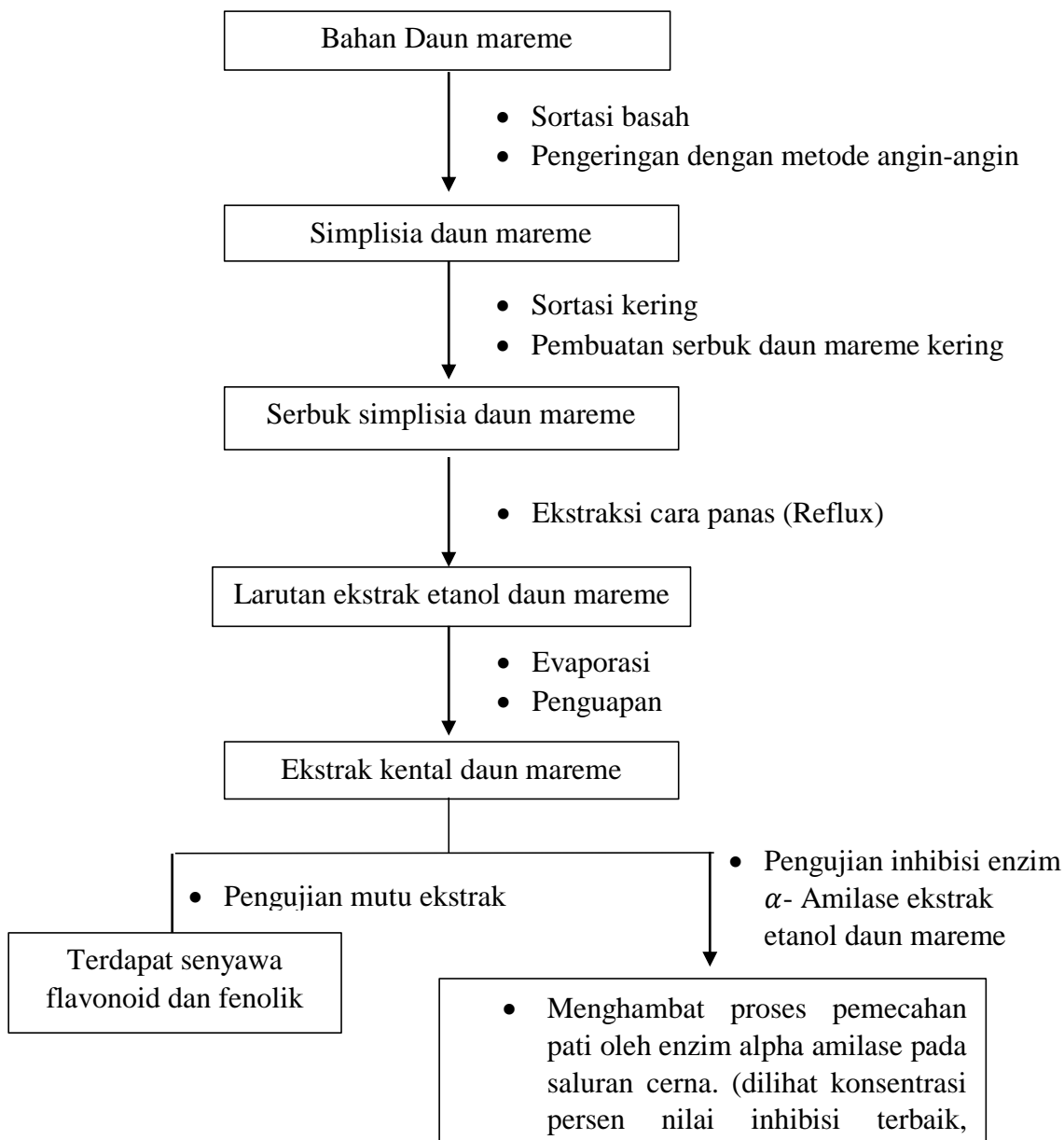
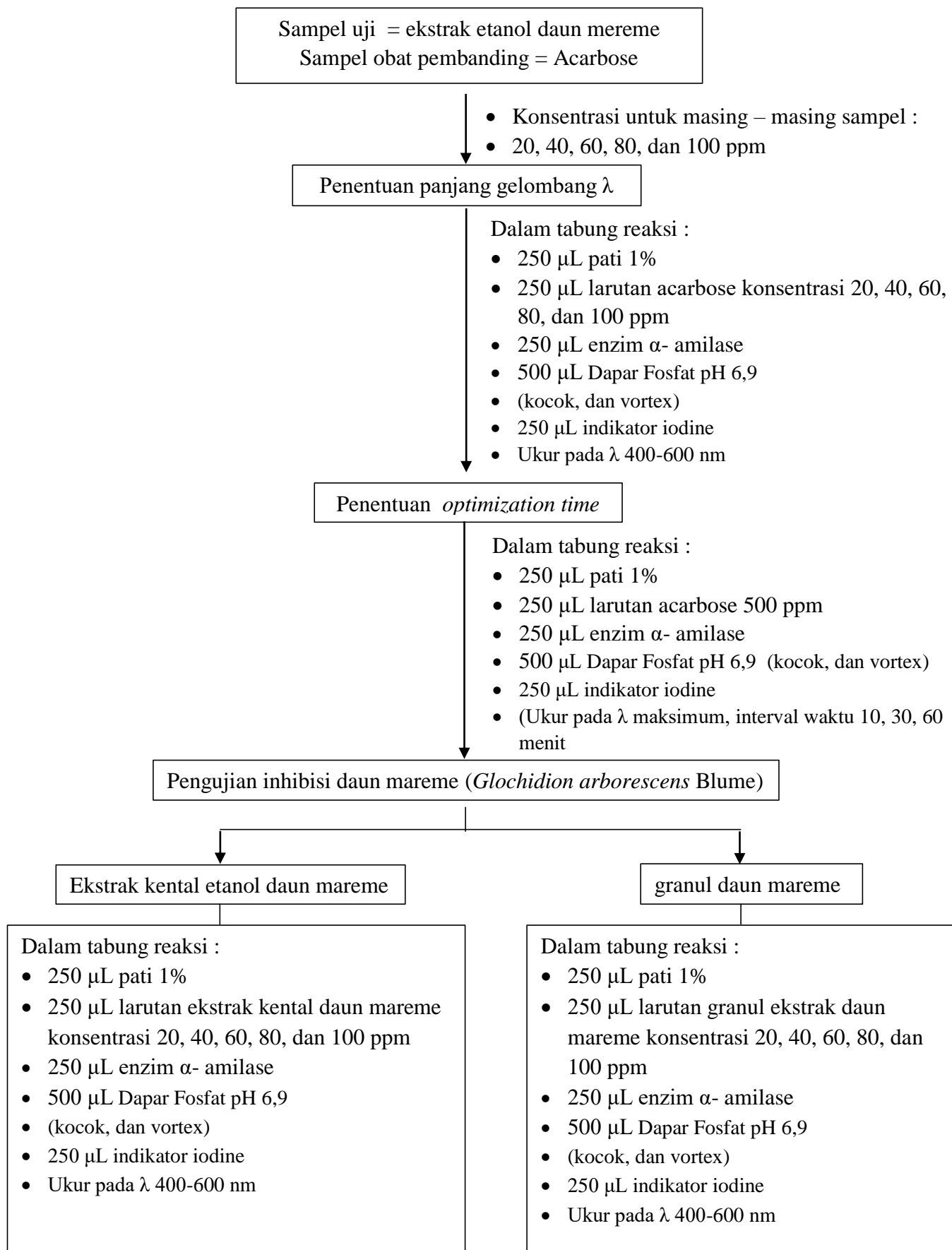


## LAMPIRAN 1

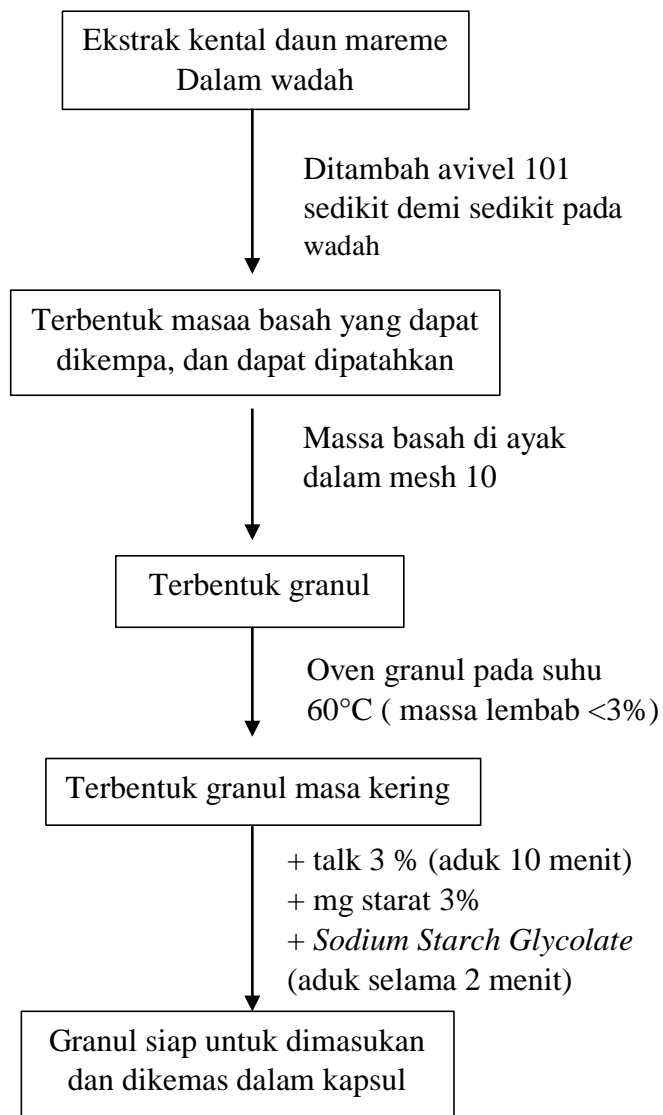
### Diagram Prosedur Penelitian

#### A. Pembuatan ekstrak etanol daun mareme (*Glochidion arborescens* Blume)



B. Pengujian Aktivitas Inhibisi  $\alpha$ -amilase dengan Ekstrak etanol daun mareme

## C. Formulasi Sediaan Granul Kapsul Dengan Metode Granulasi Basah



## LAMPIRAN 2

### Hasil Determinasi

**HERBARIUM JATINANGOR**  
**LABORATORIUM TAKSONOMI TUMBUHAN**  
**JURUSAN BIOLOGI FMIPA UNPAD**  
 Gedung D2-212, Jl. Raya Bandung Sumedang Km 21 Jatinangor  
 Telp. 022-7796412, email: [phanerogamac@yahoo.com](mailto:phanerogamac@yahoo.com)

#### LEMBAR IDENTIFIKASI TUMBUHAN

No.26/HB/12/2020

Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Jurusan Biologi FMIPA UNPAD, dengan ini menerangkan bahwa:

Nama : Ananda Thesa M.  
 NPM : 31117154  
 Instansi : STIKES BTH Tasikmalaya  
 Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -  
 Tanggal Koleksi : 27 Desember 2020  
 Lokasi : Tasikmalaya.

#### Hasil Identifikasi,

Nama Ilmiah : *Glochidion arborescens* Blume.  
 Sinonim : *Glochidion bancanum* Miq.  
 Nama Lokal : Daun mareme  
 Suku/Famili : Euphorbiaceae

#### Klasifikasi (Hirarki Taksonomi)

Kingdom : Plantae  
 Divisi : Magnoliophyta  
 Class : Magnoliopsida  
 Ordo : Euphorbiales  
 Famili : Euphorbiaceae  
 Genus : Glochidion  
 Species : *Glochidion arborescens* Blume.

#### Referensi:

Backer, C. A. and Bakhuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV. Groningen.  
 Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*. Columbia University Press. New York  
 The Plant List. *Website Dunia Tumbuhan*. <http://www.theplantlist.org/tp1.1/record/kew-158489>. Diakses tanggal, 29 Desember 2020.

Jatinangor, 29 Desember 2020.

Identifikator,

LABORATORIUM TAKSONOMI TUMBUHAN  
 JURUSAN BIOLOGI FMIPA-UNPAD

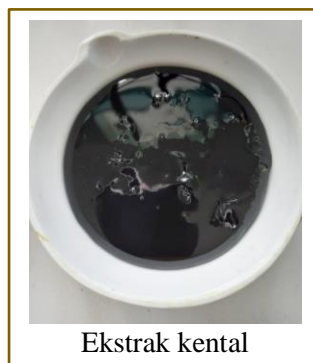
Drs. Joko Kusmoro, M.P.  
 NIP. 196008011991011001

### LAMPIRAN 3




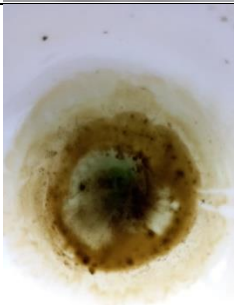



#### Lampiran Pembuatan Serbuk Simplisia



#### Lampiran pembuatan ekstrak kental

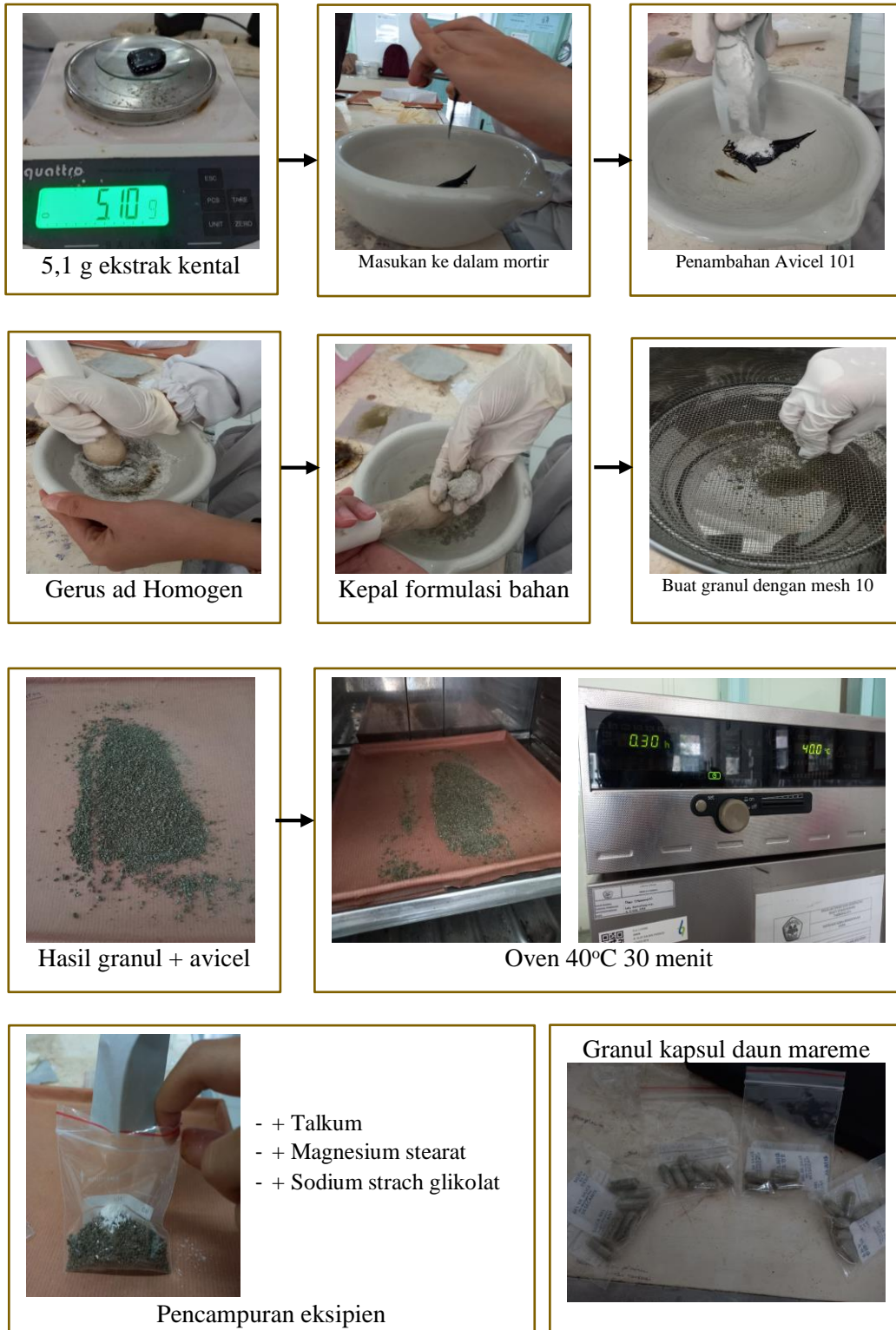


**LAMPIRAN 4**  
**Hasil Skrining Fitokimia**

No	Gambar	Keterangan	No	Gambar	Keterangan
1		+ polifenol + tanin	5		+ Flavonoid
2		1. dengan FeCl 2. dengan gelatin	6		+ steroid
3		+ saponin	7		- Alkaloid
4		- Kuion	-	-	-

## LAMPIRAN 5

### Lamporan Pembuatan Formulasi Granul Ekstrak



Formulasi A



Formulasi B



Formulasi C



Formulasi D

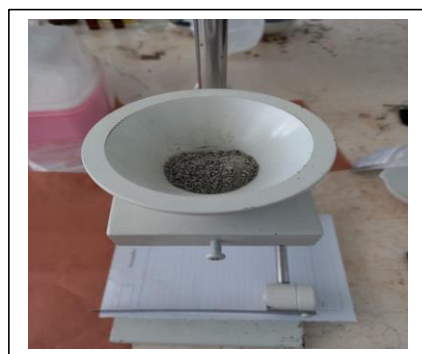




## LAMPIRAN 6

### Evaluasi Sediaan Granul Ekstrak Etanol Daun Mareme

#### a. Laju alir dan sudut diam



#### - Laju Alir

No.	Formula A	Formula B	Formula C	Formula D
1	2,03	1,84	2,05	2,06
2	2,00	2,06	2,03	2,03
3	1,96	2,09	2,02	2,03
Rata-rata Waktu alir	1,99	2,00	2,03	2,04
Kecepatan waktu alir	4,27	4,26	4,2	4,18

Perhitungan Kecepatan Waktu Alir :

$$\text{Formula A} = \frac{8,53}{1,99} = 4,27$$

$$\text{Formula B} = \frac{8,53}{2,00} = 4,26$$

$$\text{Formula C} = \frac{8,53}{2,03} = 4,20$$

$$\text{Formula D} = \frac{8,53}{2,04} = 4,18$$

- Sudut Istirahat

No.	Formula A	Formula B	Formula C	Formula D
1	21,80	23,96	22,93	18,43
2	23,30	25,70	23,74	23,96
3	22,75	25,64	24,77	24,77
Rata-rata	22,61	25,1	23,81	22,38
SD	0,61959664	0,80647381	0,75296636	2,81726226

Perhitungan sudut istirahat :

$$\tan^{-1} \frac{n}{r}$$

Keterangan :

n = tinggi puncak

d = diameter lingkaran

r = ½ diameter lingkaran

Formula A =

$$1. \quad n = 1,3 \text{ cm} \quad d = 6,5 \text{ cm} \quad r = 3,2 \text{ cm} \quad = 21,80$$

$$2. \quad n = 1,4 \text{ cm} \quad d = 6,5 \text{ cm} \quad r = 3,2 \text{ cm} \quad = 23,30$$

$$3. \quad n = 1,3 \text{ cm} \quad d = 6,2 \text{ cm} \quad r = 3,1 \text{ cm} \quad = 22,75$$

Formula B

$$1. \quad n = 1,2 \text{ cm} \quad d = 5,4 \text{ cm} \quad r = 3,2 \text{ cm} \quad = 23,96$$

$$2. \quad n = 1,2 \text{ cm} \quad d = 5,4 \text{ cm} \quad r = 3,2 \text{ cm} \quad = 25,70$$

$$3. \quad n = 1,3 \text{ cm} \quad d = 5,1 \text{ cm} \quad r = 3,1 \text{ cm} \quad = 25,64$$

Formula C

$$1. \quad n = 1,1 \text{ cm} \quad d = 5,2 \text{ cm} \quad r = 2,6 \text{ cm} \quad = 22,93$$

$$2. \quad n = 1,2 \text{ cm} \quad d = 5,1 \text{ cm} \quad r = 2,5 \text{ cm} \quad = 23,74$$

$$3. \quad n = 1,2 \text{ cm} \quad d = 5,3 \text{ cm} \quad r = 2,6 \text{ cm} \quad = 24,77$$

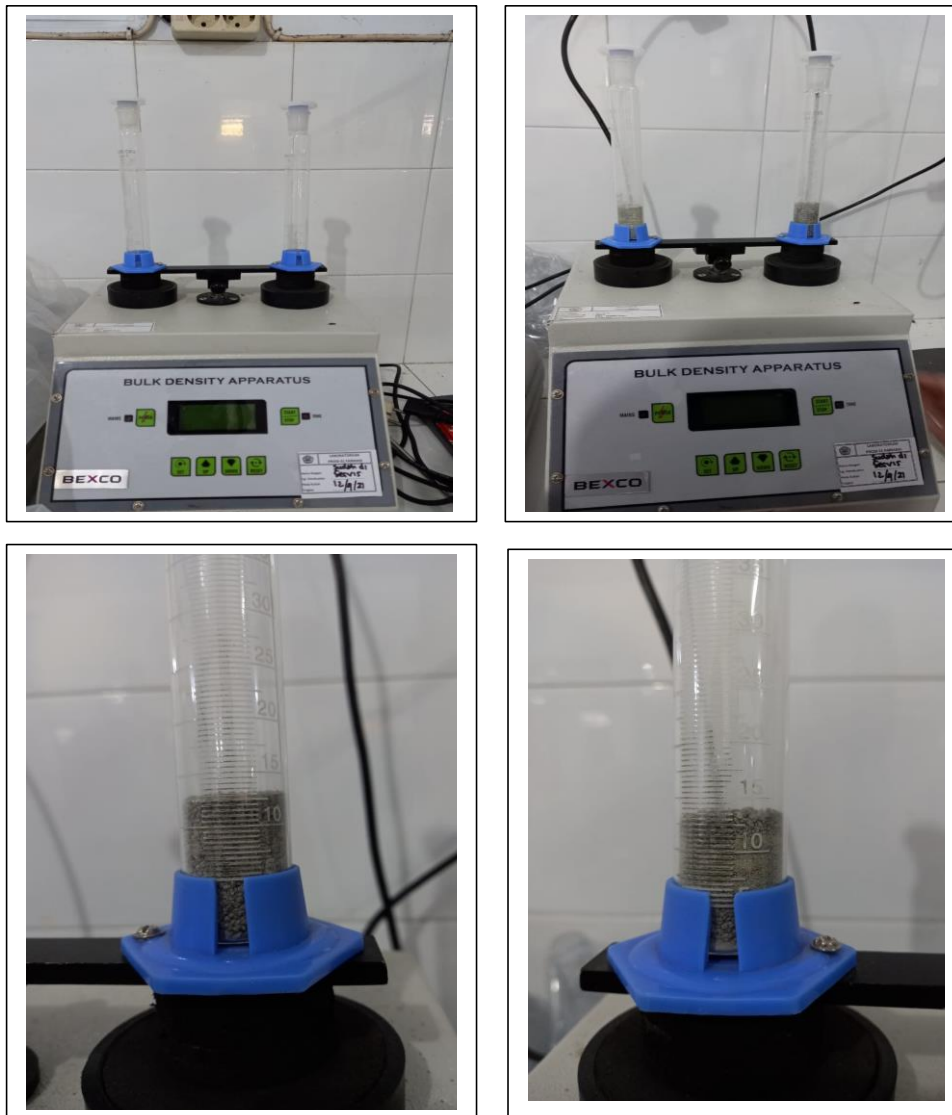
Formula D

$$1. \quad n = 1 \text{ cm} \quad d = 6 \text{ cm} \quad r = 3,0 \text{ cm} \quad = 18,43$$

$$2. \quad n = 1,2 \text{ cm} \quad d = 5,4 \text{ cm} \quad r = 2,7 \text{ cm} \quad = 23,96$$

$$3. \quad n = 1,2 \text{ cm} \quad d = 5,2 \text{ cm} \quad r = 2,6 \text{ cm} \quad = 24,77$$

## b. Bj nyata dan Bj mampat



Tabel Bj Nyata dan Bj Mampat

Formula	% Kompabilitas	Bj Ruah (g/ml)	Bj Mampat (g/ml)	Hausner Ratio (g/ml)	Kadar pemampatan
A	15,6	0,53	0,61	1,15	13
B	10	0,53	0,59	1,11	10
C	9,4	0,53	0,58	1,09	9,3
D	11,6	0,53	0,60	1,13	11

Perhitungan Bj nyata dan Bj mampat :

Formula A :

- $Bj \text{ nyata} = \frac{M_o}{V_o} = \frac{8 \text{ g}}{15 \text{ ml}} = 0,53 \text{ g/ml}$
- $Bj \text{ mampat} = \frac{M_o}{V_1} = \frac{8 \text{ g}}{13 \text{ ml}} = 0,61 \text{ g/ml}$
- Kadar pemampatan :  
 $\frac{v_o - v_1}{v_o} \times 100 \% = \frac{15 \text{ ml} - 13 \text{ ml}}{15 \text{ ml}} \times 100 \% = 13,33 \%$
- Pembandingan Haussner :  
 $\frac{Bj \text{ tapped}}{Bj \text{ bulk}} = \frac{0,61 \text{ g/ml}}{0,53 \text{ g/ml}} = 1,15 \text{ g/ml}$
- % Kompresibilitas :  
 $\% \text{ kp} = \frac{Bj \text{ mampat} - Bj \text{ nyata}}{Bj \text{ mampat}} \times 100 \%$   
 $\% \text{ kp} = \frac{0,61 - 0,53}{0,61} \times 100 \% = 15,6 \%$

Formula B :

- $Bj \text{ nyata} = \frac{M_o}{V_o} = \frac{8 \text{ g}}{15 \text{ ml}} = 0,53 \text{ g/ml}$
- $Bj \text{ mampat} = \frac{M_o}{V_1} = \frac{8 \text{ g}}{13,5 \text{ ml}} = 0,59 \text{ g/ml}$
- Kadar pemampatan :  
 $\frac{v_o - v_1}{v_o} \times 100 \% = \frac{15 \text{ ml} - 13,5 \text{ ml}}{15 \text{ ml}} \times 100 \% = 10 \%$
- Pembandingan Haussner :  
 $\frac{Bj \text{ tapped}}{Bj \text{ bulk}} = \frac{0,59 \text{ g/ml}}{0,53 \text{ g/ml}} = 1,11 \text{ g/ml}$
- % Kompresibilitas :  
 $\% \text{ kp} = \frac{Bj \text{ mampat} - Bj \text{ nyata}}{Bj \text{ mampat}} \times 100 \%$   
 $\% \text{ kp} = \frac{0,59 - 0,53}{0,59} \times 100 \% = 10 \%$

Formula C :

- a.  $Bj\ nyata = \frac{Mo}{Vo} = \frac{8\text{ g}}{15\text{ ml}} = 0,53\text{ g/ml}$
- b.  $Bj\ mampat = \frac{Mo}{V1} = \frac{8\text{ g}}{13,6\text{ ml}} = 0,58\text{ g/ml}$
- c. Kadar pemampatan :  
 $\frac{Vo-V1}{Vo} \times 100\% = \frac{15\text{ ml}-13,6\text{ ml}}{15\text{ ml}} \times 100\% = 9,3\%$
- d. Perbandingan Haussner :  
 $\frac{Bj\ tapped}{Bj\ bulk} = \frac{0,58\text{ g/ml}}{0,53\text{ g/ml}} = 1,09\text{ g/ml}$
- e. % Kompresibilitas :  
 $\% kp = \frac{Bj\ mampat - Bj\ nyata}{Bj\ mampat} \times 100\%$   
 $\% kp = \frac{0,58 - 0,53}{0,58} \times 100\% = 9,4\%$

Formula D :

- a.  $Bj\ nyata = \frac{Mo}{Vo} = \frac{8\text{ g}}{15\text{ ml}} = 0,53\text{ g/ml}$
- b.  $Bj\ mampat = \frac{Mo}{V1} = \frac{8\text{ g}}{13,3\text{ ml}} = 0,60\text{ g/ml}$
- c. Kadar pemampatan :  
 $\frac{Vo-V1}{Vo} \times 100\% = \frac{15\text{ ml}-13,3\text{ ml}}{15\text{ ml}} \times 100\% = 11,3\%$
- d. Perbandingan Haussner :  
 $\frac{Bj\ tapped}{Bj\ bulk} = \frac{0,60\text{ g/ml}}{0,53\text{ g/ml}} = 1,13\text{ g/ml}$
- e. % Kompresibilitas :  
 $\% kp = \frac{Bj\ mampat - Bj\ nyata}{Bj\ mampat} \times 100\%$   
 $\% kp = \frac{0,60 - 0,53}{0,60} \times 100\% = 11,6\%$

**LAMPIRAN 7****Evaluasi Sediaan Kapsul Ekstrak Etanol Daun Mareme**

## a. Uji keseragaman bobot kapsul



Tabel Uji Keseragaman Bobot

No Kapsul	Formula A	Formula B	Formula C	Formula D
1	73,5	74,6	77	76
2	73,5	74	76	75
3	73,2	74,8	76,5	76
4	73,7	76	77	76
5	74,5	74,6	76,6	76
6	73	74	77	74
Rata-rata	73,5	74,6	76,6	75,5
SD	0,47559	0,67046	0,36839	0,76376

Tabel persentase penyimpangan bobot

No Kapsul	Formula A	Formula B	Formula C	Formula D
1	0	0	0,5	0,6
2	0	0,6	0,7	0,6
3	0,4	0,2	0,1	0,6
4	0,2	1,8	0,5	0,6
5	1,3	0	0,6	0,6
6	0,6	0,6	0,5	2
Rata-rata	0,41666	0,53333	0,48333	0,83333
SD	0,49159	0,67724	0,20412	0,57154

Perhitungan keseragaman bobot kapsul :

$$\frac{\text{Bobot Kapsul} - \text{Bobot Cangkang Kapsul}}{\text{Bobot Kapsul}} \times 100 \%$$

Formula A

$$\frac{385 - 102}{385} \times 100 \% = 73,5 \%$$

$$\frac{386 - 102}{386} \times 100 \% = 73,5 \%$$

$$\frac{385 - 103}{385} \times 100 \% = 73,2 \%$$

$$\frac{385 - 101}{385} \times 100 \% = 73,7 \%$$

$$\frac{386 - 102}{386} \times 100 \% = 74,5 \%$$

$$\frac{386 - 104}{386} \times 100 \% = 73 \%$$

## Formula B

$$\frac{441 - 112}{441} \times 100 \% = 74,6 \%$$

$$\frac{443 - 115}{443} \times 100 \% = 74 \%$$

$$\frac{442 - 111}{442} \times 100 \% = 74,8 \%$$

$$\frac{441 - 105}{441} \times 100 \% = 76 \%$$

$$\frac{441 - 112}{441} \times 100 \% = 74,6 \%$$

$$\frac{442 - 115}{442} \times 100 \% = 74 \%$$

## Formula C

$$\frac{442 - 101}{442} \times 100 \% = 77 \%$$

$$\frac{443 - 102}{443} \times 100 \% = 76 \%$$

$$\frac{443 - 104}{443} \times 100 \% = 76,5 \%$$

$$\frac{441 - 101}{441} \times 100 \% = 77 \%$$

$$\frac{442 - 103}{442} \times 100 \% = 76,6 \%$$

$$\frac{442 - 102}{442} \times 100 \% = 77 \%$$

## Formula D

$$\frac{428 - 103}{428} \times 100 \% = 76 \%$$

$$\frac{426 - 105}{426} \times 100 \% = 75 \%$$

$$\frac{425 - 101}{425} \times 100 \% = 76 \%$$

$$\frac{428 - 102}{428} \times 100 \% = 76 \%$$

$$\frac{428 - 102}{428} \times 100 \% = 76 \%$$

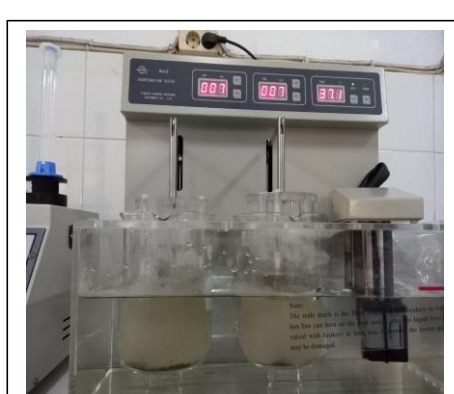
$$\frac{426 - 111}{426} \times 100 \% = 74 \%$$



## b. Uji waktu hancur granul kapsul



Formulasi 1 dan Formulasi 2



Formulasi 3 dan Formulasi 4

No Kapsul	Formula A	Formula B	Formula C	Formula D
1	3 : 05	2 : 20	2 : 20	2 : 10
2	3 : 12	2 : 18	2 : 21	2 : 11
3	3 : 10	2 : 22	2 : 16	2 : 05
4	3 : 12	2 : 25	2 : 15	2 : 07
5	3 : 08	3 : 02	2 : 11	1 : 21
6	3 : 08	3 : 05	2 : 14	1 : 33
Rata – rata	03 : 09	02 : 35	02 : 16	01 : 54
SD	0,00188483	0,0152504	0,00261379	0,01509838

## LAMPIRAN 8

### In Vitro Inhibisi Enzim $\alpha$ -amilase Acarbose, Ekstrak, Dan Granul

Sampel	konsetrasi	absorbansi kontrol	absorbansi	% inhibisi	IC <sub>50</sub>
Acarbose	20	0,5652	0,7865	28,137	63,3150
	40	0,5652	0,9453	40,209	
	60	0,5652	1,0948	48,374	
	80	0,5652	1,3894	59,320	
	100	0,5652	1,667	66,094	
Ekstrak	20	0,5652	0,8893	36,444	48,2711
	40	0,5652	1,0575	46,553	
	60	0,5652	1,281	55,878	
	80	0,5652	1,6753	66,262	
	100	0,5652	1,9344	70,781	
Granul	20	0,5652	0,778	27,352	54,9392
	40	0,5652	1,001	43,536	
	60	0,5652	1,3229	57,275	
	80	0,5652	1,584	64,318	
	100	0,5652	1,965	71,236	

Prosedur Kerja :

#### 1. Pembuatan Dapar Fosfat pH 6,9



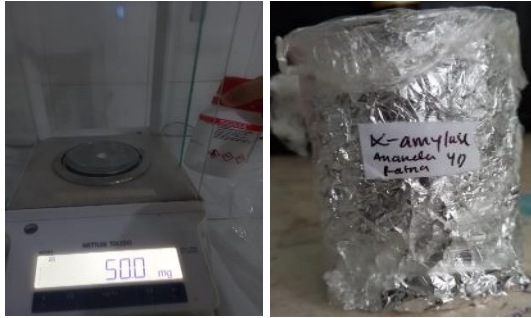
##### a. Basa (NaOH)

$$\text{gram} = \frac{N \times \text{BM} \times V}{1000} = \frac{0,019 \times 40 \times 100 \text{ mL}}{1000} = 0,076 \text{ g}$$

##### b. Garam (NaH<sub>2</sub>PO<sub>4</sub>)

$$\text{gram} = \frac{N \times \text{BM} \times V}{1000} = \frac{0,018 \times 120 \times 100 \text{ mL}}{1000} = 0,216 \text{ g}$$

## 2. Pembuatan Larutan Enzim $\alpha$ -amilase dalam Buffer phosphat



Perhitungan enzim  $\alpha$ -amilase :

1 mg enzim mengandung = 10-16 U/mg

$$\frac{50 \text{ mg}}{0,1} = 500 \text{ ppm}$$

$$M1 \times V1 = M2 \times V2$$

$$50 \text{ mg} \times V1 = 20 \text{ mg} \times 100 \text{ mL}$$

$$= 40 \text{ ml ad } 100 \text{ mL Buffer phosphat}$$

$$\text{Konsentrasi larutan enzim} = \frac{20 \text{ mg}}{100 \text{ ml}} \times 10 \text{ U}$$

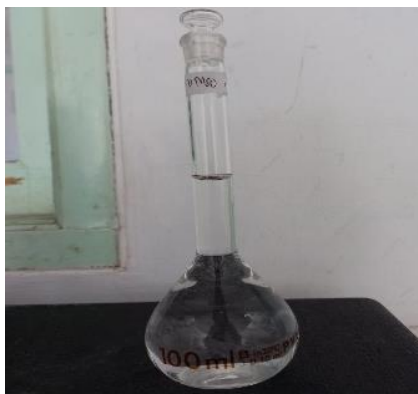
$$= 2 \text{ U/ML}$$

Untuk mendapatkan konsentrasi enzim sebesar 0,5 U/mL :

$$\text{Pengambilan dalam } 0,5 \text{ U/ml} = \frac{20 \text{ mg}}{1000 \mu\text{L}} = \frac{0,5 \text{ U}}{x}$$

$$= 250 \mu\text{L}$$

## 3. Pembuatan DMSO 1%



Keterangan :

1 ml DMSO dalam  
100 mL aq bidest

4. Pembuatan substrat pati kentang 1%



Keterangan :

1 gram pati kentang  
dalam 100 mL  
Buffer phospat

5. Pembuatan Larutan Standar Acarbose



Keterangan :

100 mg tablet Acarbose  
dalam 50 mL aqbidest

6. Pembuatan Larutan Ekstrak Etanol Daun Mareme



Keterangan :

100 mg ekstrak etanol daun mareme  
(*Glochidion arborescens* Blume)  
dalam 50 mL DMSO

7. Penentuan panjang gelombang inhibisi enzim  $\alpha$ -amilase dan Pengujian inhibisi enzim  $\alpha$ -amilase Acarbose 100 mg



Pengambilan sampel



Pengambilan pati



Pengambilan enzim



Pengambilan dapar



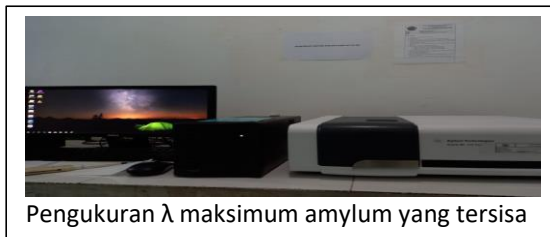
Pencampuran reagen dari berbagai macam konsentrasi 20, 40, 60, 80, dan 100 ppm



Homogenkan pencampuran reagen dalam tabung reaksi



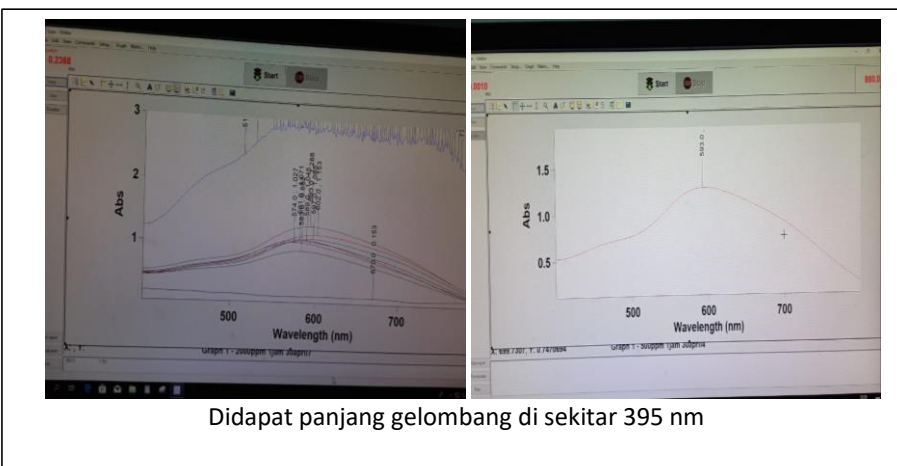
Inkubasi suhu 37°



Pengukuran  $\lambda$  maksimum amyllum yang tersisa



Penambahan indikator iodine



Didapat panjang gelombang di sekitar 395 nm

## Absorbansi sisa pati dengan indikator iodin pada $\lambda$ 595 nm Acarbose

Simple Reads Report

Collection Time: 31/05/2021 09:18:33

Method: Zero

Version: 5.0.0.999

Instrument: Cary 60

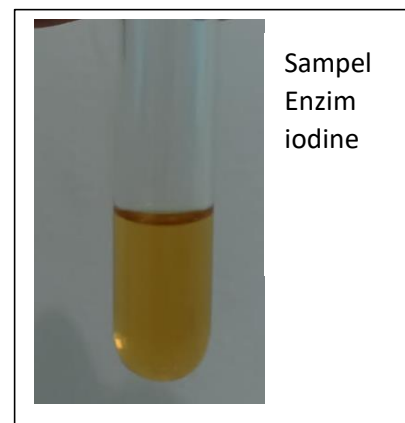
Ave Time (sec): 1.0000

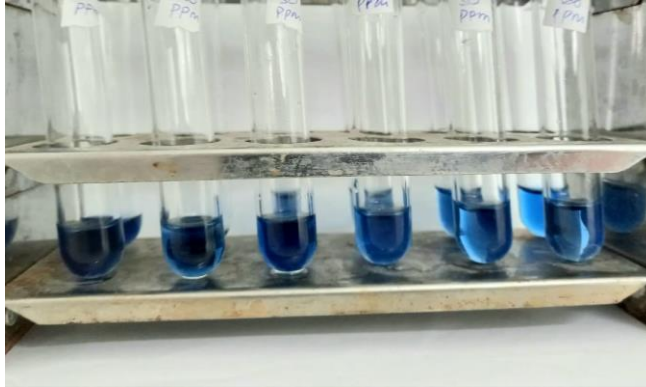
Read	Abs	nm
Zero	(0.6400)	595.0
1	2.3830	595.0
2	2.3742	595.0
3	2.3705	595.0
4	0.5607	595.0
5	0.5659	595.0
6	0.5610	595.0
7	2.6638	595.0
8	2.0976	595.0
9	2.0910	595.0
10	2.1006	595.0
11	2.1324	595.0
12	2.1479	595.0
13	2.1471	595.0
14	2.1446	595.0
15	2.1532	595.0
16	2.1013	595.0
17	2.0451	595.0
18	1.9077	595.0
19	0.5851	595.0
20	0.5968	595.0
21	0.5831	595.0
22	0.7895	595.0
23	0.7881	595.0
24	0.7640	595.0
25	0.7914	595.0
26	0.7897	595.0
27	1.1492	595.0
28	0.7098	595.0

0.6278

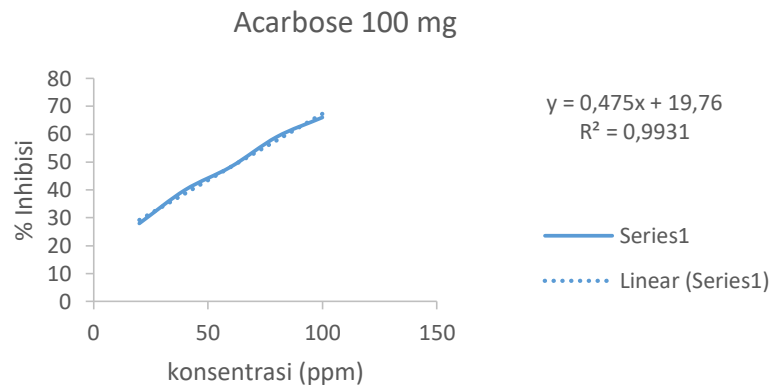
Abs

Setup	Abs	nm
28	0.7098	595.0
29	0.6543	595.0
Zero	0.3745	595.0
30	0.9288	595.0
31	0.9327	595.0
32	0.8418	595.0
33	1.0540	595.0
34	1.0552	595.0
35	1.0546	595.0
36	1.0341	595.0
37	1.1959	595.0
38	1.1806	595.0
39	1.1971	595.0
40	1.1416	595.0
41	1.1325	595.0
42	1.1303	595.0
43	0.8722	595.0
44	1.2429	595.0
45	1.2421	595.0
46	1.2472	595.0
47	1.3852	595.0
48	1.3889	595.0
49	1.3942	595.0
50	1.3764	595.0
51	1.3745	595.0
52	1.3764	595.0
53	1.3747	595.0
54	1.8653	595.0
55	1.6675	595.0
56	1.6694	595.0
57	1.6619	595.0
58	1.8652	595.0
59	1.8652	595.0
60	1.8652	595.0
61	1.8660	595.0
62	1.9035	595.0
63	1.9003	595.0
64	0.4314	595.0
65	0.4308	595.0
66	0.4301	595.0
67		





Perbedaan warna pada masing-masing konsentrasi Acarbose  
 20 ppm  
 40 ppm  
 60 ppm  
 80 ppm  
 100 ppm



a. Perhitungan % inhibisi enzim  $\alpha$ -amilase oleh tablet Acarbose

$$\% \text{ Inhibisi} = \frac{\text{Absorbansi Sampel} - \text{Absorbansi Kontrol}}{\text{Absorbansi Sampel}}$$

Rumus perhitungan persen inhibisi dari penelitian (Bhutkar *et al.*, 2018)

Konsentrasi 20 ppm

$$\% \text{ Inhibisi} = \frac{0,7865 - 0,5652}{0,7865} = 28,137 \%$$

Konsentrasi 40 ppm

$$\% \text{ Inhibisi} = \frac{0,9453 - 0,5652}{0,9453} = 40,209 \%$$

Konsentrasi 60 ppm

$$\% \text{ Inhibisi} = \frac{1,0948 - 0,5652}{1,0948} = 48,374 \%$$

Konsentrasi 80 ppm

$$\% \text{ Inhibisi} = \frac{1,3894 - 0,5652}{1,3894} = 59,320 \%$$

Konsentrasi 100 ppm

$$\% \text{ Inhibisi} = \frac{1,6670 - 0,5652}{1,6670} = 66,094 \%$$

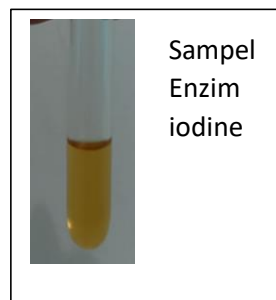
Absorbansi sisa pati dengan indikator iodin pada  $\lambda$  595 nm Ekstrak lentil dan granul ekstrak etanol daun mareme (*Glochidion arborescens* Blume)

a. Ekstrak Kental

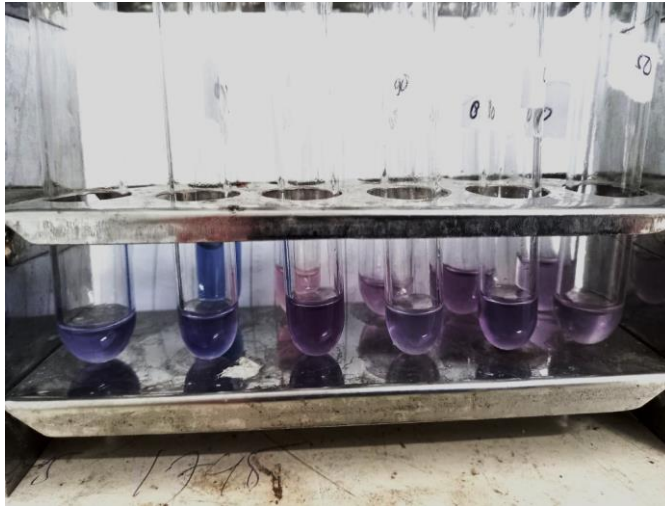
Abs	nm
0.9181	595.0
0.5908	595.0
0.5689	595.0
0.5499	595.0
1.5493	595.0
0.3322	595.0
1.2362	595.0
1.2225	595.0
0.7138	595.0
0.6624	595.0
0.6185	595.0
0.5902	595.0
1.1912	595.0
1.1933	595.0
1.1679	595.0
1.0413	595.0
0.4271	595.0
0.3369	595.0
0.5695	595.0
0.5293	595.0
0.4659	595.0
0.4648	595.0
1.7308	595.0
1.7075	595.0
1.6529	595.0
1.6766	595.0
1.6664	595.0
1.8290	595.0
1.2064	595.0
1.1601	595.0
1.1360	595.0
2.0205	595.0
1.9415	595.0
1.9376	595.0
1.9243	595.0
1.9098	595.0
1.8893	595.0
1.8966	595.0
1.8791	595.0

b. Granul Ekstrak

Abs	nm
0.1253	595.0
0.5473	595.0
0.4994	595.0
0.4907	595.0
0.4031	595.0
0.2211	595.0
0.5763	595.0
0.5739	595.0
0.5705	595.0
0.0884	595.0
0.6752	595.0
0.8633	595.0
1.0789	595.0
1.0610	595.0
1.0422	595.0
1.1870	595.0
1.1880	595.0
1.1854	595.0
1.5953	595.0
1.5965	595.0
1.5851	595.0
1.5805	595.0
1.5783	595.0
1.5743	595.0
1.3562	595.0
1.6969	595.0
1.6946	595.0
1.6983	595.0
1.7943	595.0
1.7911	595.0
1.7901	595.0
1.7937	595.0
1.2631	595.0
1.9683	595.0
1.9651	595.0
1.9637	595.0







Perbedaan warna pada masing-masing konsentrasi Ekstrak kental daun mareme  
 20 ppm  
 40 ppm  
 60 ppm  
 80 ppm  
 100 ppm

### Ekstrak Kental Daun Mareme

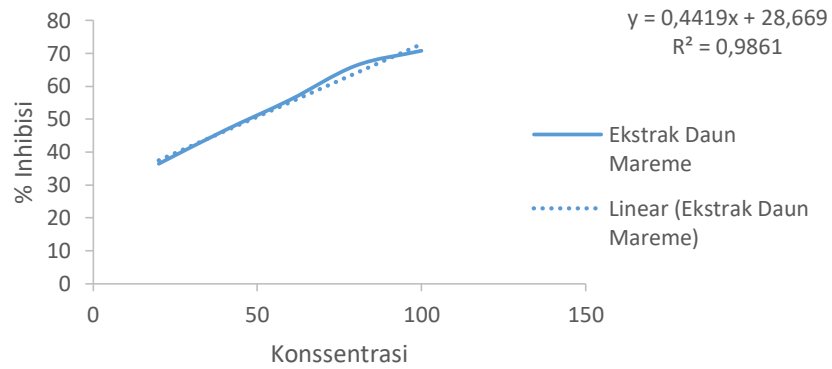


Diagram kurva inhibisi enzim  $\alpha$ -amilase oleh ekstrak etanol daun mareme

### Granul Ekstrak Kental

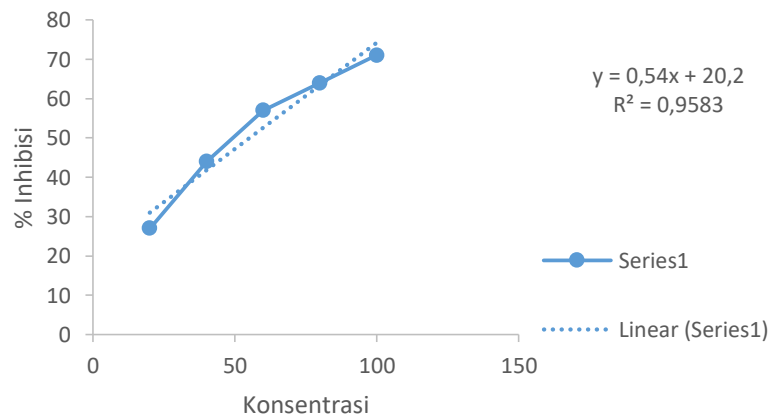


Diagram kurva inhibisi enzim  $\alpha$ -amilase oleh granul ekstrak etanol daun mareme

- b. Perhitungan % inhibisi enzim  $\alpha$ -amilase oleh Ekstrak Kental daun Mareme (*Glochidion arborescens* Blume)

$$\% \text{ Inhibisi} = \frac{\text{Absorbansi Sampel} - \text{Absorbansi Kontrol}}{\text{Absorbansi Sampel}}$$

Konsentrasi 20 ppm

$$\% \text{ Inhibisi} = \frac{0,8893 - 0,5652}{0,8893} = 36,444 \%$$

Konsentrasi 40 ppm

$$\% \text{ Inhibisi} = \frac{1,0575 - 0,5652}{1,0575} = 46,553 \%$$

Konsentrasi 60 ppm

$$\% \text{ Inhibisi} = \frac{1,2810 - 0,5652}{1,2810} = 55,878 \%$$

Konsentrasi 80 ppm

$$\% \text{ Inhibisi} = \frac{1,6753 - 0,5652}{1,6753} = 66,262 \%$$

Konsentrasi 100 ppm

$$\% \text{ Inhibisi} = \frac{1,9344 - 0,5652}{1,9344} = 70,781 \%$$

- c. Perhitungan % inhibisi enzim  $\alpha$ -amilase oleh Granul Ekstrak daun Mareme (*Glochidion arborescens* Blume)

Konsentrasi 20 ppm

$$\% \text{ Inhibisi} = \frac{0,7780 - 0,5652}{0,7780} = 27,352 \%$$

Konsentrasi 40 ppm

$$\% \text{ Inhibisi} = \frac{1,0010 - 0,5652}{1,0010} = 43,536 \%$$

Konsentrasi 60 ppm

$$\% \text{ Inhibisi} = \frac{1,3229 - 0,5652}{1,3229} = 57,275 \%$$

Konsentrasi 80 ppm

$$\% \text{ Inhibisi} = \frac{1,5840 - 0,5652}{1,5840} = 64,318 \%$$

Konsentrasi 100 ppm

$$\% \text{ Inhibisi} = \frac{1,9650 - 0,5652}{1,9650} = 71,236 \%$$

### LAMPIRAN 9

#### Uji paried T-Test Ekstrak kental dan Granul Ekstrak Daun Mareme (*Glochidion arborescens* Blume)

#### T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EKSTRAK	55.2000	5	14.16686	6.33561
	GRANUL EKSTRAK	52.6000	5	17.44420	7.80128

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	EKSTRAK & GRANUL EKSTRAK	5	.991	.001

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 EKSTRAK - GRANUL EKSTRAK	2.60000	3.91152	1.74929	-2.25680	7.45680	1.486	4	.211