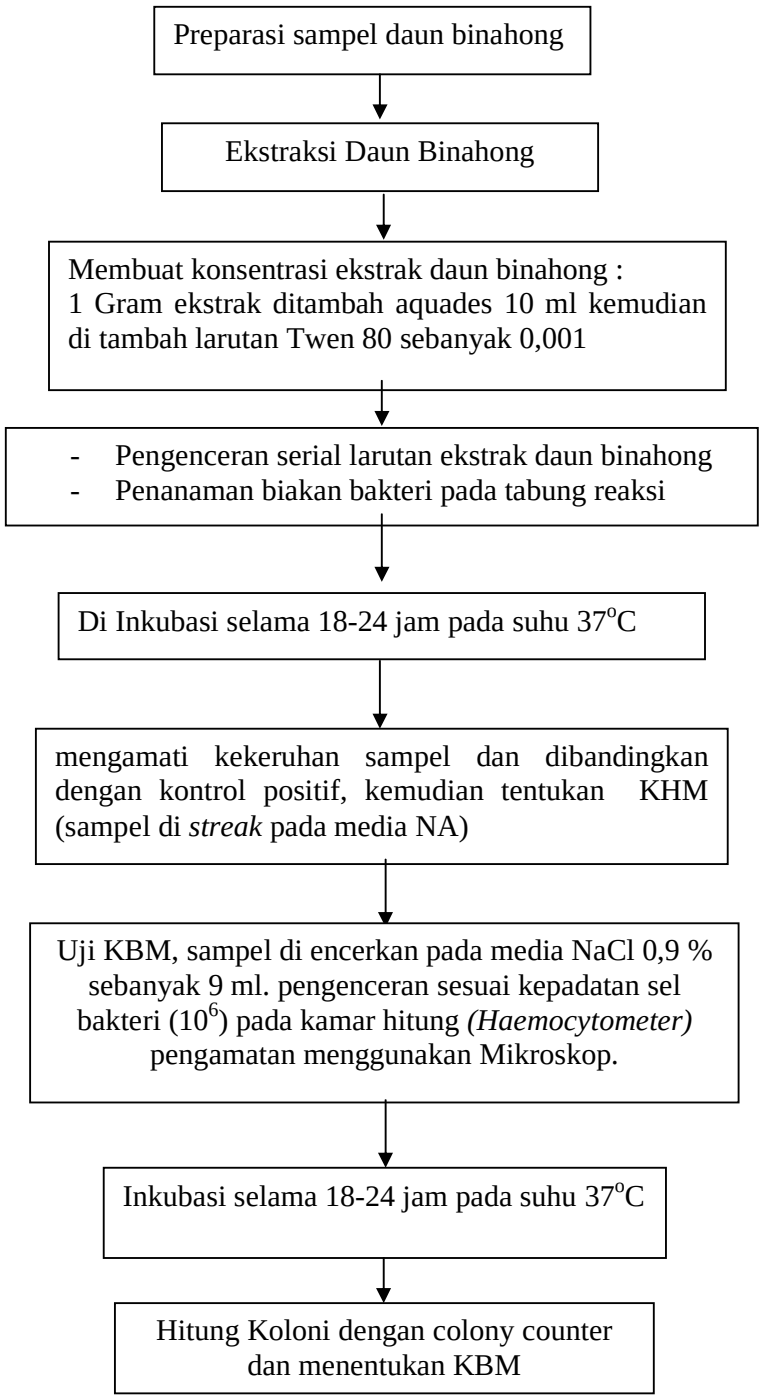
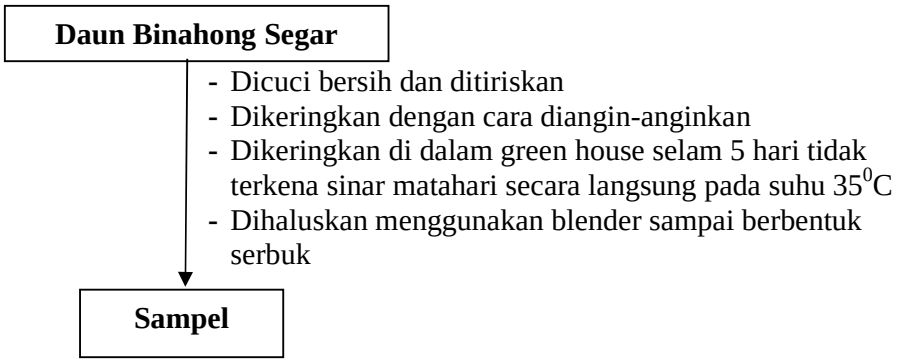
LAMPIRAN

Lampiran 1. Diagram Alir Kerja

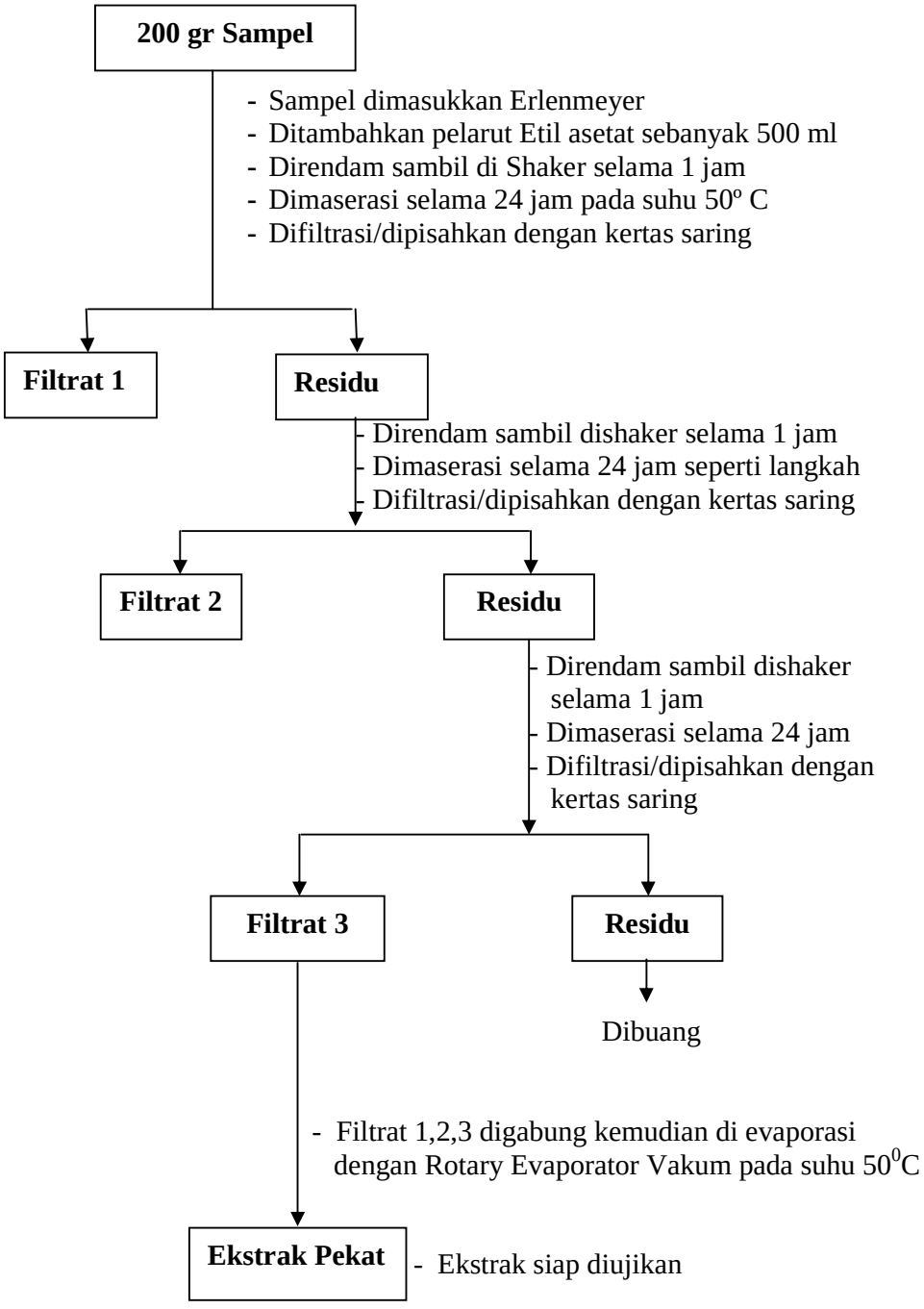


Lampiran 2.Skema kerja

2.1 Preparasi Sampel

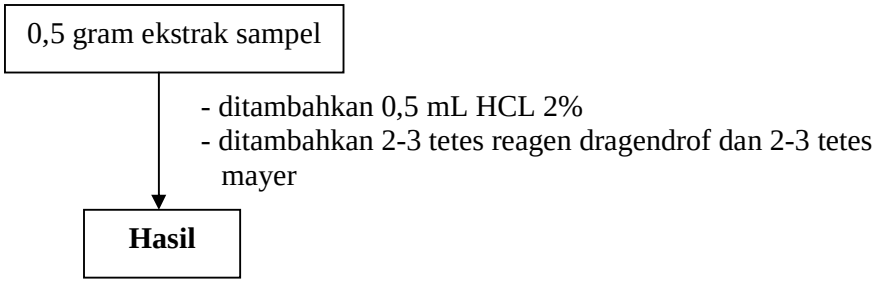


2.2 .Ekstraksi Daun Binahong Dengan Metode Maserasi

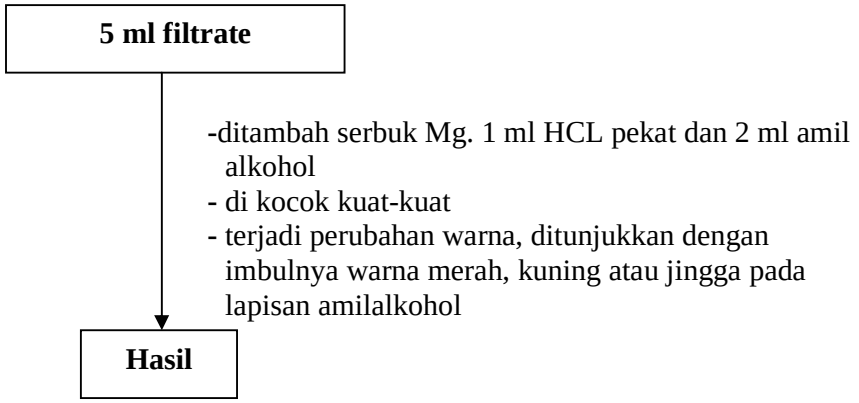


2.3. Identifikasi Senyawa Kimia

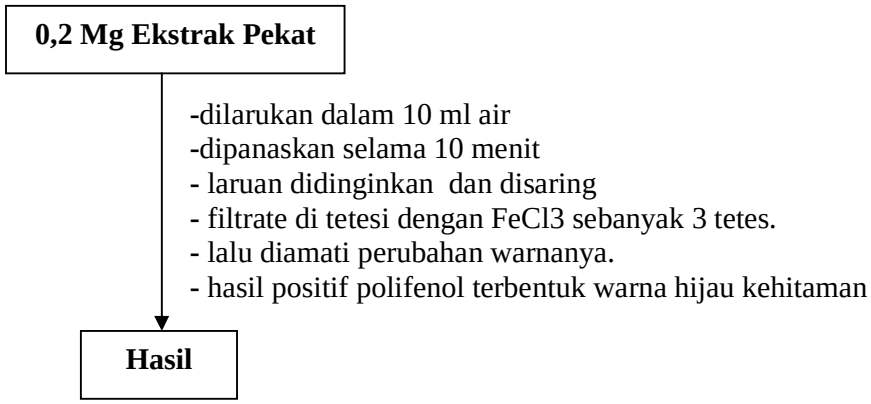
2.3.1 Uji Alkaloid



2.3.2 Uji Flavanoid



2.3.3 Uji Polifenol



Uji Fitokimia secara kualitatatif dan kuantitatif Dilakukan di Lab Kimia UIN MALIKI Malang dan Lab Kimia Universitas Muhammadiyah Malang.

2.4 Pengenceran Larutan Ekstrak Daun Binahong

1. Uji Konsentrasi Hambat Minimum (Pendahuluan)

- 1 gram ekstrak pekat daun binahong
- diencerkan dengan menggunakan pelarut aquades 10 ml,
- kemudian ditambahkan larutan tween 80 sebanyak 100 µL
- kemudian divortek sampai homogeny
- Kemudian di ujikan dengan pengenceran berseri dari konsentrasi 100%, 50%, 25%, 12,5%, 6,25% dan 3,125% pada masing-masing bakteri.

2. Uji Konsentrasi Hambat Minimum (KHM) Dan Konsentrasi Bunuh Minimum (KBM)

- **Untuk Uji Pada Bakteri *Staphylococcus aureus***

- 50% : 0,5 gram ektrak pekat + 9,5 ml aquades
- 45% : 0,45 gram ekstrak pekat + 9,55 ml aquades
- 40% : 0,4 gram ekstrak pekat + 9,6 ml aquades
- 35% : 0,35 gram ektrak pekat + 9,65 ml aquades
- 30% : 0,3 gram ektrak pekat + 9,7 ml aquades
- 25% : 0,25 gram ektrak pekat + 9,75 ml aquades

- **Untuk Uji Pada Bakteri *Pseudomonas aeruginosa***

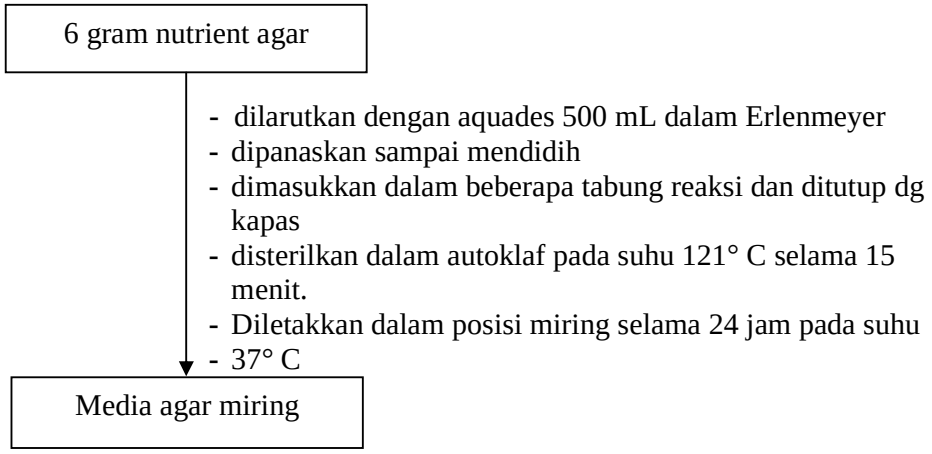
- 100% : 1 Gram ekstrak pekat + 9 ml aquades
- 90% : 0,9 gram ekstrak pekat+ 9,1 ml aquades
- 80% : 0,8 gram ekstrak pekat + 9,2 ml aquades
- 70% : 0,7 gram ekstrak pekat + 9,3 ml aquades
- 60% : 0,6 gram ekstrak pekat + 9,4 ml aquades
- 50% : 0,5 gram ekstrak pekat + 9,5 ml aquades.

Untuk Seluruh Pengenceran ditambahkan 1 ml larutan dari (campuran aquades 10 ml dan larutan tween 80 sebanyak 100 µL.)

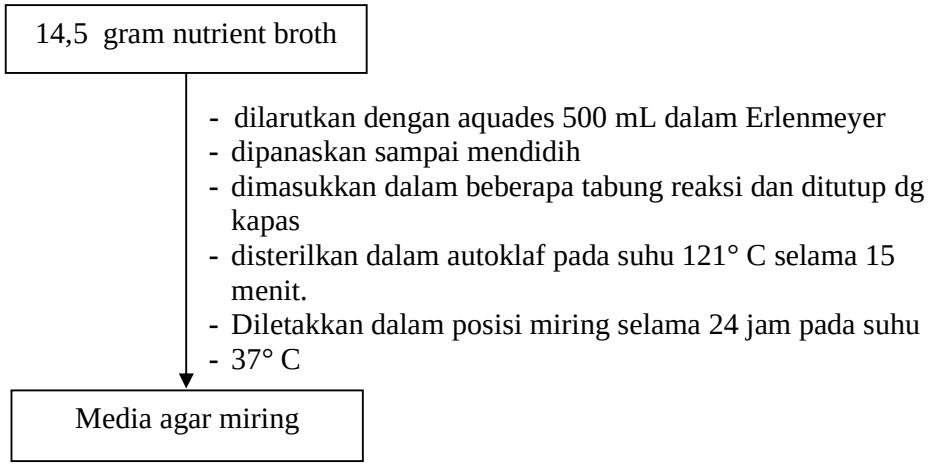
Lampiran 3. Uji Aktivitas Antibakteri

3.1 Pembuatan Media

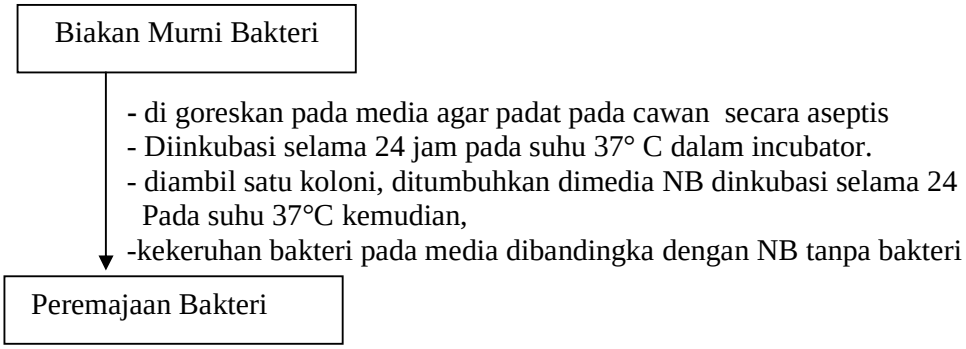
1. Media Nutrient Agar



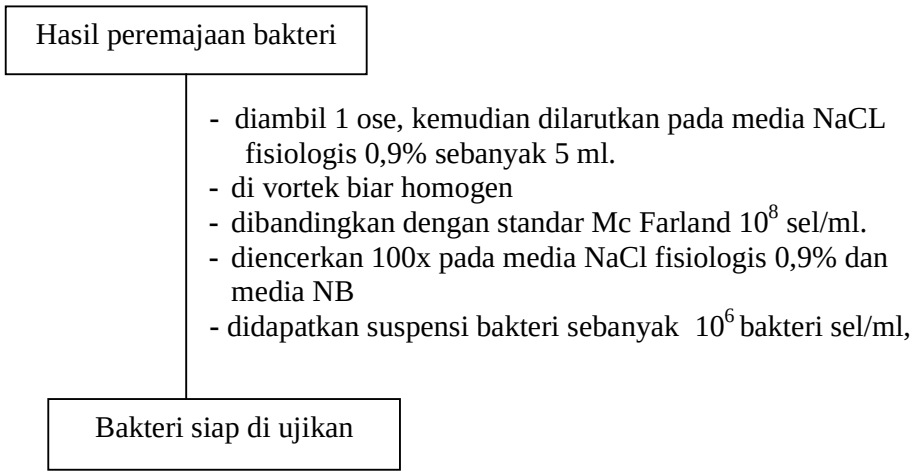
2. Media Nutrient Broth



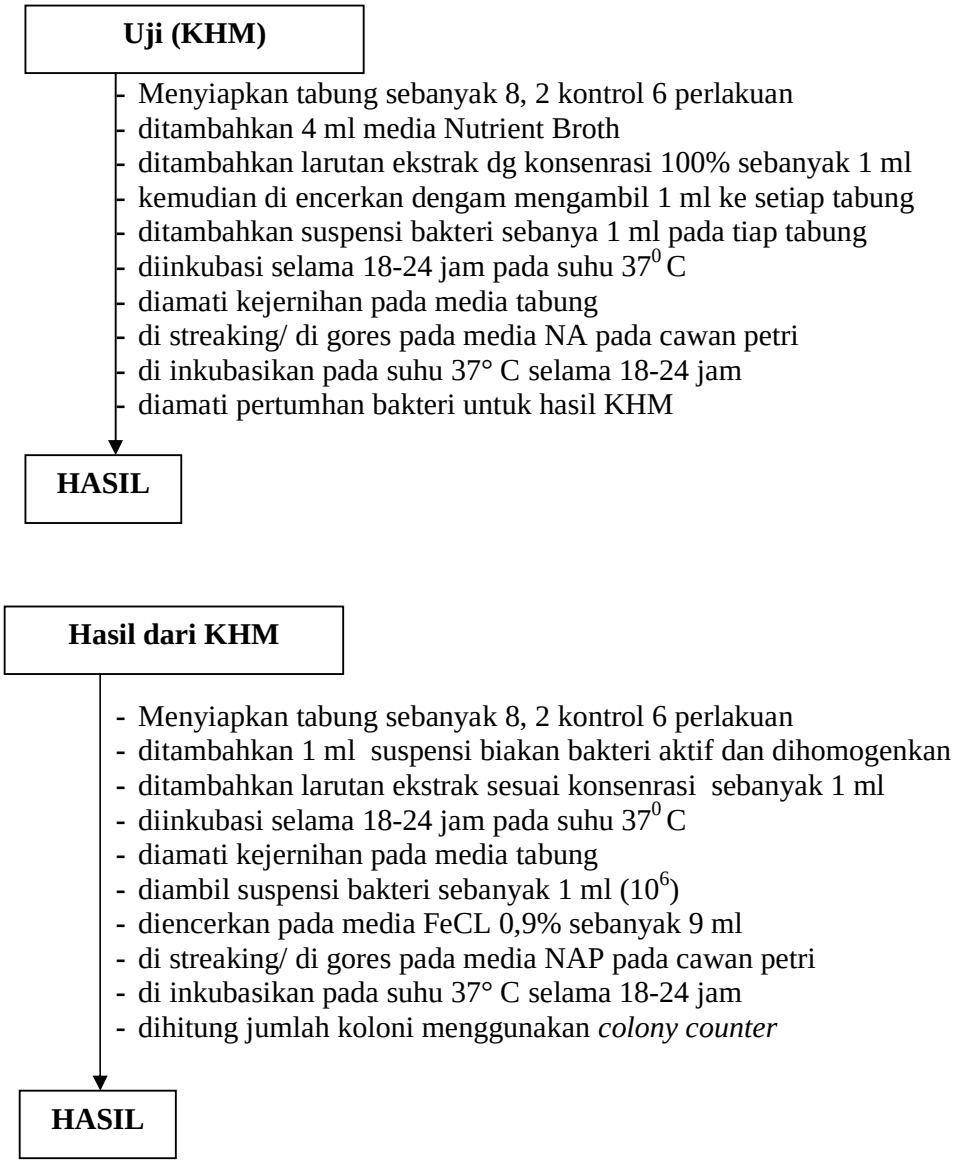
3.2 Peremajaan Biakan Bakteri Murni



3.3 Pembuatan Suspensi Bakteri



3.4 Uji Aktivistas Bakteri Dengan Metode Dilusi Tabung



Lampiran : 4

Tabel 1. Data pengaruh pemberian konsentrasi ekstrak daun binahong (*Anredera cordifoilia* (Ten) Steenis) Terhadap Penurunan Jumlah Koloni bakteri *Staphylococcus aureus* Per ml (10^6 sel/ml)

Konsentrasi	Ulangan			Total	Rerata
	I	II	III		
Kontrol Positif	30100000	31100000	30500000	91700000	30566667
250 mg	300000	303000	294000	897000	299000
300 mg	29700	28500	29000	87200	29066.667
350 mg	1860	1790	1550	5200	1733.3333
400 mg	144	129	138	411	137
450 mg	37	51	43	131	43.666667
500 mg	0	0	0	0	0
Total	30431741	31433470	30824731	92689942	30896647

Tabel 2. Data pengaruh pemberian konsentrasi ekstrak daun binahong (*Anredera cordifoilia* (Ten) Steenis) Terhadap Penurunan Jumlah Koloni bakteri *Pseudomonas aeruginosa* Per ml (10^6 sel/ml)

Konsentrasi	Ulangan			Total	Rerata
	I	II	III		
Kontrol Positif	30800000	33300000	30100000	94200000	31400000
500 mg	295000	273000	257000	825000	275000
600 mg	25300	25700	28300	79300	26433.33333
700 mg	1620	1690	1760	5070	1690
800 mg	1210	1180	1350	3740	1246.666667
900 mg	56	61	77	194	64.66666667
1000 mg	0	0	0	0	0
Total	31123186	33601631	30388487	95113304	31704434.67

Lampiran 5.

Data Penghitungan Analisis Variansi dalam RAL

a. Bakteri *Staphylococcus aureus*

1. Faktor Koreksi (FK) $= \frac{(\sum x)^2}{N}$

$= \frac{(92689942)^2}{21}$

$= \frac{8.591 \times 10^{15}}{21}$

$= 4{,}091 \times 10^{14}$

2. Menghitung JK

a. JK Total $= \sum x^2 - FK$

$= (30100000^2 + 31100000^2 + ... + 0^2) - FK$

$= 2{,}804 \times 10^{15} - 4{,}091 \times 10^{14}$

$= 2{,}395 \times 10^{15}$

b. JK Perlakuan $= \frac{(\sum x1)^2+(\sum x2)^2+...+(\sum x6)^2}{3} - FK$

$= \frac{(91700000)^2+(897000)^2+...+(0)^2}{3} - FK$

$= 2{,}803 \times 10^{15} - 4{,}091 \times 10^{14}$

$= 2{,}394 \times 10^{15}$

c. JK Galat = JK Total – JK Perlakuan

$= 2{,}395 \times 10^{15} - 2{,}394 \times 10^{15}$

$= 5{,}067 \times 10^{11}$

3. Menghitung db

a. db Total = N -1 = 21 -1= 20

b. db Perlakuan = n – 1= 7 – 1 = 6

c. db Galat = db Total – db Perlakuan = 20 – 6 = 14

4. Menghitung KT

a. KT Perlakuan $= \frac{JK\ Perlakuan}{db\ Perlakuan} = \frac{4,091 \times 1014}{6} = 3,999 \times 10^{14}$

b. KT Galat $= \frac{JK\ Galat}{db\ Galat} = \frac{5,067 \times 10^{10}}{14} = 3,619 \times 10^{10}$

5. Mencari F hitung $= \frac{KT\ Perlakuan}{KT\ Galat} = \frac{3,999 \times 10^{14}}{3,619 \times 10^{10}} = 11024,615$

6. Mencari BNT

BNT 5% $= t_{(\alpha)(db\ galat)} \times \sqrt{\frac{2\,KTG}{Ulangan}}$

$= t_{(0,05)(14)} \times \sqrt{\frac{2 \times (3,619 \times 10^{10})}{3}}$

$= 2,145 \times (155335,19)$

$= 333.160,847$

BNT 1% $= t_{(\alpha)(db\ galat)} \times \sqrt{\frac{2\,KTG}{Ulangan}}$

$= t_{(0,01)(14)} \times \sqrt{\frac{2 \times (3,619 \times 10^{10})}{3}}$

$= 2,977 \times (155335,19)$

$= 462.408,432$

b. Bakteri *Pseudomonas aeruginosa*

1. Faktor Koreksi (FK) $= \frac{(\sum x)^2}{N}$

$= \frac{(95113304)^2}{21}$

$= \frac{9.046 \times 10^{15}}{21}$

$= 4{,}308 \times 10^{14}$

2. Menghitung JK

a. JK Total $= \sum x^2 - FK$

$= (30800000^2 + 33300000^2 + ... + 0^2) - FK$

$= 2{,}964 \times 10^{15} - 4{,}308 \times 10^{14}$

$= 2{,}533 \times 10^{15}$

b. JK Perlakuan $= \frac{(\sum x1)^2+(\sum x2)^2+...+(\sum x8)^2}{3} - FK$

$= \frac{(94200000)^2+(825000)^2+...+(0)^2}{3} - FK$

$= 2{,}958 \times 10^{15} - 4{,}308 \times 10^{14}$

$= 2{,}527 \times 10^{15}$

c. JK Galat = JK Total – JK Perlakuan

$= 2{,}533 \times 10^{15} - 2{,}527 \times 10^{15}$

$= 5{,}661 \times 10^{11}$

3. Menghitung db

a. db Total = N -1 = 21 -1= 20

b. db Perlakuan = n – 1= 7 – 1 = 6

c. db Galat = db Total – db Perlakuan = 20 – 6 = 14

4. Menghitung KT

a. KT Perlakuan = $\frac{JK\ Perlakuan}{db\ Perlakuan} = \frac{2,527 \times 10^{15}}{6} = 4,212 \times 10^{14}$

b. KT Galat $= \frac{JK\ Galat}{db\ Galat} = \frac{5,661 \times 10^{11}}{14} = 4,043 \times 10^{11}$

5. Mencari F hitung $= \frac{KT\ Perlakuan}{KT\ Galat} = \frac{4,212 \times 10^{14}}{4,043 \times 10^{11}} = 1041,753$

6. Mencari BNT

BNT 5% $= t_{(\alpha)(db\ galat)} \times \sqrt{\frac{2\,KTG}{Ulangan}}$

$= t_{(0,05)(16)} \times \sqrt{\frac{2 \times (4,043 \times 10^{11})}{3}}$

= 2,145 x (519190,46)

= 1113552,776

BNT 1% $= t_{(\alpha)(db\ galat)} \times \sqrt{\frac{2\,KTG}{Ulangan}}$

$= t_{(0,01)(16)} \times \sqrt{\frac{2 \times (4,043 \times 10^{11})}{3}}$

= 2,977 x (519190,46)

= 1545548,338

Lampiran 6. Analisisa Data Dengan One Wey ANOVA

- Ringkasan ANOVA Pengaruh Ekstrak Daun Binahong terhadap Bakteri *Staphylococcus aureus*

SK	db	JK	KT	F hit	F 5%	F 1%	Sig
Perlakuan	5	$2{,}394 \times 10^{15}$	$3{,}9902 \times 10^{14}$	11.024	2,958	4,694	0,000
Galat	12	$5{,}067 \times 10^{11}$	$3{,}6194 \times 10^{10}$				
Total	17	$2{,}395 \times 10^{15}$					

- Ringkasan ANOVA Pengaruh Ekstrak Daun Binahong Terhadap Bakteri *Pseudomonas aeruginosa*

SK	db	JK	KT	F hit	F 5%	F 1%	Sig
Perlakuan	5	$2{,}52732 \times 10^{15}$	$4{,}2122 \times 10^{14}$	1041,7525	2,958	4,694	0,000
Galat	12	$5{,}660732 \times 10^{12}$	$4{,}0434 \times 10^{11}$				
Total	17	$2{,}53298 \times 10^{15}$					

Lampiran 7:

Perhitungan Analisa Varian dengan menggunakan SPSS versi 15

A. Bakteri *Staphylococcus aureus*

One-Sample Kolmogorov-Smirnov Test

			Standardized Residual
N			21
Normal Parameters	a,b	Mean	.0000000
		Std. Deviation	.97467943
Most Extreme Differences		Absolute	.124
		Positive	.124
		Negative	-.110
Kolmogorov-Smirnov Z			.570
Asymp. Sig. (2-tailed)			.901

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Aktivitas_penghambatan

Levene Statistic	df1	df2	Sig.
5.932	6	14	.076

Oneway

Descriptives

Aktivitas_penghambatan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol Positif	3	3E+007	503322.29568	290593.3	29316344.77	31816988.56	30100000	31100000
250 mg	3	299000.0	4582.57569	2645.751	287616.2509	310383.7491	294000.0	303000.0
300 mg	3	29066.67	602.77138	348.01022	27569.2996	30564.0338	28500.00	29700.00
350 mg	3	1733.3333	162.58331	93.86752	1329.4540	2137.2127	1550.00	1860.00
400 mg	3	137.0000	7.54983	4.35890	118.2452	155.7548	129.00	144.00
450 mg	3	43.6667	7.02377	4.05518	26.2187	61.1147	37.00	51.00
500 mg	3	.0000	.00000	.00000	.0000	.0000	.00	.00
Total	21	4413807	10942178.25	2387779	-567013.0609	9394626.585	.00	31100000

ANOVA

Aktivitas_penghambatan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.4E+015	6	3.990E+014	11024.615	.000
Within Groups	5.1E+011	14	3.619E+010		
Total	2.4E+015	20			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Aktivitas_penghambatan

LSD

(I) Konsentrasi	(J) Konsentrasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Positif	250 mg	30267667*	155335.2	.000	29934505.82	30600827.51
	300 mg	30537600*	155335.2	.000	30204439.15	30870760.85
	350 mg	30564933*	155335.2	.000	30231772.49	30898094.18
	400 mg	30566530*	155335.2	.000	30233368.82	30899690.51
	450 mg	30566623*	155335.2	.000	30233462.15	30899783.85
	500 mg	30566667*	155335.2	.000	30233505.82	30899827.51
250 mg	Kontrol Positif	-30267667*	155335.2	.000	-30600827.5	-29934505.8
	300 mg	269933.33	155335.2	.104	-63227.5144	603094.1810
	350 mg	297266.67	155335.2	.076	-35894.1810	630427.5144
	400 mg	298863.00	155335.2	.075	-34297.8477	632023.8477
	450 mg	298956.33	155335.2	.075	-34204.5144	632117.1810
	500 mg	299000.00	155335.2	.075	-34160.8477	632160.8477
300 mg	Kontrol Positif	-30537600*	155335.2	.000	-30870760.8	-30204439.2
	250 mg	-269933.33	155335.2	.104	-603094.1810	63227.5144
	350 mg	27333.333	155335.2	.863	-305827.5144	360494.1810
	400 mg	28929.667	155335.2	.855	-304231.1810	362090.5144
	450 mg	29023.000	155335.2	.854	-304137.8477	362183.8477
	500 mg	29066.667	155335.2	.854	-304094.1810	362227.5144
350 mg	Kontrol Positif	-30564933*	155335.2	.000	-30898094.2	-30231772.5
	250 mg	-297266.67	155335.2	.076	-630427.5144	35894.1810
	300 mg	-27333.333	155335.2	.863	-360494.1810	305827.5144
	400 mg	1596.33333	155335.2	.992	-331564.5144	334757.1810
	450 mg	1689.66667	155335.2	.991	-331471.1810	334850.5144
	500 mg	1733.33333	155335.2	.991	-331427.5144	334894.1810
400 mg	Kontrol Positif	-30566530*	155335.2	.000	-30899690.5	-30233368.8
	250 mg	-298863.00	155335.2	.075	-632023.8477	34297.8477
	300 mg	-28929.667	155335.2	.855	-362090.5144	304231.1810
	350 mg	-1596.3333	155335.2	.992	-334757.1810	331564.5144
	450 mg	93.33333	155335.2	1.000	-333067.5144	333254.1810
	500 mg	137.00000	155335.2	.999	-333023.8477	333297.8477
450 mg	Kontrol Positif	-30566623*	155335.2	.000	-30899783.8	-30233462.2
	250 mg	-298956.33	155335.2	.075	-632117.1810	34204.5144
	300 mg	-29023.000	155335.2	.854	-362183.8477	304137.8477
	350 mg	-1689.6667	155335.2	.991	-334850.5144	331471.1810
	400 mg	-93.33333	155335.2	1.000	-333254.1810	333067.5144
	500 mg	43.66667	155335.2	1.000	-333117.1810	333204.5144
500 mg	Kontrol Positif	-30566667*	155335.2	.000	-30899827.5	-30233505.8
	250 mg	-299000.00	155335.2	.075	-632160.8477	34160.8477
	300 mg	-29066.667	155335.2	.854	-362227.5144	304094.1810
	350 mg	-1733.3333	155335.2	.991	-334894.1810	331427.5144
	400 mg	-137.00000	155335.2	.999	-333297.8477	333023.8477
	450 mg	-43.66667	155335.2	1.000	-333204.5144	333117.1810

*. The mean difference is significant at the .05 level.

Aktivitas_penghambatan

Tukey HSD [a]

Konsentrasi	N	Subset for alpha = .05	
		1	2
500 mg	3	.0000	
450 mg	3	43.6667	
400 mg	3	137.0000	
350 mg	3	1733.3333	
300 mg	3	29066.67	
250 mg	3	299000.0	
Kontrol Positif	3		3E+007
Sig.		.497	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

- Notasi LSD/BNT Pengaruh Ekstrak Daun Binahong Terhadap Bakteri *Staphylococcus aureus*

Konsentrasi ekstrak daun Binahong (*Anredera cordifolia* (Ten) Steenis)	Rerata Rerata jumlah koloni bakteri *Staphylococcus aureus* per ml (10^6)
50 %(500 mg/ml)	0,000 a
45% (450 mg/ml)	43,667 a
40%(400 mg/ml)	137,000 a
35% (350 mg/ml)	1733,333 a
30% (300 mg/ml)	29066,670 a
25%(250 mg/ml)	299000,000 b
Kontrol positif	30566667 b

Keterangan: Angka yang diikuti notasi huruf yang sama tidak berbeda nyata pada uji LSD/BNT

B. Bakteri *Pseudomonas aeruginosa*

One-Sample Kolmogorov-Smirnov Test

			Standardized Residual
N			21
Normal Parameters	a,b	Mean	.0000000
		Std. Deviation	.97467943
Most Extreme Differences		Absolute	.124
		Positive	.124
		Negative	-.106
Kolmogorov-Smirnov Z			.568
Asymp. Sig. (2-tailed)			.904

a. Test distribution is Normal.

b. Calculated from data.

Test of Homogeneity of Variances

Aktivitas_penghambatan

Levene Statistic	df1	df2	Sig.
11.325	6	14	.096

Oneway

Descriptives

Aktivitas_penghambatan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Kontrol Positif	3	3E+007	1682260.384	971253.5	27221033.54	35578966.46	30100000	33300000
500 mg	3	275000.0	19078.78403	11015.14	227605.6731	322394.3269	257000.0	295000.0
600 mg	3	26433.33	1628.90556	940.44907	22386.9076	30479.7591	25300.00	28300.00
700 mg	3	1690.0000	70.00000	40.41452	1516.1104	1863.8896	1620.00	1760.00
800 mg	3	1246.6667	90.73772	52.38745	1021.2617	1472.0717	1180.00	1350.00
900 mg	3	64.6667	10.96966	6.33333	37.4165	91.9168	56.00	77.00
1000 mg	3	.0000	.00000	.00000	.0000	.0000	.00	.00
Total	21	4529205	11253848.39	2455791	-593485.4162	9651895.321	.00	33300000

ANOVA

Aktivitas_penghambatan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.5E+015	6	4.212E+014	1041.753	.000
Within Groups	5.7E+012	14	4.043E+011		
Total	2.5E+015	20			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Aktivitas_penghambatan

LSD

(I) Konsentrasi	(J) Konsentrasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Positif	500 mg	31125000*	519190.5	.000	30011447.22	32238552.78
	600 mg	31373567*	519190.5	.000	30260013.89	32487119.45
	700 mg	31398310*	519190.5	.000	30284757.22	32511862.78
	800 mg	31398753*	519190.5	.000	30285200.55	32512306.11
	900 mg	31399935*	519190.5	.000	30286382.55	32513488.11
	1000 mg	31400000*	519190.5	.000	30286447.22	32513552.78
500 mg	Kontrol Positif	-31125000*	519190.5	.000	-32238552.8	-30011447.2
	600 mg	248566.67	519190.5	.640	-864986.1130	1362119.446
	700 mg	273310.00	519190.5	.607	-840242.7797	1386862.780
	800 mg	273753.33	519190.5	.606	-839799.4463	1387306.113
	900 mg	274935.33	519190.5	.605	-838617.4463	1388488.113
	1000 mg	275000.00	519190.5	.605	-838552.7797	1388552.780
600 mg	Kontrol Positif	-31373567*	519190.5	.000	-32487119.4	-30260013.9
	500 mg	-248566.67	519190.5	.640	-1362119.45	864986.1130
	700 mg	24743.333	519190.5	.963	-1088809.45	1138296.113
	800 mg	25186.667	519190.5	.962	-1088366.11	1138739.446
	900 mg	26368.667	519190.5	.960	-1087184.11	1139921.446
	1000 mg	26433.333	519190.5	.960	-1087119.45	1139986.113
700 mg	Kontrol Positif	-31398310*	519190.5	.000	-32511862.8	-30284757.2
	500 mg	-273310.00	519190.5	.607	-1386862.78	840242.7797
	600 mg	-24743.333	519190.5	.963	-1138296.11	1088809.446
	800 mg	443.33333	519190.5	.999	-1113109.45	1113996.113
	900 mg	1625.33333	519190.5	.998	-1111927.45	1115178.113
	1000 mg	1690.00000	519190.5	.997	-1111862.78	1115242.780
800 mg	Kontrol Positif	-31398753*	519190.5	.000	-32512306.1	-30285200.6
	500 mg	-273753.33	519190.5	.606	-1387306.11	839799.4463
	600 mg	-25186.667	519190.5	.962	-1138739.45	1088366.113
	700 mg	-443.33333	519190.5	.999	-1113996.11	1113109.446
	900 mg	1182.00000	519190.5	.998	-1112370.78	1114734.780
	1000 mg	1246.66667	519190.5	.998	-1112306.11	1114799.446
900 mg	Kontrol Positif	-31399935*	519190.5	.000	-32513488.1	-30286382.6
	500 mg	-274935.33	519190.5	.605	-1388488.11	838617.4463
	600 mg	-26368.667	519190.5	.960	-1139921.45	1087184.113
	700 mg	-1625.3333	519190.5	.998	-1115178.11	1111927.446
	800 mg	-1182.0000	519190.5	.998	-1114734.78	1112370.780
	1000 mg	64.66667	519190.5	1.000	-1113488.11	1113617.446
1000 mg	Kontrol Positif	-31400000*	519190.5	.000	-32513552.8	-30286447.2
	500 mg	-275000.00	519190.5	.605	-1388552.78	838552.7797
	600 mg	-26433.333	519190.5	.960	-1139986.11	1087119.446
	700 mg	-1690.0000	519190.5	.997	-1115242.78	1111862.780
	800 mg	-1246.6667	519190.5	.998	-1114799.45	1112306.113
	900 mg	-64.66667	519190.5	1.000	-1113617.45	1113488.113

*. The mean difference is significant at the .05 level.

Aktivitas_penghambatan

Tukey HSD [a]

Konsentrasi	N	Subset for alpha = .05	
		1	2
1000 mg	3	.0000	
900 mg	3	64.6667	
800 mg	3	1246.6667	
700 mg	3	1690.0000	
600 mg	3	26433.33	
500 mg	3	275000.0	
Kontrol Positif	3		3E+007
Sig.		.998	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

- Notasi LSD/BNT Pengaruh Ekstrak Daun Binahong Terhadap Bakteri *Pseudomonas aeruginosa*

Konsentrasi ekstrak daun Binahong (*Anredera cordifolia* (Ten) Steenis)	Rerata jumlah koloni bakteri *Pseudomonas aeruginosa* per ml (10^6)
100% (1000 mg/ml)	0,000 a
90% (900 mg/ml)	64,667 a
80% (800 mg/ml)	1246,667 a
70% (700 mg/ml)	1690,000 a
60% (600 mg/ml)	26433,333 a
50% (500 mg/ml)	275000,000 b
Kontrol positif (0%)	30100000 b

Keterangan: Angka yang diikuti notasi huruf yang sama tidak berbeda nyata pada uji LSD/BNT

Lampiran 8:

Uji Korelasi dan Regresi Linear

- **Jumlah Koloni Bakteri *Staphylococcus aureus* per ml (10^6 sel/ml)**

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
jumlah koloni per ml	4413806.8096	11532848.35098	7
konsentrasi ekstrak	321.43	165.472	7

Correlations

		jumlah koloni per ml	konsentrasi ekstrak
Pearson Correlation	Jumlah koloni per ml	1.000	-.860
	Konsentrasi ekstrak	-.860	1.000
Sig. (1-tailed)	Jumlah koloni per ml	.	.007
	Konsentrasi ekstrak	.007	.
N	Jumlah koloni per ml	7	7
	Konsentrasi ekstrak	7	7

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	konsentrasi ekstrak(a)	.	Enter

a All requested variables entered.

b Dependent Variable: jumlah koloni per ml

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860(a)	.740	.687	6447290.53985

a Predictors: (Constant), konsentrasi ekstrak

b Dependent Variable: jumlah koloni per ml

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	590201769993654.000	1	590201769993654.000	14.199	.013(a)
	Residual	207837776526242.700	5	41567555305248.540		
	Total	798039546519896.000	6			

a Predictors: (Constant), konsentrasi ekstrak

b Dependent Variable: jumlah koloni per ml

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23679508.515	5663859.902		4.181	.009
	konsentrasi ekstrak	-59937.739	15906.599	-.860	-3.768	.013

a Dependent Variable: jumlah koloni per ml

- **Jumlah Koloni Bakteri *Pseudomonas aeruginosa* per ml (10^6 sel/ml)**

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
jumlah koloni bakteri Pseudomonas per ml	4529204.9524	11849335.04204	7
konsentrasi ekstrak daun binahong	642.86	330.944	7

Correlations

		jumlah koloni bakteri Pseudomonas per ml	konsentrasi ekstrak daun binahong
Pearson Correlation	jumlah koloni bakteri Pseudomonas per ml	1.000	-.860
	konsentrasi ekstrak daun binahong	-.860	1.000
Sig. (1-tailed)	jumlah koloni bakteri Pseudomonas per ml	.	.007
	konsentrasi ekstrak daun binahong	.007	.
N	jumlah koloni bakteri Pseudomonas per ml	7	7
	konsentrasi ekstrak daun binahong	7	7

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	konsentrasi ekstrak daun binahong(a)	.	Enter

a All requested variables entered.

b Dependent Variable: jumlah koloni bakteri Pseudomonas per ml

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860(a)	.739	.687	6632064.48501

a Predictors: (Constant), konsentrasi ekstrak daun binahong

b Dependent Variable: jumlah koloni bakteri Pseudomonas per ml

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	622519048964475.000	1	622519048964475.000	14.153	.013(a)
	Residual	219921396666417.400	5	43984279333283.490		
	Total	842440445630892.000	6			

a Predictors: (Constant), konsentrasi ekstrak daun binahong

b Dependent Variable: jumlah koloni bakteri Pseudomonas per ml

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24315336.884	5826181.381		4.173	.009
	konsentrasi ekstrak daun binahong	-30778.427	8181.235	-.860	-3.762	.013

a Dependent Variable: jumlah koloni bakteri Pseudomonas per ml

Lampiran 9

- **Pengaruh Konsentrasi Ekstrak daun Binahong dengan Penurunan 99,9% Asal Sub Biakan (0%) Pada Kedua Bakteri Uji**

1. Kadar Bunuh Minimum Ekstrak Daun Binahong *Anredera cordifolia* (Ten) Steenis pada bakteri *Staphylococcus aureus* per ml (10^6 sel/ml) dengan penurunan 99,9% asal sub biakan 0% (kontrol)

Konsentrasi	Ulangan			Total	Rerata	%	KBM
	I	II	III				
Kontrol Positif	30100000	31100000	30500000	91700000	30566667	100	0
250 mg	300000	303000	294000	897000	299000	0.974277	99.02572
300 mg	29700	28500	29000	87200	29066.67	0.09164	99.90836
350 mg	1860	1790	1550	5200	1733.333	0.005756	99.99424
400 mg	144	129	138	411	137	0.000415	99.99959
450 mg	37	51	43	131	43.66667	0.000164	99.99984
500 mg	0	0	0	0	0	0	100
Total	30431741	31433470	30824731	92689942	30896647	0	0

2. Kadar Bunuh Minimum Ekstrak Daun Binahong *Anredera cordifolia* (Ten) Steenis pada bakteri *Pseudomonas aureginosa* per ml (10^6 sel/ml) dengan penurunan 99,9% asal sub biakan 0% (kontrol)

Konsentrasi	Ulangan			Total	Rerata	%	KBM
	I	II	III				
Kontrol Positif	30800000	33300000	30100000	94200000	31400000	100	0
500 mg	295000	273000	257000	825000	275000	0.875796	99.1242
600 mg	25300	25700	28300	79300	26433.33	0.084183	99.91582
700 mg	1620	1690	1760	5070	1690	0.005382	99.99462
800 mg	1210	1180	1350	3740	1246.667	0.00397	99.99603
900 mg	56	61	77	194	64.66667	0.000206	99.99979
1000 mg	0	0	0	0	0	0	100
Total	31123186	33601631	30388487	95113304	31704435	0	0

Lampiran 10: Alat Dan Bahan Penelitian

Timbangan Analitik

Blender

Penyaring Buchner

Rotary Evaporator Vakum

Sheker

oven

Bahan-Bahan Penelitian

Alat-Alat Gelas Penelitian

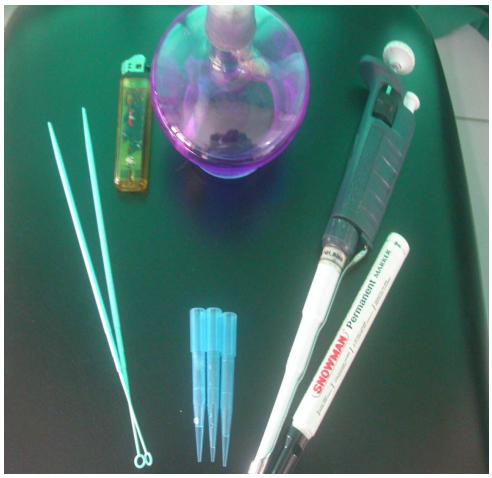
Inkubator

Autoklaf

Colony Counter

Vortek

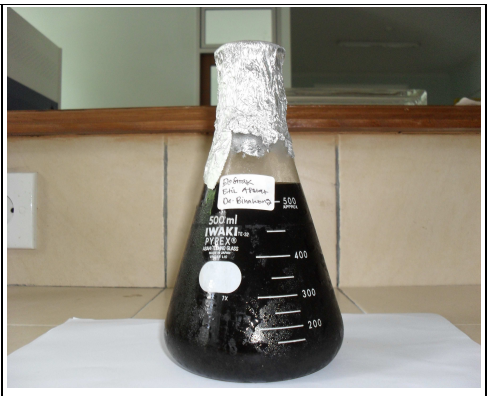
Hotplate/Stirrer



Alat Uji Antibakteri

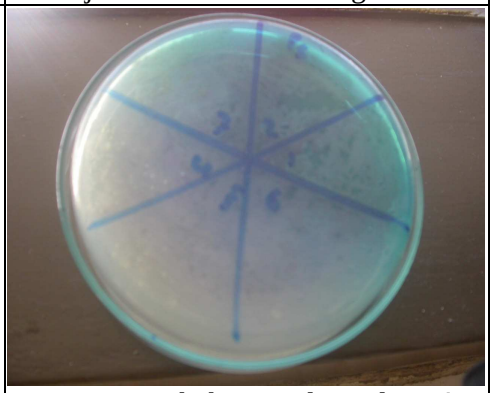
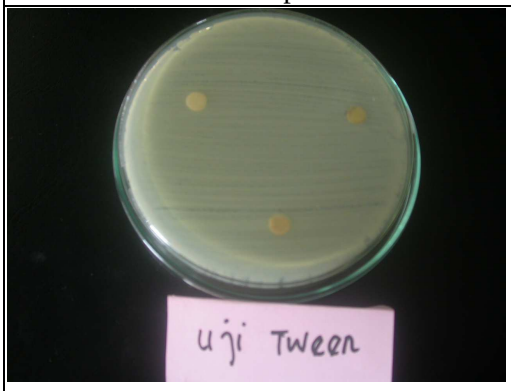
Lampiran 11.

Ekstraksi Secara Maserasi Daun Binahong *Anredera cordifolia (*Ten*)* Steenis.

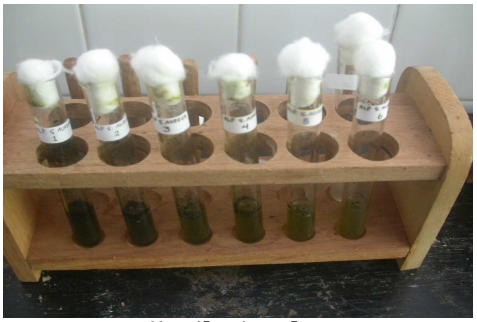
	
Serbuk Daun Binahong	Maserasi Ekstrak etil Asetat
	
Ekstrak Daun Binahong di Shaker	Penyaringan Ekstrak Daun Binahong
	
Ekstrak di Rotary Evaporator vakum	Ekstrak Pekat Etil Asetat Daun Binahong

Lampiran 12 :

A. Hasil Uji KHM (Konsentrasi hambat minimum)

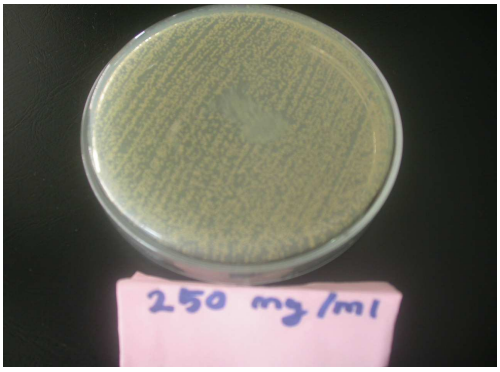
<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Uji dilusi bakteri S.aureus</td><td>Uji dilusi bakteri P.aureginosa</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Penanaman bakteri pada media NA</td><td>Penanaman bakteri pada media NA</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>Uji tween pada bakteri S.aureus</td><td>Uji tween pada bakteri P.aureginosa</td></tr>
</table>

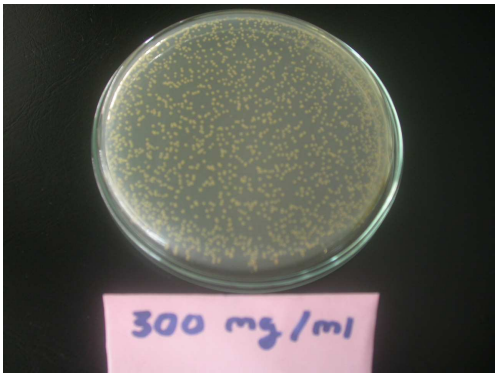
B. Hasil Uji kadar bunuh minimum (KBM) Bakteri *Staphylococcus aureus*

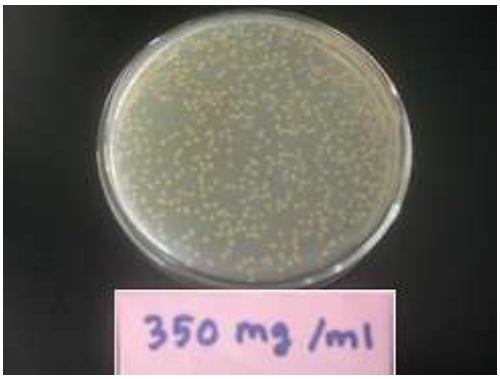


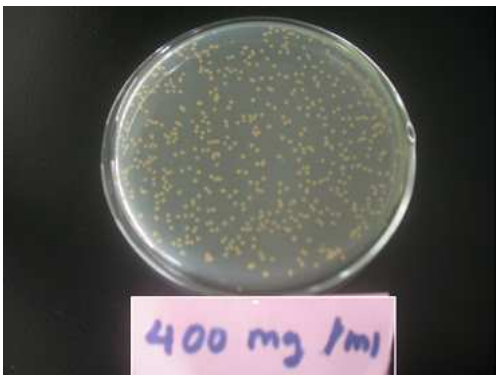
Uji Dilusi Tabung

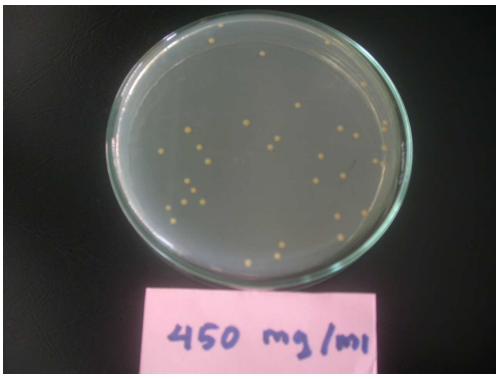
Kontrol positif

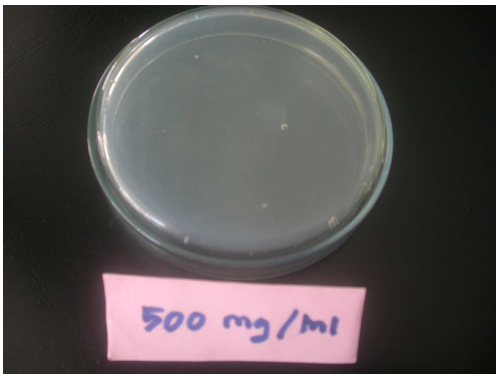












C.Hasil Uji kadar bunuh minimum (KBM) Bakteri *Pseudomonas aureginosa*