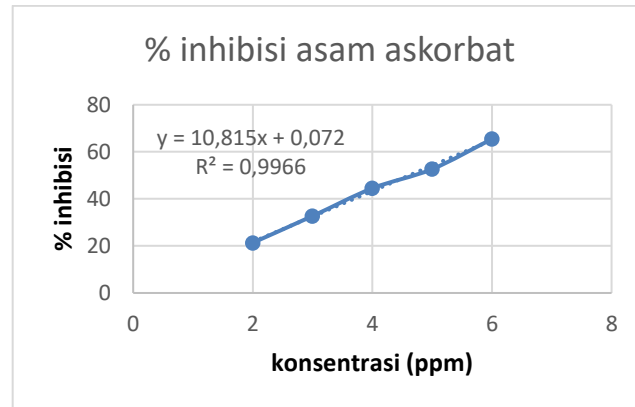


LAMPIRAN

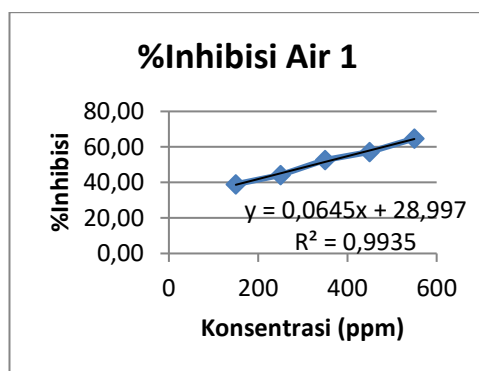
Lampiran 1 Tabel Absorbansi dan %Inhibisi Ekstrak Biji *Carica pubescens* Variasi 4 Pelarut

Sampel ID	Konsentrasi	Absorbansi			%Inhibisi (%)		
		1	2	3	1	2	3
K0	-	0,662			-		
A1	150ppm	0,404	0,399	0,387	39,00	39,73	41,58
	250ppm	0,370	0,367	0,359	44,21	44,63	45,73
	350ppm	0,314	0,310	0,306	52,62	53,27	53,84
	450ppm	0,283	0,279	0,265	57,24	57,81	59,93
	550ppm	0,234	0,232	0,222	64,71	64,91	66,54
K0	-	0,650			-		
A2	150ppm	0,386	0,384	0,386	40,55	40,86	40,63
	250ppm	0,344	0,345	0,349	47,09	46,98	46,31
	350ppm	0,296	0,300	0,294	54,46	53,89	54,75
	450ppm	0,252	0,262	0,250	61,25	59,66	61,48
	550ppm	0,228	0,219	0,223	64,92	66,35	65,66
K0	-	0,658			-		
A3	150ppm	0,364	0,387	0,386	44,64	41,20	41,41
	250ppm	0,330	0,341	0,336	49,89	48,22	48,91
	350ppm	0,275	0,290	0,287	58,24	56,00	56,41
	450ppm	0,242	0,248	0,240	63,18	62,31	63,48
	550ppm	0,207	0,217	0,204	68,48	67,05	69,07

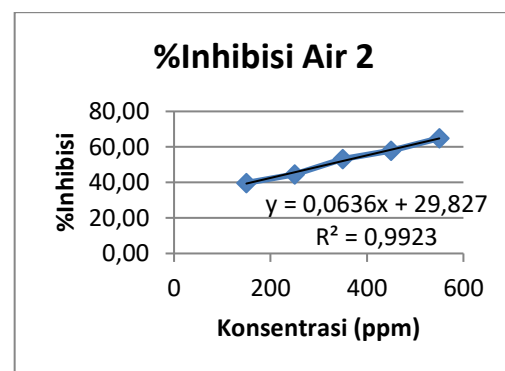
Lampiran 2 Kurva Hubungan %Inhibisi terhadap Konsentrasi Sampel Biji *Carica Pubescens* dengan Variasi Pelarut



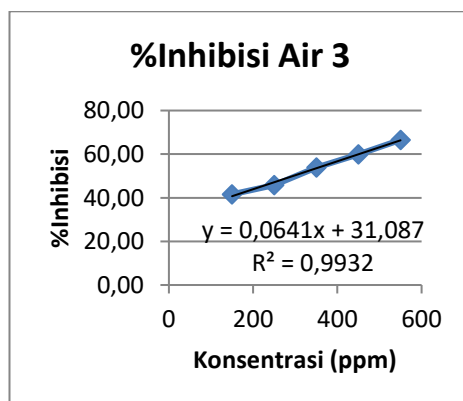
(a)



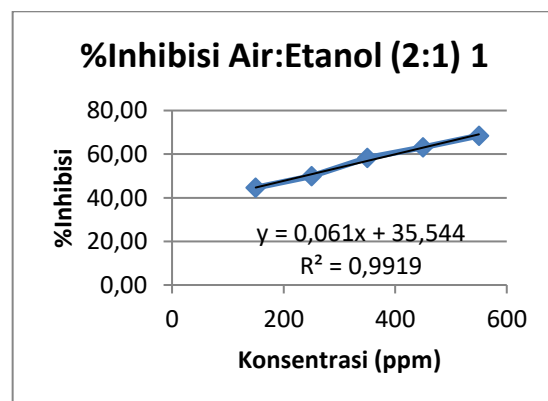
(b)



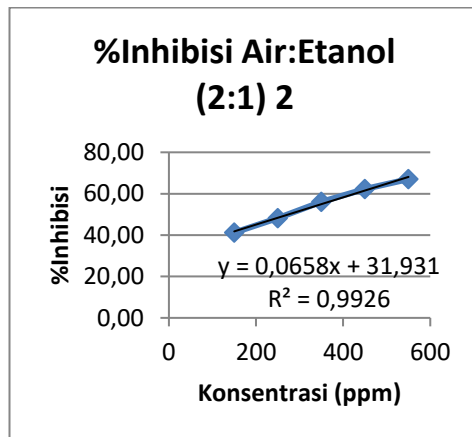
(c)



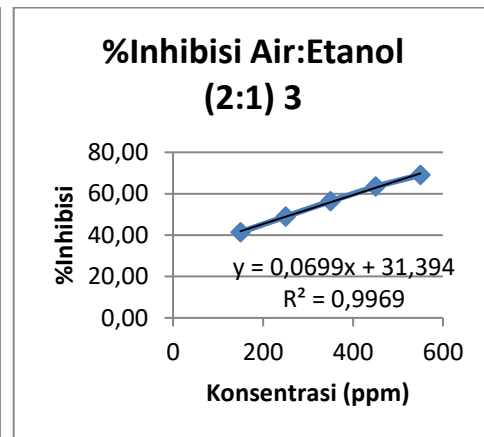
(d)



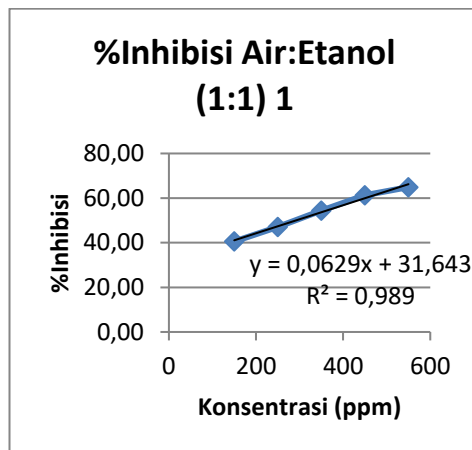
(e)



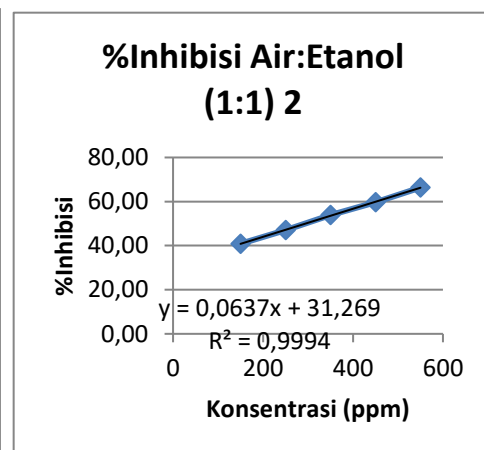
(f)



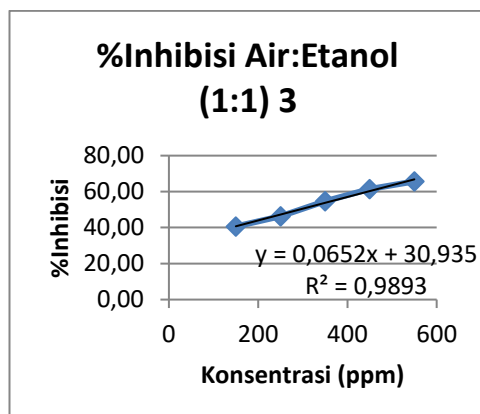
(g)



(h)



(i)



(j)

Keterangan :

(a) kontrol positif

(b), (c), (d) ekstrak air

(e), (f), (g) ekstrak air:etanol (2:1)

(h), (i), (j) ekstrak air:etanol (1:1)

Lampiran 3 Persamaan Regresi Linier dan Nilai IC50 Ekstrak Biji Carica Pubescens

Sampel ID	Rep	Persamaan	R2	Nilai Y	Nilai X atau IC50
K1	-	$y = 10,815x + 0,072$	0,9966	50	4,6166
A1	1	$y = 0,0645x + 28,997$	0,9935	50	325,628
	2	$y = 0,0636x + 29,827$	0,9923	50	317,186
	3	$y = 0,0642x + 31,087$	0,9932	50	295,055
A2	1	$y = 0,061x + 35,544$	0,9919	50	236,984
	2	$y = 0,0658x + 31,931$	0,9926	50	274,605
	3	$y = 0,0699x + 31,394$	0,9969	50	266,180
A3	1	$y = 0,0629x + 31,643$	0,989	50	291,844
	2	$y = 0,0637x + 31,269$	0,9994	50	294,050
	3	$y = 0,0652x + 30,935$	0,9893	50	292,408

Lampiran 4 Perhitungan Rendemen

Rumus :

$$\% \text{Rendemen} = \frac{\text{bobot ekstrak yang didapat}}{\text{bobot simplisia}} \times 100\%$$

A1.1

$$\begin{aligned} \% \text{Rendemen} &= \frac{27,1915g - 28,3361g}{15,0180g} \times 100\% \\ &= 7,63\% \end{aligned}$$

A1.2

$$\% \text{Rendemen} = \frac{27,9314g - 28,9658g}{15,0175g} \times 100\%$$

$$= 6,89\%$$

A1.3

$$\% \text{Rendemen} = \frac{31,0754\text{g} - 32,187\text{g}}{15,0099\text{g}} \times 100\%$$

$$= 7,41\%$$

A2.1

$$\% \text{Rendemen} = \frac{112,7812\text{g} - 113,33\text{g}}{15,0278\text{g}} \times 100\%$$

$$= 3,66\%$$

A2.2

$$\% \text{Rendemen} = \frac{104,1846\text{g} - 104,8259\text{g}}{15,0371\text{g}} \times 100\%$$

$$= 4,27\%$$

A2.3

$$\% \text{Rendemen} = \frac{130,8724\text{g} - 131,4163\text{g}}{15,0334\text{g}} \times 100\%$$

$$= 3,62\%$$

A3.1

$$\% \text{Rendemen} = \frac{26,1798\text{g} - 26,8431\text{g}}{15,0274\text{g}} \times 100\%$$

$$= 4,41\%$$

A3.2

$$\% \text{Rendemen} = \frac{39,1781\text{g} - 39,8316\text{g}}{15,0853\text{g}} \times 100\%$$

$$= 4,36\%$$

A3.3

$$\begin{aligned}\% \text{Rendemen} &= \frac{126,3173\text{g} - 126,8921\text{g}}{15,0266\text{g}} \times 100\% \\ &= 3,83\%\end{aligned}$$

Lampiran 5 Perhitungan Pengenceran larutan uji

$$\begin{aligned}M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \text{ ppm} \times V_1 &= 150 \text{ ppm} \times 10 \text{ ml} \\ V_1 &= 1,5 \text{ ml} \\ M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \text{ ppm} \times V_1 &= 250 \text{ ppm} \times 10 \text{ ml} \\ V_1 &= 2,5 \text{ ml} \\ M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \text{ ppm} \times V_1 &= 350 \text{ ppm} \times 10 \text{ ml} \\ V_1 &= 3,5 \text{ ml} \\ M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \text{ ppm} \times V_1 &= 450 \text{ ppm} \times 10 \text{ ml} \\ V_1 &= 4,5 \text{ ml} \\ M_1 \times V_1 &= M_2 \times V_2 \\ 1000 \text{ ppm} \times V_1 &= 550 \text{ ppm} \times 10 \text{ ml} \\ V_1 &= 5,5 \text{ ml}\end{aligned}$$

Lampiran 6 Perhitungan %Inhibisi

$$\% \text{Inhibisi} = \frac{\text{absorbansi blanko} - \text{absorbansi sampel}}{\text{absorbansi blanko}} \times 100\%$$

- K1

$$\% \text{Inhibisi} = \frac{\text{absorbansi blanko} - \text{absorbansi sampel}}{\text{absorbansi blanko}} \times 100\%$$

- **A1**

150 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,404}{0,662} \times 100\% \\ &= 39,00\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,399}{0,662} \times 100\% \\ &= 39,73\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,387}{0,662} \times 100\% \\ &= 41,58\%\end{aligned}$$

$$\text{Rata - rata} = 40,1\%$$

250 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,370}{0,662} \times 100\% \\ &= 44,21\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,367}{0,662} \times 100\% \\ &= 44,63\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,359}{0,662} \times 100\% \\ &= 45,73\%\end{aligned}$$

$$\text{Rata - rata} = 44,86\%$$

350 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,314}{0,662} \times 100\% \\ &= 52,62\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,310}{0,662} \times 100\% \\ &= 53,27\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,306}{0,662} \times 100\% \\ &= 53,84\%\end{aligned}$$

$$\text{Rata - rata} = 53,24\%$$

450 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,283}{0,662} \times 100\% \\ &= 57,24\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,279}{0,662} \times 100\% \\ &= 57,81\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,265}{0,662} \times 100\% \\ &= 59,93\%\end{aligned}$$

$$\text{Rata - rata} = 58,33\%$$

550 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662 - 0,234}{0,662} \times 100\% \\ &= 64,71\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662-0,232}{0,662} \times 100\% \\ &= 64,14\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,662-0,222}{0,662} \times 100\% \\ &= 66,54\%\end{aligned}$$

Rata – rata = 65,13%

- **A2**

150 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,364}{0,658} \times 100\% \\ &= 44,64\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,387}{0,685} \times 100\% \\ &= 41,20\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,386}{0,658} \times 100\% \\ &= 41,41\%\end{aligned}$$

Rata – rata = 42,42%

250 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,330}{0,658} \times 100\% \\ &= 49,89\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,341}{0,658} \times 100\% \\ &= 48,22\%\end{aligned}$$

Replikasi

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,336}{0,658} \times 100\% \\ &= 48,91\%\end{aligned}$$

Rata – rata = 49,01%

350 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,275}{0,658} \times 100\% \\ &= 58,24\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,290}{0,658} \times 100\% \\ &= 56,00\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,287}{0,658} \times 100\% \\ &= 56,41\%\end{aligned}$$

Rata – rata = 56,88%

450 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,242}{0,658} \times 100\% \\ &= 63,18\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,248}{0,658} \times 100\% \\ &= 62,31\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658-0,240}{0,658} \times 100\% \\ &= 63,48\%\end{aligned}$$

Rata – rata = 62,99%

550 ppm

Replikasi 1

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658 - 0,207}{0,658} \times 100\% \\ &= 68,48\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658 - 0,217}{0,658} \times 100\% \\ &= 67,05\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{inhibisi} &= \frac{0,658 - 0,204}{0,658} \times 100\% \\ &= 67,07\%\end{aligned}$$

Rata – rata = 67,53%

- **A3**

150 ppm

Replikasi 1

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,386}{0,650} \times 100\% \\ &= 40,55\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,384}{0,650} \times 100\% \\ &= 40,86\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,386}{0,650} \times 100\% \\ &= 40,63\%\end{aligned}$$

Rata – Rata = 40,68%

250 ppm

Replikasi 1

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,344}{0,650} \times 100\% \\ &= 47,09\%\end{aligned}$$

Replikasi 2

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,345}{0,650} \times 100\% \\ &= 46,98\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,349}{0,650} \times 100\% \\ &= 46,31\%\end{aligned}$$

Rata – rata = 46,79%

350ppm

Replikasi 1

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,296}{0,650} \times 100\% \\ &= 54,46\%\end{aligned}$$

Replikasi 2

$$\% \text{Inhibisi} = \frac{0,650 - 0,300}{0,650} \times 100\%$$

$$= 53,89\%$$

Replikasi 3

$$\% \text{Inhibisi} = \frac{0,650 - 0,294}{0,650} \times 100\%$$

$$= 54,75\%$$

$$\text{Rata - rata} = 54,37\%$$

450ppm

Replikasi 1

$$\% \text{Inhibisi} = \frac{0,650 - 0,252}{0,650} \times 100\%$$

$$= 61,25\%$$

Replikasi 2

$$\% \text{Inhibisi} = \frac{0,650 - 0,262}{0,650} \times 100\%$$

$$= 59,66\%$$

Replikasi 3

$$\% \text{Inhibisi} = \frac{0,650 - 0,250}{0,650} \times 100\%$$

$$= 61,48\%$$

$$\text{Rata - rata} = 60,77\%$$

550ppm

Replikasi 1

$$\% \text{Inhibisi} = \frac{0,650 - 0,228}{0,650} \times 100\%$$

$$= 64,92\%$$

Replikasi 2

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,219}{0,650} \times 100\% \\ &= 66,35\%\end{aligned}$$

Replikasi 3

$$\begin{aligned}\% \text{Inhibisi} &= \frac{0,650 - 0,223}{0,650} \times 100\% \\ &= 65,66\%\end{aligned}$$

Rata – rata = 65,64%

Lampiran 7 Perhitungan IC50

Rumus IC50 :

$$y = ax + b$$

$$x = \frac{y - b}{a}$$

Kontrol Positif

$$y = 10,815x + 0,072$$

$$50 = 10,815x + 0,072$$

$$x = 4,6166$$

Perhitungan IC50 pelarut air

$$\text{Replikasi 1} \rightarrow y = 0,0645x + 28,997$$

$$50 = 0,0645x + 28,997$$

$$x = \frac{50 - 28,997}{0,0645}$$

$$x = 356,628$$

$$\text{Replikasi 2} \rightarrow y = 0,0636x + 29,827$$

$$50 = 0,0636x + 29,827$$

$$x = \frac{50-29,827}{0,0636}$$

$$x = 317,186$$

$$\text{Replikasi 3} \rightarrow y = 0,0641x + 31,087$$

$$50 = 0,0641x + 31,087$$

$$x = \frac{50-31,087}{0,0641}$$

$$x = 295,055$$

Perhitungan IC50 pelarut air:etanol (2:1)

$$\text{Replikasi 1} \rightarrow y = 0,061x + 35,544$$

$$50 = 0,061x + 35,544$$

$$x = \frac{50-35,544}{0,061}$$

$$x = 236,9836$$

$$\text{Replikasi 2} \rightarrow y = 0,0658x + 31,931$$

$$50 = 0,0658x + 31,931$$

$$x = \frac{50-31,931}{0,0658}$$

$$x = 274,6049$$

$$\text{Replikasi 3} \rightarrow y = 0,0699x + 31,394$$

$$50 = 0,0699x + 31,394$$

$$x = \frac{50 - 31,394}{0,0699}$$

$$x = 266,180$$

Perhitungan IC50 pelarut air:etanol (1:1)

$$\text{Replikasi 1} \rightarrow y = 0,0629x + 31,643$$

$$50 = 0,0629x + 31,643$$

$$x = \frac{50 - 31,643}{0,0629}$$

$$x = 291,844$$

$$\text{Replikasi 2} \rightarrow y = 0,0637x + 31,269$$

$$50 = 0,0637x + 31,269$$

$$x = \frac{50 - 31,269}{0,0637}$$

$$x = 294,05$$

$$\text{Replikasi 3} \rightarrow y = 0,0652x + 30,935$$

$$50 = 0,0652x + 30,935$$

$$x = \frac{50 - 30,935}{0,0652}$$

$$x = 292,408$$

Lampiran 8 Hasil Uji Normalitas

Tests of Normality

ekstrak	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IC50 Air	.280	3	.	.937	3	.517
Air:Etanol 2:1	.304	3	.	.908	3	.411
Air:Etanol 1:1	.290	3	.	.926	3	.475

a. Lilliefors Significance Correction

Lampiran 9 Hasil Uji ANOVA

ANOVA

IC50

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4365.236	2	2182.618	10.225	.012
Within Groups	1280.788	6	213.465		
Total	5646.024	8			

Lampiran 10 Dokumentasi



Pengovenan



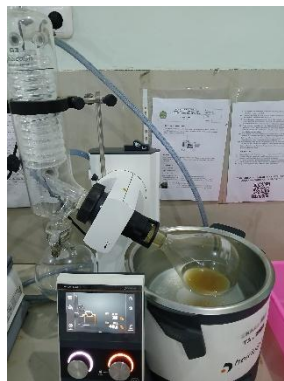
Serbuk



Ekstraksi Refluks



Penyaringan hasil ekstraksi



Pemekatan dengan rotari



Pengovenan cawan



Hasil ekstrak



Penimbangan Asam Askorbat



Penimbangan DPPH



Penimbangan Ekstrak



Larutan Induk



Larutan Uji



Larutan DPPH



Inkubasi