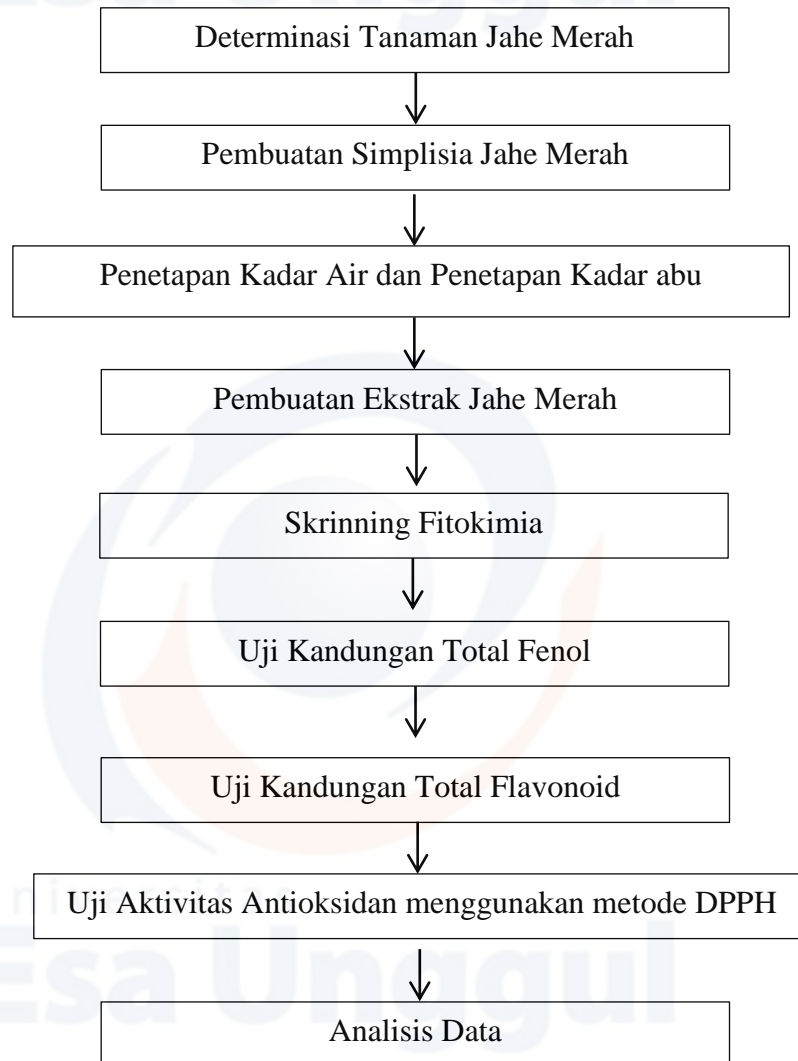


LAMPIRAN - LAMPIRAN

LAMPIRAN 1. Kerangka Prosedur Penelitian



LAMPIRAN 2. Determinasi Tanaman


ORGANISASI RISET ILMU PENGETAHUAN HAYATI
 Pusat Riset Biologi

 Jl. Raya Jakarta-Bogor km. 46, Cibinong, Kabupaten Bogor, Jawa Barat 16911
 Telp/WA: 08118610183 | email : biologi-iph@brin.go.id
<https://www.brin.go.id>

Cibinong, 29 Oktober 2021

 Nomor : B-485/V/DI.05.07/10/2021
 Lampiran : -
 Perihal : Hasil identifikasi/ determinasi Tumbuhan

 Kepada Yth.
 Bpk./Ibu/Sdr(i). **Dwi Evi Indriani**
 NIM : 20180311145
 Universitas Esa Unggul
 Fakultas Ilmu-ilmu Kesehatan
 Jl. Arjuna Utara 9, Kebun Jeruk
 Jakarta 11510

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi/determinasi tumbuhan yang Saudara kirimkan ke "Herbarium Bogoriense", Bidang Botani Pusat Penelitian Biologi-LIPI Bogor, adalah sebagai berikut :

No.	No. Kol.	Jenis	Suku
1.	Jahe Merah	<i>Zingiber officinale</i> Roscoe	Zingiberaceae

Demikian, semoga berguna bagi Saudara.

Kepala Pusat Penelitian Biologi LIPI

Dr. Anas Setiawan Achmadi, S.KH., M.Sc.
 NIP. 197810262005021003

LAMPIRAN 3. Perhitungan Data

a). Perhitungan rendemen simplisia dan Ekstrak

Rumus perhitungan rendemen

$$\begin{aligned} (\%)rendemen\ simplisia &= \frac{\text{berat simplisia kering (gr)}}{\text{berat simplisia basah (gr)}} \times 100\% \\ &= \frac{618\ (gr)}{10000.06\ (gr)} \times 100\% = 6.18\ \% \end{aligned}$$

$$\begin{aligned} (\%)rendemen\ Ekstrak\ n - heksan &= \frac{\text{berat ekstrak (gr)}}{\text{berat simplisia (gr)}} \times 100\% \\ &= \frac{10.3751\ (gr)}{300\ (gr)} \times 100\% = 3.45\ \% \end{aligned}$$

$$\begin{aligned} (\%)rendemen\ Ekstrak\ etil\ asetat &= \frac{\text{berat ekstrak (gr)}}{\text{berat simplisia (gr)}} \times 100\% \\ &= \frac{6.1613\ (gr)}{300\ (gr)} \times 100\% = 2.05\ \% \end{aligned}$$

$$\begin{aligned} (\%)rendemen\ Ekstrak\ etanol\ 96\% &= \frac{\text{berat ekstrak (gr)}}{\text{berat simplisia (gr)}} \times 100\% \\ &= \frac{24.0027\ (gr)}{300\ (gr)} \times 100\% = 8.00\ \% \end{aligned}$$

b) Perhitungan Kadar Air

Berat sampel (W2-W1)	Berat cawan (W1)	Berat cawan + sampel sebelum pemanasan (W2)	Berat cawan + sampel setelah pemanasan (W3)
1.0028	11.6765	12.6793	12.6035
			12.6018
			12.5984
1.0024	11.7773	12.7797	12.6787
			12.6760
			12.6735
1.0030	11.4341	12.4371	12.3615
			12.3600
			12.3568

Kadar Air I

$$\text{Kadar Air (\%)} = \frac{W2 - W3}{W2 - W1} \times 100\% = \frac{12.6793 - 12.5984}{1.0028} \times 100\%$$

$$= 8.06\%$$

Kadar Air II

$$\text{Kadar Air (\%)} = \frac{W2 - W3}{W2 - W1} \times 100\% = \frac{12.7797 - 12.6735}{1.0024} \times 100\%$$

$$= 10.60\%$$

Kadar Air III

$$\text{Kadar Air (\%)} = \frac{W2 - W3}{W2 - W1} \times 100\% = \frac{12.4371 - 12.3568}{1.0030} \times 100\%$$

$$= 8.01\%$$

c). Perhitungan Kadar Abu

Berat sampel (W2-W1)	Berat krusibel (W1)	Berat krusibel + sampel sebelum pengabuan (W2)	Berat krusibel + sampel setelah pengabuan	Rerata (W3)
2.0025	12.6454	14.3746	12.7289	12.7254
			12.7219	
2.0027	11.9319	13.6969	12.0247	12.0219
			12.0191	
2.0013	12.3417	14.0856	12.4153	12.4117
			12.4081	

$$\text{Kadar Abu (\%)} = \frac{W3 - W1}{W2 - W1} \times 100\%$$

Kadar Abu I

$$\begin{aligned} \text{Kadar Abu (\%)} &= \frac{W3 - W1}{W2 - W1} \times 100\% = \frac{12.7254 - 12.3721}{2.0025} \times 100\% \\ &= 3.99\% \end{aligned}$$

Kadar Abu II

$$\begin{aligned} \text{Kadar Abu (\%)} &= \frac{W3 - W1}{W2 - W1} \times 100\% = \frac{12.0219 - 11.6942}{2.0027} \times 100\% \\ &= 4.49\% \end{aligned}$$

Kadar Abu III

$$\begin{aligned} \text{Kadar Abu (\%)} &= \frac{W3 - W1}{W2 - W1} \times 100\% = \frac{12.4117 - 12.0843}{2.0013} \times 100\% \\ &= 3.49\% \end{aligned}$$

LAMPIRAN 4. Perhitungan kadar total fenol

Perhitungan konsentrasi sampel $Y = ax + b$ $Y = 0.0078x + 0.072$ Dimana $Y = \text{absorbansi (A)}$ $X = \text{Konsentrasi (C)}$	
Sampel Ekstrak Etanol Pengulangan 1 $Y = 0.0078x + 0.072$ $0.2626 = 0.0078x + 0.072$ $0.0078x = 0.209 - 0.072$ $X = 0.2554/0.0078$ $X = 32.74 \mu\text{g/ml}$ $X = 0.0327 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0327 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0327 mg/ml (10 ml/0.001 g) = 327 mg GAE/g Pengulangan 2 Sampel Ekstrak etanol $Y = 0.0078x + 0.0612$ $0.2424 = 0.0078x + 0.0612$ $0.0078x = 0.2424 - 0.0612$ $X = 0.1812/0.0078$ $X = 23.23 \mu\text{g/ml}$ $X = 0.0232 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0232 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0232 mg/ml (10 ml/0.001 g) = 232 mg GAE/g Pengulangan 3 Sampel Ekstrak etanol $Y = 0.0078x + 0.0612$ $0.3432 = 0.0078x + 0.0612$ $0.0078x = 0.3432 - 0.0612$	Sampel Ekstrak etil asetat Pengulangan 1 $Y = 0.0078x + 0.0612$ $0.2656 = 0.0078x + 0.0612$ $0.0078x = 0.2656 - 0.0612$ $X = 0.2044/0.0078$ $X = 26.20 \mu\text{g/ml}$ $X = 0.0262 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0262 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0262 mg/ml (10 ml/0.001 g) = 262 mg GAE/g Pengulangan 2 Sampel Ekstrak etil asetat $Y = 0.0078x + 0.0612$ $0.2774 = 0.0078x + 0.0612$ $0.0078x = 0.2774 - 0.0612$ $X = 0.2162/0.0078$ $X = 27.71 \mu\text{g/ml}$ $X = 0.0277 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0277 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0277 mg/ml (10 ml/0.001 g) = 277 mg GAE/g Pengulangan 3 Sampel Ekstrak etil asetat $Y = 0.0078x + 0.0612$ $0.3382 = 0.0078x + 0.0612$ $0.0078x = 0.3382 - 0.0612$

<p> $X = 0.282/0.0078$ $X = 36.15 \mu\text{g/ml}$ $X = 0.0361 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0361 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0361 mg/ml (10 ml/0.001 g) = 361 mg GAE/g </p>	<p> $X = 0.277/0.0078$ $X = 35.51 \mu\text{g/ml}$ $X = 0.0355 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0355 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0355 mg/ml (10 ml/0.001 g) = 355 mg GAE/g </p>
<p>Sampel Ekstrak n-heksan</p> <div data-bbox="288 703 805 1921" style="display: inline-block; width: 48%; vertical-align: top;"> <p>Pengulangan 1</p> $Y = 0.0078x + 0.0612$ $0.2626 = 0.0078x + 0.0612$ $0.0078x = 0.2626 - 0.0612$ $X = 0.2014/0.0078$ $X = 25.82 \mu\text{g/ml}$ $X = 0.0258 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0258 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0258 mg/ml (10 ml/0.001 g) = 258 mg GAE/g <p>Pengulangan 2</p> $Y = 0.0078x + 0.0612$ $0.3417 = 0.0078x + 0.0612$ $0.0078x = 0.3417 - 0.0612$ $X = 0.2805/0.0078$ $X = 35.96 \mu\text{g/ml}$ $X = 0.0359 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0359 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0359 mg/ml (10 ml/0.001 g) = 359 mg GAE/g </div> <div data-bbox="805 703 1378 1921" style="display: inline-block; width: 48%; vertical-align: top; border: 1px solid black; padding: 5px;"> <p>Pengulangan 3</p> $Y = 0.0078x + 0.0612$ $0.3686 = 0.0078x + 0.0612$ $0.0078x = 0.3686 - 0.0612$ $X = 0.3074/0.0078$ $X = 39.41 \mu\text{g/ml}$ $X = 0.0394 \text{ mg/ml}$ Perhitungan Kadar Total fenol Berat ekstrak (M) == 1 mg = 0.001 g Konsentrasi asam galat (C) = 0.0394 Volume Stok (V) = 10 mL Kadar total fenol = C (V/M) = 0.0394 mg/ml (10 ml/0.001 g) = 394 mg GAE/g </div>	

LAMPIRAN 5. Perhitungan Kadar Total flavonoid

Perhitungan konsentrasi sampel $Y = ax + b$ $Y = 0.0063x + 0.0324$ Dimana $Y = \text{absorbansi (A)}$ $X = \text{Konsentrasi (C)}$	
Sampel Ekstrak Etanol Pengulangan 1 $Y = 0.0063x + 0.0324$ $0.1487 = 0.0063x + 0.0324$ $0.0063x = 0.1478 - 0.0324$ $X = 0.1154/0.0063$ $X = 18.31 \mu\text{g/ml}$ $X = 0.0183 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0183 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0183 mg/ml (10 ml/0.3 g) = 0.61 mg QE/g Pengulangan 2 $Y = 0.0063x + 0.0324$ $0.1448 = 0.0063x + 0.0324$ $0.0063x = 0.1448 - 0.0324$ $X = 0.1124/0.0063$ $X = 17.84 \mu\text{g/ml}$ $X = 0.0178 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0178 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0178 mg/ml (10 ml/0.3 g) = 0.594 mg QE/g Pengulangan 3 $Y = 0.0063x + 0.0324$ $0.1437 = 0.0063x + 0.0324$ $0.0063x = 0.1437 - 0.0324$ $X = 0.1113/0.0063$	Sampel Ekstrak etil asetat Pengulangan 1 $Y = 0.0063x + 0.0324$ $0.819 = 0.0063x + 0.0324$ $0.0063x = 0.819 - 0.0324$ $X = 0.7866/0.0063$ $X = 124.85 \mu\text{g/ml}$ $X = 0.1248 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.1248 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.1248 mg/ml (10 ml/0.3 g) = 4.161 mg QE/g Pengulangan 2 $Y = 0.0063x + 0.0324$ $0.6669 = 0.0063x + 0.0324$ $0.0063x = 0.6669 - 0.0324$ $X = 0.6364/0.0063$ $X = 100.71 \mu\text{g/ml}$ $X = 0.1007 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.1007 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.1007 mg/ml (10 ml/0.3 g) = 3.357 mg QE/g Pengulangan 3 $Y = 0.0063x + 0.0324$ $0.6754 = 0.0063x + 0.0324$ $0.0063x = 0.6754 - 0.0324$ $X = 0.643/0.0063$

<p> $X = 17.66 \mu\text{g/ml}$ $X = 0.0176 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0176 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0176 mg/ml (10 ml/0.3 g) = 0.588 mg QE/g </p>	<p> $X = 102.06 \mu\text{g/ml}$ $X = 0.102 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.102 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.102 mg/ml (10 ml/0.3 g) = 3.402 mg QE/g </p>
<p> Sampel Ekstrak n-heksan Pengulangan 1 $Y = 0.0063x + 0.0324$ $0.3746 = 0.0063x + 0.0324$ $0.0063x = 0.3746 - 0.0324$ $X = 0.3422/0.0063$ $X = 54.31 \mu\text{g/ml}$ $X = 0.0543 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0543 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0543 mg/ml (10 ml/0.3 g) = 1.81 mg QE/g </p> <p> Pengulangan 2 $Y = 0.0063x + 0.0324$ $0.3973 = 0.0063x + 0.0324$ $0.0063x = 0.3973 - 0.0324$ $X = 0.3649/0.0063$ $X = 57.92 \mu\text{g/ml}$ $X = 0.0579 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0579 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0579 mg/ml (10 ml/0.3 g) = 1.93 mg QE/g </p>	<p> Pengulangan 3 $Y = 0.0063x + 0.0324$ $0.3935 = 0.0063x + 0.0324$ $0.0063x = 0.3935 - 0.0324$ $X = 0.3611/0.0063$ $X = 57.31 \mu\text{g/ml}$ $X = 0.0573 \text{ mg/ml}$ Perhitungan Kadar Total flavonoid Berat ekstrak (M) == 300 mg = 0.3 g Konsentrasi sampel (C) = 0.0573 Volume Stok (V) = 10 mL Kadar total flavonoid = C (V/M) = 0.0573 mg/ml (10 ml/0.3 g) = 1.91 mg QE/g </p>

LAMPIRAN 6. Hasil Optimasi Kadar total fenol**a. Optimasi panjang gelombang, konsentrasi dan waktu inkubasi asam galat**

Tabel hasil optimasi panjang gelombang

Waktu	Konsentrasi	Absorbansi		
		766	768	770
30 menit	20 ppm	0.2047	0.2052	0.2044

Tabel hasil optimasi konsentrasi dan waktu inkubasi asam galat

Volume Asam galat (μl)	Volume Folin-Ciocalteu (μl)	Volume Natrium Karbonat (μl)	Total Volume Sumuran (μl)	Waktu Inkubasi (menit)	Absorbansi
20	125 (10%)	100 (7.5%)	250	0	0.1768
				5	0.1790
				10	0.1826
				15	0.1899
				20	0.1946
				25	0.2048
				30	0.2052
				35	0.2052
				40	0.2098
				45	0.2106
				50	0.2188
				55	0.2269
60	0.2276				

LAMPIRAN 7. Hasil Optimasi Kadar Total Flavonoid**a. Optimasi panjang gelombang, konsentrasi dan waktu inkubasi Kuersetin**

Tabel hasil optimasi panjang gelombang

Waktu	Konsentrasi	Absorbansi		
		438	439	440
30 menit	20 ppm	0.2325	0.2326	0.2324

Tabel hasil optimasi konsentrasi dan waktu inkubasi kuersetin

Kuersetin 30 ppm (μ l) + metanol (μ l)	$AlCl_3$ (μ l)	Metanol (μ l)	Total Volume Sumuran (μ l)	Waktu Inkubasi (menit)	Absorbansi
40 + 100	10 (10%)	100	250	0	0.1865
				5	0.1890
				10	0.1911
				15	0.1356
				20	0.2156
				25	0.2289
				30	0.1659
				35	0.2326
				40	0.2326
				45	0.2377
				50	0.2409
				55	0.2413
				60	0.1978

LAMPIRAN 8. Hasil Optimasi Aktivitas Antioksidan**a. Optimasi panjang gelombang, konsentrasi dan waktu inkubasi Vit.C**

Tabel hasil optimasi panjang gelombang

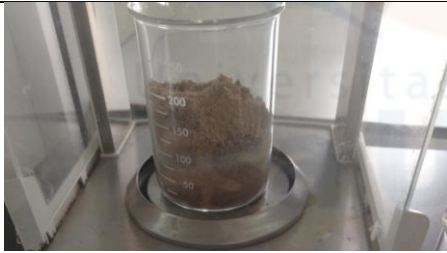
Waktu	Konsentrasi	Absorbansi		
		514	516	518
30 menit	1 ppm	0.8646	0.8657	0.8644

Tabel hasil optimasi konsentrasi dan waktu inkubasi Vit.C

Volume Vit. C 1 ppm (μ l)	Volume DPPH 100 ppm (μ l)	Total Volume Sumuran (μ l)	Waktu Inkubasi (menit)	Absorbansi
125	125	250	0	0.9290
			10	0.9181
			15	0.9067
			20	0.8861
			25	0.8740
			30	0.8657
			35	0.8655
			40	0.8466
			45	0.8308
			50	0.7606
			55	0.7109
			60	0.6320

LAMPIRAN 9. Dokumentasi Pembuatan Ekstrak

 <p>Pengumpulan jahe merah</p>	 <p>Sortasi basah</p>
 <p>Pencucian</p>	 <p>Perajangan</p>
 <p>Pengeringan dehidrator</p>	 <p>Sotasi Kering</p>



Serbuk simplisia



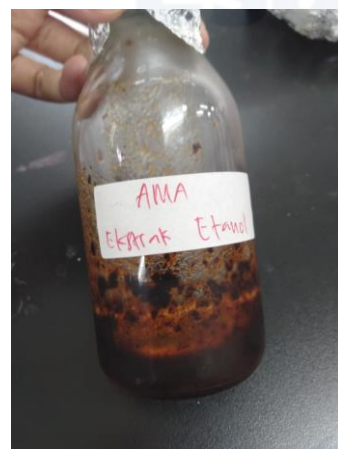
Maserasi



Hasil ekstrak etil asetat

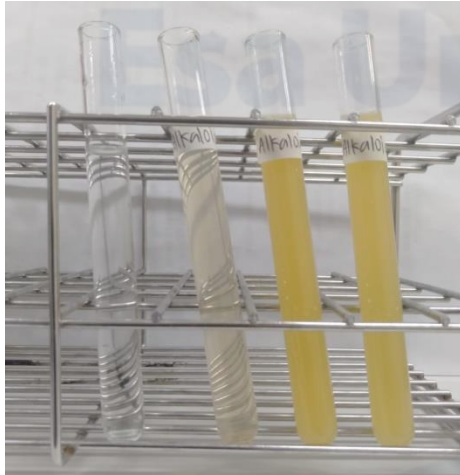


Hasil ekstrak n-heksan

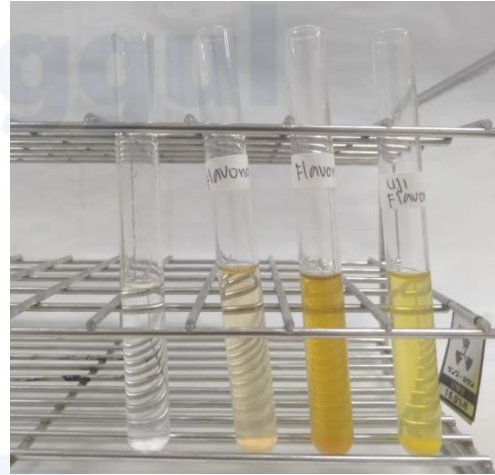


Hasil ekstrak etanol 96%

LAMPIRAN 10. Dokumentasi Skrinning Fitokimia



(+) Alkaloid apabila terdapat endapan putih (pereaksi mayer)



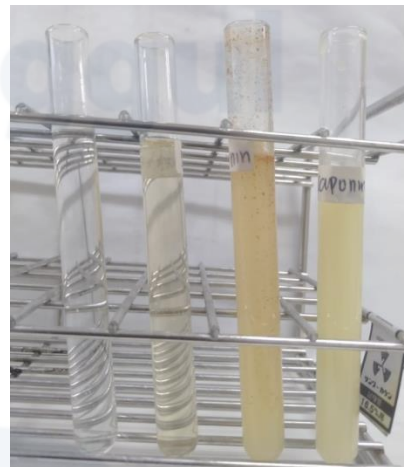
(+) Flavonoid apabila terbentuk warna jingga/kuning



(+) Alkaloid apabila terdapat endapan coklat sampai kuning (pereaksi wagner)



(+) Fenolik apabila terbentuk warna hijau



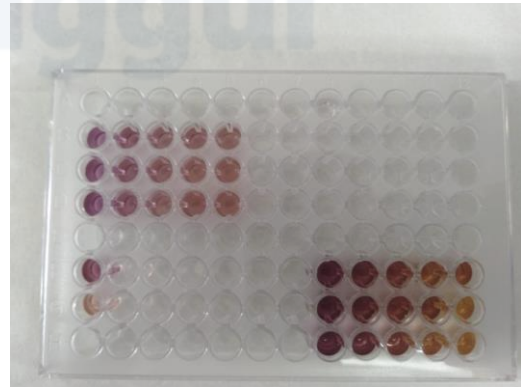
(+) Saponin apabila terbentuk busa

	
<p>(+) Steroid apabila terdapat endapan merah.</p>	<p>Pereaksi uji fitokimia</p>

LAMPIRAN 11. Dokumentasi lain-lain



Pembuatan larutan induk sampel



Uji DPPH sampel menggunakan spektrofotometri Uv-Vis

LAMPIRAN 12. Data Kadar Total fenol

Tabel Kurva Asam Galat

Pembuatan kurva asam galat						
Konsentrasi (ppm) (X)	A. Pengulangan			rata2	Blanko	Abs rata2 - Blanko (Y)
	1	2	3			
20	0.2052	0.2228	0.2742	0.23407	0.0540	0.18007
40	0.3301	0.3565	0.4307	0.37243	0.0540	0.31843
60	0.5030	0.5410	0.5494	0.53113	0.0540	0.47713
80	0.7100	0.6520	0.8114	0.72447	0.0540	0.67047
100	0.8439	0.8054	0.9033	0.85087	0.0540	0.79687



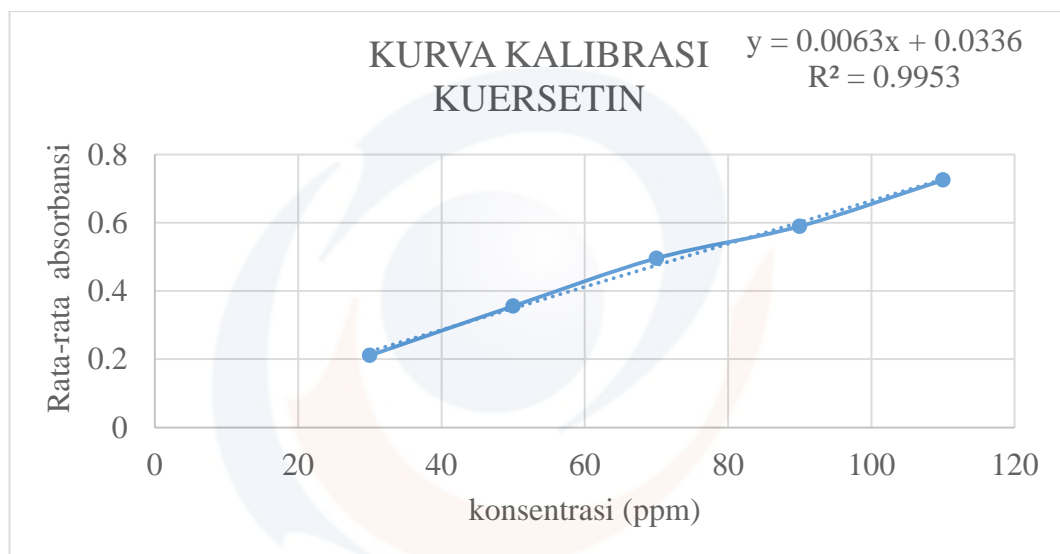
Tabel Kadar Total Fenol

Ekstrak	Konsentrasi (ppm)	Abs Pengulangan	Rata2 abs	KTFe (mGAE/g)	Rata-rata KTFe (mGAE/g)	SD	KTFe \pm SD (mGAE/g)
n-heksan	100 ppm	0.2626	0.265	334.5897	413.6068	70.53	413.6068 \pm 70.53
		0.3417		435.9998			
		0.3684		470.2308			
Etil asetat		0.2656	0.294	338.4359	374.5043	49.94	374.5043 \pm 49.94
		0.2774		353.5641			
		0.3382		431.5128			
Etanol 96%		0.209	0.324	265.8718	337.4957	89.56	337.4957 \pm 89.56
		0.2424		308.6923			
		0.3432		437.9231			

LAMPIRAN 13. Data Kadar Total Flavonoid

Tabel kurva kalibrasi Kuersetin

Konsentrasi (ppm) (X)	Abs Pengulangan			Abs rata2	blanko	Abs rata2 - blanko (Y)
	1	2	3			
30	0.2326	0.2622	0.2816	0.2588	0.0479	0.2109
50	0.4119	0.389	0.4097	0.40353	0.0479	0.3556333
70	0.472	0.5722	0.5869	0.5437	0.0479	0.4958
90	0.6242	0.6078	0.6809	0.63763	0.0479	0.5897333
110	0.7189	0.7914	0.8082	0.77283	0.0479	0.7249333



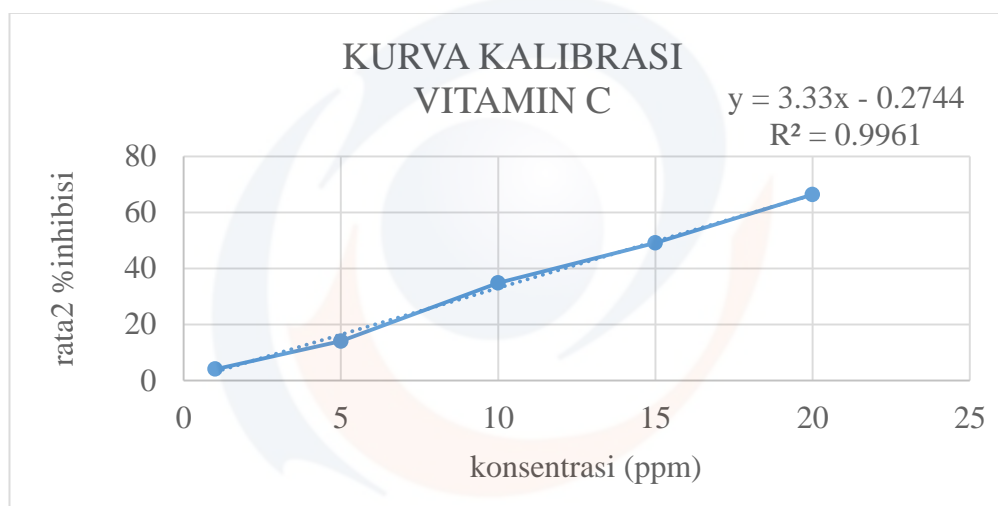
Tabel Kadar Total Flavonoid

Ekstrak	Konsentrasi (ppm)	Abs pengulangan	Rata2 abs	KTFe (mQE/g)	Rata-rata KTFe (mQE/g)	SD	KTFe \pm SD (mQE/g)
n-heksan	30.000	0.3746	0.388	1.5508	1.624	0.064	1.624 \pm 0.064
		0.3973		1.6709			
		0.3935		1.6508			
Etil asetat		0.819	0.720	3.9021	3.381	0.452	3.381 \pm 0.452
		0.6669		3.0974			
		0.6754		3.1423			
Etanol 96%		0.1487	0.146	0.3555	0.340	0.014	0.340 \pm 0.014
		0.1448		0.3349			
		0.1437		0.3291			

LAMPIRAN 14. Data aktivitas Antioksidan

Tabel Kurva Kalibrasi Vitamin C

Konsentrasi (ppm)	A.pengulangan			% Inhibisi			rata2 % inhibisi	IC50
	1	2	3	1	2	3		
1	0.827	0.829	0.826	4.1137	3.8817	4.1833	4.05954	14.933
5	0.753	0.718	0.751	12.662	16.675	12.871	14.0692	
10	0.470	0.632	0.583	45.521	26.662	32.38	34.8541	
15	0.409	0.509	0.398	52.527	40.986	53.86	49.1243	
20	0.335	0.288	0.247	61.144	66.584	71.328	66.3522	



Tabel data Aktivitas Antioksidan Ekstrak Etanol 96%

Konsentrasi (ppm)	A.pengulangan			% Inhibisi			Rata2 % inhibisi	IC 50
	1	2	3	1	2	3		
60	0.647	0.661	0.636	16.143	14.368	17.567	16.03	198.867
90	0.586	0.593	0.568	24.148	23.189	26.375	24.57	
120	0.527	0.545	0.520	31.699	29.458	32.632	31.26	
150	0.408	0.494	0.467	47.087	36.051	39.549	40.90	
180	0.479	0.419	0.410	37.929	45.688	46.945	43.52	

Tabel data Aktivitas Antioksidan Ekstrak Etil Asetat

Konsentrasi (ppm)	A.pengulangan	% Inhibisi	Rata2 % inhibisi	IC 50

	1	2	3	1	2	3		
60	0.665	0.664	0.675	13.850	13.979	12.542	13.46	165.381
90	0.496	0.489	0.570	35.740	36.686	26.181	32.87	
120	0.472	0.440	0.436	38.836	43.033	43.538	41.80	
150	0.422	0.406	0.430	45.364	47.463	44.289	45.71	
180	0.360	0.397	0.390	53.343	48.564	49.471	50.46	

Tabel data Aktivitas Antioksidan Ekstrak n-heksan

Konsentrasi (ppm)	A.pengulangan			% Inhibisi			Rata2 % inhibisi	IC 50
	1	2	3	1	2	3		
60	0.370	0.368	0.357	52.048	52.385	53.810	52.75	38.583
90	0.275	0.278	0.257	64.392	64.056	66.750	65.07	
120	0.224	0.217	0.219	70.947	71.892	71.659	71.50	
150	0.173	0.172	0.152	77.617	77.721	80.312	78.55	
180	0.134	0.125	0.129	82.643	83.861	83.304	83.27	

