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LAMPIRAN

Lampiran 1 Hasil Uji Statistik

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total Gula	Between Groups	8.692	2	4.346	3.213	.180
	Within Groups	4.057	3	1.352		
	Total	12.749	5			
Sulfat	Between Groups	472650.648	2	236325.324	24.603	.014
	Within Groups	28816.062	3	9605.354		
	Total	501466.710	5			
Rendemen	Between Groups	.143	2	.072	1.195	.415
	Within Groups	.180	3	.060		
	Total	.324	5			
Antioksidan	Between Groups	164991.796	2	82495.898	10.544	.044
	Within Groups	23472.981	3	7824.327		
	Total	188464.777	5			
Total Fenolik	Between Groups	4172.707	2	2086.354	1.108E3	.000
	Within Groups	5.648	3	1.883		
	Total	4178.356	5			

Lampiran 2 Hasil Uji Lanjut *Duncan* Antioksidan

Antioksidan

Duncan

Perlakuan	N	Subset for alpha = 0.05	
		1	2
4 Jam	2	171.2300	
3 Jam	2		472.8950
2 Jam	2		557.6310
Sig.		1.000	.409

Means for groups in homogeneous subsets are displayed.

Lampiran 3 Hasil Uji Lanjut *Duncan* Total Fenolik

Total Fenolik

Duncan

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
2 Jam	2	82.1250		
4 Jam	2		1.2556E2	
3 Jam	2			1.4525E2
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Lampiran 4 Hasil Uji Lanjut Duncan Sulfat

Sulfat

Duncan

Perlakuan	N	Subset for alpha = 0.05	
		1	2
3 Jam	2	3.3650	
4 Jam	2	5.8650	
2 Jam	2		600.0000
Sig.		.981	1.000

Means for groups in homogeneous subsets are displayed.

Lampiran 5 Perhitungan

1. Rendemen

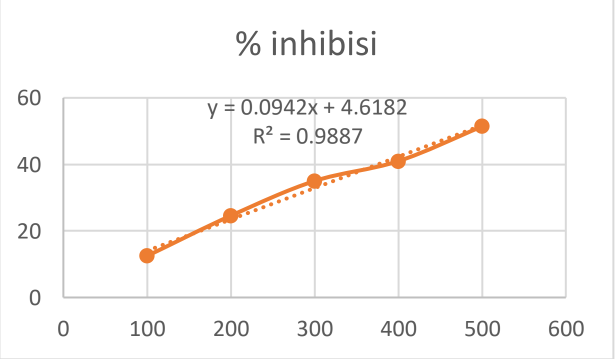
$$\%\text{Yield} = \frac{\text{ekstrak yang dihasilkan (g)}}{\text{bahan baku yang digunakan (g)}} \text{ x } 100\%$$

- 2 jam ulangan 1 = $\frac{1.03}{100}$ x 100% = 1,03%
- 2 jam ulangan 2 = $\frac{1.03}{100}$ x 100% = 1,03%
- 3 jam ulangan 1 = $\frac{1.42}{100}$ x 100% = 1,42%
- 3 jam ulangan 2 = $\frac{0.83}{100}$ x 100% = 0,83%
- 4 jam ulangan 1 = $\frac{1,46}{100}$ x 100% = 1,46%
- 4 jam ulangan 2 = $\frac{1,34}{100}$ x 100% = 1,34%

2. Aktivitas Antioksidan

– 2 jam ulangan 1

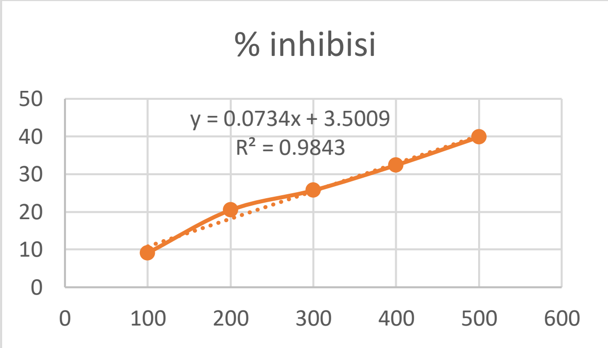
2.1			
Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
100	0.470	0.537	12.476723
200	0.405	0.537	24.581006
300	0.349	0.537	35.009311
400	0.317	0.537	40.968343
500	0.261	0.537	51.396648
IC50	481.760085		



– 2 jam ulangan 2

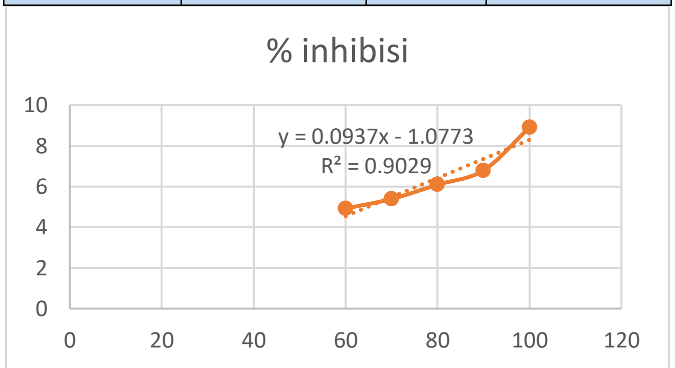
2.2

Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
100	0.488	0.537	9.1247672
200	0.427	0.537	20.484171
300	0.399	0.537	25.698324
400	0.363	0.537	32.402235
500	0.323	0.537	39.851024
IC50	633.502725		



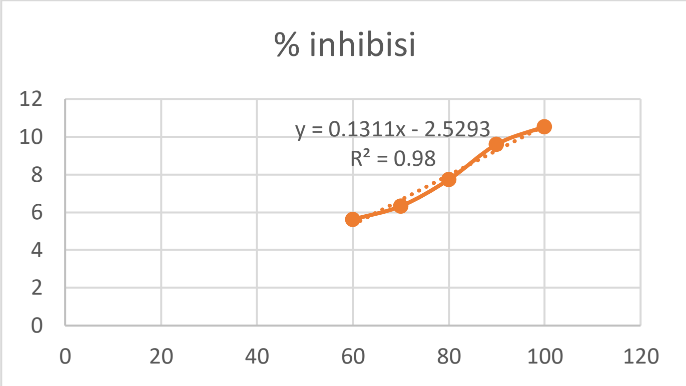
– 3 jam ulangan 1

3.1			
Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
60	0.406	0.427	4.918032787
70	0.404	0.427	5.386416862
80	0.401	0.427	6.088992974
90	0.398	0.427	6.791569087
100	0.389	0.427	8.899297424
IC50	545.1152615		



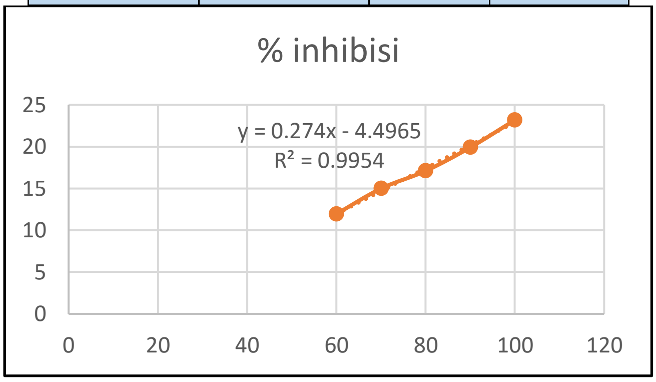
– 3 jam ulangan 2

3.2			
Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
60	0.403	0.427	5.620608899
70	0.400	0.427	6.323185012
80	0.394	0.427	7.728337237
90	0.386	0.427	9.601873536
100	0.382	0.427	10.53864169
IC50	400.6811594		



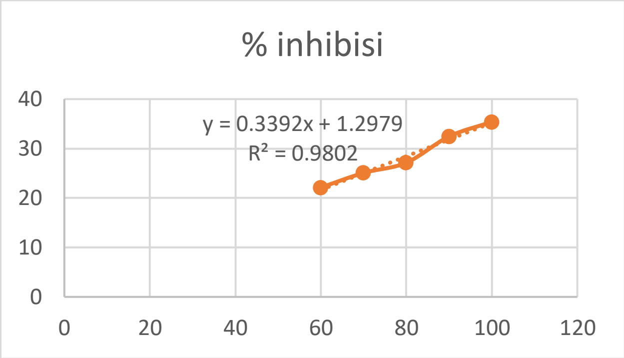
– 4 jam ulangan 1

4.1			
Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
60	0.376	0.427	11.94379
70	0.363	0.427	14.98829
80	0.354	0.427	17.09602
90	0.342	0.427	19.90632
100	0.328	0.427	23.18501
IC50	198.892336		



– 4 jam ulangan 2

4.2			
Konsentrasi (ppm)	Absorbansi	Kontrol	% inhibisi
60	0.264	0.339	22.12389
70	0.254	0.339	25.07375
80	0.247	0.339	27.13864
90	0.229	0.339	32.44838
100	0.219	0.339	35.39823
IC50	143.579304		



3. Total Fenolik

Perlakuan	Absorbansi	Berat hasil evaporasi (gram)	Berat sampel ditimbang (gr)/10 ml EtOH 70%	FP	Konsentrasi (µg/mL)	Total Fenol dalam 0,1 gr (µg)	Total Fenol dalam 1 gr (mg)	Total Fenol dalam berat hsil eva (mg)	Total Fenol mg GAE/gr	Rata-rata
2 jam	0.160	1.03	0.05	10 x	815.000	8150.000	81.500	83.945	81.500	**82.125**
	0.162	1.03	0.05		827.500	8275.000	82.750	85.233	82.750	
3 jam	0.262	1.42	0.05		1452.500	14525.000	145.250	149.608	145.250	**145.250**
	0.262	0.83	0.05		1452.500	14525.000	145.250	120.558	145.250	
4 jam	0.228	1.45	0.05		1240.000	12400.000	124.000	179.800	124.000	**125.563**
	0.233	1.34	0.05		1271.250	12712.500	127.125	170.348	127.125	

4. Total Gula

Y = 0,0063x + 0,0883

FP = 60

- 2 jam ulangan 1

  0,237 = 0,0063x + 0,0883

  $x = \frac{0,1487}{0,0063} = 23 \text{ x } 60 = 1,380\ \mu g/ml$

- 2 jam ulangan 2

  0,352 = 0,0063x + 0,0883

  $x = \frac{0,2637}{0,0063} = 41 \text{ x } 60 = 2,460\ \mu g/ml$

- 3 jam ulangan 1

  0,491 = 0,0063x + 0,0883

  $x = \frac{0,4027}{0,0063} = 63 \text{ x } 60 = 3,780\ \mu g/ml$

- 3 jam ulangan 2

  0,219 = 0,0063x + 0,0883

  $x = \frac{0,1307}{0,0063} = 20 \text{ x } 60 = 1,200\ \mu g/ml$

- 4 jam ulangan 1

  0,615 = 0,0063x + 0,0883

  $x = \frac{0,5267}{0,0063} = 83 \text{ x } 60 = 4,980\ \mu g/ml$

- 4 jam ulangan 2

  0,556 = 0,0063x + 0,0883

$x = \frac{0,4677}{0,0063} = 74 \text{ x } 60 = 4,440\ \mu g/ml$

5. Sulfat

$Y = 0,0012x + 0,3626$

$FP = 20$

- 2 jam ulangan 1

  $0,333 = 0,0012x + 0,3626$

  $x = \frac{0,0296}{0,0012} = 24 \text{ x } 20 = 480 \text{ mg/ml}$
- 2 jam ulangan 2

  $0,406 = 0,0063x + 0,0883$

  $x = \frac{0,0434}{0,0012} = 36 \text{ x } 20 = 720 \text{ mg/ml}$
- 3 jam ulangan 1

  $0,530 = 0,0063x + 0,0883$

  $x = \frac{0,1674}{0,0012} = 139,5 \text{ x } 20 = 2,790 \text{ mg/ml}$
- 3 jam ulangan 2

  $0,599 = 0,0063x + 0,0883$

  $x = \frac{0,2364}{0,0012} = 197 \text{ x } 20 = 3,940 \text{ mg/ml}$
- 4 jam ulangan 1

  $0,548 = 0,0063x + 0,0883$

  $x = \frac{0,1854}{0,0012} = 154,5 \text{ x } 20 = 3,090 \text{ mg/ml}$
- 4 jam ulangan 2

  $0,882 = 0,0063x + 0,0883$

  $x = \frac{0,5194}{0,0012} = 432 \text{ x } 20 = 8,640 \text{ mg/ml}$

Lampiran 6 Dokumentasi Penelitian

<table>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Pre-treatment Jahe Merah</td></tr>
</table>



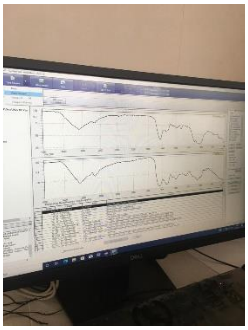






Ekstraksi Polisakarida Metode *Hot Water Extraction*

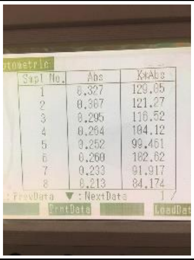
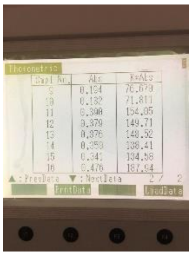
Rendemen (*Yield*)

Penentuan Gugus Fungsional (FT-IR)





Penentuan Aktivitas Antioksidan








Penentuan Total Gula



Penentuan Sulfat