**Lampiran 1.** Tumbuhan Tembelekan (*Lantana camara* L).

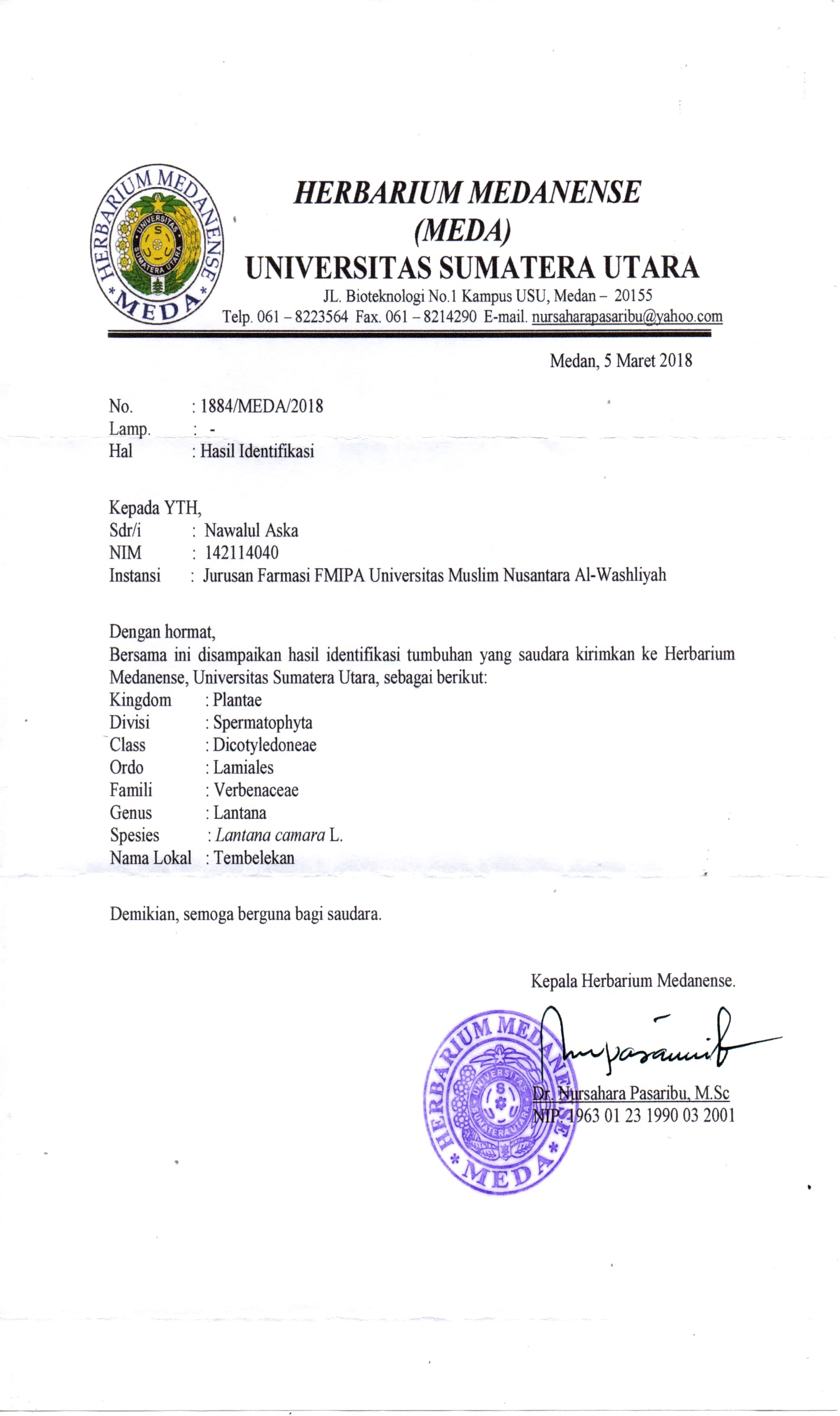
****

Tumbuhan tembelekan

** **

Daun Tembelekan

**Lampiran 2.** Hasil Identifikasi Tanaman Tembelekan (*Lantana camara* L.)

****

**Lampiran 3.** Bagan Prosedur Penelitian

1. Alkaloid
2. Flavonoid
3. Tanin
4. Saponin
5. Steroid/Triterpenoid
6. Glikosida

Daun tembelekan segar

Pemeriksaan golongan senyawa kimia

Pemeriksaan evaluasi sediaan gel

1. Uji organoleptis
2. Uji homogenitas
3. Uji pH sediaan
4. Uji stabilitas sediaan
5. Uji daya sebar sediaan

Sediaan gel mengandung bahan alam daun tembelekan dengan konsentrasi 5%, 10%, 15%

Dasar gel Hand Sanitizer

Pembanding

(Dettol)

Uji iritasi terhadap sukarelawan

1. Uji kesukaan
2. Uji homogenitas
3. Uji tipe emulsi
4. Uji pH sediaan
5. Uji stabilitas sediaan

Uji aktivitas antibakteri terhadap *Escherichia coli* dan *Staphylococcus aureus*

**Lampiran 4.** Bagan Formulasi Sediaan Hand sanitizer Daun Tembelekan (*Lantana camara* L.)

Nipagin + propilenglikol

HPMC

+ akuades panas, diamkan

Digerus

Digerus

Massa 2

Massa 1

Massa 1 + Massa 2

Digerus

Basis gel

+ sari air daun tembelekan berbagai konsentrasi

Gel hansanitizer

**Lampiran 5.** Bagan Pengujian Aktivitas Antibakteri Sediaan Hand Sanitizer

Biakan murni bakteri

Diambil dengan jarum ose steril

Ditanam pada media Nutrien Agar

Diinkubasi pada suhu 37ºC selama 24 jam

o

C

Stok kultur bakteri

Disuspensikan dalam 10 ml larutan fisiologis NaCl 0,9% steril

Disesuaikan kekeruhan dengan standar *Mc. Farland*

Inokulum bakteri

Dimasukkan 0,1 ml inokulum ke dalam cawan petri

Ditambahkan 20 ml media Muller Hinton Agar kedalam cawan petri

Dihomogenkan dan dibiaran hingga memadat

Media padat

Media dilubangi menggunakan punch hole

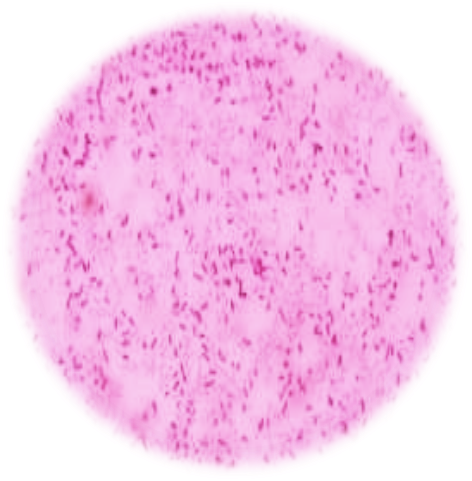
Dimasukkan sediaan *Hand sanitizer* daun tembelekan kedalam lubang dengan konsentrasi 5%, 10%, 15%, basis gel dan pembanding (Dettol)

Diinkubasi pada sushu 37ºC selama 24 jam

Diukur diameter daerah hambatan disekitar lubang dengan menggunakanjangka sorong

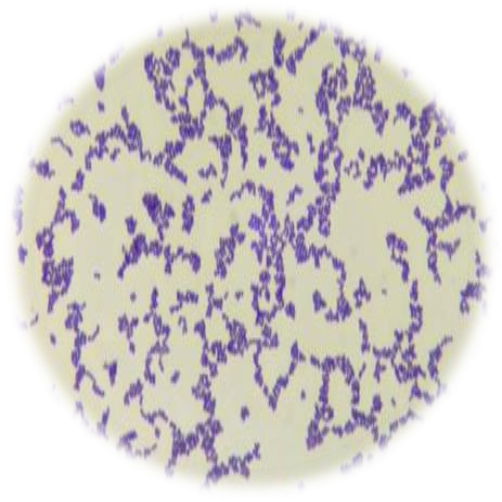
Hasil

**Lampiran 6.** Hasil Identifikasi Bakteri

****

*Escherichia coli*

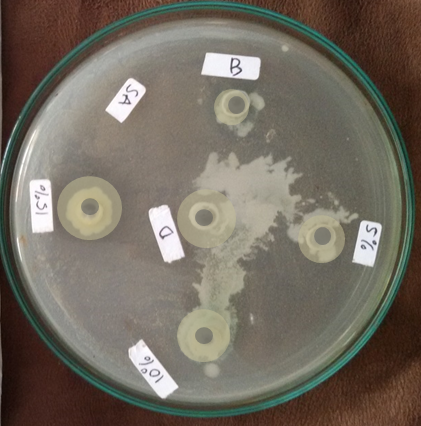
Bakteri *Escherichia coli* di bawah mikroskop

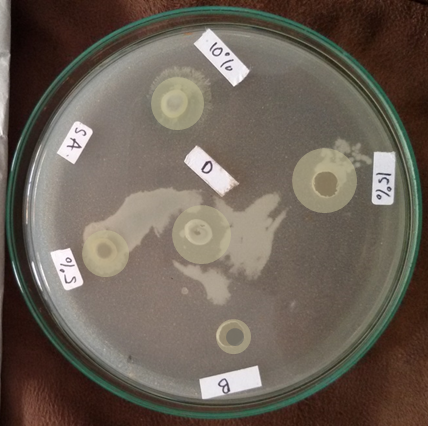


*Staphylococcus aureus*

Bakteri *Staphylococcus aureus* di bawah mikroskop

**Lampiran 7.** Diameter Hambatan Terhadap bakteri *Staphylococcus aureus*

****

****

Keterangan:

SA : *Staphylococcus aureus*

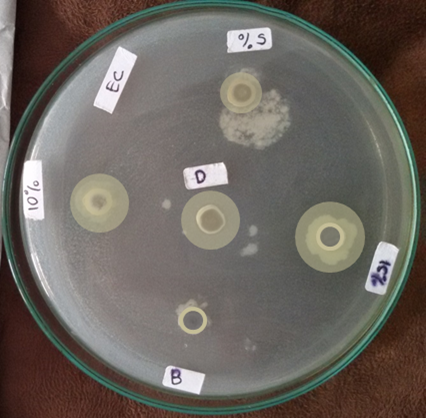
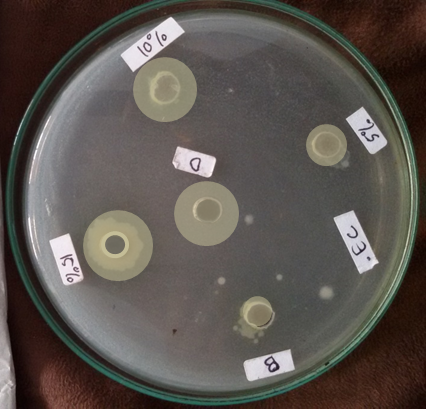
5% : *Hand sanitizer* Daun Tembelekan 5%

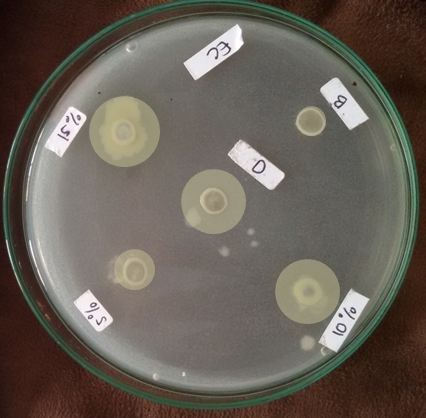
10% : *Hand sanitizer* Daun Tembelekan 10%

15% : *Hand sanitizer* Daun Tembelekan 15%

B : Basis Gel

D : *Hand Sanitizer* yang beredar di pasaran (Dettol)

**Lampiran 8.** Diameter Hambatan Terhadap bakteri Escherichia coli

****

Keterangan:

EC : *Escherichia coli*

5% : *Hand sanitizer* Daun Tembelekan 5%

10% : *Hand sanitizer* Daun Tembelekan 10%

15% : *Hand sanitizer* Daun Tembelekan 15%

B : Basis Gel

D : *Hand Sanitizer* yang beredar di pasaran (Dettol)

**Lampiran 9.** Contoh Perhitugan Statistik Diamteter Hambatan Aktivitas Antibakteri

Sebagai contoh diambil data dari sediaan *hand sanitizer* daun tembelekan konsentrasi 5% terhadap bakteri *Staphylococcus aureus.*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | Diameter hambatan | **X -** |  |
| 1. | 7,50 | 0,33 | 0,1089 |
| 2. | 8,00 | -0,17 | 0,0289 |
| 3. | 8,00 | -0,17 | 0,0289 |
| 4. | 8,00 | -0,17 | 0,0289 |
| 5. | 7,50 | 0,33 | 0,1089 |
| 6. | 8,00 | -0,17 | 0,0289 |
| **N = 6** | **∑ X =** 47,00  **=** 7,83 | | |

Standar deviasi (SD) =

Standar deviasi (SD) = = 0,258

Dasar penolakan data adalah apabila thitung> ttabel dengan tingkat kepercayaan 99%

α = 0,01; n = 6, dk = 5 dan ttabel = 4,032

1. thitung  = = = = 3,16
2. thitung  = = = = 1,58
3. thitung  = = = = 1,58
4. thitung  = = = = 1,58
5. thitung  = = = = 3,16
6. thitung  = = = = 1,58

Seluruh thitung dari ke-6 perlakuan < ttabel, berarti semua data ini dapat diterima.

**Menghitung hasil sebenarnya =**

Diameter hambatan rata-rata ± (1-α) x

Hasil sebenarnya = X ± (1-α) x

Hasil sebenarnya = 7,83 ± 4,032 x

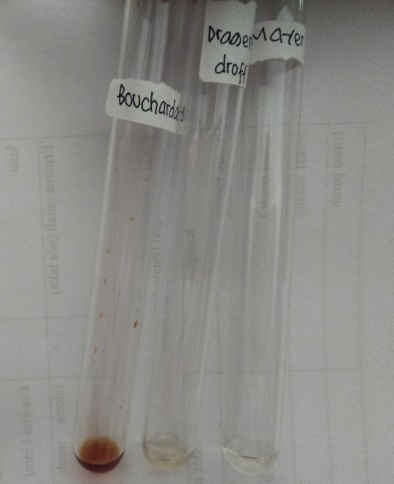
Hasil sebenarnya = 7,83 ± 0,43

Dengan cara yang sama dapat dihitung untuk data diameter hambatan pertumbuhan bakteri dari sediaan dengan konsentrasi 10% dan 15% terhadap *Staphylococcus aureus*, dan sediaan dengan konsentrasi 5%, 10% dan 15 % terhadap bakteri *Escherichia coli*  serta Dettol sebagai pembanding kedua bakteri, hasil perhitungan selengkapnya dapat dilihat pada Lampiran 10.

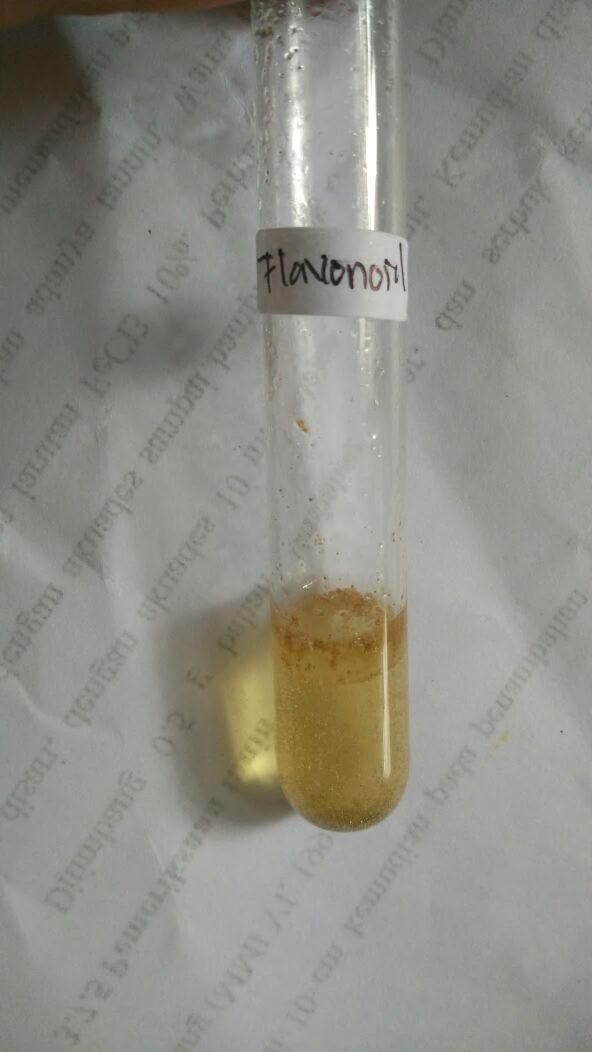
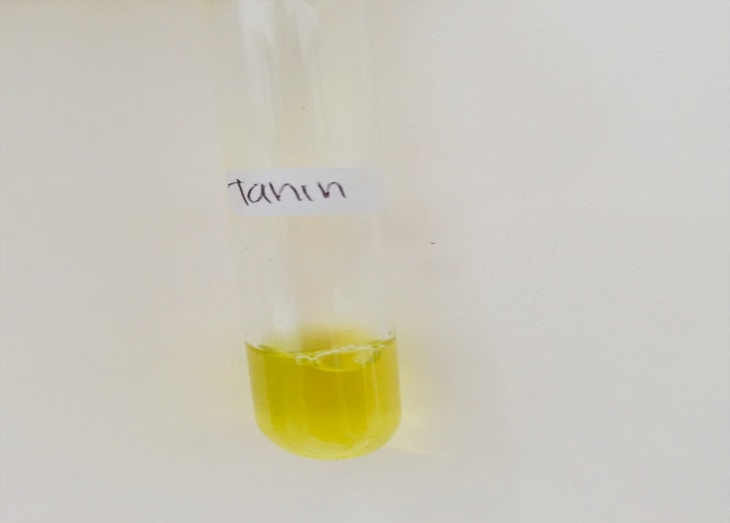
**Lampiran 10.** Hasil Pengamatan Diameter Hambatan Pertumbuhan Bakteri oleh formula Hand Sanitizer Daun Tembelekan berbagai Konsentrasi

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bakteri uji** | **Dettol** | | | **Diameter Hambatan Pertumbuhan Bakteri Dari Gel Hand Sanitizer Daun Tembelekan (mm)** | | | | | | | | | | | |
| **Dasar Gel** | | | **5%** | | | **10%** | | | **15%** | | |
|
| *Escherichia coli* | 13,0 | | | - | | | 7,0 | | | 12,0 | | | 17,0 | | |
| 13,5 | | | - | | | 7,5 | | | 12,0 | | | 17,5 | | |
| 13,0 | | | - | | | 7,0 | | | 12,5 | | | 17,0 | | |
| 13,5 | | | - | | | 7,0 | | | 12,5 | | | 17,5 | | |
| 13,5 | | | - | | | 7,0 | | | 12,5 | | | 17,5 | | |
| 13,0 | | | - | | | 7,5 | | | 12,0 | | | 17,0 | | |
| Rata-rata | 13,25 | | | - | | | 7,17 | | | 12,25 | | | 17,25 | | |
| Std.deviasi | 0,274 | | | - | | | 0,26 | | | 0,27 | | | 0,27 | | |
| **Hasil sebenarnya** | **13,3** | **±** | **0,45** |  |  |  | **7,2** | **±** | **0,43** | **12,3** | **±** | **0,45** | **17,3** | **±** | **0,45** |
| *Sthapylococcus aureus* | 14,0 | | | - | | | 7,5 | | | 12,5 | | | 17,5 | | |
| 14,5 | | | - | | | 8,0 | | | 12,5 | | | 18,0 | | |
| 14,5 | | | - | | | 8,0 | | | 13,0 | | | 18,0 | | |
| 14,0 | | | - | | | 8,0 | | | 13,0 | | | 18,0 | | |
| 14,0 | | | - | | | 7,5 | | | 13,0 | | | 17,5 | | |
| 14,0 | | | - | | | 8,0 | | | 13,0 | | | 18,0 | | |
| Rata-rata | 14,17 | | | - | | | 7,83 | | | 12,83 | | | 17,83 | | |
| Std.deviasi | 0,258 | | | - | | | 0,26 | | | 0,26 | | | 0,26 | | |
| **Hasil sebenarnya** | **14,17** | **±** | **0,43** |  |  |  | **7,83** | **±** | **0,43** | **12,83** | **±** | **0,43** | **17,83** | **±** | **0,43** |

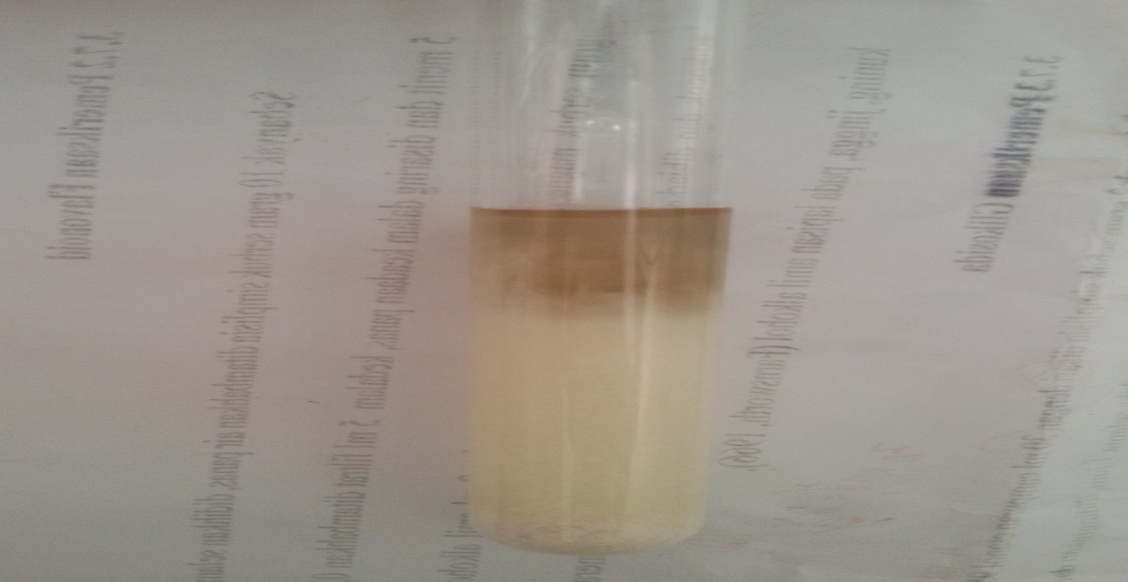
**Lampiran 11.** Hasil Skrining Fitokimia

****

Uji Alkaloid

**  **

Uji flavonoid Uji saponin Uji tanin

** **

Uji steroid/triterpenoid Uji glikosida

**Lampiran 12.** Contoh Lembar penilaian Kuesioner Untuk Uji Kesukaan (*Hedonic test*)

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

Nama :

Umur :

1. Perhatikan **warna** dari masing-masing formula dan mohon diberi jawaban pada pertanyaan:
2. Bagaimana penilaian sahabat/teman-teman terhadap **warna** sediaan Hand sanitizer “basis gel” ini
3. STS 2. TS 3. KS. 4. S 5. SS
4. Bagaimana penilaian sahabat/teman-teman terhadap **Warna** sediaan Hand sanitizer “daun tembelekan konsentrasi 5%”ini
5. STS 2. TS 3. KS. 4. S 5. SS
6. Bagaimana penilaian sahabat/teman-teman terhadap **Warna** sediaan Hand sanitizer “daun tembelekan konsentrasi 10%”ini
7. STS 2. TS 3. KS. 4. S 5. SS
8. Bagaimana penilaian sahabat/teman-teman terhadap **Warna** sediaan Hand sanitizer “daun tembelekan konsentrasi 15%”ini
9. 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.** (Lanjutan)

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

1. Bagaimana penilaian sahabat/teman-teman terhadap **Bau** sediaan Hand sanitizer “basis gel” ini
2. STS 2. TS 3. KS. 4. S 5. SS
3. Bagaimana penilaian sahabat/teman-teman terhadap **Bau** sediaan Hand sanitizer “daun tembelekan konsentrasi 5%”ini
4. STS 2. TS 3. KS. 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap **Bau** sediaan Hand sanitizer “daun tembelekan konsentrasi 10%”ini

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

4. Bagaimana penilaian sahabat/teman-teman terhadap **Bau** sediaan Hand sanitizer “daun tembelekan konsentrasi 15%”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.** (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 Hand sanitizer “basis gel” ini

1. STS 2. TS 3. KS. 4. S 5. SS
2. Bagaimana penilaian sahabat/teman-teman terhadap **Bentuk/konsistensi** sediaan Hand sanitizer “daun tembelekan konsentrasi 5%”ini
3. STS 2. TS 3. KS. 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap **Bentuk/konsistensi** sediaan Hand sanitizer “daun tembelekan konsentrasi 10%”ini

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

4. Bagaimana penilaian sahabat/teman-teman terhadap **Bentuk/konsistensi** sediaan Hand sanitizer “daun tembelekan konsentrasi 15%”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.** (Lanjutan)

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

1. Bagaimana penilaian sahabat/teman-teman terhadap **Mudah dioleskan** sediaan Hand sanitizer “basis gel” ini

1. STS 2. TS 3. KS. 4. S 5. SS
2. Bagaimana penilaian sahabat/teman-teman terhadap **Mudah dioleskan** sediaan Hand sanitizer “daun tembelekan konsentrasi 5%”ini
3. STS 2. TS 3. KS. 4. S 5. SS

3. Bagaimana penilaian sahabat/teman-teman terhadap **Mudah dioleskan** sediaan Hand sanitizer “daun tembelekan konsentrasi 10%”ini

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

4. Bagaimana penilaian sahabat/teman-teman terhadap **Mudah dioleskan** sediaan Hand sanitizer “daun tembelekan konsentrasi 15%”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 13.** Data dan Perhitungan Rentang Kesukaan Warna Secara Organoleptis Terhadap Berbagai Formula *Hand Sanitiuzer*

Lampiran Kesukaan Warna Formula 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Warna pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,05 | 1,1025 |
| 2 | KS | 3 | -1,05 | 1,1025 |
| 3 | KS | 3 | -1,05 | 1,1025 |
| 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 | SS | 5 | 0,95 | 0,9025 |
| 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 (Xi - )2 = 6,95 | |

Standar deviasi (SD) =

Standar deviasi (SD)= = 0,6048

Rentang nilai kesukaan warna dari sediaan basis gel *hand sanitizer*

= Nilai rata-rata (- 0,6048 µ Nilai rata-rata ( + 0,6048

= 4,05 - 0,6048 µ 4,05 + 0,6048

= 3,4452 µ 4,6548

**Lampiran 13.** (Lanjutan)

Hasil Uji kesukaan Warna formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan warna pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,15 | 1,32 |
| 2 | S | 4 | -0,15 | 0,02 |
| 3 | S | 4 | -0,15 | 0,02 |
| 4 | S | 4 | -0,15 | 0,02 |
| 5 | S | 4 | -0,15 | 0,02 |
| 6 | S | 4 | -0,15 | 0,02 |
| 7 | S | 4 | -0,15 | 0,02 |
| 8 | S | 4 | -0,15 | 0,02 |
| 9 | S | 4 | -0,15 | 0,02 |
| 10 | S | 4 | -0,15 | 0,02 |
| 11 | S | 4 | -0,15 | 0,02 |
| 12 | S | 4 | -0,15 | 0,02 |
| 13 | S | 4 | -0,15 | 0,02 |
| 14 | S | 4 | -0,15 | 0,02 |
| 15 | S | 4 | -0,15 | 0,02 |
| 16 | S | 4 | -0,15 | 0,02 |
| 17 | SS | 5 | 0,85 | 0,72 |
| 18 | SS | 5 | 0,85 | 0,72 |
| 19 | SS | 5 | 0,85 | 0,72 |
| 20 | SS | 5 | 0,85 | 0,72 |
| Nilai kesukaan rata-rata (= 4,15 | | | Nilai total (Xi - )2 = 4,55 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,4894

Rentang nilai kesukaan warna dari sediaan formulasi I *hand sanitizer*

= Nilai rata-rata ( - 0,4894 µ Nilai rata-rata ( + 0,4894

= 4,15 - 0,4894 µ 4,15+ 0,4894

= 3,6606 µ 4,6394

**Lampiran 13.** (Lanjutan)

Tabel Uji Kesukaan Warna Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Warna pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,60 | 2,56 |
| 2 | S | 4 | -0,60 | 0,36 |
| 3 | S | 4 | -0,60 | 0,36 |
| 4 | S | 4 | -0,60 | 0,36 |
| 5 | S | 4 | -0,60 | 0,36 |
| 6 | S | 4 | -0,60 | 0,36 |
| 7 | S | 4 | -0,60 | 0,36 |
| 8 | SS | 5 | 0,40 | 0,16 |
| 9 | SS | 5 | 0,40 | 0,16 |
| 10 | SS | 5 | 0,40 | 0,16 |
| 11 | SS | 5 | 0,40 | 0,16 |
| 12 | SS | 5 | 0,40 | 0,16 |
| 13 | SS | 5 | 0,40 | 0,16 |
| 14 | SS | 5 | 0,40 | 0,16 |
| 15 | SS | 5 | 0,40 | 0,16 |
| 16 | SS | 5 | 0,40 | 0,16 |
| 17 | Ss | 5 | 0,40 | 0,16 |
| 18 | SS | 5 | 0,40 | 0,16 |
| 19 | SS | 5 | 0,40 | 0,16 |
| 20 | SS | 5 | 0,40 | 0,16 |
| Nilai kesukaan rata-rata ( = 4,60 | | | Nilai total (Xi - )2 = 6,80 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5982

Rentang nilai kesukaan warna dari sediaan formulasi I *hand sanitizer*

= Nilai rata-rata ( - 0,6708 µ Nilai rata-rata ( + 0,6708

= 4,60 - 0,5982 µ 4,60 + 0,5982

= 4,0018 µ 5,1982

**Lampiran 13.** (Lanjutan)

Hasil Uji Kesukaan Warna Formula III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Warna pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -0,80 | 0,64 |
| 2 | KS | 3 | -0,80 | 0,64 |
| 3 | KS | 3 | -0,80 | 0,64 |
| 4 | KS | 3 | -0,80 | 0,64 |
| 5 | KS | 3 | -0,80 | 0,64 |
| 6 | KS | 3 | -0,80 | 0,64 |
| 7 | S | 4 | 0,20 | 0,04 |
| 8 | S | 4 | 0,20 | 0,04 |
| 9 | S | 4 | 0,20 | 0,04 |
| 10 | S | 4 | 0,20 | 0,04 |
| 11 | S | 4 | 0,20 | 0,04 |
| 12 | S | 4 | 0,20 | 0,04 |
| 13 | S | 4 | 0,20 | 0,04 |
| 14 | S | 4 | 0,20 | 0,04 |
| 15 | S | 4 | 0,20 | 0,04 |
| 16 | S | 4 | 0,20 | 0,04 |
| 17 | S | 4 | 0,20 | 0,04 |
| 18 | S | 4 | 0,20 | 0,04 |
| 19 | SS | 5 | 1,20 | 1,44 |
| 20 | SS | 5 | 1,20 | 1,44 |
| Nilai kesukaan rata-rata( = 3,80 | | | Nilai total (Xi - )2 = 7,20 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,6156

Rentang nilai kesukaan warna dari sediaan formulasi III *hand sanitizer*

= Nilai rata-rata ( - 0,6156 µ Nilai rata-rata ( + 0,6156

= 3,80 - 0,6156 µ 3,80 + 0,6156

= 3,1844 µ 4,4156

**Lampiran 13.** (Lanjutan)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan warna dari berbagai formula  sediaan gel *hand sanitizer* | | | | | | | |
| Basis | | Formula I | | Formula II | | Formula III | |
| Kode | Nilai | Kode | nilai | Kode | Nilai | kode | Nilai |
| 1 | KS | 3 | KS | 3 | KS | 3 | KS | 3 |
| 2 | KS | 3 | S | 4 | S | 4 | KS | 3 |
| 3 | KS | 3 | S | 4 | S | 4 | KS | 3 |
| 4 | S | 4 | S | 4 | S | 4 | KS | 3 |
| 5 | S | 4 | S | 4 | S | 4 | KS | 3 |
| 6 | S | 4 | S | 4 | S | 4 | KS | 3 |
| 7 | S | 4 | S | 4 | S | 4 | S | 4 |
| 8 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 9 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 10 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 11 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 12 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 13 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 14 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 15 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 16 | S | 4 | S | 4 | SS | 5 | S | 4 |
| 17 | SS | 5 | SS | 5 | Ss | 5 | S | 4 |
| 18 | SS | 5 | SS | 5 | SS | 5 | S | 4 |
| 19 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II | Formula III |
| Rata-rata nilai kesukaaan = | 4,05 | 4,15 | 4,60 | 3,80 |
| Standar deviasi = | 0,6048 | 0,4894 | 0,5982 | 0,6156 |
| Rentang nilai kesukaan = | 3,4452 sampai 4,6548 | 3,6606 sampai 4,6394 | 4,0018  sampai 5,1982 | 3,1844 sampai  4,4156 |

**Lampiran 14.** Data dan Perhitungan Rentang Kesukaan Bau Secara Organoleptis Terhadap Berbagai Formula *Hand Sanitiuzer*

Hasil Uji Kesukaan Bau Formula 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Bau pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | TS | 2 | -1,40 | 1,96 |
| 2 | TS | 2 | -1,40 | 1,96 |
| 3 | KS | 3 | -0,40 | 0,16 |
| 4 | KS | 3 | -0,40 | 0,16 |
| 5 | KS | 3 | -0,40 | 0,16 |
| 6 | KS | 3 | -0,40 | 0,16 |
| 7 | KS | 3 | -0,40 | 0,16 |
| 8 | KS | 3 | -0,40 | 0,16 |
| 9 | KS | 3 | -0,40 | 0,16 |
| 10 | KS | 3 | -0,40 | 0,16 |
| 11 | KS | 3 | -0,40 | 0,16 |
| 12 | S | 4 | 0,60 | 0,36 |
| 13 | S | 4 | 0,60 | 0,36 |
| 14 | S | 4 | 0,60 | 0,36 |
| 15 | S | 4 | 0,60 | 0,36 |
| 16 | S | 4 | 0,60 | 0,36 |
| 17 | S | 4 | 0,60 | 0,36 |
| 18 | S | 4 | 0,60 | 0,36 |
| 19 | S | 4 | 0,60 | 0,36 |
| 20 | SS | 5 | 1,60 | 2,56 |
| Nilai kesukaan rata-rata ( = 3,40 | | | Nilai total (Xi - )2 = 10,80 | |

Standar deviasi (SD) =

Standar deviasi (SD)= = 0,7539

Rentang nilai kesukaan bau dari sediaan basis gel *hand sanitizer*

= Nilai rata-rata (- 0,7539 µ Nilai rata-rata ( + 0,7539

= 3,40 - 0,7539 µ 3,40 + 0,7539

= 2,6461 µ 4,1539**Lampiran 14.** (Lanjutan)

Hasil Uji kesukaan Bau formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan bau pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,35 | 1,82 |
| 2 | S | 4 | -0,35 | 0,12 |
| 3 | S | 4 | -0,35 | 0,12 |
| 4 | S | 4 | -0,35 | 0,12 |
| 5 | S | 4 | -0,35 | 0,12 |
| 6 | S | 4 | -0,35 | 0,12 |
| 7 | S | 4 | -0,35 | 0,12 |
| 8 | S | 4 | -0,35 | 0,12 |
| 9 | S | 4 | -0,35 | 0,12 |
| 10 | S | 4 | -0,35 | 0,12 |
| 11 | S | 4 | -0,35 | 0,12 |
| 12 | S | 4 | -0,35 | 0,12 |
| 13 | SS | 5 | 0,65 | 0,42 |
| 14 | SS | 5 | 0,65 | 0,42 |
| 15 | SS | 5 | 0,65 | 0,42 |
| 16 | SS | 5 | 0,65 | 0,42 |
| 17 | SS | 5 | 0,65 | 0,42 |
| 18 | SS | 5 | 0,65 | 0,42 |
| 19 | SS | 5 | 0,65 | 0,42 |
| 20 | SS | 5 | 0,65 | 0,42 |
| Nilai kesukaan rata-rata (= 4,35 | | | Nilai total (Xi - )2 = 6,55 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5871

Rentang nilai kesukaan bau dari sediaan formulasi I *hand sanitizer*

= Nilai rata-rata ( - 0,5871 µ Nilai rata-rata ( + 0,5871

= 4,35 - 0,5871 µ 4,35+ 0,5871

= 3,7629 µ 4,9371

**Lampiran 14.** (Lanjutan)

Tabel Uji Kesukaan Bau Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan bau pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,40 | 1,96 |
| 2 | S | 4 | -0,40 | 0,16 |
| 3 | S | 4 | -0,40 | 0,16 |
| 4 | S | 4 | -0,40 | 0,16 |
| 5 | S | 4 | -0,40 | 0,16 |
| 6 | S | 4 | -0,40 | 0,16 |
| 7 | S | 4 | -0,40 | 0,16 |
| 8 | S | 4 | -0,40 | 0,16 |
| 9 | S | 4 | -0,40 | 0,16 |
| 10 | S | 4 | -0,40 | 0,16 |
| 11 | S | 4 | -0,40 | 0,16 |
| 12 | SS | 5 | 0,60 | 0,36 |
| 13 | SS | 5 | 0,60 | 0,36 |
| 14 | SS | 5 | 0,60 | 0,36 |
| 15 | SS | 5 | 0,60 | 0,36 |
| 16 | SS | 5 | 0,60 | 0,36 |
| 17 | SS | 5 | 0,60 | 0,36 |
| 18 | SS | 5 | 0,60 | 0,36 |
| 19 | SS | 5 | 0,60 | 0,36 |
| 20 | SS | 5 | 0,60 | 0,36 |
| Nilai kesukaan rata-rata ( = 4,40 | | | Nilai total (Xi - )2 = 6,80 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5982

Rentang nilai kesukaan bau dari sediaan formulasi II *hand sanitizer*

= Nilai rata-rata - 0,5982 µ Nilai rata-rata ( + 0,5982

= 4,40 - 0,5982 µ 4,40 + 0,5982

= 3,8018 µ 4,9982

**Lampiran 14.** (Lanjutan)

Hasil Uji Kesukaan Bau Formula III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan bau pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,60 | 2,56 |
| 2 | S | 4 | -0,60 | 0,36 |
| 3 | S | 4 | -0,60 | 0,36 |
| 4 | S | 4 | -0,60 | 0,36 |
| 5 | S | 4 | -0,60 | 0,36 |
| 6 | S | 4 | -0,60 | 0,36 |
| 7 | S | 4 | -0,60 | 0,36 |
| 8 | SS | 5 | 0,40 | 0,16 |
| 9 | SS | 5 | 0,40 | 0,16 |
| 10 | SS | 5 | 0,40 | 0,16 |
| 11 | SS | 5 | 0,40 | 0,16 |
| 12 | SS | 5 | 0,40 | 0,16 |
| 13 | SS | 5 | 0,40 | 0,16 |
| 14 | SS | 5 | 0,40 | 0,16 |
| 15 | SS | 5 | 0,40 | 0,16 |
| 16 | SS | 5 | 0,40 | 0,16 |
| 17 | SS | 5 | 0,40 | 0,16 |
| 18 | SS | 5 | 0,40 | 0,16 |
| 19 | SS | 5 | 0,40 | 0,16 |
| 20 | SS | 5 | 0,40 | 0,16 |
| Nilai kesukaan rata-rata( = 4,60 | | | Nilai total (Xi - )2 = 6,80 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5982

Rentang nilai kesukaan bau dari sediaan formulasi III *hand sanitizer*

= Nilai rata-rata ( - 0,5982 µ Nilai rata-rata ( + 0,5982

= 4,60 - 0,5982 µ 4,60 + 0,5982

= 4,0018 µ 5,1982

**Lampiran 14.** (Lanjutan)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan bau dari berbagai formula  sediaan gel *hand sanitizer* | | | | | | | |
| Basis | | Formula I | | Formula II | | Formula III | |
| Kode | Nilai | kode | nilai | Kode | Nilai | kode | Nilai |
| 1 | TS | 2 | KS | 3 | KS | 3 | KS | 3 |
| 2 | TS | 2 | S | 4 | S | 4 | S | 4 |
| 3 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 4 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 5 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 6 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 7 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 8 | KS | 3 | S | 4 | S | 4 | SS | 5 |
| 9 | KS | 3 | S | 4 | S | 4 | SS | 5 |
| 10 | KS | 3 | S | 4 | S | 4 | SS | 5 |
| 11 | KS | 3 | S | 4 | S | 4 | SS | 5 |
| 12 | S | 4 | S | 4 | SS | 5 | SS | 5 |
| 13 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 14 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 15 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 16 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 17 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 18 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 19 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II | Formula III |
| Rata-rata nilai kesukaaan = | 3,40 | 4,35 | 4,40 | 4,50 |
| Standar deviasi = | 0,7539 | 0,5871 | 0,5982 | 0,5982 |
| Rentang nilai kesukaan = | 2,6461  sampai 4,1539 | 3,7629  sampai 4,9371 | 3,8018  sampai 4,9982 | 4,0018  sampai 5,1982 |

**Lampiran 15.** Data dan Perhitungan Rentang Kesukaan Bentuk/Konsistensi Secara Organoleptis Terhadap Berbagai Formula *Hand Sanitiuzer*

Hasil Uji Kesukaan Bentuk Formula 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Bentuk pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | TS | 2 | -2,20 | 4,84 |
| 2 | KS | 3 | -1,20 | 1,44 |
| 3 | KS | 3 | -1,20 | 1,44 |
| 4 | S | 4 | -0,20 | 0,04 |
| 5 | S | 4 | -0,20 | 0,04 |
| 6 | S | 4 | -0,20 | 0,04 |
| 7 | S | 4 | -0,20 | 0,04 |
| 8 | S | 4 | -0,20 | 0,04 |
| 9 | S | 4 | -0,20 | 0,04 |
| 10 | S | 4 | -0,20 | 0,04 |
| 11 | S | 4 | -0,20 | 0,04 |
| 12 | S | 4 | -0,20 | 0,04 |
| 13 | SS | 5 | 0,80 | 0,64 |
| 14 | SS | 5 | 0,80 | 0,64 |
| 15 | SS | 5 | 0,80 | 0,64 |
| 16 | SS | 5 | 0,80 | 0,64 |
| 17 | SS | 5 | 0,80 | 0,64 |
| 18 | SS | 5 | 0,80 | 0,64 |
| 19 | SS | 5 | 0,80 | 0,64 |
| 20 | SS | 5 | 0,80 | 0,64 |
| Nilai kesukaan rata-rata ( = 4,20 | | | Nilai total (Xi - )2 = 13,20 | |

Standar deviasi (SD) =

Standar deviasi (SD)= = 0,8335

Rentang nilai kesukaan bentuk dari sediaan basis gel *hand sanitizer*

= Nilai rata-rata (-0,8335 µ Nilai rata-rata (+ 0,8335

= 4,20- 0,8335 µ 4,20+ 0,8335

= 3,3665 µ 5,0335

**Lampiran 15.** (Lanjutan)

Hasil Uji kesukaan Bentuk formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Bentuk pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | TS | 2 | -2,45 | 6,00 |
| 2 | KS | 3 | -1,45 | 2,10 |
| 3 | S | 4 | -0,45 | 0,20 |
| 4 | S | 4 | -0,45 | 0,20 |
| 5 | S | 4 | -0,45 | 0,20 |
| 6 | S | 4 | -0,45 | 0,20 |
| 7 | S | 4 | -0,45 | 0,20 |
| 8 | S | 4 | -0,45 | 0,20 |
| 9 | SS | 5 | 0,55 | 0,30 |
| 10 | SS | 5 | 0,55 | 0,30 |
| 11 | SS | 5 | 0,55 | 0,30 |
| 12 | SS | 5 | 0,55 | 0,30 |
| 13 | SS | 5 | 0,55 | 0,30 |
| 14 | SS | 5 | 0,55 | 0,30 |
| 15 | SS | 5 | 0,55 | 0,30 |
| 16 | SS | 5 | 0,55 | 0,30 |
| 17 | SS | 5 | 0,55 | 0,30 |
| 18 | SS | 5 | 0,55 | 0,30 |
| 19 | SS | 5 | 0,55 | 0,30 |
| 20 | SS | 5 | 0,55 | 0,30 |
| Nilai kesukaan rata-rata (= 4,45 | | | Nilai total (Xi - )2 = 12,95 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,8256

Rentang nilai kesukaan bentuk dari sediaan formulasi I *hand sanitizer*

= Nilai rata-rata ( -0,8256 µ Nilai rata-rata ( +0,8256

= 4,45 - 0,8256 µ 4,45 + 0,8256

= 3,6244 µ 5,2756

**Lampiran 15.** (Lanjutan)

Tabel Uji Kesukaan Bentuk Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Bentuk pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,45 | 2,10 |
| 2 | KS | 3 | -1,45 | 2,10 |
| 3 | S | 4 | -0,45 | 0,20 |
| 4 | S | 4 | -0,45 | 0,20 |
| 5 | S | 4 | -0,45 | 0,20 |
| 6 | S | 4 | -0,45 | 0,20 |
| 7 | S | 4 | -0,45 | 0,20 |
| 8 | S | 4 | -0,45 | 0,20 |
| 9 | S | 4 | -0,45 | 0,20 |
| 10 | SS | 5 | 0,55 | 0,30 |
| 11 | SS | 5 | 0,55 | 0,30 |
| 12 | SS | 5 | 0,55 | 0,30 |
| 13 | SS | 5 | 0,55 | 0,30 |
| 14 | SS | 5 | 0,55 | 0,30 |
| 15 | SS | 5 | 0,55 | 0,30 |
| 16 | SS | 5 | 0,55 | 0,30 |
| 17 | SS | 5 | 0,55 | 0,30 |
| 18 | SS | 5 | 0,55 | 0,30 |
| 19 | SS | 5 | 0,55 | 0,30 |
| 20 | SS | 5 | 0,55 | 0,30 |
| Nilai kesukaan rata-rata ( = 4,45 | | | Nilai total (Xi - )2 = 8,95 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,6863

Rentang nilai kesukaan brntuk dari sediaan formulasi II *hand sanitizer*

= Nilai rata-rata - 0,6863 µ Nilai rata-rata ( + 0,6863

= 4,45 - 0,6863 µ 4,45 + 0,6863

= 3,7637 µ 5,1363

**Lampiran 15.** (Lanjutan)

Hasil Uji Kesukaan Bentuk Formula III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Bentuk pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,50 | 2,25 |
| 2 | S | 4 | -0,50 | 0,25 |
| 3 | S | 4 | -0,50 | 0,25 |
| 4 | S | 4 | -0,50 | 0,25 |
| 5 | S | 4 | -0,50 | 0,25 |
| 6 | S | 4 | -0,50 | 0,25 |
| 7 | S | 4 | -0,50 | 0,25 |
| 8 | S | 4 | -0,50 | 0,25 |
| 9 | S | 4 | -0,50 | 0,25 |
| 10 | SS | 5 | 0,50 | 0,25 |
| 11 | SS | 5 | 0,50 | 0,25 |
| 12 | SS | 5 | 0,50 | 0,25 |
| 13 | SS | 5 | 0,50 | 0,25 |
| 14 | SS | 5 | 0,50 | 0,25 |
| 15 | SS | 5 | 0,50 | 0,25 |
| 16 | SS | 5 | 0,50 | 0,25 |
| 17 | SS | 5 | 0,50 | 0,25 |
| 18 | SS | 5 | 0,50 | 0,25 |
| 19 | SS | 5 | 0,50 | 0,25 |
| 20 | SS | 5 | 0,50 | 0,25 |
| Nilai kesukaan rata-rata( = 4,50 | | | Nilai total (Xi - )2 = 7,00 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,6070

Rentang nilai kesukaan bentuk dari sediaan formulasi III *hand sanitizer*

= Nilai rata-rata ( - 0,6070 µ Nilai rata-rata ( + 0,6070

= 4,50 - 0,6070 µ 4,50 + 0, 0,6070

= 3,8930 µ 5,1070

**Lampiran 15.** (Lanjutan)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan bentuk dari berbagai formula  sediaan gel *hand sanitizer* | | | | | | | |
| Basis | | Formula I | | Formula II | | Formula III | |
| Kode | Nilai | kode | nilai | Kode | Nilai | kode | Nilai |
| 1 | TS | 2 | TS | 2 | KS | 3 | KS | 3 |
| 2 | KS | 3 | KS | 3 | KS | 3 | S | 4 |
| 3 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 4 | S | 4 | S | 4 | S | 4 | S | 4 |
| 5 | S | 4 | S | 4 | S | 4 | S | 4 |
| 6 | S | 4 | S | 4 | S | 4 | S | 4 |
| 7 | S | 4 | S | 4 | S | 4 | S | 4 |
| 8 | S | 4 | S | 4 | S | 4 | S | 4 |
| 9 | S | 4 | SS | 5 | S | 4 | S | 4 |
| 10 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 11 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 12 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 13 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 14 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 15 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 16 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 17 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 18 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 19 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II | Formula III |
| Rata-rata nilai kesukaaan = | 4,20 | 4,45 | 4,45 | 4,50 |
| Standar deviasi = | 0,8335 | 0,8256 | 0,6863 | 0,6070 |
| Rentang nilai kesukaan = | 3,3665 sampai  5,0335 | 3,6244 sampai 5,2756 | 3,7637 sampai 5,1363 | 3,8930 sampai 5,1070 |

**Lampiran 16.**  Data dan Perhitungan Rentang Kesukaan Mudah Dioles Secara Organoleptis Terhadap Berbagai Formula *Hand Sanitiuzer*

Hasil Uji Kesukaan Mudah diolekan Formula 0

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Mudah diolekan pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,25 | 1,56 |
| 2 | KS | 3 | -1,25 | 1,56 |
| 3 | S | 4 | -0,25 | 0,06 |
| 4 | S | 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 | SS | 5 | 0,75 | 0,56 |
| 15 | SS | 5 | 0,75 | 0,56 |
| 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 (Xi - )2 = 7,75 | |

Standar deviasi (SD) =

Standar deviasi (SD)= = 0,6387

Rentang nilai kesukaan mudah diolekan dari sediaan basis gel *hand sanitizer*

= Nilai rata-rata (-0,6387 µ Nilai rata-rata (+ 0,6387

= 4,25 - 0,6387 µ 4,25 + 0,6387

= 3,6113 µ 4,8887

**Lampiran 16.** (Lanjutan)

Hasil Uji kesukaan Mudah diolekan formula I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Mudah diolekan pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,45 | 2,10 |
| 2 | S | 4 | -0,45 | 0,20 |
| 3 | S | 4 | -0,45 | 0,20 |
| 4 | S | 4 | -0,45 | 0,20 |
| 5 | S | 4 | -0,45 | 0,20 |
| 6 | S | 4 | -0,45 | 0,20 |
| 7 | S | 4 | -0,45 | 0,20 |
| 8 | S | 4 | -0,45 | 0,20 |
| 9 | S | 4 | -0,45 | 0,20 |
| 10 | S | 4 | -0,45 | 0,20 |
| 11 | SS | 5 | 0,55 | 0,30 |
| 12 | SS | 5 | 0,55 | 0,30 |
| 13 | SS | 5 | 0,55 | 0,30 |
| 14 | SS | 5 | 0,55 | 0,30 |
| 15 | SS | 5 | 0,55 | 0,30 |
| 16 | SS | 5 | 0,55 | 0,30 |
| 17 | SS | 5 | 0,55 | 0,30 |
| 18 | SS | 5 | 0,55 | 0,30 |
| 19 | SS | 5 | 0,55 | 0,30 |
| 20 | SS | 5 | 0,55 | 0,30 |
| Nilai kesukaan rata-rata (= 4,45 | | | Nilai total (Xi - )2 = 6,95 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,6048

Rentang nilai kesukaan mudah diolekan dari sediaan formulasi I *hand sanitizer*

= Nilai rata-rata ( - 0,6048 µ Nilai rata-rata ( + 0,6048

= 4,45 - 0,6048 µ 4,45 + 0,6048

= 3,8452 µ 5,0548

**Lampiran 16.** (Lanjutan)

Tabel Uji Kesukaan Mudah diolekan Formula II

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Mudah diolekan pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | KS | 3 | -1,40 | 1,96 |
| 2 | S | 4 | -0,40 | 0,16 |
| 3 | S | 4 | -0,40 | 0,16 |
| 4 | S | 4 | -0,40 | 0,16 |
| 5 | S | 4 | -0,40 | 0,16 |
| 6 | S | 4 | -0,40 | 0,16 |
| 7 | S | 4 | -0,40 | 0,16 |
| 8 | S | 4 | -0,40 | 0,16 |
| 9 | S | 4 | -0,40 | 0,16 |
| 10 | S | 4 | -0,40 | 0,16 |
| 11 | S | 4 | -0,40 | 0,16 |
| 12 | SS | 5 | 0,60 | 0,36 |
| 13 | SS | 5 | 0,60 | 0,36 |
| 14 | SS | 5 | 0,60 | 0,36 |
| 15 | SS | 5 | 0,60 | 0,36 |
| 16 | SS | 5 | 0,60 | 0,36 |
| 17 | SS | 5 | 0,60 | 0,36 |
| 18 | SS | 5 | 0,60 | 0,36 |
| 19 | SS | 5 | 0,60 | 0,36 |
| 20 | SS | 5 | 0,60 | 0,36 |
| Nilai kesukaan rata-rata ( = 4,40 | | | Nilai total (Xi - )2 = 6,80 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5982

Rentang nilai kesukaan mudah diolekan dari sediaan formulasi II *hand sanitizer*

= Nilai rata-rata -0,5982 µ Nilai rata-rata ( + 0,5982

= 4,40-0,5982 µ 4,40 + 0,5982

= 3,8018 µ 4,9982

**Lampiran 16.** (Lanjutan)

Hasil Uji Kesukaan Mudah diolekan Formula III

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Panelis | Hasil Uji Kesukaan Mudah diolekan pada Sukarelawan | | | |
| Kode | Nilai kesukaan (X) | (Xi - ) | (Xi - )2 |
| 1 | S | 4 | -0,55 | 0,30 |
| 2 | S | 4 | -0,55 | 0,30 |
| 3 | S | 4 | -0,55 | 0,30 |
| 4 | S | 4 | -0,55 | 0,30 |
| 5 | S | 4 | -0,55 | 0,30 |
| 6 | S | 4 | -0,55 | 0,30 |
| 7 | S | 4 | -0,55 | 0,30 |
| 8 | S | 4 | -0,55 | 0,30 |
| 9 | S | 4 | -0,55 | 0,30 |
| 10 | SS | 5 | 0,45 | 0,20 |
| 11 | SS | 5 | 0,45 | 0,20 |
| 12 | SS | 5 | 0,45 | 0,20 |
| 13 | SS | 5 | 0,45 | 0,20 |
| 14 | SS | 5 | 0,45 | 0,20 |
| 15 | SS | 5 | 0,45 | 0,20 |
| 16 | SS | 5 | 0,45 | 0,20 |
| 17 | SS | 5 | 0,45 | 0,20 |
| 18 | SS | 5 | 0,45 | 0,20 |
| 19 | SS | 5 | 0,45 | 0,20 |
| 20 | SS | 5 | 0,45 | 0,20 |
| Nilai kesukaan rata-rata( = 4,55 | | | Nilai total (Xi - )2 = 4,95 | |

Standar deviasi (SD) =

Standar deviasi (SD)== 0,5104

Rentang nilai kesukaan mudah diolekan dari sediaan formulasi III *hand sanitizer*

= Nilai rata-rata ( -0,5104 µ Nilai rata-rata ( + 0,5104

= 4,55 - 0,5104 µ 4,55 + 0,5104

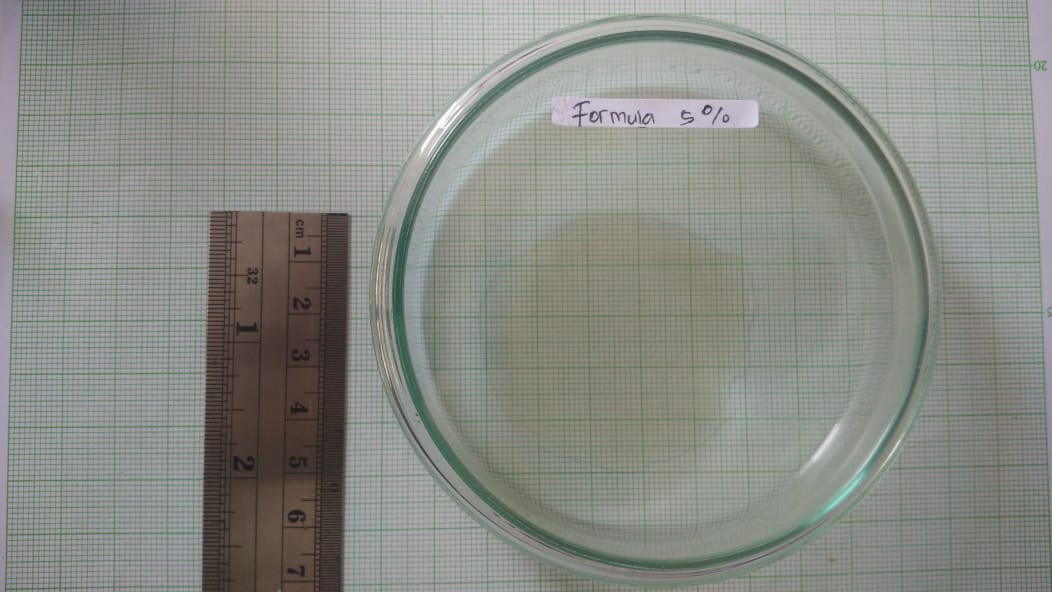
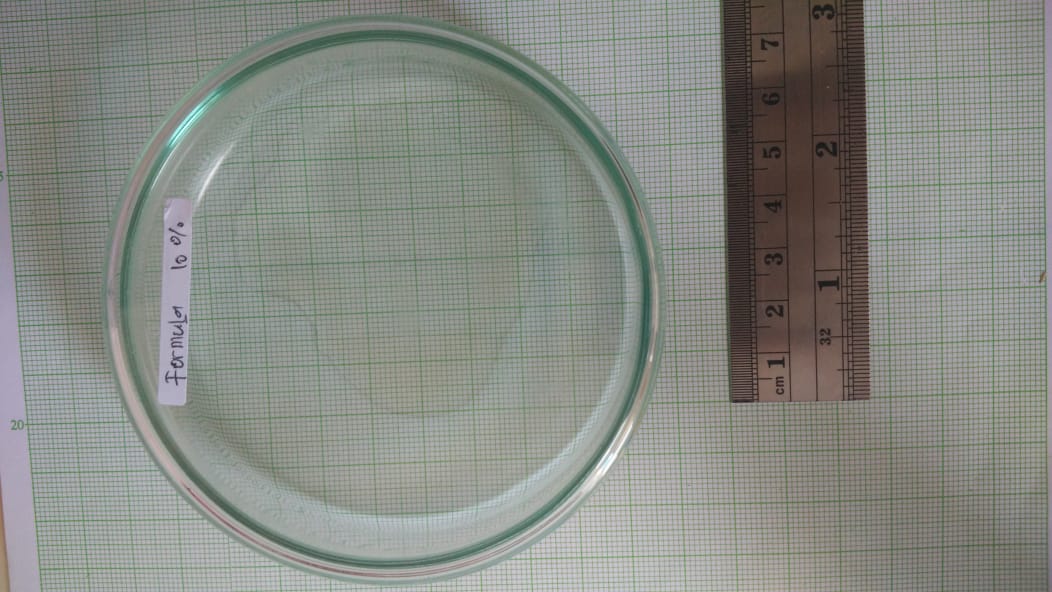
= 4,0396 µ 5,0604

**Lampiran 16.** (Lanjutan)

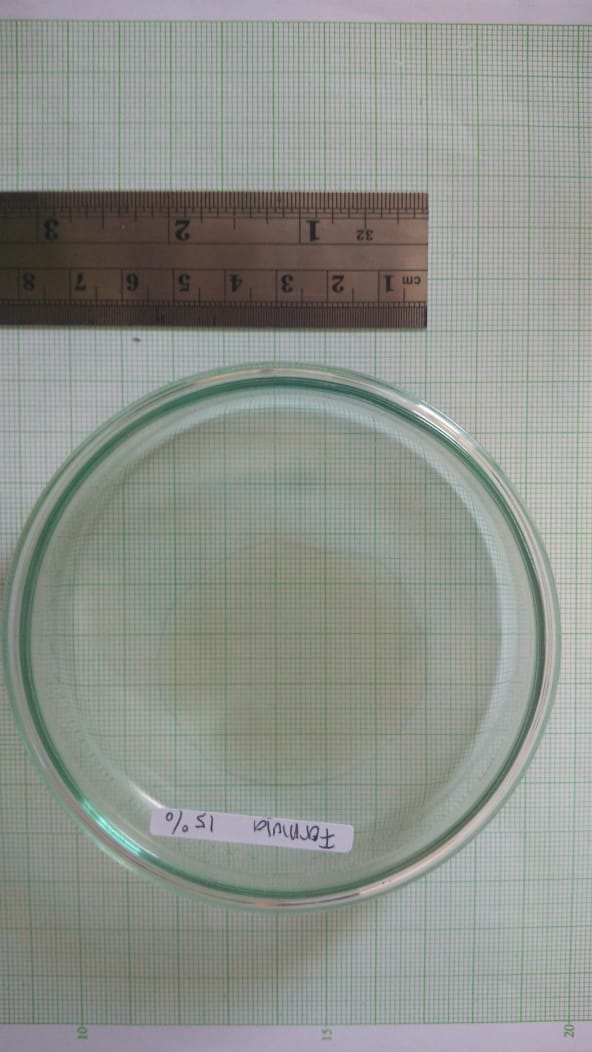
|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Hasil uji kesukaan mudah diolekan dari berbagai formula  sediaan gel *hand sanitizer* | | | | | | | |
| Basis | | Formula I | | Formula II | | Formula III | |
| Kode | Nilai | kode | nilai | Kode | Nilai | kode | Nilai |
| 1 | KS | 3 | KS | 3 | KS | 3 | S | 4 |
| 2 | KS | 3 | S | 4 | S | 4 | S | 4 |
| 3 | S | 4 | S | 4 | S | 4 | S | 4 |
| 4 | S | 4 | S | 4 | S | 4 | S | 4 |
| 5 | S | 4 | S | 4 | S | 4 | S | 4 |
| 6 | S | 4 | S | 4 | S | 4 | S | 4 |
| 7 | S | 4 | S | 4 | S | 4 | S | 4 |
| 8 | S | 4 | S | 4 | S | 4 | S | 4 |
| 9 | S | 4 | S | 4 | S | 4 | S | 4 |
| 10 | S | 4 | S | 4 | S | 4 | SS | 5 |
| 11 | S | 4 | SS | 5 | S | 4 | SS | 5 |
| 12 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 13 | S | 4 | SS | 5 | SS | 5 | SS | 5 |
| 14 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 15 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 16 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 17 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 18 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 19 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |
| 20 | SS | 5 | SS | 5 | SS | 5 | SS | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Formula 0 | Formula I | Formula II | Formula III |
| Rata-rata nilai kesukaaan = | 4,25 | 4,45 | 4,40 | 4,55 |
| Standar deviasi = | 0,6048 | 0,6048 | 0,5982 | 0,5104 |
| Rentang nilai kesukaan = | 3,6113 sampai 4,8887 | 3,8452 sampai 5,0548 | 3,8018 sampai 4,9982 | 4,0396  Sampai  5,0604 |

**Lampiran 17.** Hasil Uji Daya Sebar Sediaan *Hand Sanitizer*

** **

1. **(B)**

****

**(C)**

Keterangan :

A = Hand sanitizer daun tembelekan konsentrasi 5%

B = Hand sanitizer daun tembelekan konsentrasi 10%

C = Hand sanitizer daun tembelekan konsentrasi 15%

**Lampiran 18.** Surat Pernyataan Sukarelawan

**SURAT PERNYATAAN**

Saya yang betanda tangan di bawah ini:

Nama :

Umur :

Alamat :

Menyatakan bersedia menjadi sukarelawan untuk uji iritasi kulit yang dilakukan dalam penelitian Nawalul Aska dengan judul penelitian **Skrining Fitokimia Dan Formulasi Hand Sanitizer Daun Tembelekan (*Lantana camara* L.) Serta Uji Aktivitas Antibakteri Terhadap Escherichia coli Dan Staphylococcus aureus** dan memenuhi kriteria sebagai sukarelawan uji sebagai berikut:

1. Wanita berbadan sehat
2. Usia antara 20-30 tahun
3. Tidak ada riwayat penyakit yang berhubungan dengan alergi, dan
4. Bersedia menjadi relawan

Apabila terjadi hal-hal yag tidak diinginkan selama uji iritasi, sukarelawan tidak akan menuntut kepada peneliti.

Demikian surat pernyataan ini dibuat, atas partisipasinya peneliti mengucakan terima kasih.

Medan, Juni 2018

Sukarelawan Peneliti

( ) (Nawalul Aska)

**Lampiran 19.** Hasil Uji Iritasi pada Sukarelawan

** **

Sebelum pengolesan Setelah 24 jam