7. Lampiran

7.1. Tabel

Lampiran 1 Uji Homogenitas Variabel Ukuran Partikel

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Polifenol	Based on Mean	.877	1	52	.353
	Based on Median	.600	1	52	.442
	Based on Median and with adjusted df	.600	1	46.590	.442
	Based on trimmed mean	.830	1	52	.367
Antioksidan_Trolox	Based on Mean	.384	1	52	.538
	Based on Median	.340	1	52	.563
	Based on Median and with adjusted df	.340	1	51.998	.563
	Based on trimmed mean	.362	1	52	.550
Antioksidan_Ascorbic	Based on Mean	1.010	1	52	.320
	Based on Median	.844	1	52	.362
	Based on Median and with adjusted df	.844	1	51.919	.362
	Based on trimmed mean	1.002	1	52	.322
Fukosantin	Based on Mean	18.548	1	52	.000
	Based on Median	11.245	1	52	.001
	Based on Median and with adjusted df	11.245	1	43.244	.002
	Based on trimmed mean	19.002	1	52	.000

Lampiran 2 Uji Homogenitas Variabel Konsentrasi Pelarut

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Polifenol	Based on Mean	.524	2	51	.595
	Based on Median	.518	2	51	.599
	Based on Median and with adjusted df	.518	2	49.716	.599
	Based on trimmed mean	.524	2	51	.595
Antioksidan_Trolox	Based on Mean	1.280	2	51	.287
	Based on Median	1.266	2	51	.291
	Based on Median and with adjusted df	1.266	2	36.352	.294
	Based on trimmed mean	1.367	2	51	.264
Antioksidan_Ascorbic	Based on Mean	1.288	2	51	.285
	Based on Median	1.152	2	51	.324
	Based on Median and with adjusted df	1.152	2	38.619	.326
	Based on trimmed mean	1.377	2	51	.262
Fukosantin	Based on Mean	1.451	2	51	.244
	Based on Median	1.487	2	51	.236
	Based on Median and with adjusted df	1.487	2	31.748	.241
	Based on trimmed mean	1.433	2	51	.248

Lampiran 3 Uji Homogenitas Variabel Rasio *Dried Mass*:*Sovent*

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Polifenol	Based on Mean	1.329	2	51	.274
	Based on Median	1.263	2	51	.291
	Based on Median and with adjusted df	1.263	2	45.674	.292
	Based on trimmed mean	1.320	2	51	.276
Antioksidan_Trolox	Based on Mean	2.193	2	51	.122
	Based on Median	2.031	2	51	.142
	Based on Median and with adjusted df	2.031	2	48.828	.142
	Based on trimmed mean	2.195	2	51	.122
Antioksidan_Ascorbic	Based on Mean	2.199	2	51	.121
	Based on Median	1.939	2	51	.154
	Based on Median and with adjusted df	1.939	2	45.919	.155
	Based on trimmed mean	2.213	2	51	.120
Fukosantin	Based on Mean	1.676	2	51	.197
	Based on Median	.840	2	51	.438
	Based on Median and with adjusted df	.840	2	47.011	.438
	Based on trimmed mean	1.674	2	51	.198

Lampiran 4 Uji Normalitas Variabel Ukuran Partikel

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Ukuran_partikel	Statistic	df	Sig.	Statistic	df	Sig.
Polifenol	1.00	.154	27	.099	.954	27	.265
	2.00	.078	27	.200*	.983	27	.928
Antioksidan_Trolox	1.00	.123	27	.200*	.971	27	.619
	2.00	.118	27	.200*	.979	27	.843
Antioksidan_Ascorbic	1.00	.132	27	.200*	.966	27	.491
	2.00	.118	27	.200*	.979	27	.844
Fukosantin	1.00	.189	27	.014	.918	27	.034
	2.00	.145	27	.152	.926	27	.056

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lampiran 5 Uji Normalitas Variabel Konsentrasi Pelarut

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Konsentrasi pelarut	Statistic	df	Sig.	Statistic	df	Sig.
Polifenol	1.00	.086	18	.200*	.984	18	.981
	2.00	.085	18	.200*	.978	18	.930
	3.00	.104	18	.200*	.973	18	.858
Antioksidan_Trolox	1.00	.116	18	.200*	.960	18	.605
	2.00	.163	18	.200*	.949	18	.414
	3.00	.105	18	.200*	.936	18	.248
Antioksidan_Ascorbic	1.00	.116	18	.200*	.960	18	.605
	2.00	.144	18	.200*	.939	18	.274
	3.00	.105	18	.200*	.936	18	.250
Fukosantin	1.00	.155	18	.200*	.911	18	.088
	2.00	.148	18	.200*	.932	18	.213
	3.00	.252	18	.004	.884	18	.031

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lampiran 6 Uji Normalitas Variabel Rasio *Dried Mass*:*Sovent*

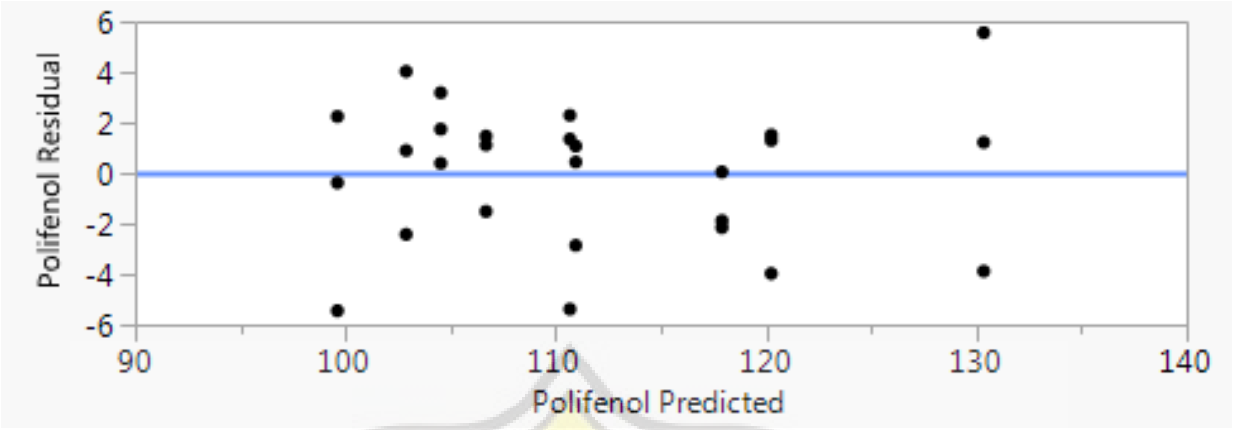
Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Ratio	Statistic	df	Sig.	Statistic	df	Sig.
Polifenol	1.00	.101	18	.200*	.969	18	.780
	2.00	.134	18	.200*	.972	18	.836
	3.00	.094	18	.200*	.985	18	.986
Antioksidan_Trolox	1.00	.119	18	.200*	.966	18	.715
	2.00	.146	18	.200*	.919	18	.123
	3.00	.157	18	.200*	.928	18	.182
Antioksidan_Ascorbic	1.00	.119	18	.200*	.966	18	.715
	2.00	.207	18	.041	.870	18	.018
	3.00	.157	18	.200*	.928	18	.182
Fukosantin	1.00	.242	18	.007	.790	18	.001
	2.00	.207	18	.040	.808	18	.002
	3.00	.193	18	.074	.887	18	.034

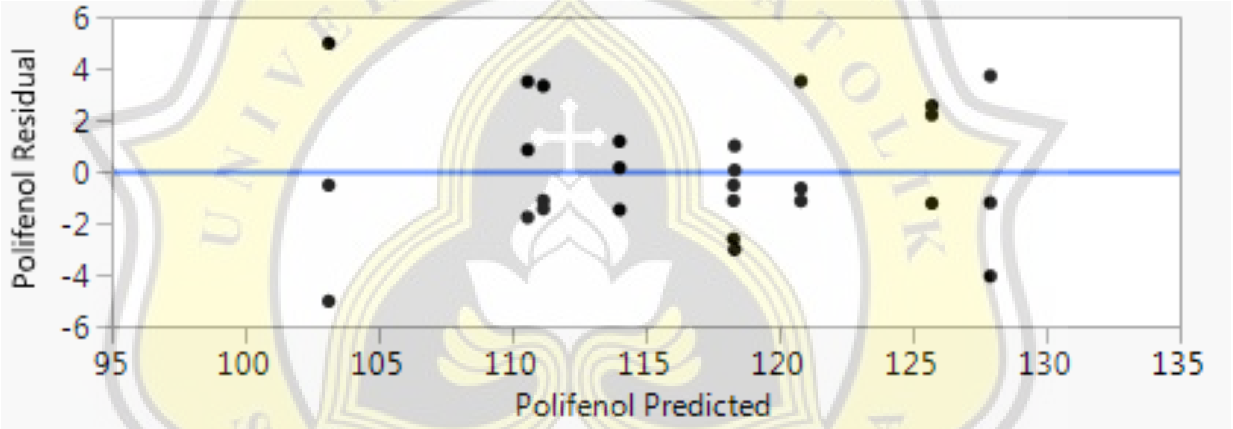
*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

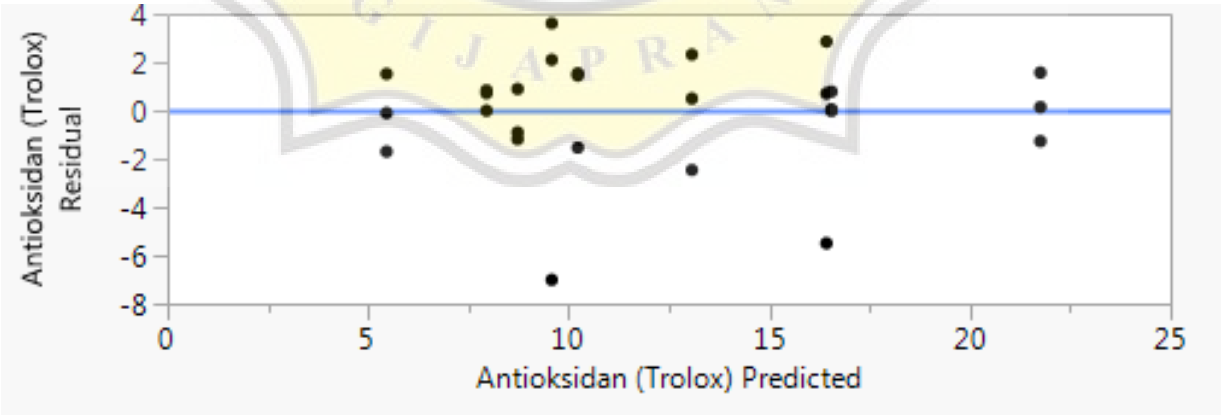
Lampiran 7 *Residual by Predicted* Plot Total Polifenol 0,400 mm



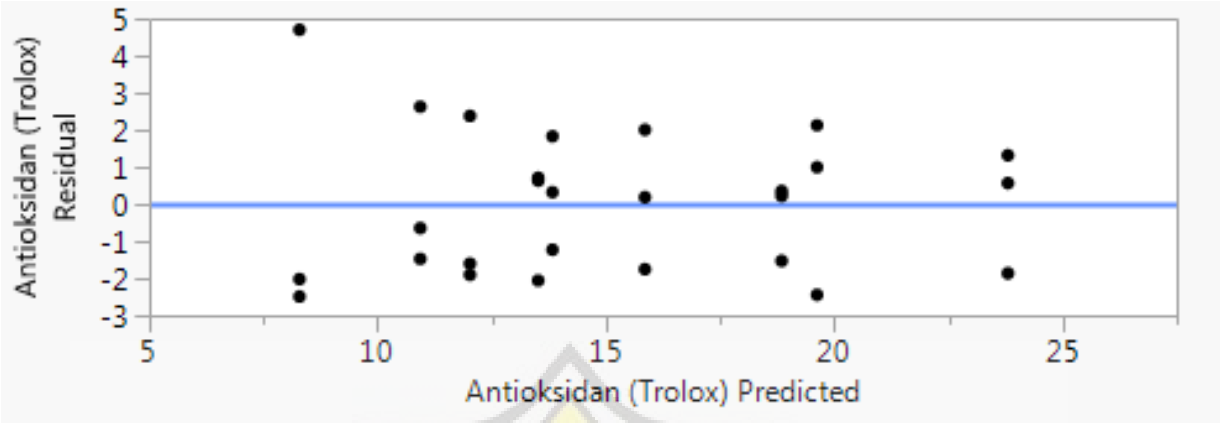
Lampiran 8 *Residual by Predicted* Plot Total Polifenol 0,149 mm



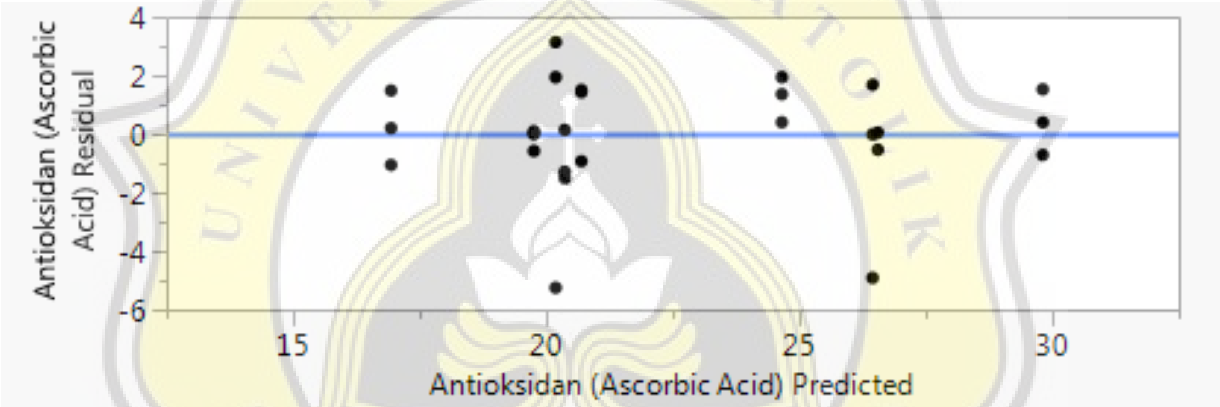
Lampiran 9 *Residual by Predicted* Plot Antioksidan (*Trolox*) 0,400 mm



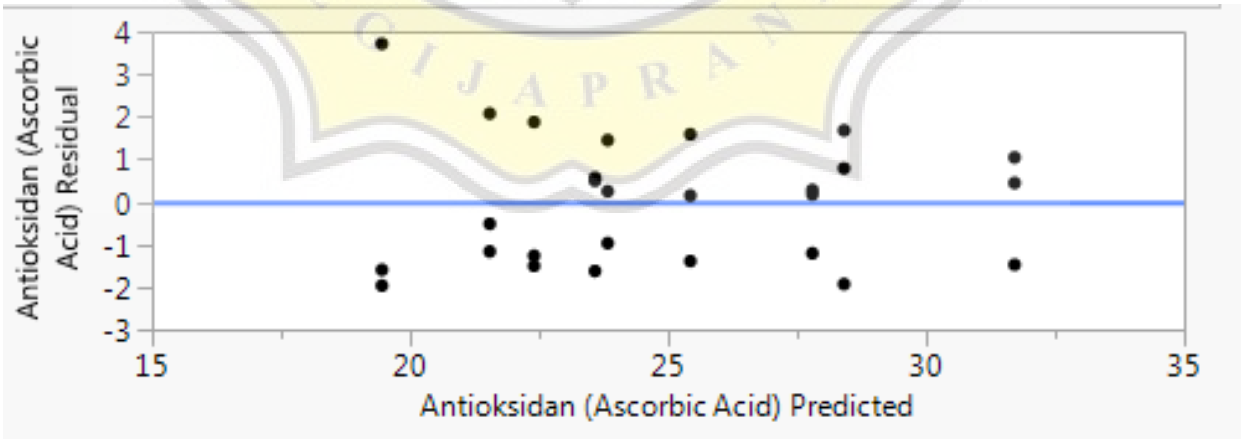
Lampiran 10 *Residual by Predicted* Plot Antioksidan (*Trolox*) 0,149 mm



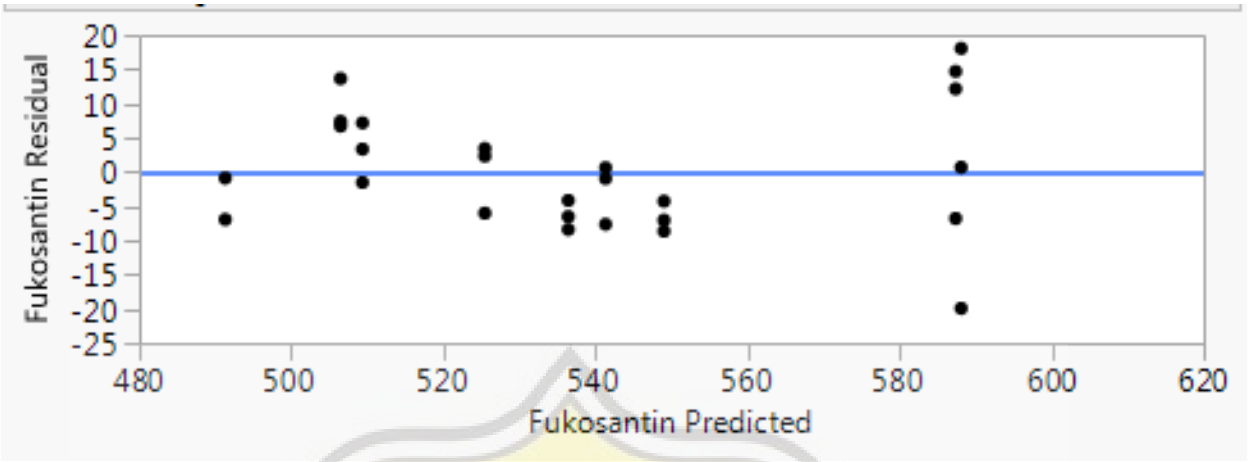
Lampiran 11 *Residual by Predicted* Plot Antioksidan (*Ascorbic Acid*) 0,400 mm



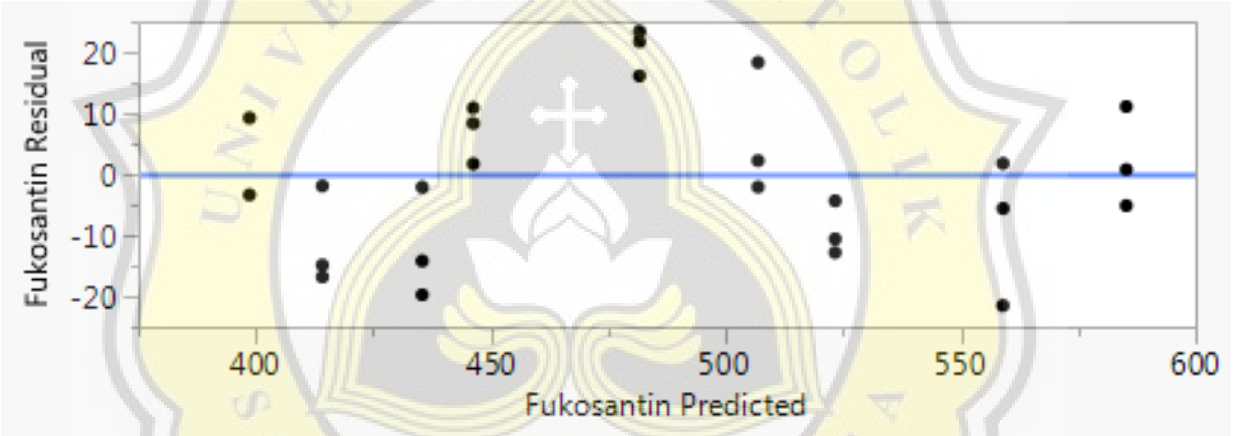
Lampiran 12 *Residual by Predicted* Plot Antioksidan (*Asocorbic Acid*) 0,149 mm



Lampiran 13 *Residual by Predicted* Plot Fukosantin 0,400 mm



Lampiran 14 *Residual by Predicted* Plot Fukosantin 0,149 mm



Lampiran 15 *Test of Between Subjects Effects*

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Polifenol	4144.494[a]	17	243.794	27.683	.000
	Antioksidan_Trolox	1336.799[b]	17	78.635	12.698	.000
	Antioksidan_Ascorbic	847.360[c]	17	49.845	13.480	.000
	Fukosantin	172075.912[d]	17	10122.112	154.367	.000
Intercept	Polifenol	702981.510	1	702981.510	79824.159	.000
	Antioksidan_Trolox	10121.838	1	10121.838	1634.496	.000
	Antioksidan_Ascorbic	30755.541	1	30755.541	8317.304	.000
	Fukosantin	14061204.24	1	14061204.24	214440.117	.000
Ukuran_partikel	Polifenol	354.458	1	354.458	40.249	.000
	Antioksidan_Trolox	121.350	1	121.350	19.596	.000
	Antioksidan_Ascorbic	58.615	1	58.615	15.851	.000
	Fukosantin	39092.696	1	39092.696	596.182	.000
Konsentrasi_pelarut	Polifenol	1269.872	2	634.936	72.098	.000
	Antioksidan_Trolox	563.117	2	281.559	45.467	.000
	Antioksidan_Ascorbic	359.570	2	179.785	48.620	.000
	Fukosantin	62129.421	2	31064.711	473.752	.000
Ratio	Polifenol	2292.343	2	1146.171	130.149	.000
	Antioksidan_Trolox	583.807	2	291.903	47.137	.000
	Antioksidan_Ascorbic	370.371	2	185.185	50.080	.000
	Fukosantin	44386.926	2	22193.463	338.461	.000
Ukuran_partikel * Konsentrasi_pelarut	Polifenol	46.704	2	23.352	2.652	.084
	Antioksidan_Trolox	.864	2	.432	.070	.933
	Antioksidan_Ascorbic	.580	2	.290	.078	.925
	Fukosantin	17333.738	2	8666.869	132.174	.000
Ukuran_partikel * Ratio	Polifenol	18.487	2	9.243	1.050	.361
	Antioksidan_Trolox	3.886	2	1.943	.314	.733
	Antioksidan_Ascorbic	8.073	2	4.037	1.092	.347
	Fukosantin	1847.878	2	923.939	14.091	.000
Konsentrasi_pelarut * Ratio	Polifenol	72.637	4	18.159	2.062	.106
	Antioksidan_Trolox	56.084	4	14.021	2.264	.081
	Antioksidan_Ascorbic	41.121	4	10.280	2.780	.041
	Fukosantin	4642.699	4	1160.675	17.701	.000
Ukuran_partikel * Konsentrasi_pelarut * Ratio	Polifenol	89.993	4	22.498	2.555	.055
	Antioksidan_Trolox	7.691	4	1.923	.310	.869
	Antioksidan_Ascorbic	9.031	4	2.258	.611	.658
	Fukosantin	2642.554	4	660.638	10.075	.000
Error	Polifenol	317.039	36	8.807		
	Antioksidan_Trolox	222.935	36	6.193		
	Antioksidan_Ascorbic	133.120	36	3.698		
	Fukosantin	2360.581	36	65.572		
Total	Polifenol	707443.043	54			
	Antioksidan_Trolox	11681.573	54			
	Antioksidan_Ascorbic	31736.022	54			
	Fukosantin	14235640.74	54			
Corrected Total	Polifenol	4461.532	53			
	Antioksidan_Trolox	1559.734	53			
	Antioksidan_Ascorbic	980.480	53			
	Fukosantin	174436.494	53			

a. R Squared = .929 (Adjusted R Squared = .895)

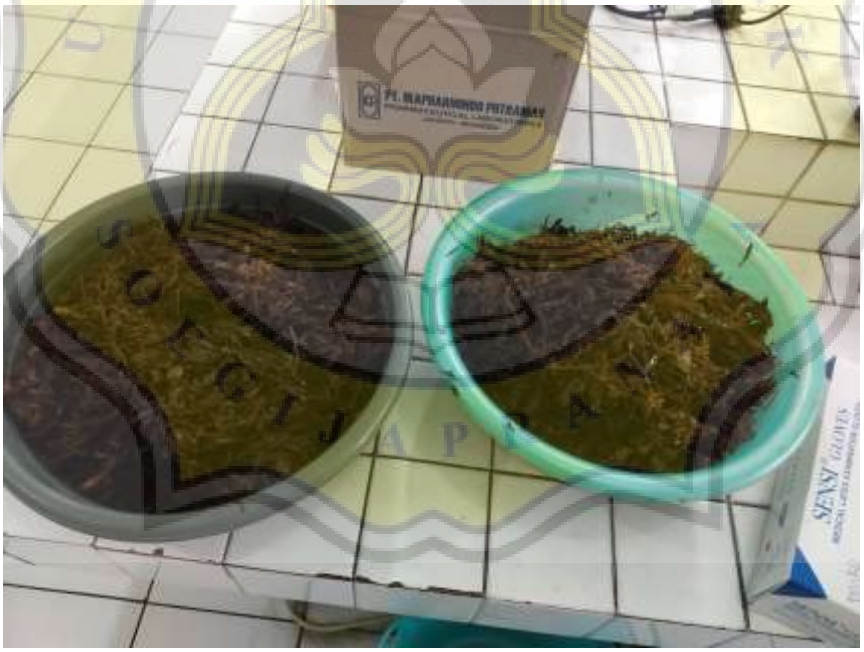
b. R Squared = .857 (Adjusted R Squared = .790)

c. R Squared = .864 (Adjusted R Squared = .800)

d. R Squared = .986 (Adjusted R Squared = .980)

7.2. Gambar

Lampiran 16 Proses Pencucian *Sargassum* sp.



Lampiran 17 *Sargassum* sp. Setelah Pencucian

Lampiran 18 *Ultrasonic Cleaner* (*Biobase* UC-10SD) yang dimodifikasi

4.65% PLAGIARISM APPROXIMATELY

Report #14327367

PENDAHULUAN Latar Belakang Rumput laut (seaweed) merupakan tanaman di perairan laut dan sangat berpotensi sebagai salah satu sumber pangan alternatif. Rumput laut memiliki nilai kandungan nutrisi yang tinggi, antara lain mineral, vitamin, serat, dan senyawa antioksidan (Yan dan Chuda, 1999). Rumput laut terbagi menjadi 3 kelompok besar berdasarkan struktur kimia serta distribusi pigmennya, yaitu rumput laut cokelat (Phaeophyta), rumput laut hijau (Chlorophyta), dan rumput laut merah (Rhodophyta) (Mabeau dan Fleurence, 1993). Dari ketiga kelompok tersebut, rumput laut cokelat merupakan rumput laut yang cukup banyak dijumpai dan memiliki kandungan nutrisi yang tinggi. Rumput laut cokelat memiliki beberapa kandungan senyawa bioaktif, salah satunya adalah fukosantin. Fukosantin merupakan senyawa yang paling banyak dimanfaatkan dibandingkan senyawa lain yang terkandung di dalam rumput laut cokelat. 1 Fukosantin merupakan salah satu senyawa pigmen terpenting di dalam rumput laut cokelat dan menyumbang kurang lebih 10 persen dari total produksi