

LAMPIRAN

Lampiran 1. Kode Etik Penelitian



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 559/EP-FKIK-UMY/X/2017

KETERANGAN LOLOS Uji ETIK ETHICAL APPROVAL

Komite Etik Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta dalam upaya melindungi hak asasi dan kesejahteraan responden/subyek penelitian, telah mengkaji dengan teliti protokol berjudul :

The Ethics Committee of the Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, with regards of the protection of human rights and welfare in research, has carefully reviewed the research protocol entitled :

**"Perbandingan Efek Analgesik Ekstrak Etanol Kelopak Bunga Matahari
(Helianthus Annuus L.) dengan Ekstrak Etanol Daun Pepaya (Carica Papaya L.)
Pada Mencit yang Diinduksi Asam Asetat 1%"**

Peneliti Utama : Nolim Istiqomah Mubalikah
Principal Investigator

Nama Institusi : Program Studi Pendidikan Dokter FKIK UMY.
Name of the Institution

Negara : Indonesia
Country

Dan telah menyetujui protokol tersebut diatas.
And approved the above-mentioned protocol.

Yogyakarta, 18 Oktober 2017



Sekretaris

Dr.-dr. Titiek Hidayati, M.Kes.

***Peneliti Berkewajiban :**

1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila :
 - a. Setelah masa berlakunya keterangan lolos uji etik, penelitian masih belum selesai, dalam hal ini *ethical clearance* harus diperpanjang
 - b. Penelitian berhenti di tengah jalan
3. Melaporkan kejadian serius yang tidak diinginkan (*serious adverse events*)
4. Peneliti tidak boleh melakukan tindakan apapun pada responden/subyek sebelum penelitian lolos uji etik

Kampus:

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183
Telp. (0274) 387656 ext. 213, 7491350 Fax. (0274) 387658

Muda mendunia

Lampiran 2. Analisis Data

1. Hasil Uji Normalitas Data Menggunakan *Shapiro Wilk*

Tests of Normality

Kelompok perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah_geliat Ekstrak etanol daun pepaya	.163	24	.100	.942	24	.178
Ekstrak etanol kelopak bunga matahari	.115	24	.200*	.968	24	.619
Kontrol Positif	.120	24	.200*	.973	24	.734
Kontrol Negatif	.087	24	.200*	.963	24	.508

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

a. Lilliefors Significance Correction

a. Uji normalitas kelompok perlakuan pemberian ekstrak etanol daun pepaya (*Carica papaya* L.)

Tests of Normality

Menit Ke-	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah geliat Menit 30	.201	6	.200*	.902	6	.387
Menit 60	.258	6	.200*	.940	6	.659
Menit 90	.213	6	.200*	.911	6	.445
Menit 120	.279	6	.159	.838	6	.126

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

a. Lilliefors Significance Correction

b. Uji normalitas kelompok perlakuan pemberian ekstrak etanol kelopak bunga matahari (*Helianthus annuus* L.)

Tests of Normality

Menit Ke-	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah geliat Menit 30	.246	5	.200*	.956	5	.777
Menit 60	.258	6	.200*	.940	6	.659
Menit 90	.204	6	.200*	.955	6	.783
Menit 120	.182	6	.200*	.921	6	.515

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

a. Lilliefors Significance Correction

c. Kontrol positif

Tests of Normality

Menit Ke-	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah geliat Menit 30	.169	6	.200*	.968	6	.880
Menit 60	.221	6	.200*	.941	6	.666
Menit 90	.213	6	.200*	.905	6	.406
Menit 120	.235	6	.200*	.864	6	.204

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

a. Lilliefors Significance Correction

d. Kontrol negatif

Tests of Normality

Menit Ke-	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah geliat Menit 30	.225	6	.200*	.915	6	.472
Menit 60	.232	6	.200*	.874	6	.243
Menit 90	.226	6	.200*	.837	6	.122
Menit 120	.269	6	.200*	.920	6	.505

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

a. Lilliefors Significance Correction

2. Uji Homogenitas Levene Test

Test of Homogeneity of Variances

Jumlah_geliat

Levene Statistic	df1	df2	Sig.
2.085	3	92	.108

3. Uji Parametrik *One Way ANOVA*

ANOVA

Jumlah_geliat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1832.167	3	610.722	36.957	.000
Within Groups	1520.333	92	16.525		
Total	3352.500	95			

Descriptives

Jumlah_geliat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
kelompok ekstrak etanol daun pepaya	24	6.0833	3.61057	.73700	4.5587	7.6079	.00	12.00
kelompok ekstrak etanol kelopak bunga matahari	24	7.1667	3.40928	.69592	5.7271	8.6063	1.00	14.00
kelompok paracetamol	24	8.1667	3.57122	.72897	6.6587	9.6747	1.00	16.00
kelompok aquades	24	17.0833	6.91512	1.41154	14.1633	20.0033	3.00	35.00
Total	96	9.6250	6.31831	.64486	8.3448	10.9052	.00	35.00

Multiple Comparisons

Dependent Variable: Jumlah_geliat

Tukey HSD

(I) Kelompok perlakuan	(J) Kelompok perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
kelompok ekstrak etanol daun pepaya	kelompok ekstrak etanol kelopak bunga matahari	-1.08333	1.17350	.793	-4.1539	1.9873
	kelompok paracetamol	-2.08333	1.17350	.292	-5.1539	.9873
	kelompok aquades	-11.00000*	1.17350	.000	-14.0706	-7.9294
kelompok ekstrak etanol kelopak bunga matahari	kelompok ekstrak etanol daun pepaya	1.08333	1.17350	.793	-1.9873	4.1539
	kelompok paracetamol	-1.00000	1.17350	.829	-4.0706	2.0706
	kelompok aquades	-9.91667*	1.17350	.000	-12.9873	-6.8461
kelompok paracetamol	kelompok ekstrak etanol daun pepaya	2.08333	1.17350	.292	-.9873	5.1539
	kelompok ekstrak etanol kelopak bunga matahari	1.00000	1.17350	.829	-2.0706	4.0706
	kelompok aquades	-8.91667*	1.17350	.000	-11.9873	-5.8461
kelompok aquades	kelompok ekstrak etanol daun pepaya	11.00000*	1.17350	.000	7.9294	14.0706
	kelompok ekstrak etanol kelopak bunga matahari	9.91667*	1.17350	.000	6.8461	12.9873
	kelompok paracetamol	8.91667*	1.17350	.000	5.8461	11.9873

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

- **Kelompok perlakuan pemberian ekstrak etanol daun papaya (*Carica papaya* L.)**

Descriptives

Menit Ke-				Statistic	Std. Error
Jumlah geliat	Menit 30	Mean		5.8333	1.40040
		95% Confidence Interval for Mean	Lower Bound	2.2335	
			Upper Bound	9.4332	
		5% Trimmed Mean		5.8148	
		Median		6.0000	
		Variance		11.767	
		Std. Deviation		3.43026	
		Minimum		2.00	
		Maximum		10.00	
		Range		8.00	
		Interquartile Range		7.25	
		Skewness		-.056	.845
		Kurtosis		-2.023	1.741
			Menit 60	Mean	
95% Confidence Interval for Mean	Lower Bound			.2249	
	Upper Bound			4.7751	
5% Trimmed Mean				2.4444	
Median				2.0000	
Variance				4.700	
Std. Deviation				2.16795	
Minimum				.00	
Maximum				6.00	
Range				6.00	
Interquartile Range				3.75	
Skewness				.795	.845
Kurtosis				.068	1.741
	Menit 90			Mean	
		95% Confidence Interval for Mean	Lower Bound	3.9850	
			Upper Bound	9.6817	
		5% Trimmed Mean		6.9259	
		Median		7.5000	
		Variance		7.367	
		Std. Deviation		2.71416	
		Minimum		2.00	
		Maximum		10.00	
		Range		8.00	
		Interquartile Range		3.50	
		Skewness		-1.179	.845
		Kurtosis		2.141	1.741
			Menit 120	Mean	
95% Confidence Interval for Mean	Lower Bound			6.0951	
	Upper Bound			12.2382	
5% Trimmed Mean				9.2407	
Median				10.5000	
Variance				8.567	
Std. Deviation				2.92689	
Minimum				5.00	
Maximum				12.00	
Range				7.00	
Interquartile Range				5.50	
Skewness				-.819	.845
Kurtosis				-1.581	1.741

- **Kelompok perlakuan pemberian ekstrak etanol kelopak bunga matahari (*Helianthus annuus* L.)**

Descriptives

Menit Ke-			Statistic	Std. Error
Jumlah geliat	Menit 30	Mean	4.2000	.66332
		95% Confidence Interval for Mean	2.3583	
		Lower Bound	6.0417	
		Upper Bound		
		5% Trimmed Mean	4.2222	
		Median	4.0000	
		Variance	2.200	
		Std. Deviation	1.48324	
		Minimum	2.00	
		Maximum	6.00	
		Range	4.00	
		Interquartile Range	2.50	
		Skewness	-.552	.913
		Kurtosis	.868	2.000
	Menit 60	Mean	7.5000	.88506
		95% Confidence Interval for Mean	5.2249	
		Lower Bound	9.7751	
		Upper Bound		
		5% Trimmed Mean	7.5556	
		Median	8.0000	
		Variance	4.700	
		Std. Deviation	2.16795	
		Minimum	4.00	
		Maximum	10.00	
		Range	6.00	
		Interquartile Range	3.75	
		Skewness	-.795	.845
		Kurtosis	.068	1.741
	Menit 90	Mean	10.0000	1.23828
		95% Confidence Interval for Mean	6.8169	
		Lower Bound	13.1831	
		Upper Bound		
		5% Trimmed Mean	10.0556	
		Median	10.0000	
		Variance	9.200	
		Std. Deviation	3.03315	
		Minimum	5.00	
		Maximum	14.00	
		Range	9.00	
		Interquartile Range	4.50	
		Skewness	-.581	.845
		Kurtosis	1.177	1.741
	Menit 120	Mean	7.5000	1.38444
		95% Confidence Interval for Mean	3.9412	
		Lower Bound	11.0588	
		Upper Bound		
		5% Trimmed Mean	7.3889	
		Median	7.5000	
		Variance	11.500	
		Std. Deviation	3.39116	
		Minimum	4.00	
		Maximum	13.00	
		Range	9.00	
		Interquartile Range	6.00	
		Skewness	.646	.845
		Kurtosis	.209	1.741

- **Kontrol positif**

Descriptives

Menit Ke-				Statistic	Std. Error	
Jumlah geliat	Menit 30	Mean		10.3333	1.60555	
		95% Confidence Interval for Mean	Lower Bound	6.2061		
			Upper Bound	14.4605		
		5% Trimmed Mean		10.3148		
		Median		11.0000		
		Variance		15.467		
		Std. Deviation		3.93277		
		Minimum		5.00		
		Maximum		16.00		
		Range		11.00		
		Interquartile Range		6.50		
		Skewness		.012		.845
		Kurtosis		-.459		1.741
			Menit 60	Mean		
95% Confidence Interval for Mean	Lower Bound			4.7618		
	Upper Bound			10.9049		
5% Trimmed Mean				7.8704		
Median				8.0000		
Variance				8.567		
Std. Deviation				2.92689		
Minimum				3.00		
Maximum				12.00		
Range				9.00		
Interquartile Range				3.75		
Skewness				-.473	.845	
Kurtosis				1.853	1.741	
	Menit 90			Mean		6.1667
		95% Confidence Interval for Mean	Lower Bound	1.8440		
			Upper Bound	10.4894		
		5% Trimmed Mean		6.1852		
		Median		5.5000		
		Variance		16.967		
		Std. Deviation		4.11906		
		Minimum		1.00		
		Maximum		11.00		
		Range		10.00		
		Interquartile Range		8.50		
		Skewness		.234	.845	
		Kurtosis		-1.614	1.741	
			Menit 120	Mean		8.3333
95% Confidence Interval for Mean	Lower Bound			5.5436		
	Upper Bound			11.1231		
5% Trimmed Mean				8.3704		
Median				8.5000		
Variance				7.067		
Std. Deviation				2.65832		
Minimum				5.00		
Maximum				11.00		
Range				6.00		
Interquartile Range				5.25		
Skewness				-.153	.845	
Kurtosis				-2.534	1.741	

- **Kontrol negatif**

Descriptives

Menit Ke-				Statistic	Std. Error	
Jumlah geliat	Menit 30	Mean		18.5000	2.23234	
		95% Confidence Interval for Mean	Lower Bound	12.7616		
			Upper Bound	24.2384		
		5% Trimmed Mean		18.6111		
		Median		17.5000		
		Variance		29.900		
		Std. Deviation		5.46809		
		Minimum		10.00		
		Maximum		25.00		
		Range		15.00		
		Interquartile Range		9.00		
		Skewness		-.330		.845
		Kurtosis		-.041		1.741
			Menit 60	Mean		
95% Confidence Interval for Mean	Lower Bound			9.0982		
	Upper Bound			23.2351		
5% Trimmed Mean				16.2963		
Median				16.0000		
Variance				45.367		
Std. Deviation				6.73548		
Minimum				7.00		
Maximum				23.00		
Range				16.00		
Interquartile Range				12.25		
Skewness				-.216	.845	
Kurtosis				-2.087	1.741	
	Menit 90			Mean		14.3333
		95% Confidence Interval for Mean	Lower Bound	9.6089		
			Upper Bound	19.0577		
		5% Trimmed Mean		14.5926		
		Median		15.5000		
		Variance		20.267		
		Std. Deviation		4.50185		
		Minimum		6.00		
		Maximum		18.00		
		Range		12.00		
		Interquartile Range		6.75		
		Skewness		-1.570	.845	
		Kurtosis		2.604	1.741	
			Menit 120	Mean		19.3333
95% Confidence Interval for Mean	Lower Bound			8.5355		
	Upper Bound			30.1311		
5% Trimmed Mean				19.3704		
Median				20.5000		
Variance				105.867		
Std. Deviation				10.28915		
Minimum				3.00		
Maximum				35.00		
Range				32.00		
Interquartile Range				11.75		
Skewness				-.149	.845	
Kurtosis				1.966	1.741	

Lampiran 3. Dokumentasi



Gambar 9. Pemetikan Kelopak Bunga Matahari (*Helianthus Annuus L.*)



Gambar 10. Proses Penjemuran



Gambar 11. Simplisia Kering Kelopak Bunga Matahari (*Helianthus Annuus L.*)



Gambar 12. Simplisia Kering Daun Pepaya (*Carica Papaya L.*)



Gambar 13. Simplisia Kering di Haluskan dengan di Blender



Gambar 14. Serbuk Halus Simplisia Kering Ekstrak Daun Pepaya (*Carica
Papaya L.*) di Rendam dengan Etanol 96%



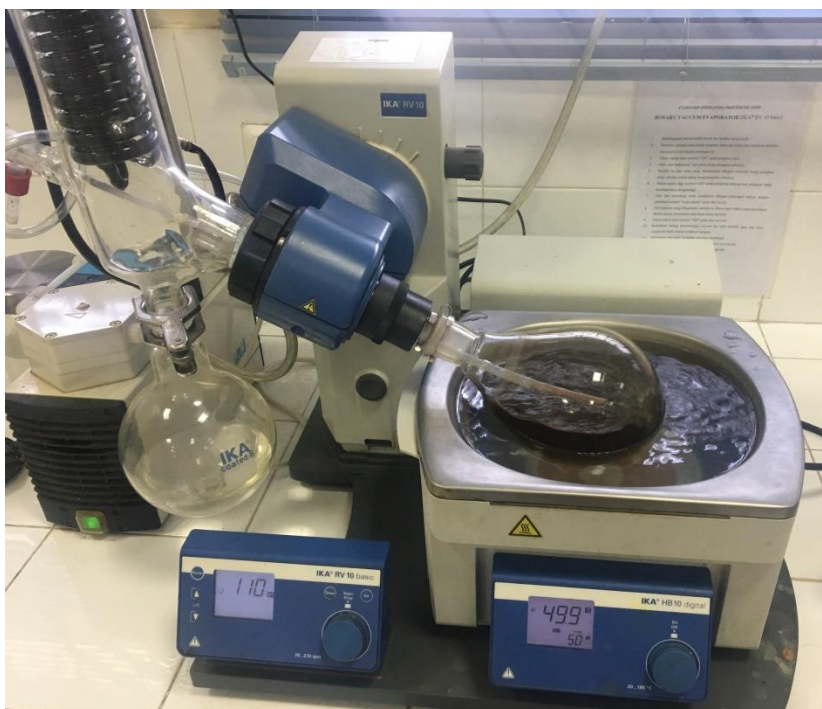
Gambar 15. Serbuk Halus Simplisia Kering Ekstrak Kelopak Bunga Matahari (*Helianthus Annuus L.*) di Rendam dengan Etanol 96%



Gambar 16. Proses Penyaringan Tahap I (Menggunakan Kain Flanel)



Gambar 17. Proses Penyaringan Tahap II (Menggunakan Kertas Saring)



Gambar 18. Penguapan Larutan Menggunakan Rotary Evaporator



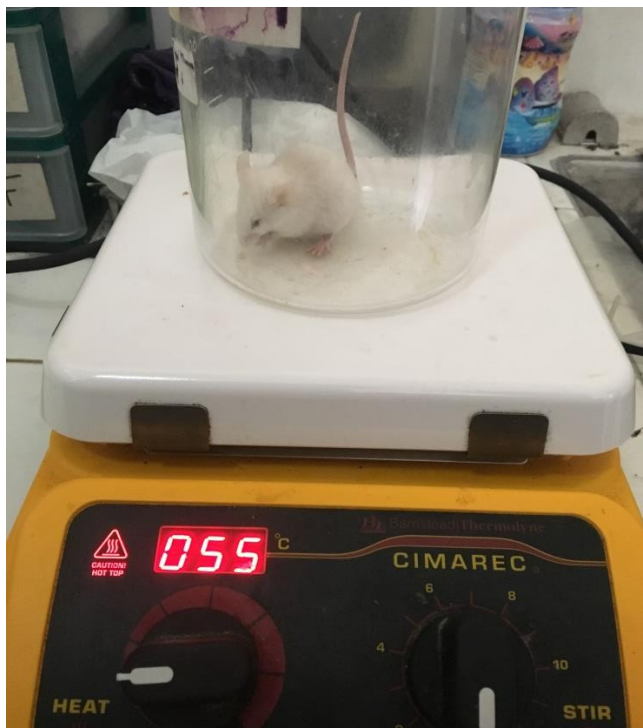
Gambar 19. Penguapan Larutan Menggunakan Waterbath



Gambar 20. Pemberian Ekstrak Secara Per Oral



Gambar 21. Pemberian Asam Asetat 1% Secara Intraperitoneal



Gambar 22. Induksi Nyeri Menggunakan Hot Plate 55⁰C