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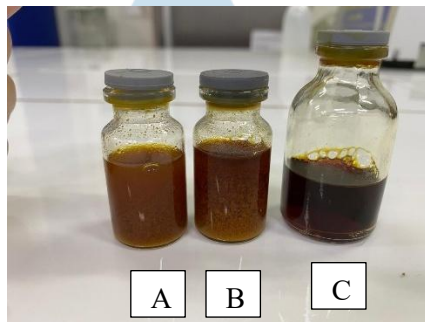
## LAMPIRAN



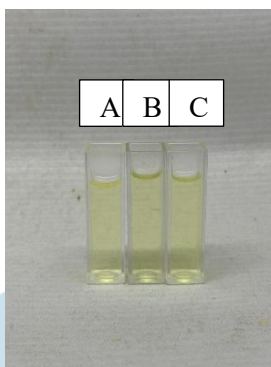
Lampiran 1. Hasil Maserasi. Keterangan: filtrat sebanyak  $\pm 780$  mL



Lampiran 2. Proses maserasi. Keterangan: perbandingan simplisia : pelarut (1:5)

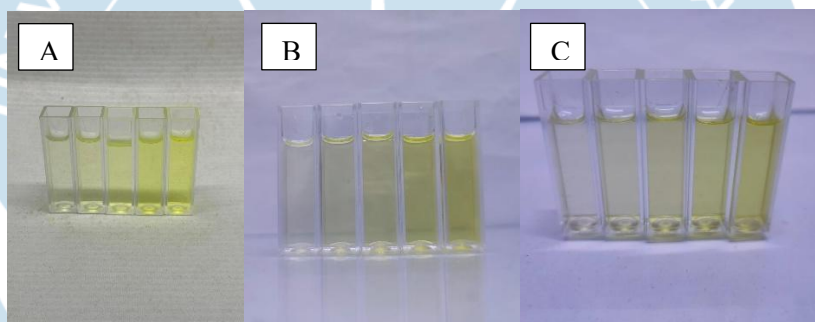


Lampiran 3. Ekstrak 10% (A), ekstrak 15% (B), ekstrak 20%(C)



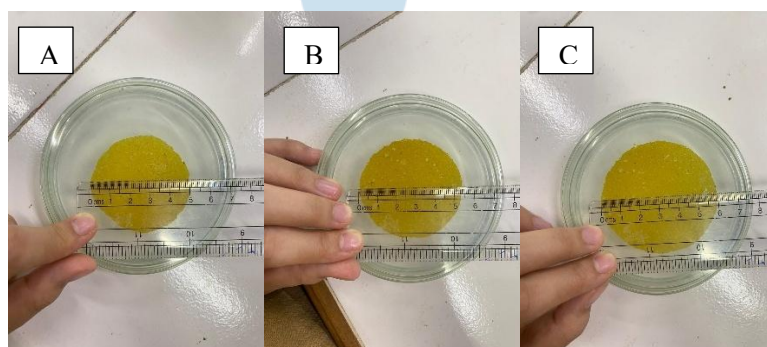
Lampiran 4. Sampel uji flavonoid kuantitatif. Keterangan: (A) pengulangan 1, (B) pengulangan 2, (C) pengulangan 3

Lampiran 4. Sampel uji flavonoid kuantitatif. Keterangan: (A) pengulangan 1, (B) pengulangan 2, (C) pengulangan 3



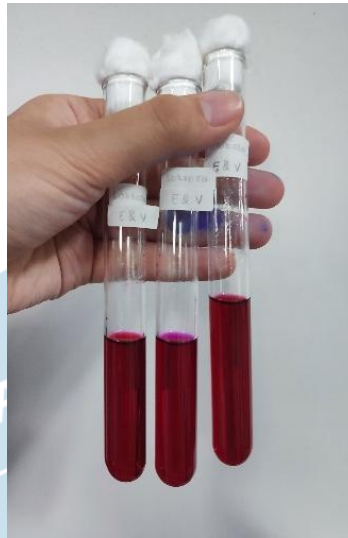
Lampiran 5. Deret standar kuersetin. Keterangan: (A) pengulangan 1, (B) pengulangan 2, (C) pengulangan 3

Lampiran 5. Deret standar kuersetin. Keterangan: (A) pengulangan 1, (B) pengulangan 2, (C) pengulangan 3



Lampiran 6. Uji daya sebar salep ekstrak. Keterangan: (A) ekstrak 10%, (B) ekstrak 15%, (C) ekstrak 20%

Lampiran 6. Uji daya sebar salep ekstrak. Keterangan: (A) ekstrak 10%, (B) ekstrak 15%, (C) ekstrak 20%

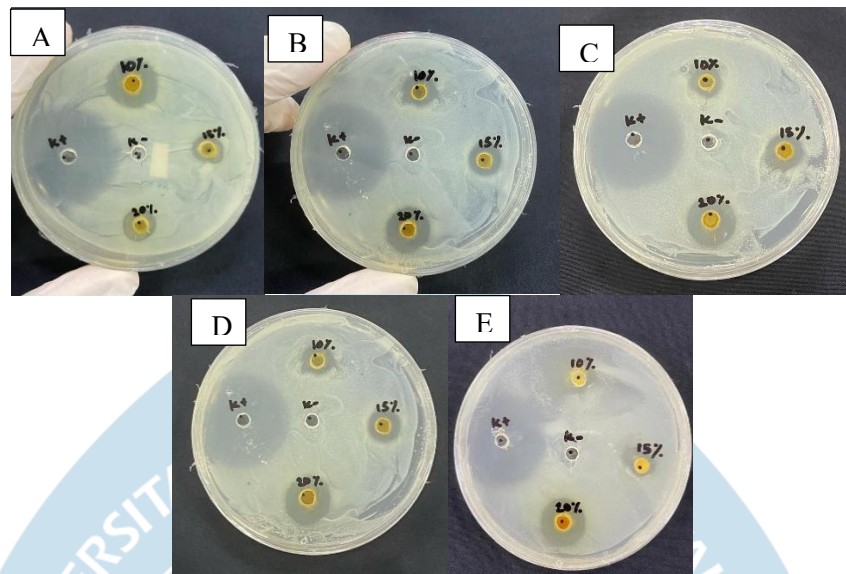


Lampiran 7. Media Uji Fermentasi Karbohidrat. Keterangan: laktosa, sukrosa, glukosa

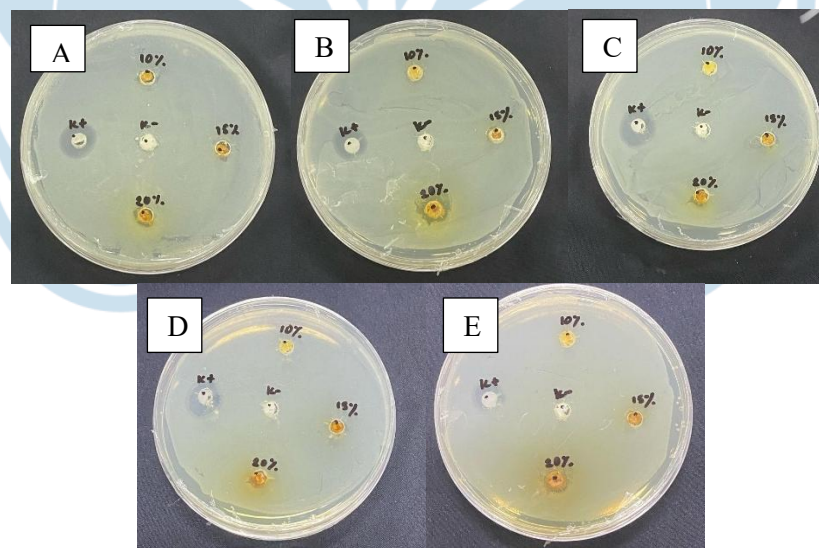
Lampiran 7. Media Uji Fermentasi Karbohidrat. Keterangan: laktosa, sukrosa, glukosa



Lampiran 8. Kontrol +. Keterangan: salep gentamisin



Lampiran 9. Hasil antibakteri ekstrak akar manis. Keterangan: (A) ulangan ke-1, (B) ulangan ke-2, (C) ulangan ke-3, (D) ulangan ke-4, (E) ulangan ke-5



Lampiran 10. Hasil uji antibakteri sediaan salep akar manis. Keterangan: (A) ulangan ke-1, (B) ulangan ke-2, (C) ulangan ke-3, (D) ulangan ke-4, (E) ulangan ke-5

### Descriptives

zona\_hambat

|       | N  | Mean    | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |         |                |            | Lower Bound                      | Upper Bound |         |         |
| K-    | 5  | .0000   | .00000         | .00000     | .0000                            | .0000       | .00     | .00     |
| k+    | 5  | 14.3000 | .27386         | .12247     | 13.9600                          | 14.6400     | 14.00   | 14.50   |
| 10%   | 5  | 7.5000  | .61237         | .27386     | 6.7396                           | 8.2604      | 7.00    | 8.50    |
| 15%   | 5  | 7.7000  | .90830         | .40620     | 6.5722                           | 8.8278      | 6.50    | 8.50    |
| 20%   | 5  | 12.3000 | .27386         | .12247     | 11.9600                          | 12.6400     | 12.00   | 12.50   |
| Total | 25 | 8.3600  | 5.06113        | 1.01223    | 6.2709                           | 10.4491     | .00     | 14.50   |

Lampiran 11. Hasil uji deskriptif ekstrak

### Multiple Comparisons

Dependent Variable: zona\_hambat

LSD

| (I) perlakuan | (J) perlakuan | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|---------------|---------------|-----------------------|------------|-------|-------------------------|-------------|
|               |               |                       |            |       | Lower Bound             | Upper Bound |
| K-            | k+            | -14.3000*             | .32863     | <.001 | -14.9855                | -13.6145    |
|               | 10%           | -7.5000*              | .32863     | <.001 | -8.1855                 | -6.8145     |
|               | 15%           | -7.7000*              | .32863     | <.001 | -8.3855                 | -7.0145     |
|               | 20%           | -12.3000*             | .32863     | <.001 | -12.9855                | -11.6145    |
| k+            | K-            | 14.3000*              | .32863     | <.001 | 13.6145                 | 14.9855     |
|               | 10%           | 6.8000*               | .32863     | <.001 | 6.1145                  | 7.4855      |
|               | 15%           | 6.6000*               | .32863     | <.001 | 5.9145                  | 7.2855      |
|               | 20%           | 2.0000*               | .32863     | <.001 | 1.3145                  | 2.6855      |
| 10%           | K-            | 7.5000*               | .32863     | <.001 | 6.8145                  | 8.1855      |
|               | k+            | -6.8000*              | .32863     | <.001 | -7.4855                 | -6.1145     |
|               | 15%           | -.20000               | .32863     | .550  | -.8855                  | .4855       |
|               | 20%           | -4.8000*              | .32863     | <.001 | -5.4855                 | -4.1145     |
| 15%           | K-            | 7.7000*               | .32863     | <.001 | 7.0145                  | 8.3855      |
|               | k+            | -6.6000*              | .32863     | <.001 | -7.2855                 | -5.9145     |
|               | 10%           | .20000                | .32863     | .550  | -.4855                  | .8855       |
|               | 20%           | -4.6000*              | .32863     | <.001 | -5.2855                 | -3.9145     |
| 20%           | K-            | 12.3000*              | .32863     | <.001 | 11.6145                 | 12.9855     |
|               | k+            | -2.0000*              | .32863     | <.001 | -2.6855                 | -1.3145     |
|               | 10%           | 4.8000*               | .32863     | <.001 | 4.1145                  | 5.4855      |
|               | 15%           | 4.6000*               | .32863     | <.001 | 3.9145                  | 5.2855      |

\*. The mean difference is significant at the 0.05 level.

Lampiran 12. Tabel uji signifikansi zona hambat ekstrak

### Descriptives

zona\_hambat

|       | N  | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |    |        |                |            | Lower Bound                      | Upper Bound |         |         |
| K-    | 5  | .0000  | .00000         | .00000     | .0000                            | .0000       | .00     | .00     |
| k+    | 5  | 7.0000 | 1.58114        | .70711     | 5.0368                           | 8.9632      | 5.50    | 9.50    |
| 10%   | 5  | .3000  | .67082         | .30000     | -.5329                           | 1.1329      | .00     | 1.50    |
| 15%   | 5  | .7000  | .67082         | .30000     | -.1329                           | 1.5329      | .00     | 1.50    |
| 20%   | 5  | 2.6000 | 2.77038        | 1.23895    | -.8399                           | 6.0399      | 1.00    | 7.50    |
| Total | 25 | 2.1200 | 2.98357        | .59671     | .8884                            | 3.3516      | .00     | 9.50    |

### Lampiran 13. Hasil uji deskriptif sediaan salep

### Multiple Comparisons

Dependent Variable: zona\_hambat

LSD

| (I) perlakuan | (J) perlakuan | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval Lower Bound | Upper Bound |
|---------------|---------------|-----------------------|------------|-------|-------------------------------------|-------------|
| K-            | k+            | -7.00000*             | .94128     | <.001 | -8.9635                             | -5.0365     |
|               | 10%           | -.30000               | .94128     | .753  | -2.2635                             | 1.6635      |
|               | 15%           | -.70000               | .94128     | .466  | -2.6635                             | 1.2635      |
|               | 20%           | -2.60000*             | .94128     | .012  | -4.5635                             | -.6365      |
| k+            | K-            | 7.00000*              | .94128     | <.001 | 5.0365                              | 8.9635      |
|               | 10%           | 6.70000*              | .94128     | <.001 | 4.7365                              | 8.6635      |
|               | 15%           | 6.30000*              | .94128     | <.001 | 4.3365                              | 8.2635      |
|               | 20%           | 4.40000*              | .94128     | <.001 | 2.4365                              | 6.3635      |
| 10%           | K-            | .30000                | .94128     | .753  | -1.6635                             | 2.2635      |
|               | k+            | -6.70000*             | .94128     | <.001 | -8.6635                             | -4.7365     |
|               | 15%           | -.40000               | .94128     | .675  | -2.3635                             | 1.5635      |
|               | 20%           | -2.30000*             | .94128     | .024  | -4.2635                             | -.3365      |
| 15%           | K-            | .70000                | .94128     | .466  | -1.2635                             | 2.6635      |
|               | k+            | -6.30000*             | .94128     | <.001 | -8.2635                             | -4.3365     |
|               | 10%           | .40000                | .94128     | .675  | -1.5635                             | 2.3635      |
|               | 20%           | -1.90000              | .94128     | .057  | -3.8635                             | .0635       |
| 20%           | K-            | 2.60000*              | .94128     | .012  | .6365                               | 4.5635      |
|               | k+            | -4.40000*             | .94128     | <.001 | -6.3635                             | -2.4365     |
|               | 10%           | 2.30000*              | .94128     | .024  | .3365                               | 4.2635      |
|               | 15%           | 1.90000               | .94128     | .057  | -.0635                              | 3.8635      |

\*. The mean difference is significant at the 0.05 level.

### Lampiran 14. Hasil uji signifikasi zona hambat sediaan

**CERTIFICATE**

No. : BT-0425154

Gresik, 12 July 2025

I have examined the specimen brought by Vendya Hendora, Atma Jaya University, Yogyakarta. The specimen is in agreement with characters of *Glycyrrhiza glabra* L. Belonging to the family *Fabaceae*. The plant is known by the common name *kayu legi*. The specimen was deposited to Herbarium Genbinesia (GEN) with register code: GEN 1151. The classification, specimen, and references are provided below.

**Classification**

|          |                              |
|----------|------------------------------|
| Regnum   | Plantae                      |
| Division | Magnoliophyta                |
| Class    | Magnoliopsida                |
| Order    | Fabales                      |
| Family   | Fabaceae                     |
| Genus    | <i>Glycyrrhiza</i>           |
| Species  | <i>Glycyrrhiza glabra</i> L. |

**References**

- Govaerts, R. (2003). World Checklist of Selected Plant Families Database in ACCESS: 1-216203. The Board of Trustees of the Royal Botanic Gardens, Kew.  
 Kumar, S. & Sane, P.V. (2003). Legumes of South Asia. A Checklist: 1-536. Royal Botanic Gardens, Kew.

 Chief Executive Officer  
 Generasi Biologi Indonesia



**GENERASI  
BIOLOGI  
INDONESIA**

Reza Raihandhany, M.Sc.

Lampiran 15. Hasil determinasi sampel akar manis



## PEMERINTAH DAERAH DAERAH ISTIMEWA YOGYAKARTA

DINAS KESEHATAN  
BALAI LABKES DAN KALIBRASI

ကောသလသမ္ဘာဗျူဟာသီလီ

Alamat : Ngadinegaran MJ III/62 Yogyakarta telepon. (0274) 378167, faksimile (0274) 381582  
Website <http://labkes.jogjaprovo.go.id> Email labkes\_yk@yahoo.com Kode Pos 55143

## SERTIFIKAT HASIL UJI

## Pengujian Mikrobiologi

1. Contoh Uji : Koleksi Strain Balai Labkes dan Kalibrasi Dinkes DIY
2. Asal Contoh uji : Microbiologisc
3. Penguji : dra. Darwani, M. Sc.
4. Jabatan : PLK Ahli Madya Balai Labkes dan Kalibrasi Dinkes DIY
5. Tanggal pengujian : 28 Mei – 4 Juni 2025
6. Peminta : Vendya Hendora
7. Alamat : Univ. Jend. Atma Jaya Yogyakarta

Uraian : Biakan murni *Staphylococcus aureus* ATCC 25923

| NO | PARAMETER                                  | SATUAN | HASIL UJI                                                                                               | METODE                |
|----|--------------------------------------------|--------|---------------------------------------------------------------------------------------------------------|-----------------------|
| 1  | <i>Staphylococcus aureus</i><br>ATCC 25923 | Tabung | Uji isolasi dan Identifikasi sesuai dengan karakteristik strain <i>Staphylococcus aureus</i> ATCC 25923 | Biakan & Identifikasi |

Catatan :

1. Hasil uji ini hanya berlaku untuk contoh yang diuji

Yogyakarta, 4 Juni 2025

Manager Teknik,

Septi Widyastuti, S Si, M Kes  
NIP. 197109051996032004

### Lampiran 16. Hasil Identifikasi Bakteri *Staphylococcus aureus*