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## LAMPIRAN

### Lampiran 1. Determinasi



**LABORATORIUM BOTANI DEPARTEMEN BIOLOGI**  
**FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM**  
**UNIVERSITAS HASANUDDIN, KAMPUS TAMALANREA**  
 JL. PERINTIS KEMERDEKAAN KM. 10 TLP. (0411) 585466, Fax: 620411 MAKASSAR 90915

Nomor : 003/UN4.11.9/BIO-BOT/PL-03/2023  
 Hal : Identifikasi dan Klasifikasi Tanaman  
 Nama : Yulniangsi  
 NIM : N011181362  
 Prodi : S1 Farmasi  
 Instansi : Fakultas Farmasi Universitas Hasanuddin

Identifikasi Tanaman Jagung *Zea mays* L. yaitu:

Habitus herba rumput, berakar serabut, batang beruas-ruas, tidak bercabang, pada buku batang ada akar nafas. Daun tunggal memeluk batang, rumus duduk daun  $1/2$ , bangun daun berbentuk pita, ujung daun meruncing, pangkal daun membulat, pertulangan daun sejajar, tepi daun rata, permukaan daun berbulu, permukaan atas daun berwarna hijau tua, dan permukaan bawah hijau muda, ada pelepah daun, lidah daun dan helaian daun. Panjang daun 68.0-74.5 cm dan lebar daun 5.3-6.8 cm. Tanaman berumah satu, bunga tidak sempurna, bunga jantan bentuk bulir dalam susunan berbentuk payung di ujung batang (terminalis). Panjang ibu tangkai bunga jantan 40.9-41.9 cm. Bunga betina terletak di ketiak daun, panjang tangkai putik 10.2-27.31 cm. Buah ditutupi oleh klobot, pada tongkol terdapat bulir betina buah jagung berisi 12 baris vertikal, buah jagung berbentuk bulat telur berwarna kuning. Panjang tongkol buah 23.8-29.9 cm dan diameter tongkol 3.95-4.52 cm. Sampel tanaman jagung berasal dari kecamatan Kelara, Kabupaten Jeneponto Sulawesi Selatan.

Klasifikasi Tanaman Jagung *Zea mays* L. yaitu:

Regnum : Plantae  
 Divisio : Spermatophyta  
 Subdivisio : Angiospermae  
 Classis : Monocotyledoneae  
 Ordo : Poales  
 Familia : Poaceae  
 Genus : *Zea*  
 Species : *Zea mays* L.

Makassar, 15 Maret 2023

Mengetahui,  
 Kepala Laboratorium Botani

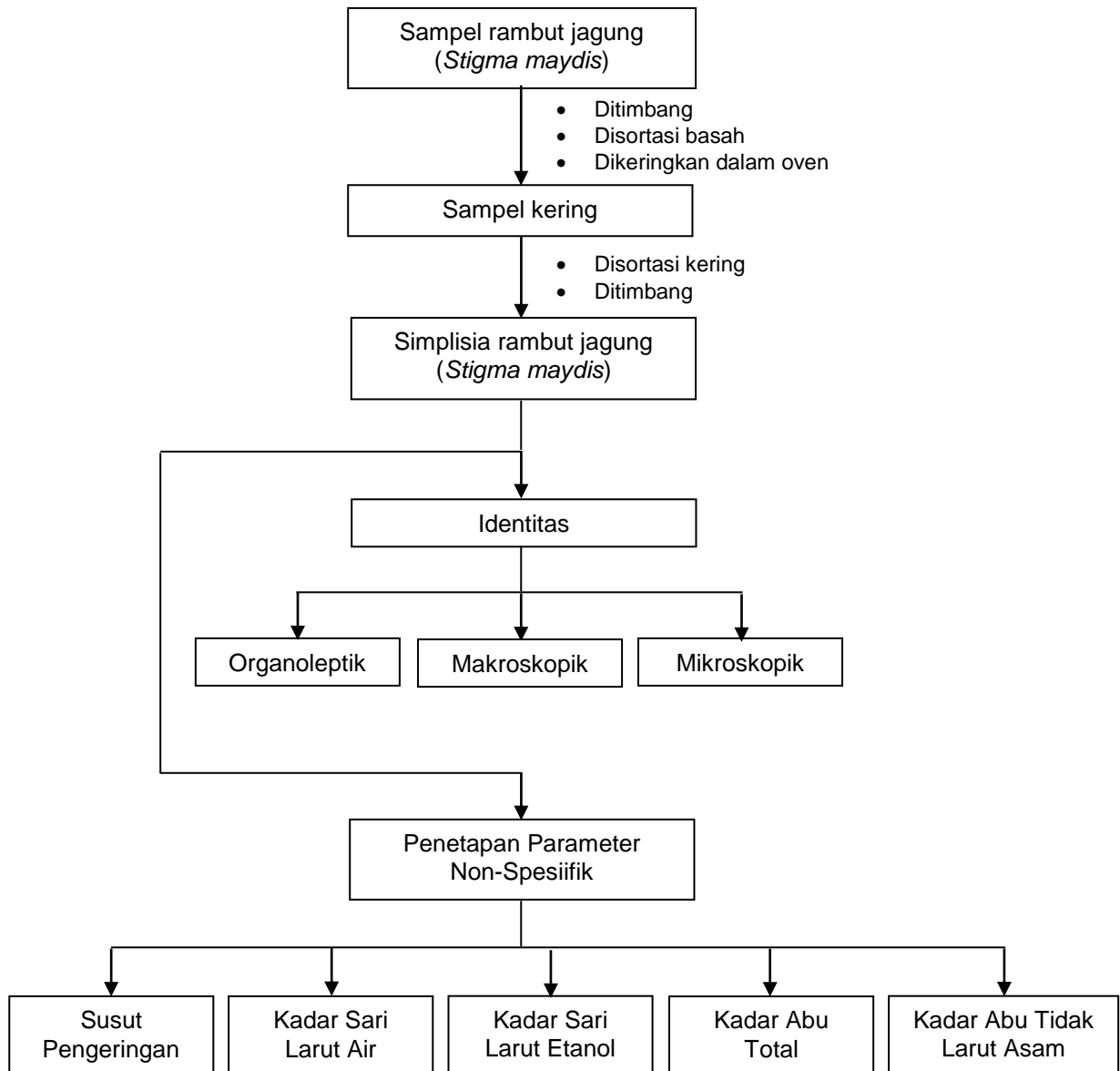
Dr. Andi Ilham Latuena, M.Si.  
 NIP 19670207 199203 1 001



Pembuat Identifikasi,

Dr. Elis Tambaru, M.Si.  
 NIP 196301021990022001

## Lampiran 2. Skema Kerja



**Lampiran 3. Dokumentasi Penelitian****Gambar 8. Pengeringan bahan simplisia****Gambar 9. Pengujian susut pengeringan****Gambar 10. Pengujian kadar sari larut**





**Gambar 11. Pengujian kadar abu total**



**Gambar 12. Pengujian kadar abu tidak larut asam**

#### Lampiran 4. Perhitungan

##### Susut Pengerinan

$$\% \text{ Susut pengeringan} = \frac{\text{Bobot awal} - \text{bobot akhir}}{\text{Bobot awal}} \times 100\%$$

$$1. \quad \% \text{ Susut pengeringan} = \frac{0,25 - 0,2264}{0,25} \times 100\% = 9,44\%$$

$$2. \quad \% \text{ Susut pengeringan} = \frac{0,25 - 0,2269}{0,25} \times 100\% = 9,24\%$$

$$3. \quad \% \text{ Susut pengeringan} = \frac{0,25 - 0,2268}{0,25} \times 100\% = 9,28\%$$

$$\text{Rata-rata (X)} = \frac{9,44 + 9,24 + 9,28}{3} = \frac{21,77}{3} = 9,32$$

$$\text{SD} = \sqrt{\frac{\sum Xi^2 - \frac{(\sum Xi)^2}{n}}{n-1}} = \sqrt{\frac{260,6096 - \frac{(27,9616)^2}{3}}{3-1}} = \sqrt{\frac{260,6096 - 260,5872}{2}} = \sqrt{\frac{0,0224}{2}} = \sqrt{0,0112} = 0,1058$$

$$\text{RSD} = \frac{\text{SD}}{\text{X}} = \frac{0,1058}{9,32} = 0,011355 = 1,1355\%$$

##### Kadar Sari Larut Air

$$\% \text{ Kadar sari larut air} = \frac{\text{Bobot (cawan+filtrat)} - \text{cawan kosong}}{\text{Berat Sampel}} \times 100\%$$

$$1. \quad \% \text{ Kadar sari larut air} = \frac{36,776 - 36,7383}{1,0002} \times 100\% = 3,7692\%$$

$$2. \quad \% \text{ Kadar sari larut air} = \frac{66,3588 - 66,323}{1,0004} \times 100\% = 3,5786\%$$

$$3. \quad \% \text{ Kadar sari larut air} = \frac{55,1391 - 55,0996}{1,0003} \times 100\% = 3,9488\%$$

$$\text{Rata-rata (X)} = \frac{3,7692 + 3,5786 + 3,9488}{3} = \frac{11,29663}{3} = 3,765543$$

$$\text{SD} = \sqrt{\frac{\sum Xi^2 - \frac{(\sum Xi)^2}{n}}{n-1}} = \sqrt{\frac{42,60651 - \frac{(11,29663)^2}{3}}{3-1}} = \sqrt{\frac{42,60651 - 42,53795}{2}} = \sqrt{\frac{0,068562}{2}} = \sqrt{0,034281} = 0,1851$$

$$\text{RSD} = \frac{\text{SD}}{\text{X}} = \frac{0,1851}{3,765543} = 0,04917 = 4,917\%$$

##### Kadar Sari Larut Etanol

$$\% \text{ Kadar sari larut etanol} = \frac{\text{Bobot (cawan+filtrat)} - \text{cawan kosong}}{\text{Berat Sampel}} \times 100\%$$

$$1. \quad \% \text{ Kadar sari larut etanol} = \frac{36,7688 - 36,7383}{1} \times 100\% = 2,8489\%$$

$$2. \quad \% \text{ Kadar sari larut etanol} = \frac{66,3519 - 66,323}{1} \times 100\% = 2,8894\%$$

$$3. \text{ \% Kadar sari larut etanol} = \frac{55,1315-55,0996}{1} \times 100\% = 3,1887\%$$

$$\text{Rata-rata (X)} = \frac{2.8489+2.8894+3.1887}{3} = \frac{8.927007}{3} = 2.975669$$

$$SD = \sqrt{\frac{\sum Xi^2 - \frac{(\sum Xi)^2}{n}}{n-1}} = \sqrt{\frac{26.63273 - \frac{(79.69146)^2}{3}}{3-1}} = \sqrt{\frac{26.63273 - 26.56382}{2}} = \sqrt{\frac{0.068912}{2}} = \sqrt{0.034456} = 0.1856$$

$$RSD = \frac{SD}{X} = \frac{0.1856}{2.975669} = 0.06238 = 6.238016\%$$

### Kadar Abu Total

$$\text{\% Kadar abu total} = \frac{\text{Bobot (cawan+abu)} - \text{cawan kosong}}{\text{Berat Sampel}} \times 100\%$$

$$1. \text{ \% Kadar abu total} = \frac{38,9636-38,9022}{2} \times 100\% = 3,07\%$$

$$2. \text{ \% Kadar abu total} = \frac{35,8270-35,7636}{2} \times 100\% = 3,17\%$$

$$3. \text{ \% Kadar abu total} = \frac{37,6815-37,6200}{2} \times 100\% = 3,075\%$$

$$\text{Rata-rata (X)} = \frac{3.07+3.17+3.075}{3} = \frac{9.315}{3} = 3.105$$

$$SD = \sqrt{\frac{\sum Xi^2 - \frac{(\sum Xi)^2}{n}}{n-1}} = \sqrt{\frac{28.92943 - \frac{(86.76923)^2}{3}}{3-1}} = \sqrt{\frac{28.92943 - 28.92308}{2}} = \sqrt{\frac{0.00635}{2}} = \sqrt{0.003175} = 0.05634$$

$$RSD = \frac{SD}{X} = \frac{0.05634}{3.105} = 0.018147 = 1.8147\%$$

### Kadar Abu Tidak Larut Asam

$$\text{\% Kadar abu tidak larut asam} = \frac{\text{Bobot (cawan+abu)} - \text{cawan kosong}}{\text{Berat Sampel}} \times 100\%$$

$$1. \text{ \% Kadar abu tidak larut asam} = \frac{38,9043-38,9022}{2} \times 100\% = 0,105\%$$

$$2. \text{ \% Kadar abu tidak larut asam} = \frac{35,7684-35,7636}{2} \times 100\% = 0,24\%$$

$$3. \text{ \% Kadar abu tidak larut asam} = \frac{37,6223-37,6200}{2} \times 100\% = 0,115\%$$

$$\text{Rata-rata (X)} = \frac{0.105+0.24+0.115}{3} = \frac{0.46}{3} = 0.153333$$

$$SD = \sqrt{\frac{\sum Xi^2 - \frac{(\sum Xi)^2}{n}}{n-1}} = \sqrt{\frac{0.08185 - \frac{(0.46)^2}{3}}{3-1}} = \sqrt{\frac{0.08185 - 0.070533}{2}} = \sqrt{\frac{0.011317}{2}} = \sqrt{0.005658} = 0.075222$$

$$RSD = \frac{SD}{X} = \frac{0.075222}{0.15333} = 0.490578 = 49.0578\%$$

