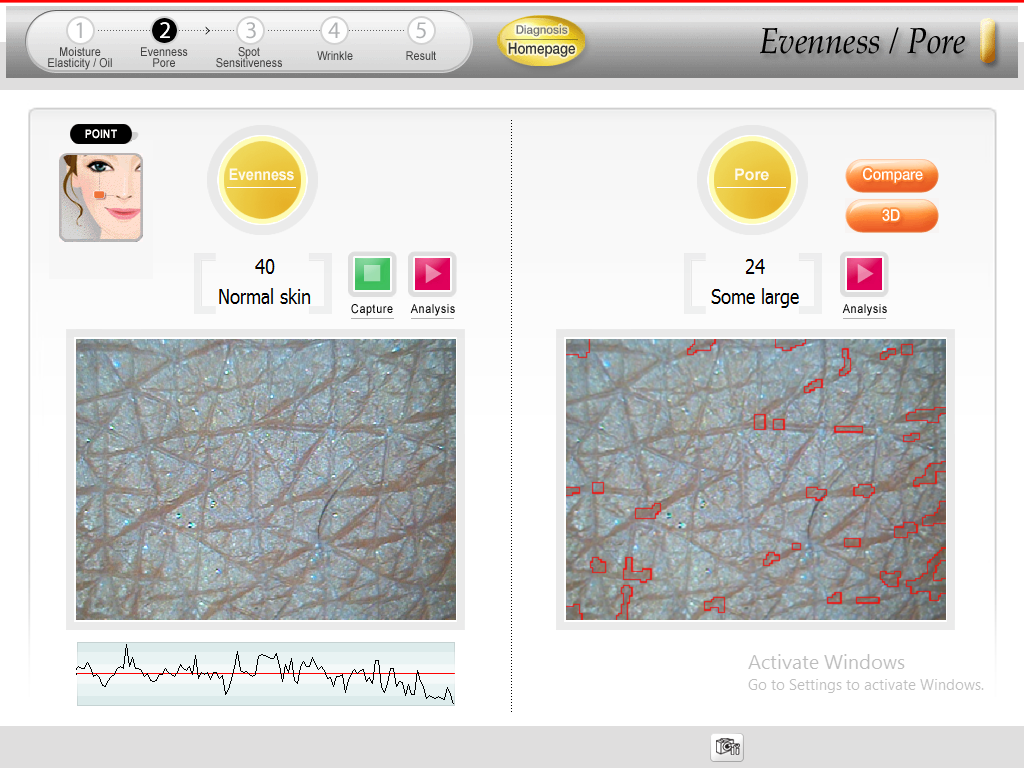


Minggu kedua

**Lampiran 19**. (lanjutan)



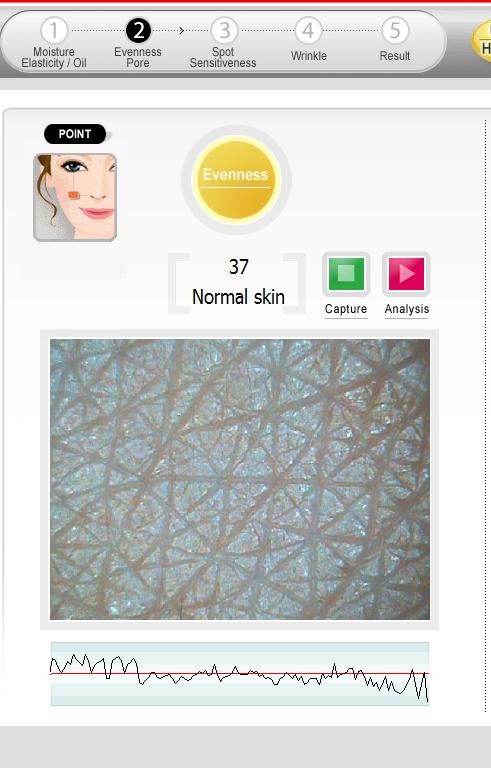
Minggu ketiga



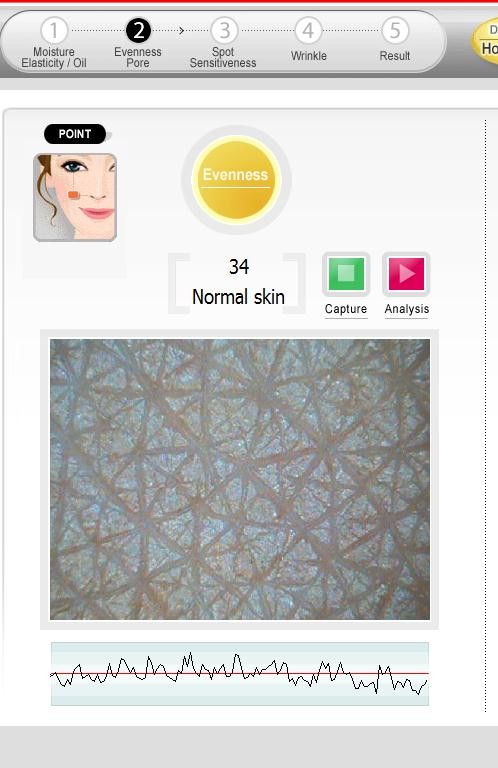
Minggu keempat

La**mpiran 19**. (lanjutan)

3**.** Kehalusan

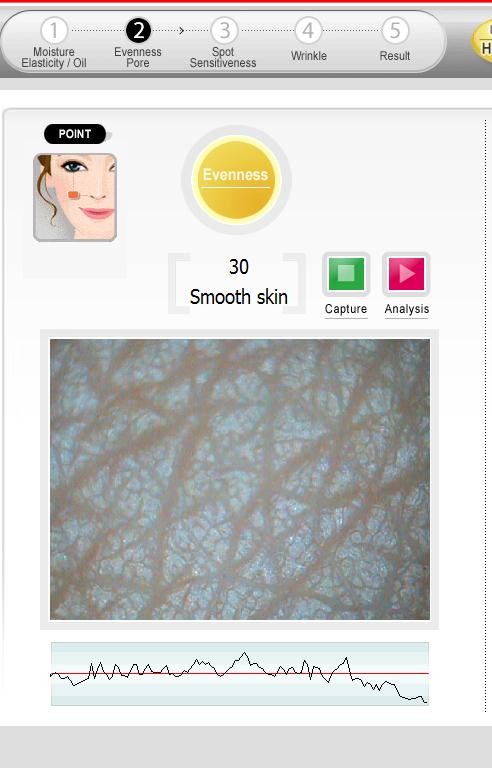


Kondisi awal

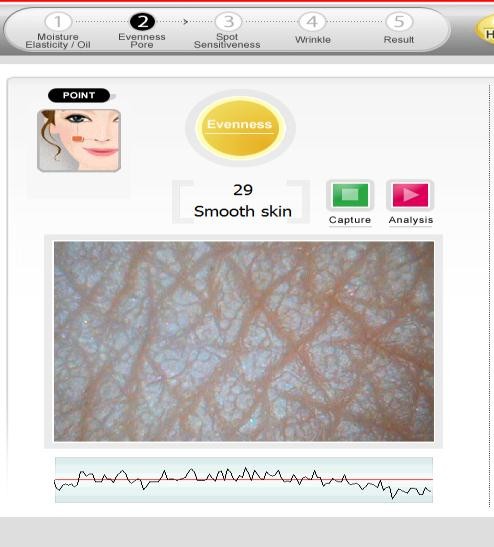


Minggu pertama

**Lampiran 19**. (lanjutan)

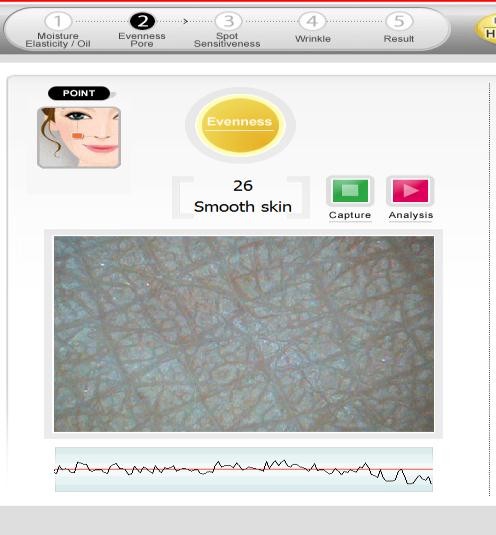


Minggu kedua



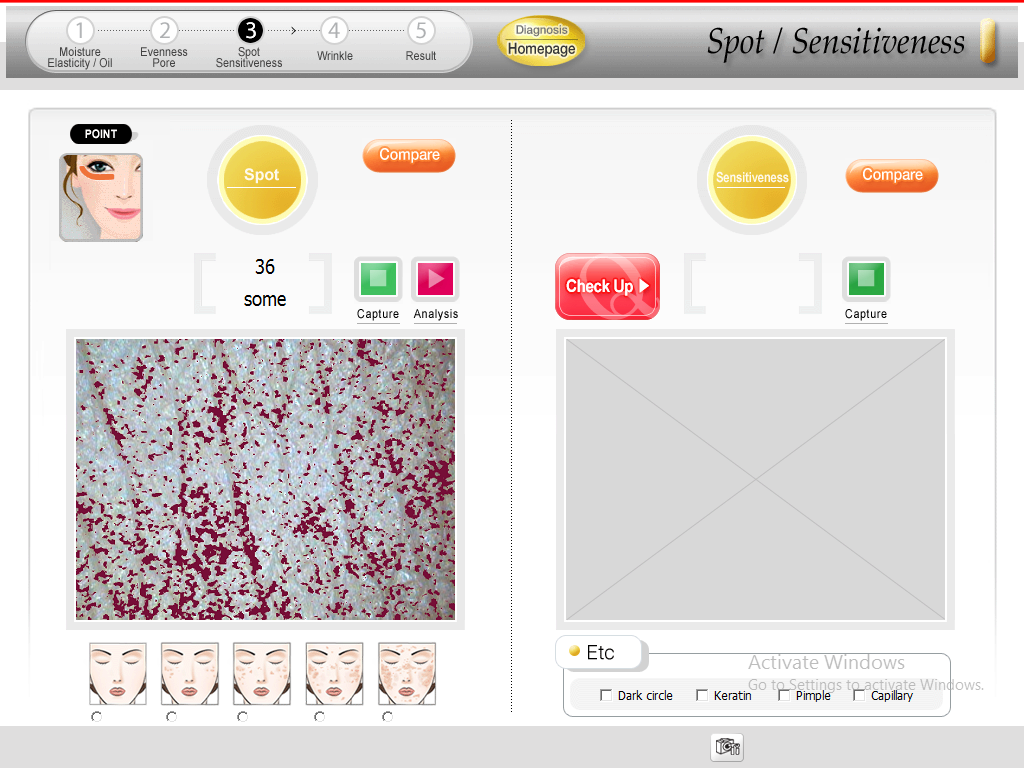
Minggu ketiga

**Lampiran 19**. (lanjutan)



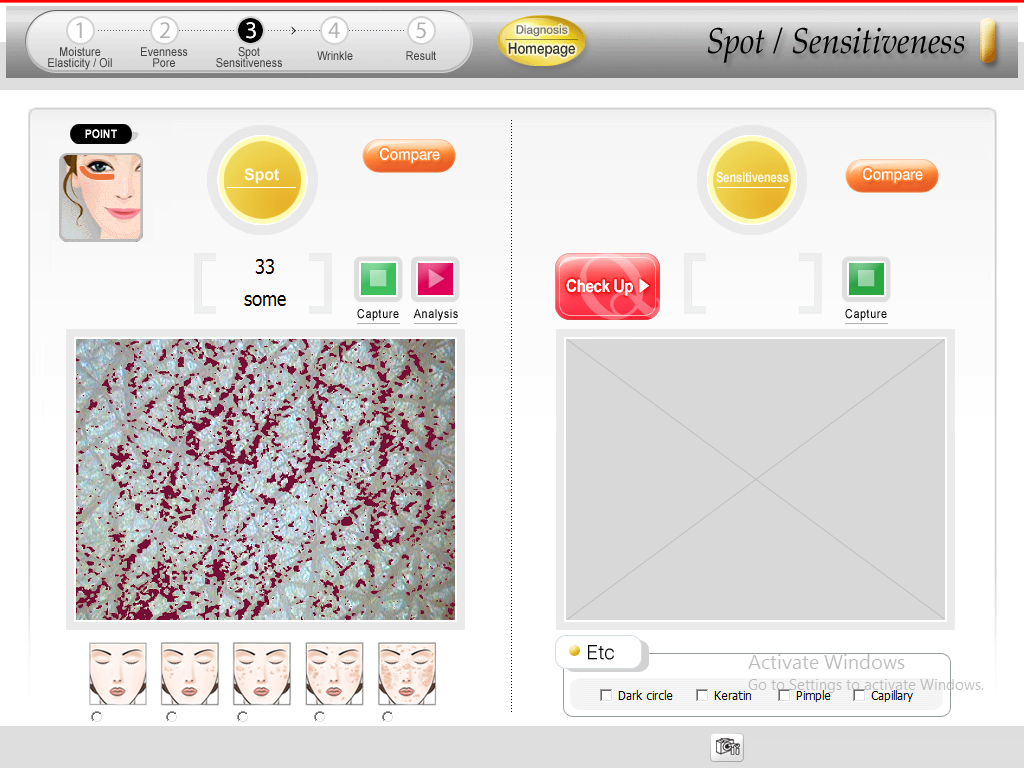
Minggu keempat

1. Noda

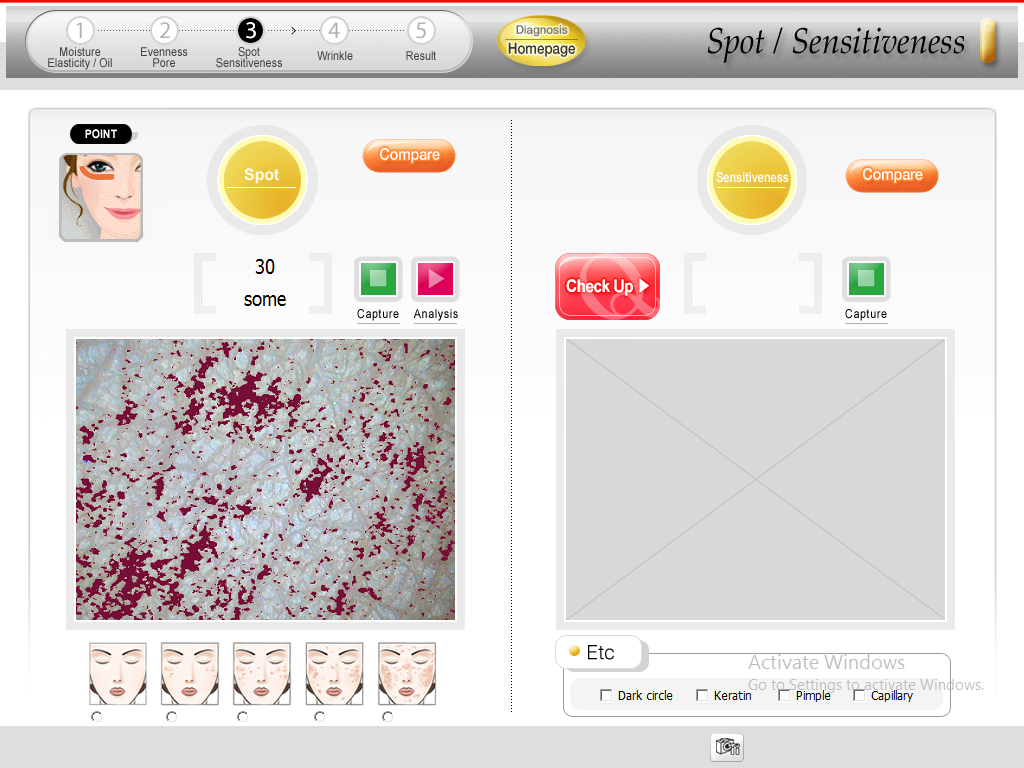


Kondisi awal

**Lampiran 19**. (lanjutan)

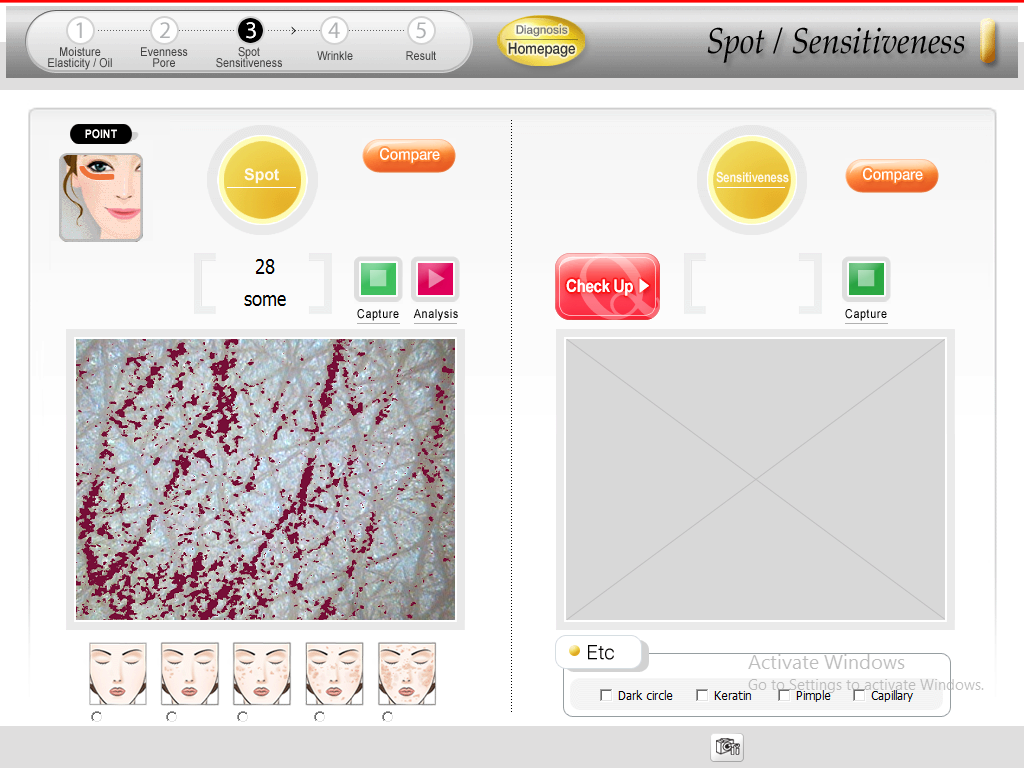


Minggu pertama

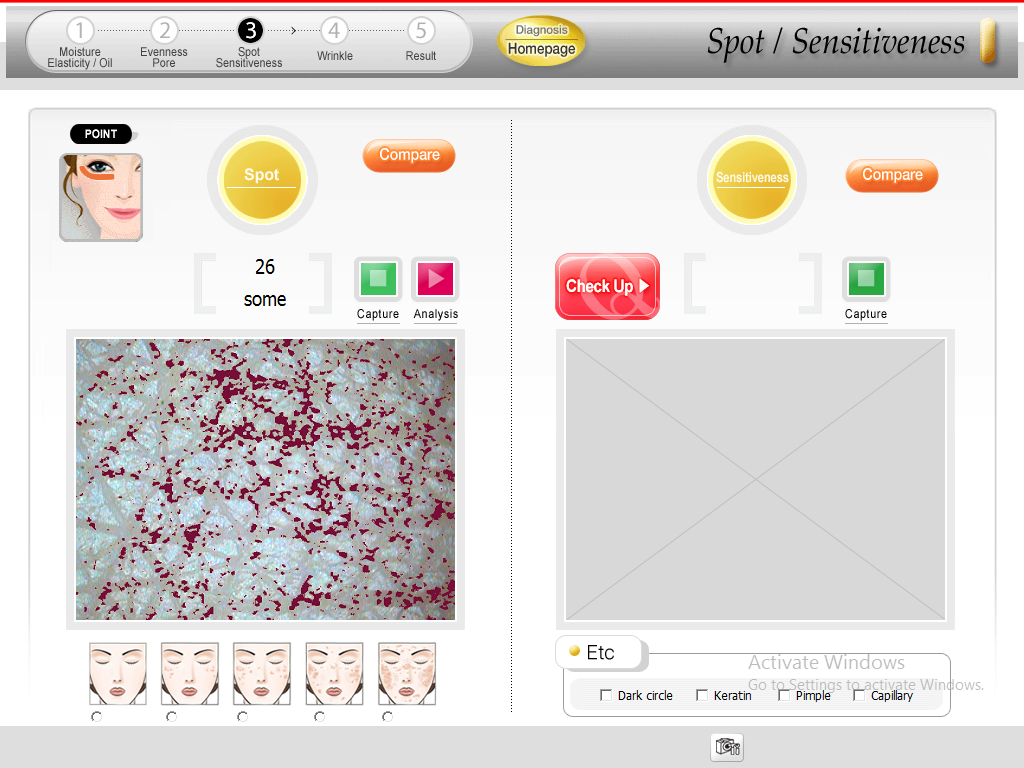


Minggu kedua

**Lampiran 19.**  (lanjutan)



Minggu ketiga



Minggu keempat