

Lampiran 2. Proses Persiapan Simplisia Daun Gaharu



Lampiran 2.1 Daun Gaharu Basah



Lampiran 2.2 Pengeringan Simplisia



Lampiran 2.3 Grinder



Lampiran 2.4 Simplisia Daun Gaharu

Lampiran 2.5 Perhitungan Rendemen Simplisia

$$\text{Rendemen Simplisia (\%)} = \frac{\text{Bobot Simplisia Kering}}{\text{Bobot Simplisia Basah}} \times 100\%$$

$$\text{Rendemen Simplisia (\%)} = \frac{700}{1000} \times 100\% = 70\%$$

Lampiran 3. Uji Kadar Air dan Kadar Abu
Lampiran 3.1 Kadar Air dan Kadar Abu SIG Laboratory

28.1/F-PP Revisi 4

No	Parameter	Unit	Simplo	Duplo	Limit Of Detection	Method
1	Kadar Abu	%	8.02	8.27	-	SNI 01-2891-1992 point 6.1
2	Kadar Air	%	10.70	10.52	-	SNI 01-2891 - 1992, point 5.1

Bogor, 25 Juli 2023
PT. Saraswanti Indo Genetech

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Result Of Analysis | Page 2 of 2
The results of these tests relate only to the sample(s) submitted.
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Lampiran 3.2 Perhitungan Kadar Air dan Kadar Abu

Karakterisasi Simplisia	Pengulangan (%)		Rata-rata Kadar (%)	Rata-rata Kadar (%) ± SD
	1	2		
Kadar Air	10,70	10,52	10,61	0,13
Kadar Abu	8,02	8,27	8,15	0,18

Lampiran 4. Proses Ekstraksi



Lampiran 4.1 Ekstraksi dengan Pelarut Etanol 96%



Lampiran 4.2 Ekstraksi dengan Pelarut Metanol



Lampiran 4.3 Ekstraksi dengan Pelarut Aseton



Lampiran 4.4 Ekstraksi dengan Pelarut Etil Asetat



Lampiran 4.5 Proses penyaringan



Lampiran 4.6 Ekstraksi UAE



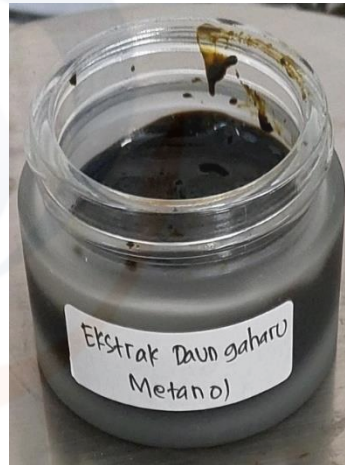
Lampiran 4.7 Rotary Evaporator



Lampiran 4.8 Waterbath



Lampiran 4.9 Ekstrak Etanol 96%



Lampiran 4.10 Ekstrak Metanol



Lampiran 4.11 Ekstrak Aseton



Lampiran 4.12 Ekstrak Etil Asetat

Lampiran 5. Perhitungan Rendemen Ekstrak

$$\% \text{ Rendemen Ekstrak} = \frac{\text{Bobot Ekstrak Kental (gram)}}{\text{Bobot Simplisia Awal (gram)}} \times 100\%$$

$$\% \text{ Rendemen Ekstrak Etanol 96\%} = \frac{15,07}{100} \times 100\% = 15,07\%$$

$$\% \text{ Rendemen Ekstrak Metanol} = \frac{17,09}{100} \times 100\% = 17,09\%$$

$$\% \text{ Rendemen Ekstrak Aseton} = \frac{9,85}{100} \times 100\% = 9,85\%$$

$$\% \text{ Rendemen Ekstrak Etil Asetat} = \frac{1,37}{100} \times 100\% = 1,37\%$$

Lampiran 6. Skrining Fitokimia



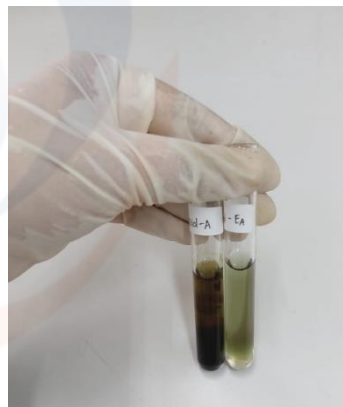
Lampiran 6.1 Flavonoid Etanol dan Metanol



Lampiran 6.2 Flavonoid Aseton dan Etil Asetat



Lampiran 6.3 Steroid Etanol dan Metanol



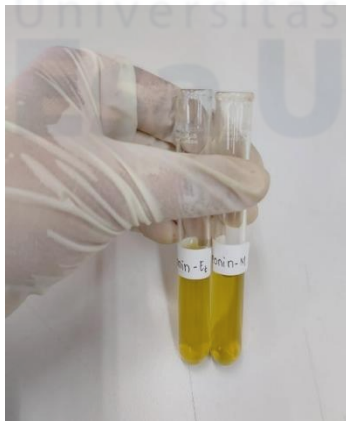
Lampiran 6.4 Steroid Aseton dan Etil Asetat



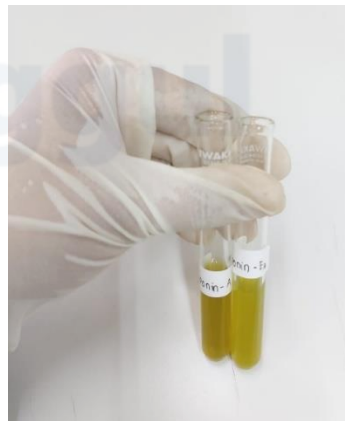
Lampiran 6.5 Triterpenoid Etanol dan Metanol



Lampiran 6.6 Triterpenoid Aseton dan Etil Asetat



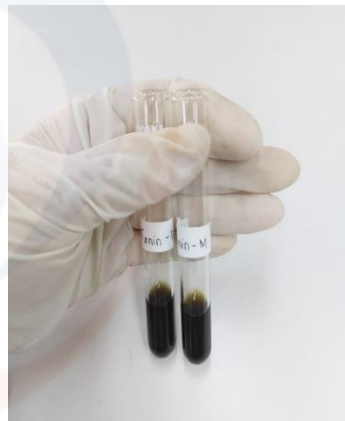
Lampiran 6.7 Saponin Etanol dan Metanol



Lampiran 6.8 Saponin Aseton dan Etil Asetat



Lampiran 6.9 Tanin Etanol dan Metanol



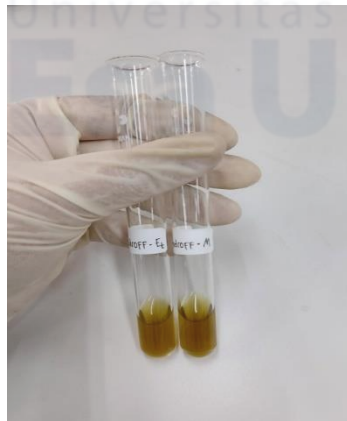
Lampiran 6.10 Tanin Aseton dan Etil Asetat



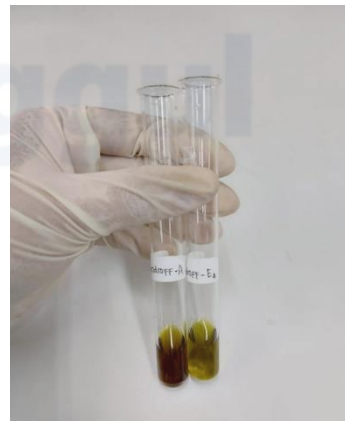
Lampiran 6.11 Alkaloid Mayer Etanol dan Metanol



Lampiran 6.12 Alkaloid Mayer Aseton dan Etil Asetat



Lampiran 6.13 Alkaloid Dragendroff
Etanol dan Metanol



Lampiran 6.14 Alkaloid Dragendroff
Aseton dan Etil Asetat

Lampiran 7. Uji Total Fenol**Lampiran 7.1 Perhitungan Uji Total Fenol**

1. Larutan Folin-ciocalteu 10%

$$\text{Larutan folin } \frac{10}{100} \times 5 \text{ mL} = 0,5 \text{ mL}$$

2. Larutan Natrium Karbonat 7,5%

$$\text{Larutan Na}_2\text{CO}_3 \frac{7,5}{100} \times 5 \text{ mL} = 0,375 \text{ gram} \sim 375 \text{ mg/mL}$$

3. Larutan Induk Asam Galat 1000 $\mu\text{g/mL}$

$$\text{Larutan induk asam galat } \frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$$

4. Larutan Asam Galat 100 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 100 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 500 \mu\text{L} \end{aligned}$$

5. Larutan Seri Konsentrasi Asam Galat

Larutan seri konsentrasi dengan konsentrasi 50, 60, 70, 80, 90 dan 100 $\mu\text{g/mL}$

- Asam galat dengan konsentrasi 50 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 50 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 250 \mu\text{L} \end{aligned}$$
- Asam galat dengan konsentrasi 60 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 60 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 300 \mu\text{L} \end{aligned}$$
- Asam galat dengan konsentrasi 70 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 70 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 350 \mu\text{L} \end{aligned}$$
- Asam galat dengan konsentrasi 80 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 80 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 400 \mu\text{L} \end{aligned}$$
- Asam galat dengan konsentrasi 90 $\mu\text{g/mL}$

$$\begin{aligned} M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \mu\text{g/mL} \times V_1 &= 90 \mu\text{g/mL} \times 5 \text{ mL} \\ V_1 &= 450 \mu\text{L} \end{aligned}$$

- Asam galat dengan konsentrasi 100 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 100 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 500 \mu\text{L}$$

6. Larutan Induk Sampel Ekstrak 1000 $\mu\text{g/mL}$

$$\text{Larutan induk ekstrak } \frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$$

7. Larutan Sampel Ekstrak 500 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 500 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 2500 \mu\text{L}$$

8. Konsentrasi Total Fenol Sampel Ekstrak ($\mu\text{g/mL}$)

Perhitungan Sampel Ekstrak Etanol 96%

$$C = \frac{\text{Absorbansi} - b}{a}$$

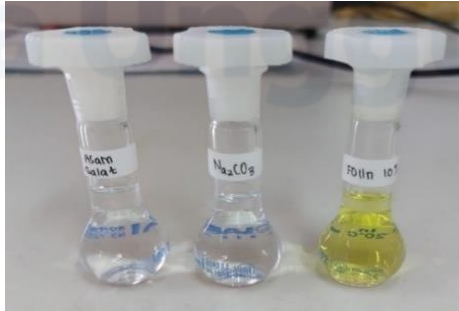
$$C = \frac{0,8087 - 0,0223}{0,0063} = 124,825 \mu\text{g/mL}$$

9. Larutan Kadar Total Fenol Dalam Sampel (mgGAE/g)

$$C = \frac{c \times V \times fp}{m}$$

$$C = \frac{0,1248 \text{ mg/mL} \times 5 \text{ mL} \times 2}{0,005 \text{ g}} = 249,6508 \text{ mgGAE/g}$$

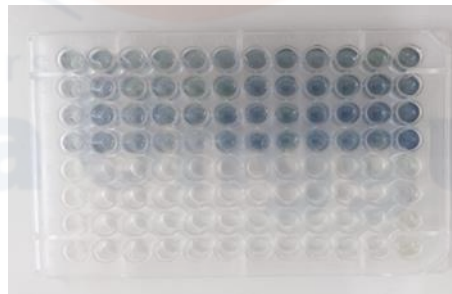
Lampiran 7.2 Pengujian Standar Asam Galat



Lampiran 7.2.1 Larutan Uji Fenol

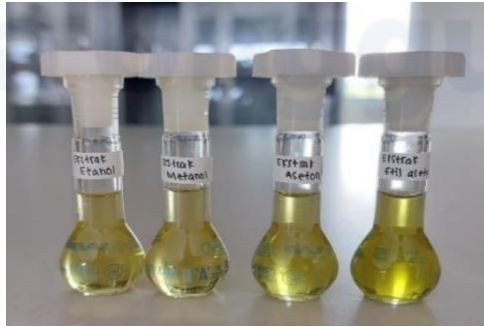
Konsentrasi ($\mu\text{g/mL}$)	Absorbansi Pengulangan			Rata-rata
	1	2	3	
50	0,4282	0,4092	0,3992	0,4122
60	0,4797	0,4687	0,4560	0,4681
70	0,5321	0,5261	0,5188	0,5257
80	0,5969	0,5845	0,5783	0,5866
90	0,6933	0,6607	0,6334	0,6625
100	0,7453	0,7283	0,7056	0,7264
$y = 0,0143x + 0,0075$				

Lampiran 7.2.2 Data Absorbansi Asam Galat



Lampiran 7.2.3 Hasil Pengujian Asam Galat Pada Microplate

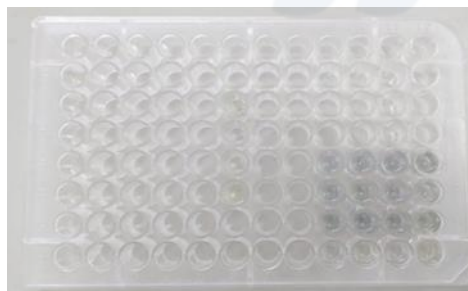
Lampiran 8.3 Pengujian Ekstrak Sampel



Lampiran 8.3.1 Larutan Ekstrak

Sampel Ekstrak	Pengulangan	KTFe (mgGAE/g)	Rata-rata KTFe (mgGAE/g)	SD	KTFe \pm SD (mgGAE/g)
Etanol 96%	1	249,6508	233,62	13,90	233,62 \pm 13,90
	2	226,1587			
	3	225,0476			
Metanol	1	222,1905	214,86	8,30	214,86 \pm 8,30
	2	216,5397			
	3	205,8413			
Aseton	1	229,7778	221,13	8,99	221,13 \pm 8,99
	2	221,7778			
	3	211,8413			
Etil Asetat	1	61,7460	48,56	11,39	48,56 \pm 11,39
	2	42,1587			
	3	41,8730			

Lampiran 8.3.2 Data Pengujian Sampel Ekstrak



Lampiran 8.3.3 Hasil Pengujian Kadar Fenol Ekstrak Pada Microplate

Lampiran 8. Uji Total Flavonoid**Lampiran 8.1** Perhitungan Uji Total Flavonoid

1. Larutan Aluminium Klorida 10%

$$\text{Larutan AlCl}_3 \frac{10}{100} \times 5 \text{ mL} = 0,5 \text{ gram} \sim 500 \text{ mg/mL}$$

2. Larutan Natrium Asetat 1 M

$$M = \frac{\text{gr}}{\text{Mr}} \times \frac{1000}{V}$$

$$1 = \frac{\text{gr}}{82} \times \frac{1000}{5 \text{ mL}}$$

$$82 = \text{gr} \times 200 \text{ mL}$$

$$\text{gr} = \frac{82}{200 \text{ mL}}$$

$$\text{gr} = 0,41 \text{ gram} \sim 410 \text{ mg/mL}$$

3. Larutan Induk Kuersetin 1000
- $\mu\text{g/mL}$

$$\text{Larutan induk kuersetin} \frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$$

4. Larutan Kuersetin 50
- $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 50 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 250 \mu\text{L}$$

5. Larutan Seri Konsentrasi Kuersetin

Larutan seri konsentrasi dengan konsentrasi 25, 30, 35, 40, 45 dan 50 $\mu\text{g/mL}$

- Kuersetin dengan konsentrasi 25 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 25 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 125 \mu\text{L}$$

- Kuersetin dengan konsentrasi 30 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 30 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 150 \mu\text{L}$$

- Kuersetin dengan konsentrasi 35 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 35 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 175 \mu\text{L}$$

- Kuersetin dengan konsentrasi 40 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 40 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 200 \mu\text{L}$$

- Kuersetin dengan konsentrasi 45 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 45 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 225 \mu\text{L}$$

- Kuersetin dengan konsentrasi 50 $\mu\text{g/mL}$

$$M_1 \times V_1 = M_2 \times V_2$$

$$1000 \mu\text{g/mL} \times V_1 = 50 \mu\text{g/mL} \times 5 \text{ mL}$$

$$V_1 = 250 \mu\text{L}$$

6. Larutan Sampel Ekstrak 1000 $\mu\text{g/mL}$

$$\text{Larutan sampel ekstrak } \frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$$

7. Konsentrasi Total Flavonoid Sampel Ekstrak ($\mu\text{g/mL}$)

Perhitungan Sampel Ekstrak Etanol 96%

$$C = \frac{\text{Absorbansi} - b}{a}$$

$$C = \frac{0,3265 - 0,0075}{0,0143} = 22,307 \mu\text{g/mL}$$

8. Larutan Kadar Total Flavonoid Sampel Ekstrak (mgQE/g)

$$C = \frac{c \times V}{m}$$

$$C = \frac{0,023 \text{ mg/mL} \times 5}{0,005 \text{ g}} = 22,307 \text{ mgQAE/g}$$

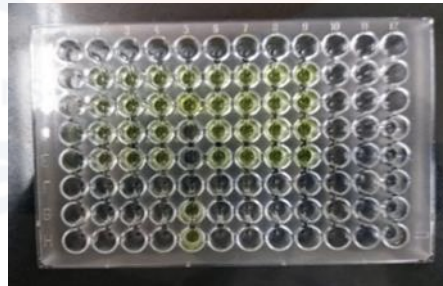
Lampiran 8.2 Pengujian Standar Kuersetin



Lampiran 8.2.1 Larutan Uji Flavonoid

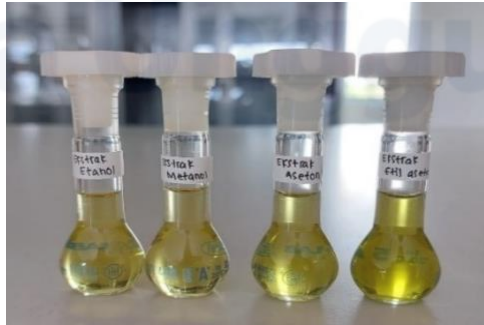
Konsentrasi ($\mu\text{g/mL}$)	Absorbansi Pengulangan			Rata-rata
	1	2	3	
25	0,4263	0,4579	0,4803	0,4548
30	0,5005	0,5310	0,5509	0,5275
35	0,5492	0,5867	0,6179	0,5846
40	0,6306	0,6605	0,6989	0,6633
45	0,7082	0,7375	0,7607	0,7355
50	0,8016	0,8085	0,831	0,8137
$y = 0,0143x + 0,0075$				

Lampiran 8.2.2 Data Absorbansi Kuersetin



Lampiran 8.2.3 Hasil Pengujian Kuersetin Pada Microplate

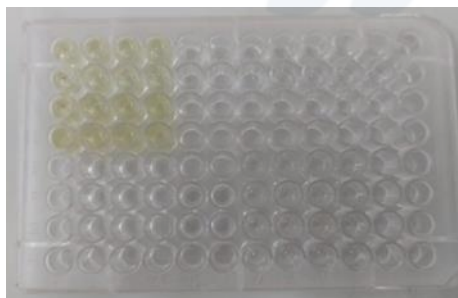
Lampiran 8.3 Pengujian Ekstrak Sampel



Lampiran 8.3.1 Larutan Ekstrak

Sampel Ekstrak	Pengulangan	KTF (mgQE/g)	Rata-rata KTF (mgQE/g)	SD	KTF _e ± SD (mgQE/g)
Etanol 96%	1	22,3077	22,86	0,81	22,86 ± 0,81
	2	22,4755			
	3	23,7832			
Metanol	1	20,8182	21,38	0,56	21,38 ± 0,56
	2	21,3706			
	3	21,9371			
Aseton	1	28,2937	28,79	0,43	28,79 ± 0,43
	2	29,0070			
	3	29,0769			
Etil Asetat	1	45,8671	46,65	0,80	46,65 ± 0,80
	2	46,6224			
	3	47,4615			

Lampiran 8.3.2 Data Pengujian Sampel Ekstrak



Lampiran 8.3.3 Hasil Pengujian Kadar Flavonoid Ekstrak Pada Microplate

Lampiran 9. Uji Aktivitas Antioksidan**Lampiran 9.1** Perhitungan Uji Aktivitas Antioksidan

1. Larutan Induk DPPH 1000 $\mu\text{g/mL}$
 Larutan induk DPPH $\frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$

2. Larutan DPPH 100 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 100 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 500 \mu\text{L}$

3. Larutan Induk Asam Askorbat 1000 $\mu\text{g/mL}$
 Larutan induk asam askorbat $\frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$

4. Larutan Seri Konsentrasi Asam Askorbat
 Larutan seri konsentrasi dengan konsentrasi 15, 20, 25, 30 dan 35 $\mu\text{g/mL}$
 - Asam askorbat dengan konsentrasi 15 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 15 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 75 \mu\text{L}$
 - Asam askorbat dengan konsentrasi 20 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 20 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 100 \mu\text{L}$
 - Asam askorbat dengan konsentrasi 25 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 25 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 125 \mu\text{L}$
 - Asam askorbat dengan konsentrasi 30 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 30 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 150 \mu\text{L}$
 - Asam askorbat dengan konsentrasi 35 $\mu\text{g/mL}$
 $M_1 \times V_1 = M_2 \times V_2$
 $1000 \mu\text{g/mL} \times V_1 = 35 \mu\text{g/mL} \times 5 \text{ mL}$
 $V_1 = 200 \mu\text{L}$

5. Larutan Induk Sampel Ekstrak 1000 $\mu\text{g/mL}$
 Larutan induk sampel ekstrak $\frac{5 \text{ mg}}{5 \text{ mL}} = 1 \text{ mg/mL} \sim 1000 \mu\text{g/mL}$

6. Larutan Seri Konsentrasi Sampel Ekstrak

Larutan seri konsentrasi dengan konsentrasi 50, 60, 70, 80 dan 90 $\mu\text{g/mL}$

- Ekstrak dengan konsentrasi 35 $\mu\text{g/mL}$
$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\1000 \mu\text{g/mL} \times V_1 &= 50 \mu\text{g/mL} \times 5 \text{ mL} \\V_1 &= 250 \mu\text{L}\end{aligned}$$
- Ekstrak dengan konsentrasi 60 $\mu\text{g/mL}$
$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\1000 \mu\text{g/mL} \times V_1 &= 60 \mu\text{g/mL} \times 5 \text{ mL} \\V_1 &= 300 \mu\text{L}\end{aligned}$$
- Ekstrak dengan konsentrasi 70 $\mu\text{g/mL}$
$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\1000 \mu\text{g/mL} \times V_1 &= 70 \mu\text{g/mL} \times 5 \text{ mL} \\V_1 &= 350 \mu\text{L}\end{aligned}$$
- Ekstrak dengan konsentrasi 80 $\mu\text{g/mL}$
$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\1000 \mu\text{g/mL} \times V_1 &= 80 \mu\text{g/mL} \times 5 \text{ mL} \\V_1 &= 400 \mu\text{L}\end{aligned}$$
- Ekstrak dengan konsentrasi 90 $\mu\text{g/mL}$
$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\1000 \mu\text{g/mL} \times V_1 &= 90 \mu\text{g/mL} \times 5 \text{ mL} \\V_1 &= 450 \mu\text{L}\end{aligned}$$

Lampiran 9.2 Pengujian Standar Asam Askorbat



Lampiran 9.2.1 Larutan Uji Aktivitas Antioksidan

	1	2	3	Rata-rata
Larutan DPPH	0,7711	0,6426	0,7711	0,7283
Metanol	0,0412	0,0393	0,0402	0,0402
Kontrol				0,6880

Lampiran 9.2.2 Data Blanko Asam Askorbat

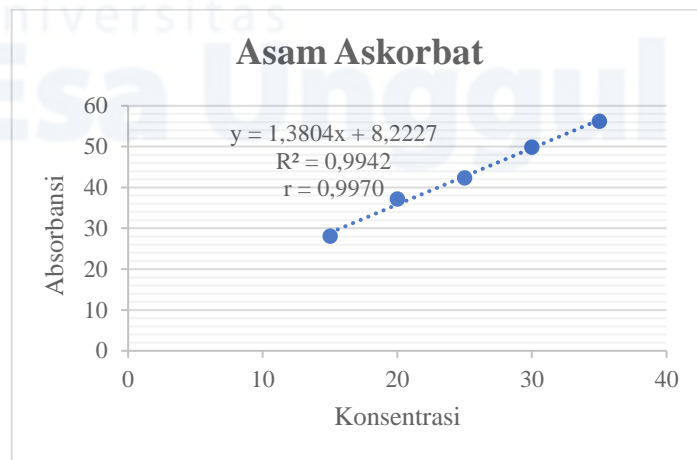
Konsentrasi ($\mu\text{g/mL}$)	Absorbansi Pengulangan			Rata-rata	Absorbansi Asam Askorbat	% Inhibisi	IC ₅₀ ($\mu\text{g}/\text{mL}$)
	1	2	3				
50	0,5463	0,5301	0,5289	0,5351	0,4948	28,0785	30,26
60	0,4816	0,4739	0,4624	0,4726	0,4324	37,1542	
70	0,4452	0,4370	0,4288	0,4370	0,3968	42,3330	
80	0,3956	0,3854	0,3747	0,3852	0,3450	49,8571	
90	0,3511	0,3412	0,3317	0,3413	0,3011	56,2361	
$y = 1,3804x + 8,2227$							

Lampiran 9.2.3 Data Absorbansi Asam Askorbat

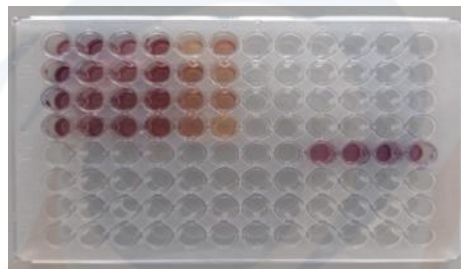
Lampiran 9.2.4 Perhitungan nilai IC₅₀ Seri Konsentrasi Asam Askorbat

$$IC_{50} = \frac{50 - b}{a}$$

$$IC_{50} = \frac{50 - 8,2227}{1,3804} = 30,26 \mu\text{g/mL}$$



Lampiran 9.2.5 Kurva Asam Askorbat



Lampiran 9.2.6 Hasil Pengujian Asam Askorbat Pada Microplate

Lampiran 9.3 Pengujian Ekstrak Sampel



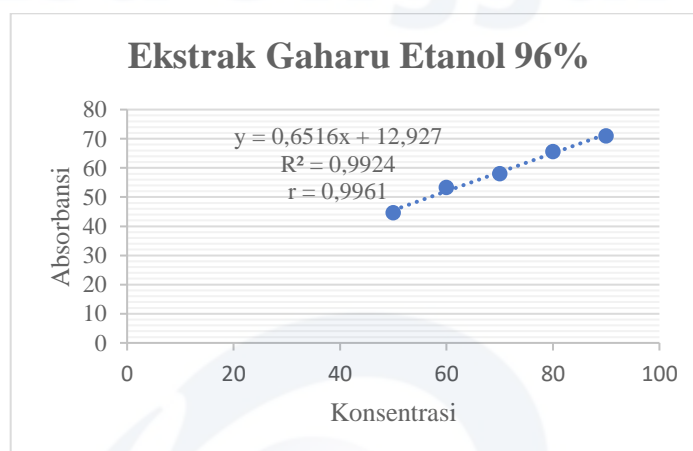
Lampiran 9.3.1 Larutan Ekstrak

	1	2	3	Rata-rata
Larutan DPPH	0,7699	0,7504	0,7306	0,7503
Metanol	0,0570	0,0540	0,0530	0,0547
Kontrol				0,6956

Lampiran 9.3.2 Data Blanko Sampel Ekstrak

ETANOL 96%							
Konsentrasi	Absorbansi Pengulangan			Rata-rata	Absorbansi Sampel	% Inhibisi	IC ₅₀ (µg/mL)
	1	2	3				
50	0,4539	0,4418	0,4234	0,4397	0,4397	36,7914	56,90
60	0,3896	0,3799	0,3690	0,3795	0,3795	45,4439	
70	0,3689	0,3491	0,3220	0,3467	0,3467	50,1654	
80	0,3140	0,2923	0,2744	0,2936	0,2936	57,7987	
90	0,2669	0,2604	0,2408	0,2560	0,2560	63,1926	

Lampiran 9.3.3 Data Pengujian Sampel Ekstrak Etanol 96%



Lampiran 9.3.4 Kurva Ekstrak Gaharu Etanol 96%

Lampiran 9.3.5 Perhitungan nilai IC₅₀ Ekstrak Etanol 96%

$$IC_{50} = \frac{50 - b}{a}$$

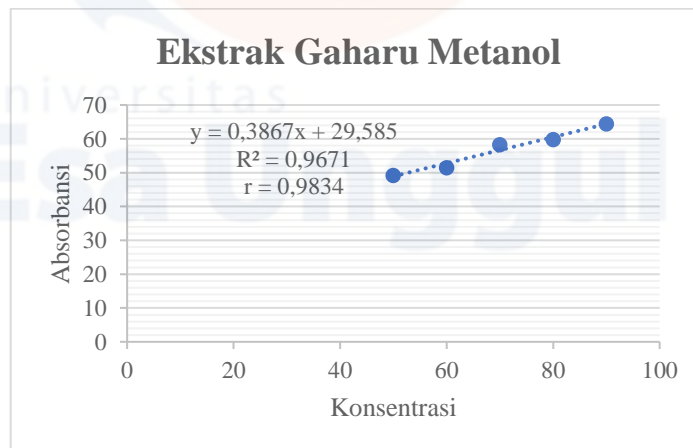
$$IC_{50} = \frac{50 - 12,927}{0,6516} = 56,90 \mu\text{g/mL}$$

	1	2	3	Rata-rata
Larutan DPPH	0,7699	0,7504	0,7306	0,7503
Metanol	0,0570	0,0540	0,0530	0,0547
Kontrol				0,6956

Lampiran 9.3.6 Data Blanko Sampel Ekstrak

METANOL							
Konsentrasi	Absorbansi Pengulangan			Rata-rata	Absorbansi Sampel	% Inhibisi	IC ₅₀ (μg/mL)
	1	2	3				
50	0,3586	0,3520	0,3484	0,3530	0,3530	49,2531	52,79
60	0,3421	0,3390	0,3313	0,3375	0,3375	51,4876	
70	0,2991	0,2908	0,2801	0,2900	0,2900	58,3136	
80	0,2864	0,2784	0,2744	0,2797	0,2797	59,7871	
90	0,2540	0,2473	0,2408	0,2474	0,2474	64,4401	

Lampiran 9.3.7 Data Pengujian Sampel Ekstrak Metanol



Lampiran 9.3.8 Kurva Ekstrak Gaharu Metanol

Lampiran 9.3.9 Perhitungan nilai IC₅₀ Ekstrak Metanol

$$IC_{50} = \frac{50 - b}{a}$$

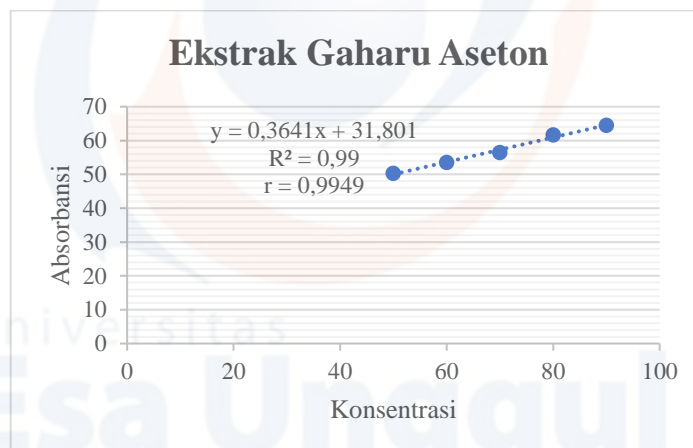
$$IC_{50} = \frac{50 - 29,585}{0,3867} = 52,79 \mu\text{g/mL}$$

	1	2	3	Rata-rata
Larutan DPPH	0,7699	0,7504	0,7306	0,7503
Metanol	0,0570	0,0540	0,0530	0,0547
Kontrol				0,6956

Lampiran 9.3.10 Data Blanko Sampel Ekstrak

ASETON							
Konsentrasi	Absorbansi Pengulangan			Rata-rata	Absorbansi Sampel	% Inhibisi	IC ₅₀ (µg/mL)
	1	2	3				
50	0,3515	0,3452	0,3401	0,3456	0,3456	50,3144	49,98
60	0,3344	0,3212	0,3139	0,3232	0,3232	53,5441	
70	0,3060	0,3023	0,3004	0,3029	0,3029	56,4546	
80	0,2710	0,2686	0,2607	0,2668	0,2668	61,6513	
90	0,2512	0,2490	0,2414	0,2472	0,2472	64,4640	

Lampiran 9.3.11 Data Pengujian Sampel Ekstrak Aseton



Lampiran 9.3.12 Kurva Ekstrak Gaharu Aseton

Lampiran 9.3.13 Perhitungan nilai IC₅₀ Ekstrak Aseton

$$IC_{50} = \frac{50 - b}{a}$$

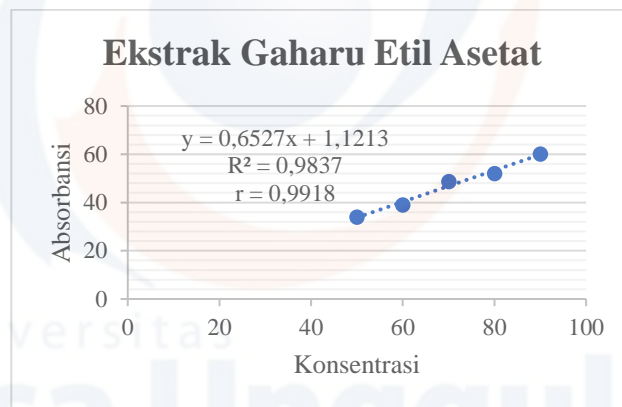
$$IC_{50} = \frac{50 - 31,801}{0,3641} = 49,98 \text{ µg/mL}$$

	1	2	3	Rata-rata
Larutan DPPH	0,7699	0,7504	0,7306	0,7503
Metanol	0,0570	0,0540	0,0530	0,0547
Kontrol				0,6956

Lampiran 9.3.14 Data Blanko Sampel Ekstrak

ETIL ASETAT							
Konsentrasi	Absorbansi Pengulangan			Rata-rata	Absorbansi Sampel	% Inhibisi	IC ₅₀ (µg/mL)
	1	2	3				
50	0,4651	0,4574	0,4539	0,4588	0,4588	34,0457	74,90
60	0,4344	0,4264	0,4115	0,4241	0,4241	39,0345	
70	0,3660	0,3588	0,3451	0,3566	0,3566	48,7302	
80	0,3483	0,3312	0,3209	0,3335	0,3335	52,0600	
90	0,2812	0,2790	0,2711	0,2771	0,2771	60,1658	

Lampiran 9.3.15 Data Pengujian Sampel Ekstrak

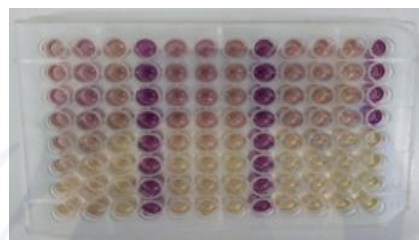


Lampiran 9.3.16 Kurva Ekstrak Gaharu Etil Asetat

Lampiran 9.3.17 Perhitungan nilai IC₅₀ Ekstrak Etil Asetat

$$IC_{50} = \frac{50 - b}{a}$$

$$IC_{50} = \frac{50 - 1,1213}{0,6527} = 74,90 \text{ µg/mL}$$



Lampiran 9.3.18 Hasil Pengujian Antioksidan Ekstrak Pada Microplate