

Lampiran 1 : Pembuatan Infusa daun Sirih (IDS)

Penelitian ini menggunakan dosis dengan dasar penelitian Vivin K (2008) yang menggunakan ekstrak daun sirih dengan dosis 0,01% sampai 0,1%.

Diketahui : 240 gr serbuk simplicia daun sirih menghasilkan 15 gr ekstrak.

$$\frac{15 \text{ g}}{240 \text{ g}} \times 1000 \text{ g} = 62,5 \text{ g ekstrak / kg serbuk simplicia}$$

$$0,1\% = 0,1 \text{ gr ekstrak / 100 ml}$$

$$\frac{1000 \text{ g}}{62,5 \text{ g}} \times 0,1 \text{ gr} = 1,6 \text{ g}$$

Sehingga 0,1% ekstrak daun sirih mengandung 1,6 g zat tersuspensi dari 0,1 g simplicia daun sirih dalam 100 ml air.

Berdasarkan penelitian ini dibuat variasi dosis IDS 0,2%, 0,4%, 0,8%, dan 1,6%.

Prosedur pembuatan IDS sesuai Farmakope Indonesia, Edisi IV, Tahun 1995 Infusa daun sirih kadar 10 % dibuat sebagai berikut :

Daun sirih yang sudah kering, kemudian dihaluskan sampai derajat halus tertentu, selanjutnya ditimbang sebanyak 10 gram, ditambah air secukupnya, dipanaskan dalam pemanas air selama 15 menit, dihitung mulai suhu di dalam panci mencapai 90°C, sambil sesekali diaduk. Setelah dingin diserkai dengan kain flanel, kekurangan air ditambah dengan air mendidih .

Bahan uji IDS 0,2%, 0,4%, 0,8% dan 1,6% dibuat dari pengenceran IDS 10% :

$$V_{10\%} = 80 \text{ ml}$$

Jadi, IDS dosis 1,6% dibuat dari 80 ml IDS 10% ditambah aquades hingga volume 500 ml.

IDS dosis selanjutnya dibuat dengan cara pengenceran yang sama.

Dosis Temephos 0,0001% yang digunakan dalam penelitian didapat dari :

$$1 \text{ ppm} = 1 \text{ mg temephos di dalam 1.000 ml air.}$$

Berarti di dalam 100 ml dilarutkan 0,1 mg temephos

$$= 0,1 \text{ mg temephos di dalam 100 ml air}$$

$$= 0,0001 \text{ g temephos di dalam 100 ml air}$$

$$= 0,0001\%$$

Lampiran 2 :

Oneway

Pengamatan efek larvasida selama 24 jam

Descriptives

Persentase larva mati selama 24 jam

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Infus daun sirih 1.6 %	4	100,0000	,00000	,00000	100,0000	100,0000	100,00	100,00
Infus daun sirih 0.8 %	4	63,3333	2,72166	1,36083	59,0026	67,6641	60,00	66,67
Infus daun sirih 0.4 %	4	46,6667	2,72166	1,36083	42,3359	50,9974	43,33	50,00
Infus daun sirih 0.2 %	4	30,0000	2,72166	1,36083	25,6692	34,3308	26,67	33,33
Kontrol	4	,0000	,00000	,00000	,0000	,0000	,00	,00
Pembanding	4	84,1667	1,66667	,83333	81,5146	86,8187	83,33	86,67
Total	24	54,0278	34,07833	6,95621	39,6378	68,4178	,00	100,00

Test of Homogeneity of Variances

Persentase larva mati selama 24 jam

<i>Levene Statistic</i>	df1	df2	Sig.
1,376	5	18	,279

ANOVA

Persentase larva mati selama 24 jam

	<i>Sum of Squares</i>	df	<i>Mean Square</i>	F	<i>Sig.</i>
<i>Between Groups</i>	26635,648	5	5327,130	1278,511	,000
<i>Within Groups</i>	75,000	18	4,167		
<i>Total</i>	26710,648	23			

Lampiran 3 : Post Hoc Tests

Multiple Comparisons

Dependent Variable: Persentase larva mati selama 24 jam

Tukey HSD

(I) Kelompok Perlakuan	(J) Kelompok Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Infus daun sirih 1.6 %	Infus daun sirih 0.8 %	36,66667*	1,44338	,000	32,0796	41,2538
	Infus daun sirih 0.4 %	53,33333*	1,44338	,000	48,7462	57,9204
	Infus daun sirih 0.2 %	70,00000*	1,44338	,000	65,4129	74,5871
	Kontrol	100,00000*	1,44338	,000	95,4129	104,5871
	Pembanding	15,83333*	1,44338	,000	11,2462	20,4204
Infus daun sirih 0.8 %	Infus daun sirih 1.6 %	-36,66667*	1,44338	,000	-41,2538	-32,0796
	Infus daun sirih 0.4 %	16,66667*	1,44338	,000	12,0796	21,2538
	Infus daun sirih 0.2 %	33,33333*	1,44338	,000	28,7462	37,9204
	Kontrol	63,33333*	1,44338	,000	58,7462	67,9204
	Pembanding	-20,83333*	1,44338	,000	-25,4204	-16,2462
Infus daun sirih 0.4 %	Infus daun sirih 1.6 %	-53,33333*	1,44338	,000	-57,9204	-48,7462
	Infus daun sirih 0.8 %	-16,66667*	1,44338	,000	-21,2538	-12,0796
	Infus daun sirih 0.2 %	16,66667*	1,44338	,000	12,0796	21,2538
	Kontrol	46,66667*	1,44338	,000	42,0796	51,2538
	Pembanding	-37,50000*	1,44338	,000	-42,0871	-32,9129
Infus daun sirih 0.2 %	Infus daun sirih 1.6 %	-70,00000*	1,44338	,000	-74,5871	-65,4129
	Infus daun sirih 0.8 %	-33,33333*	1,44338	,000	-37,9204	-28,7462
	Infus daun sirih 0.4 %	-16,66667*	1,44338	,000	-21,2538	-12,0796
	Kontrol	30,00000*	1,44338	,000	25,4129	34,5871
	Pembanding	-54,16667*	1,44338	,000	-58,7538	-49,5796
Kontrol	Infus daun sirih 1.6 %	-100,00000*	1,44338	,000	-104,5871	-95,4129
	Infus daun sirih 0.8 %	-63,33333*	1,44338	,000	-67,9204	-58,7462
	Infus daun sirih 0.4 %	-46,66667*	1,44338	,000	-51,2538	-42,0796
	Infus daun sirih 0.2 %	-30,00000*	1,44338	,000	-34,5871	-25,4129
	Pembanding	-84,16667*	1,44338	,000	-88,7538	-79,5796
Pembanding	Infus daun sirih 1.6 %	-15,83333*	1,44338	,000	-20,4204	-11,2462
	Infus daun sirih 0.8 %	20,83333*	1,44338	,000	16,2462	25,4204
	Infus daun sirih 0.4 %	37,50000*	1,44338	,000	32,9129	42,0871
	Infus daun sirih 0.2 %	54,16667*	1,44338	,000	49,5796	58,7538
	Kontrol	84,16667*	1,44338	,000	79,5796	88,7538

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

Lampiran 4 :
Homogeneous Subsets

Persentase larva mati selama 24 jam

Tukey HSD^a

Kelompok Perlakuan	N	Subset for alpha = .05					
		1	2	3	4	5	6
Kontrol	4	,0000					
Infus daun sirih 0.2 %	4		30,0000				
Infus daun sirih 0.4 %	4			46,6667			
Infus daun sirih 0.8 %	4				63,3333		
Pembanding	4					84,1667	
Infus daun sirih 1.6 %	4						100,0000
<i>Sig.</i>		1,000	1,000	1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

^a. Uses Harmonic Mean Sample Size = 4,000.

Lampiran 5 :

Oneway

Pengamatan efek larvasida selama 48 jam

Descriptives

Persentase Larva Hidup Selama 48 Jam (IDS)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
IDS 0.2 %	4	36.6667	2.72166	1.36083	32.3359	40.9974	33.33	40.00
IDS 0.4 %	4	26.6667	2.72166	1.36083	22.3359	30.9974	23.33	30.00
IDS 0.8 %	4	16.6667	2.72166	2.72166	1.36083	32.3359	41.00	33.33
IDS 1.6 %	4	.0000	.00000	2.72166	1.36083	22.3359	31.00	23.33
Kontrol	4	100.0000	.00000	2.72166	1.36083	12.3359	21.00	13.33
Pembanding	4	36.6667	2.72166	.00000	.00000	.0000	.0000	.00
Total	4	26.6667	2.72166	.00000	.00000	100.0000	100.0	100.0

ANOVA

Persentase Larva Hidup Selama 48 Jam (IDS)

	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Between Groups</i>	25964.815	5	5192.963	1201.800	.000
<i>Within Groups</i>	77.778	18	4.321		
<i>Total</i>	26042.593	23			

Lampiran 6 :
Post Hoc Tests

Multiple Comparisons

Dependent Variable: Persentase Larva Hidup Selama 48 Jam (IDS)

Tukey HSD

(I) Kelompok Perlakuan	(J) Kelompok Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
IDS 0.2 %	IDS 0.4 %	10.00000*	1.46986	.000	5.3287	14.6713
	IDS 0.8 %	20.00000*	1.46986	.000	15.3287	24.6713
	IDS 1.6 %	36.66667*	1.46986	.000	31.9954	41.3379
	Kontrol	-63.33333*	1.46986	.000	-68.0046	-58.6621
	Pembanding	28.33333*	1.46986	.000	23.6621	33.0046
IDS 0.4 %	IDS 0.2 %	-10.00000*	1.46986	.000	-14.6713	-5.3287
	IDS 0.8 %	10.00000*	1.46986	.000	5.3287	14.6713
	IDS 1.6 %	26.66667*	1.46986	.000	21.9954	31.3379
	Kontrol	-73.33333*	1.46986	.000	-78.0046	-68.6621
	Pembanding	18.33333*	1.46986	.000	13.6621	23.0046
IDS 0.8 %	IDS 0.2 %	-20.00000*	1.46986	.000	-24.6713	-15.3287
	IDS 0.4 %	-10.00000*	1.46986	.000	-14.6713	-5.3287
	IDS 1.6 %	16.66667*	1.46986	.000	11.9954	21.3379
	Kontrol	-83.33333*	1.46986	.000	-88.0046	-78.6621
	Pembanding	8.33333*	1.46986	.000	3.6621	13.0046
IDS 1.6 %	IDS 0.2 %	-36.66667*	1.46986	.000	-41.3379	-31.9954
	IDS 0.4 %	-26.66667*	1.46986	.000	-31.3379	-21.9954
	IDS 0.8 %	-16.66667*	1.46986	.000	-21.3379	-11.9954
	Kontrol	-100.00000*	1.46986	.000	-104.6713	-95.3287
	Pembanding	-8.33333*	1.46986	.000	-13.0046	-3.6621
Kontrol	IDS 0.2 %	63.33333*	1.46986	.000	58.6621	68.0046
	IDS 0.4 %	73.33333*	1.46986	.000	68.6621	78.0046
	IDS 0.8 %	83.33333*	1.46986	.000	78.6621	88.0046
	IDS 1.6 %	100.00000*	1.46986	.000	95.3287	104.6713
	Pembanding	91.66667*	1.46986	.000	86.9954	96.3379
Pembanding	IDS 0.2 %	-28.33333*	1.46986	.000	-33.0046	-23.6621
	IDS 0.4 %	-18.33333*	1.46986	.000	-23.0046	-13.6621
	IDS 0.8 %	-8.33333*	1.46986	.000	-13.0046	-3.6621
	IDS 1.6 %	8.33333*	1.46986	.000	3.6621	13.0046
	Kontrol	-91.66667*	1.46986	.000	-96.3379	-86.9954

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

Lampiran 7 :

Homogeneous Subsets

Persentase Larva Hidup Selama 48 Jam (IDS)

Tukey HSD^a

Kelompok Perlakuan	N	Subset for alpha = .05					
		1	2	3	4	5	6
IDS 1.6 %	4	.0000					
Pembanding	4		8.3333				
IDS 0.8 %	4			16.6667			
IDS 0.4 %	4				26.6667		
IDS 0.2 %	4					36.6667	
Kontrol	4						100.0000
Sig.		1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Lampiran 8 :

***** PROBIT ANALYSIS *****
 DATA Information

16 unweighted cases accepted.
 0 cases rejected because of missing data.
 0 cases are in the control group.

MODEL Information
 ONLY Normal Sigmoid is requested.

***** PROBIT ANALYSIS *****

Parameter estimates converged after 12 iterations.
 Optimal solution found.

Parameter Estimates (PROBIT model: (PROBIT(p)) = Intercept + BX):

	Regression Coeff.	Standard Error	Coeff./S.E.
dosisIDS	1.87625	.18947	9.90272
Intercept		Standard Error	Intercept/S.E.
	-.93640	.12012	-7.79531

Pearson Goodness-of-Fit Chi Square = 8.004 DF = 14 P = .889

Since Goodness-of-Fit Chi square is NOT significant, no heterogeneity factor is used in the calculation of confidence limits.

***** PROBIT ANALYSIS *****

Observed and Expected Frequencies

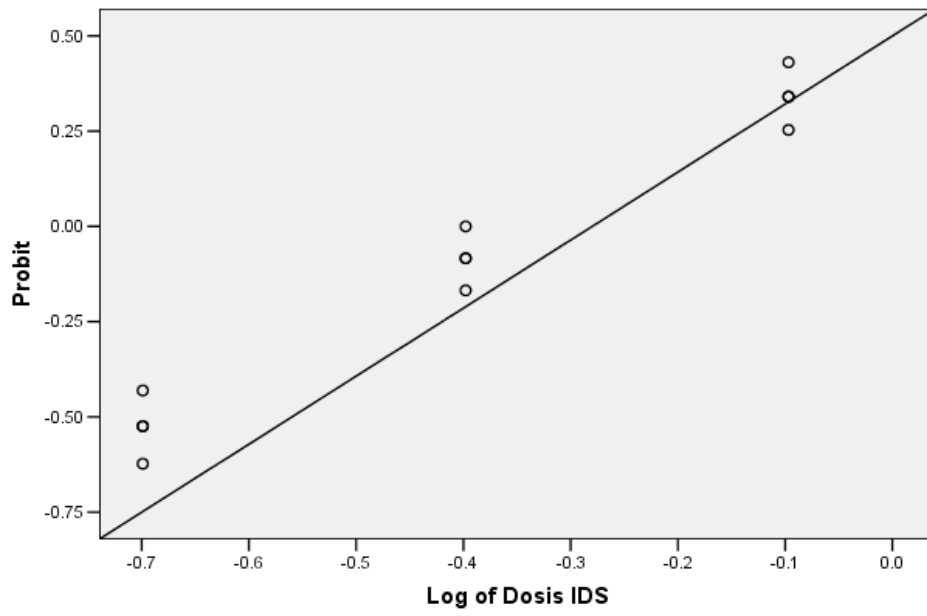
dosisIDS	Number of Observed Subjects	Expected Responses	Expected Responses	Residual	Prob
.20	30.0	9.0	8.620	.380	.28735
.20	30.0	10.0	8.620	1.380	.28735
.20	30.0	9.0	8.620	.380	.28735
.20	30.0	8.0	8.620	-.620	.28735
.40	30.0	15.0	12.788	2.212	.42626
.40	30.0	13.0	12.788	.212	.42626
.40	30.0	14.0	12.788	1.212	.42626
.40	30.0	14.0	12.788	1.212	.42626
.80	30.0	20.0	21.415	-1.415	.71382
.80	30.0	19.0	21.415	-2.415	.71382
.80	30.0	19.0	21.415	-2.415	.71382
.80	30.0	18.0	21.415	-3.415	.71382
1.60	30.0	30.0	29.417	.583	.98057
1.60	30.0	30.0	29.417	.583	.98057
1.60	30.0	30.0	29.417	.583	.98057
1.60	30.0	30.0	29.417	.583	.98057

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Confidence Limits for Effective dosisIDS

Prob	dosisIDS	95% Confidence Limits	
		Lower	Upper
.01	-.74081	-1.06341	-.52171
.02	-.59552	-.88343	-.39926
.03	-.50334	-.76940	-.32141
.04	-.43400	-.68372	-.26274
.05	-.37759	-.61411	-.21494
.06	-.32958	-.55493	-.17419
.07	-.28748	-.50309	-.13840
.08	-.24979	-.45674	-.10630
.09	-.21551	-.41462	-.07706
.10	-.18396	-.37590	-.05010
.15	-.05331	-.21618	.06213
.20	.05052	-.09019	.15226
.25	.13959	.01688	.23061
.30	.21959	.11186	.30214
.35	.29372	.19846	.36984
.40	.36406	.27892	.43579
.45	.43211	.35470	.50167
.50	.49908	.42687	.56891
.55	.56606	.49641	.63878
.60	.63411	.56439	.71246
.65	.70445	.63212	.79115
.70	.77858	.70124	.87632
.75	.85857	.77388	.97019
.80	.94765	.85309	1.07640
.85	1.05148	.94389	1.20173
.90	1.18212	1.05665	1.36091
.91	1.21368	1.08371	1.39953
.92	1.24796	1.11304	1.44155
.93	1.28565	1.14523	1.48782
.94	1.32775	1.18111	1.53957
.95	1.37576	1.22195	1.59866
.96	1.43216	1.26984	1.66818
.97	1.50151	1.32860	1.75377
.98	1.59369	1.40655	1.86770
.99	1.73898	1.52911	2.04756

Probit Transformed Responses



RIWAYAT HIDUP

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