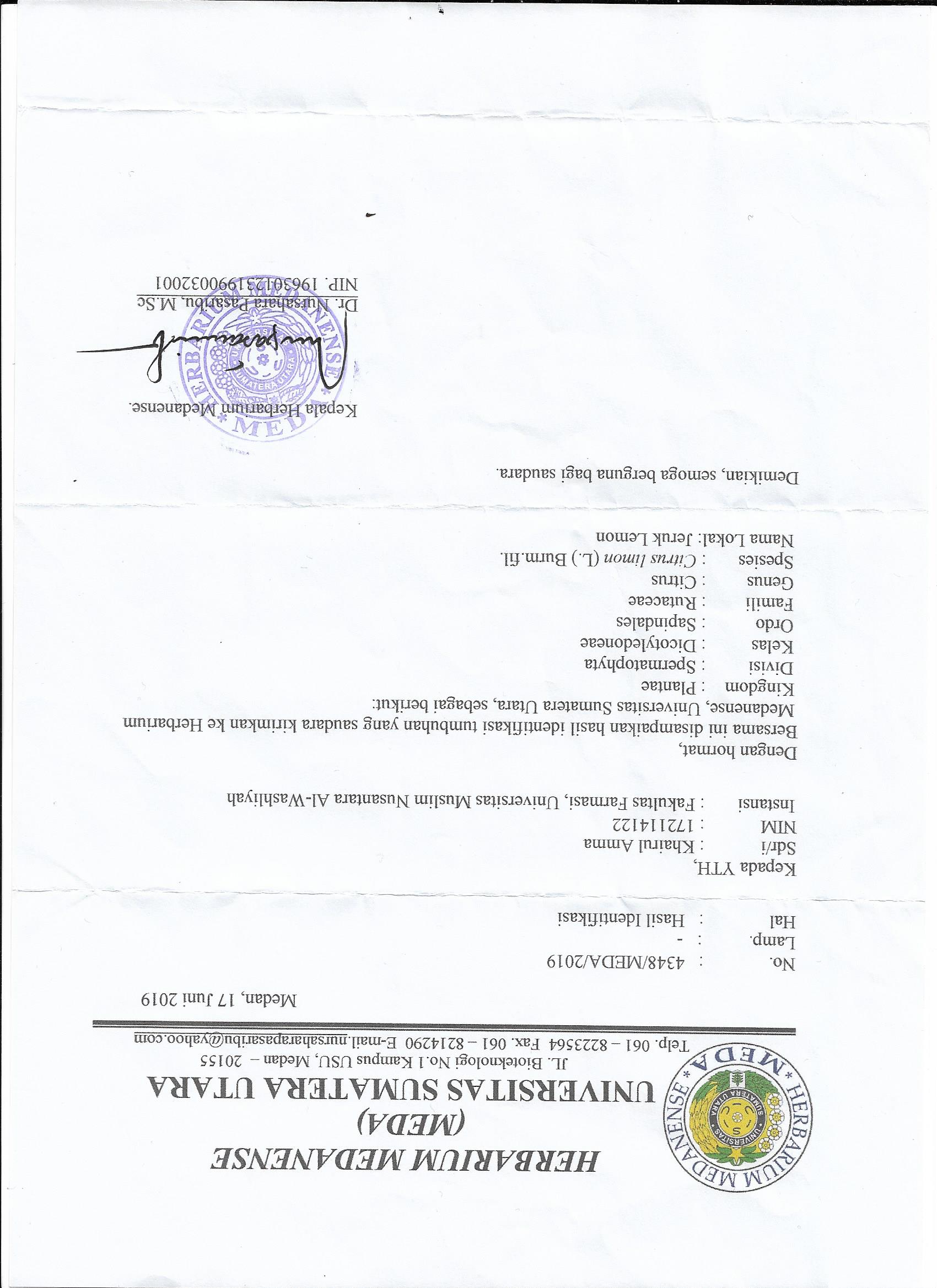
**Lampiran 1.** Hasil Identifikasi Tanaman

Riska Fatmasari

17211412**1**

:

**Lampiran 2.** Tumbuhan Lemon

****

**** Tanaman Lemon Lemon Pon k4 Segar

Simplisia Kering Tanaman Lemon Pon k4

**Lampiran 3 .** Bagan Alir Pembuatan Simplisia Kulit Lemom Pon k4

Buah Lemon

Diambil bagian kulitnya,sortir basa

Cuci, tiriskan

Dikeringkan, sortir kering

Dipotong kecil-kecil

Simplisia kulit buah lemon (1000 g)

1. pengujian kadar air
2. penetapan kadar abu total
3. penetapan kadar abu tidak larut asam
4. penetapan kadar sari larut air
5. penetapan kadar sari larut etanol
6. pemeriksaan mikroskopik
7. pemeriksaan makroskopik

Karakterisasi Simplisia Kulit Buah Lemon

**Lampiran 4 .**  Bagan Alir Isolasi Minyak Atsiri

Ditambah aquadest secukupnya

870 g Simplisia Kulit Lemon

Aquadest ditambahkan 1:1

Destilat

Dipanaskan dengan destilasi Uap

Suhu 110 ̊C

Destilat dimurnikan

Minyak Atsiri Kulit Lemon

Formulasi Sediaan

Karakterisasi Minyak Atsiri Kulit Lemon

Antinyamuk Elektrik

1. Penentapan kadar kotoran
2. Penetapan kadar minyak

**Lampiran 5.** Bagan Alir Pembuatan Sediaan Keping Anti Nyamuk Elektrik

Kardus bekas telor

Ditimmbang, disobek

Direndam selama 1 jam

Dibelender, tambah air secukupnya.

Disaring

Masukkan dalam baskom, ratakan

Ditiriskan, diperas

Ditambahkan amilum

Jemur dibawah sinar matahari

Keeping nyamuk yang sudah kering ditambahkan minyak atsiri lemonkedalamnya

1,5 mL

perkeping

2,25 mL

perkeping

3 mL

perkeping

Direndam selama 10-15 menit

Disimpan dalam tempat tertutup

**Lampiran 6.** Perhitungan Kadar Abu Total Simplisia Kulit Lemon

**Penetapan Kadar Abu Total**

Kadar abu total =

* Sampel 1

Berat sampel = 2,001 gram

Berat abu = 2,02 gram

Kadar Abu Total =

* Sampel 1

Berat sampel = 2,005 gram

Berat abu = 2,00 gram

Kadar Abu Total =

* Sampel 1

Berat sampel = 2,008 gram

Berat abu = 1,98 gram

Kadar Abu Total =

Rata-rata Kadar Abu Total =

**Lampiran 7.** Perhitungan Kadar Sari Larut Dalam Air Simplisia Kulit Lemon

**Penetapan Kadar Sari Larut Dalam Air**

Kadar sari larut dalam air =

* Sampel 1

Berat sampel = 5,002 gram

Berat cawan kosng = 62,97 gram

Berat cawan berisi = 63,23 gram

Berat Sari = 0,26 gram

Kadar Sari Larut Air =

* Sampel 2

Berat sampel = 5,102 gr

Berat cawan kosong = 42,66 gr

Berat cawan berisi = 42,91 gr

Berat Sari = 25 gr

Kadar Sari arut Air =

* Sampel 3

Berat sampel = 5,200 gr

Berat cawan kosong = 68,52 gr

Berat cawan berisi = 68,70 gr

Berat Sari = 0,18

Kadar Sari Larut Air =

Rata-rata kadar sari larut air =

**Lampiran 8.** Pengujian Kadar Sari Larut dalam Etanol

**Penetapan Kadar Sari Larut Etanol**

Kadar Sari Larut Etanol =

* Sampel 1

Berat sampel = 5, 005 gr

Berat cawan kosng = 68,55 gr

Berat cawan berisi = 68,74 gr

Berat Sari = 0,19

Kadar sari larut etanol =

* Sampel 2

Berat sampel = 5,006 gr

Berat cawan kosong = 42,72 gr

Berat cawan berisi = 42,96 gr

Berat Sari = 0,24

Kadar sari larut etanol =

* Sampel 3

Berat sampel = 5,102 gr

Berat cawan kosong = 68,60 gr

Berat cawan berisi = 68,77 gr

Berat Sari = 0,17

Kadar sari larut etanol =

Rata-Rata Kadar Sari Larut Etanol =

**Lampiran 9.** Penetapan Kadar Abu Tidak Larut Asam dala Serbuk Simplisia

**Penetapan Kadar Abu Tidak Larut Asam**

Kadar Abu Tidak Larut Asam =

* Sampel 1

Berat Sampel = 2,001 gr

Berat Abu = 0,009 gr

Kadar Abu Tidak Larut Asam =

* Sampel 1

Berat Sampel = 2,001 gr

Berat Abu = 0,003 gr

Kadar Abu Tidak Larut Asam =

* Sampel 1

Berat Sampel = 2,001 gr

Berat Abu = 0,02 gr

Kadar Abu Tidak Larut Asam =

Rata- rata =

**Lampiran 10**. Perhitungan Standarisasi Minyak Atsiri Kulit Lemon

1. Perhitungan kadar kotoran Minyak Atsiri Kulit Lemon

Kadar kotoran =

* Sampel 1

Berat kertas saring = 0,54 gr

Berat kertas saring+ sampel = 0,552 gr

Berat Sampel =5,002 gr

Kadar Kotoran =

* Sampel 1

Berat kertas saring = 0,496 gr

Berat kertas saring+ sampel = 0,509 gr

Berat Sampel =5,002 gr

Kadar Kotoran =

* Sampel 1

Berat kertas saring = 0,501 gr

Berat kertas saring+ sampel = 0,510 gr

Berat Sampel = 5,003 gr

Kadar Kotoran =

Rata-rata kadar kotoran =

**Lampiran 10.** (lanjutan)

1. Perhitungan kadar minyak atsiri kulit lemon

Kadar minyak atsiri =

* Sampel 1

Berat simplisia = 300 gr

Berat minyak = 10,109 gram

Kadar minyak atsiri =

* Sampel 1

Berat simplisia = 300 gr

Berat minyak = 10,100 gram

Kadar minyak atsiri =

* Sampel 1

Berat simplisia = 300 gr

Berat minyak = 10,005 gram

Kadar minyak atsiri =

Rata-rata =

**Lampiran 11.** Nilai Standar Deviasi Kadar Minyak Atsiri Kulit Lemon

|  |  |  |
| --- | --- | --- |
| **Kadar (X)** | **Xi-X** | **(X - X̅̅)2** |
| 3.36 | 0.020 | 0.0004 |
| 3.33 | -0.010 | 0.0001 |
| 3.33 | -0.010 | 0.0001 |
| X̅ =3.340 |  | Σ ( X- X̅ )2 = 0.0006 |

SD =

=

= 0,01

**Lampiran 12.**  Perhitungan Bobot Jenis Minyak Atsiri Kulit Lemon

1. Bobot pikno + sampel = 16,2249 gr

Berat picno kosong = 11, 8642 gr

Volume sampel = 5 ml

Bj minyak atsiri =

=

= 0,87214 gr/ml

1. Bobot pikno + sampel = 16,2249 gr

Berat picno kosong = 12,0002 gr

Volume sampel = 5 ml

Bj minyak atsiri =

=

= 0,8441 gr/ml

1. Bobot pikno + sampel = 16,2209 gr

Berat picno kosong = 12,0000 gr

Volume sampel = 5 ml

Bj minyak atsiri =

=

= 0,8441 gr/ml

Rata- rata Bobot jenis =

**Lampiran 13.** Hasil Analisa *Probic LC50*Uji Efektivitas Minyak Atsiri Kulit Kulit Lemon Sebagai Sediaan Anti Nyamuk Elektrik Terhadap Nyamuk Culex

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Confidence Limits** | | | | | | | |
|  | Probability | 95% Confidence Limits for konsentrasi | | | 95% Confidence Limits for log(konsentrasi)a | | |
| Estimate | Lower Bound | Upper Bound | Estimate | Lower Bound | Upper Bound |
| PROBIT | .010 | 2.114 | .153 | 3.520 | .325 | -.815 | .547 |
| .020 | 2.410 | .231 | 3.814 | .382 | -.636 | .581 |
| .030 | 2.618 | .300 | 4.014 | .418 | -.523 | .604 |
| .040 | 2.787 | .365 | 4.173 | .445 | -.438 | .620 |
| .050 | 2.932 | .428 | 4.308 | .467 | -.368 | .634 |
| .060 | 3.062 | .490 | 4.426 | .486 | -.310 | .646 |
| .070 | 3.180 | .552 | 4.533 | .502 | -.258 | .656 |
| .080 | 3.290 | .614 | 4.632 | .517 | -.212 | .666 |
| .090 | 3.393 | .676 | 4.724 | .531 | -.170 | .674 |
| .100 | 3.491 | .738 | 4.811 | .543 | -.132 | .682 |
| .150 | 3.926 | 1.064 | 5.195 | .594 | .027 | .716 |
| .200 | 4.311 | 1.419 | 5.534 | .635 | .152 | .743 |
| .250 | 4.671 | 1.813 | 5.857 | .669 | .258 | .768 |
| .300 | 5.020 | 2.252 | 6.181 | .701 | .353 | .791 |
| .350 | 5.366 | 2.743 | 6.524 | .730 | .438 | .815 |
| .400 | 5.717 | 3.288 | 6.906 | .757 | .517 | .839 |
| .450 | 6.078 | 3.885 | 7.358 | .784 | .589 | .867 |
| .500 | 6.456 | 4.522 | 7.931 | .810 | .655 | .899 |
| .550 | 6.857 | 5.168 | 8.704 | .836 | .713 | .940 |
| .600 | 7.290 | 5.787 | 9.788 | .863 | .762 | .991 |
| .650 | 7.767 | 6.353 | 11.313 | .890 | .803 | 1.054 |
| .700 | 8.303 | 6.871 | 13.443 | .919 | .837 | 1.129 |
| .750 | 8.923 | 7.369 | 16.433 | .951 | .867 | 1.216 |
| .800 | 9.668 | 7.883 | 20.770 | .985 | .897 | 1.317 |
| .850 | 10.615 | 8.459 | 27.507 | 1.026 | .927 | 1.439 |
| .900 | 11.940 | 9.183 | 39.431 | 1.077 | .963 | 1.596 |
| .910 | 12.284 | 9.360 | 43.045 | 1.089 | .971 | 1.634 |
| .920 | 12.669 | 9.555 | 47.357 | 1.103 | .980 | 1.675 |
| .930 | 13.107 | 9.771 | 52.612 | 1.117 | .990 | 1.721 |
| .940 | 13.613 | 10.016 | 59.188 | 1.134 | 1.001 | 1.772 |
| .950 | 14.214 | 10.300 | 67.715 | 1.153 | 1.013 | 1.831 |
| .960 | 14.955 | 10.640 | 79.341 | 1.175 | 1.027 | 1.899 |
| .970 | 15.918 | 11.069 | 96.441 | 1.202 | 1.044 | 1.984 |
| .980 | 17.295 | 11.661 | 125.072 | 1.238 | 1.067 | 2.097 |
| .990 | 19.712 | 12.648 | 188.578 | 1.295 | 1.102 | 2.275 |

**Lampiran 14.** Modifikasi Alat Destilasi Uap



Kondensor

Aquades dan Batu Didih

Sampel + Aquades

Penampung Destilat

Alat Destilasi Uap

**Lampiran 15.** Minyak Atsiri Kulit Lemon



Hasil isolasi minyak atsiri kulit lemon Pon k4

**Lampiran 16.**  Perendaman Keping Nyamuk





**Lampiran 17.** Sediaan Antinyamuk Elektrik dari Minyak Lemon Pon k4

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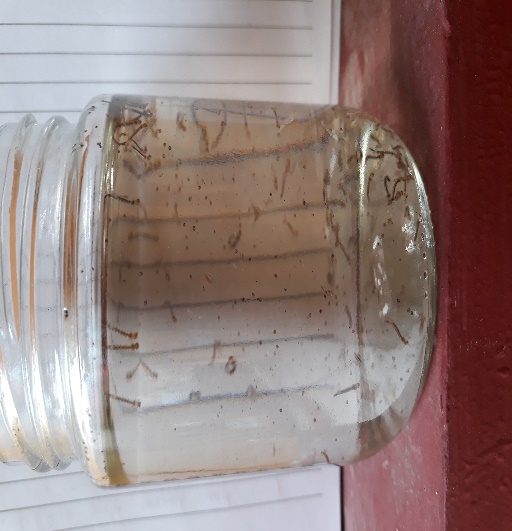
Keterangan:

K 5 % = volume 1,5 mL

K 7,5% = Volume 2,25 mL

K 10% = Volume 3 mL

**Lampiran 18.** Pertumbuhan jentik-jentik nyamuk

****

****

**Lampiran 19.** Pengujian Keping Antinyamuk

Volume 1,5 mL

****sebelum pengujian

****

sesudah pengujian

**Lampiran 19.** (Lanjutan)

Volume 2,25 mL

****

Sebelum Pengujian



Sesudah pengujian

**Lampiran 19.** (Lanjutan)

Volume 3 mL

****

Sebelum pengujian

****

Sesudah pengujian

**Lampiran 19.** (Lanjutan)

Pembanding sediaan dipasaran

****

**Lampiran 20.** Mikroskopik Kulit Lemon

Mikroskopik Kulit lemon

Minyak atsiri