

## LAMPIRAN

### 1. Perhitungan Pembuatan Larutan Standar

Larutan induk 200 ppm

Rumus pengenceran :  $V_1 \times N_1 = V_2 \times N_2$

Larutan standar diencerkan kedalam labu ukur 10 ml

- **Rumus pengenceran**

- **20 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 20 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 20 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 1 \text{ mL}$$

- **40 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 40 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 40 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 2 \text{ mL}$$

- **60 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 60 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 60 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 3 \text{ mL}$$

- **80 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 80 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 80 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 4 \text{ mL}$$

- **100 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 100 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 100 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 5 \text{ mL}$$

- **120 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 120 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 120 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 6 \text{ mL}$$

○ **140 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 140 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 140 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 7 \text{ mL}$$

○ **160 ppm**

$$V_1 \times 200 \text{ ppm} = 10 \text{ mL} \times 160 \text{ ppm}$$

$$= V_1 = \frac{10 \text{ mL} \times 160 \text{ ppm}}{200 \text{ ppm}}$$

$$= V_1 = 8 \text{ mL}$$

## 2. Preparasi bahan



Proses penjemuran batang daun pepaya



Proses penjemuran biji mahoni



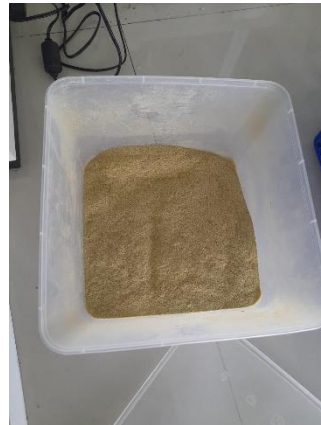
Proses oven bahan baku suhu 115°C  
selama 4 jam



Proses pengalusan bahan

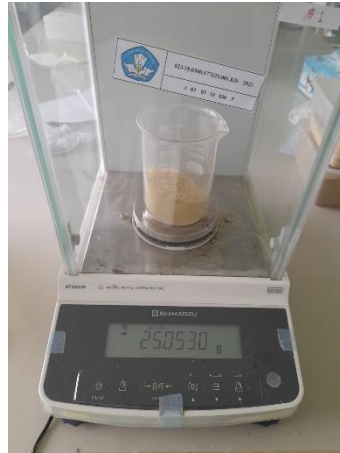


Proese pengayakan dengan ukuran  
mesh 60 mesh

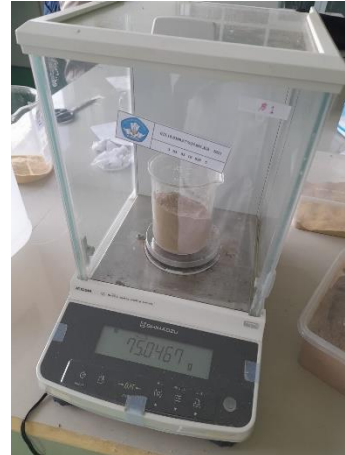


Hasil pengayakan bahan baku

### 3. Proses Ekstraksi Maserasi



Proses penimbangan bahan baku



Proses penimbangan bahan baku



Proses prendaman kombinasi serbuk bahan baku selama 24 jam



Proses penyaringan hasil ekstraksi kombinasi bahan baku



Proses destilasi hasil ekstrak bahan baku selama 4 jam



Ekstrak dari hasil proses destilasi



Pengukuran volume hasil ekstrak kombinasi bahan baku



Pengukuran volume hasil ekstrak kombinasi bahan baku



Sampel hasil ekstraksi

#### 4. Hasil Pengujian Flavonoid



Hasil pengujian ekstrak kombinasi 75 gram serbuk biji mahoni dan 25 gram serbuk batang daun pepaya



Hasil pengujian ekstrak 100 gram serbuk biji mahoni



Hasil pengujian ekstrak 100 gram serbuk batang daun pepaya



Hasil pengujian ekstrak kombinasi 25 gram serbuk biji mahoni dan 75 gram serbuk batang daun pepaya



## 5. Hasil Pengujian Saponin



Hasil pengujian ekstrak 100 gram serbuk batang daun pepaya



Hasil pengujian ekstrak kombinasi 25 gram biji mahoni dan 75 gram serbuk batang daun pepaya



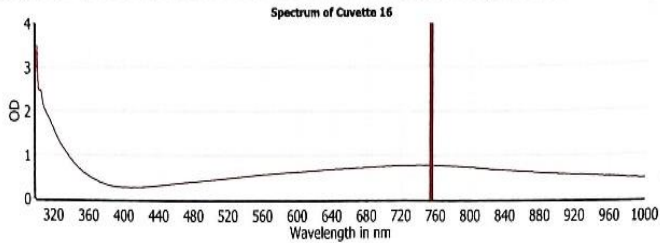
Hasil pengujian ekstrak 100 gram serbuk biji mahoni



Hasil pengujian ekstrak kombinasi 75 gram serbuk biji mahoni dan 25 gram serbuk batang daun pepaya

## 6. Hasil Pengujian Kadar Tanin

Test Name: UJI TANIN 2 - SHAHRUL Date: 02/07/2024 Time: 13:55:08  
 ID1: 02072024  
 Absorbance spectrum



Cuvette	Content and concentration	755 nm
1 Standar 1	Standard 1 20	17.865 ppm 0.144 OD
2 Standar 2	Standard 2 40	44.984 ppm 0.266 OD
3 Standar 3	Standard 3 60	56.3 ppm 0.318 OD
4 Standar 4	Standard 4 80	84.259 ppm 0.444 OD
5 Standar 5	Standard 5 100	94.116 ppm 0.489 OD
6 Sampel 1	Sample	759.667 ppm 3.5 OD
7 Sampel 2	Sample	759.667 ppm 3.5 OD
8 Sampel 3	Sample	759.667 ppm 3.5 OD
9 Sampel 4	Sample	759.667 ppm 3.5 OD
10 BDP	Sample	128.529 ppm 0.644 OD
11 BM	Sample	138.497 ppm 0.69 OD
12 BM;BDP	Sample	143.47 ppm 0.712 OD
13 BDP;BM	Sample	123.136 ppm 0.62 OD
14 Standar 6	Standard 6 120	118.804 ppm 0.6 OD
15 Standar 7	Standard 7 140	146.542 ppm 0.726 OD
16 Standar 8	Standard 8 160	157.129 ppm 0.774 OD

Cuvette	Concentration (ppm)	OD
Cuvette 1	17.865	0.144
Cuvette 2	44.984	0.266
Cuvette 3	56.3	0.318
Cuvette 4	84.259	0.444
Cuvette 5	94.116	0.489
Cuvette 6	759.667	3.5
Cuvette 7	759.667	3.5
Cuvette 8	759.667	3.5
Cuvette 9	759.667	3.5
Cuvette 10	128.529	0.644
Cuvette 11	138.497	0.69
Cuvette 12	143.47	0.712
Cuvette 13	123.136	0.62
Cuvette 14	118.804	0.6
Cuvette 15	146.542	0.726
Cuvette 16	157.129	0.774

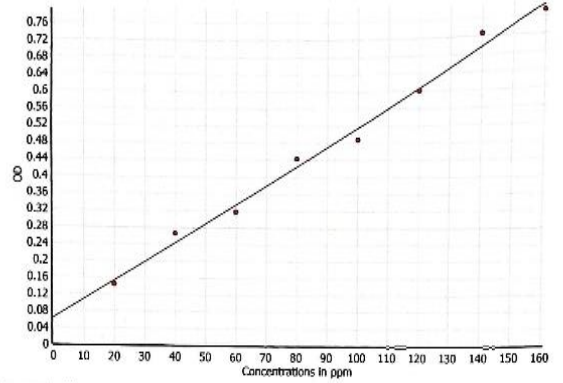
Legend:

- Linear regression fit based on Raw Data in ppm (755)
- Raw Data (755)

Reader: SPECTROstar Nano User: USER (C:\Program Files (x86)\BMG\SPECTROstar Nano\User\Data)  
 BMG LABTECH MARS 3.33 Test run: 423 (UJI TANIN 2 - SHAHRUL) printing date: 11/07/2024 Page: 1 of 1



Test Name: UJI TANIN 2 - SHAHRUL Date: 02/07/2024 Time: 13:55:08  
 ID1: 02072024  
 Absorbance spectrum Standard Curve(s) / Fit Results / Absorbance Spectrum

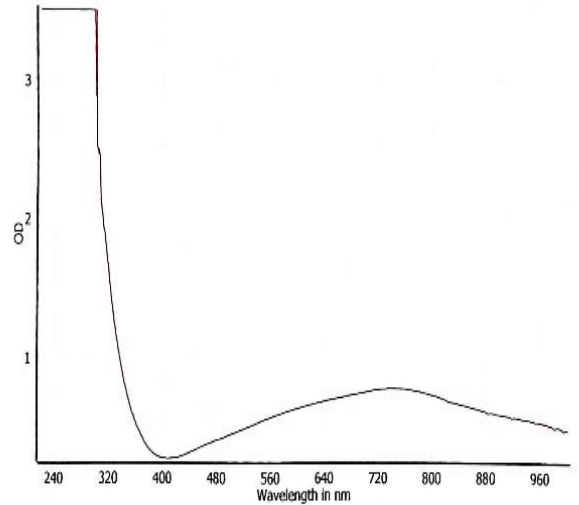


Linear regression fit

Formula:  $y = mx + b$

Parameter	Value
Slope	0.0045245
B	0.063
r	0.9956149
r <sup>2</sup>	0.9912491

Curve Color:  



Reader: SPECTROstar Nano User: USER (C:\Program Files (x86)\BMG\SPECTROstar Nano\User\Data)  
 BMG LABTECH MARS 3.33 Test run: 423 (UJI TANIN 2 - SHAHRUL) printing date: 11/07/2024 Page: 1 of 1





## 7. Hasil Pengaplikasian

- Pengaplikasian sampel A



Sebelum pengaplikasian volume 1  
mL



Sesudah pengaplikasian volume 1  
mL



Sebelum pengaplikasian volume 2  
mL



Sesudah pengaplikasian volume 2  
mL



Sebelum pengaplikasian volume 3  
mL



Sesudah pengaplikasian volume 3  
mL

- Pengaplikasian sampel B



Sebelum pengaplikasian volume 1  
mL



Sesudah pengaplikasian volume 1  
mL



Sebelum pengaplikasian volume 2  
mL



Sesudah pengaplikasian volume 2  
mL



Sebelum pengaplikasian volume 3  
mL



Sesudah pengaplikasian volume 3  
mL

- Pengaplikasian sampel C



Sebelum pengaplikasian volume 1  
mL



Sesudah pengaplikasian volume 1  
mL



Sebelum pengaplikasian volume 2  
mL



Sesudah pengaplikasian volume 2  
mL



Sebelum pengaplikasian volume 3  
mL



Sesudah pengaplikasian volume 3  
mL



- Pengaplikasian sampel D



Sebelum pengaplikasian volume 1 mL



Sesudah pengaplikasian volume 1 mL



Sebelum pengaplikasian volume 2 mL



Sesudah pengaplikasian volume 2 mL



Sebelum pengaplikasian volume 3 mL



Sesudah pengaplikasian volume 3 mL