


LAMPIRAN

1) Surat Ijin Penelitian



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 167/C6-III/PN-FKIK UMY/III/2017
Hal : Permohonan Ijin Penelitian dan Pengambilan Data

Kepada Yth :
Kepala Lab. Sistematika Tumbuhan
Fakultas Biologi
Universitas Gadjah Mada Yogyakarta

Assalamu'alaikum Wr.Wb

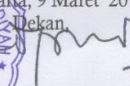
Bersama ini kami sampaikan dengan hormat, bahwa untuk memperoleh derajat Sarjana, mahasiswa Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta diberi tugas Penulisan Karya Tulis Ilmiah (KTI). Untuk diperlukan penelitian untuk mendapatkan kebenaran dalam penulisan.


Sehubungan dengan hal tersebut, kami mohon Mahasiswa tersebut di bawah ini dapat diijinkan untuk melakukan **penelitian dan pengambilan data** guna mendapatkan informasi sebagai bahan penyusunan Karya Tulis Ilmiah.

Nama Peneliti : Hajar Mar'atussolikhah S.
NIM : 20140310027
Judul KTI : Daya Insulin Mimik Infusa Kayu Manis (Cinnamomum burmanii) terhadap Aktivitas Superoksida Dismustase (SOD) pada Tikus Diabetes Sprague Dowley
Pembimbing : Dra. Yoni Astuti, M.Kes., Ph.D

Demikian surat permohonan ini kami ajukan, atas terkabulnya serta kerjasamanya yang baik kami ucapkan terima kasih.

Wassalamu'alaikum Wr.Wb.


Yogyakarta, 9 Maret 2017
Dekan,

Dr. Yoni Astuti, Sp.An., M.Kes



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

Muda mendunia

2) Surat Ijin Etika Penelitian



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 179/EP-FKIK-UMY/III/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 :

"Daya Insulin Mimik Infusa Kayu Manis (*Cinamon burmaniii*) Terhadap Aktivitas Superoksida Dismutase (SOD) Pada Tikus Diabetes Strain *Sparague dawley*"


Peneliti Utama : Hajar Mar'atussolikah S
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, 27 Maret 2017


 Sekretaris
 Secretary
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 dan *informed consent*

Kampus:

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183
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Muda mendunia

3) Data Awal Semua kelompok

No	Kode sampel	Sebelum Induksi STZ+NA			Setelah induksi STZ+NA		Setelah terapi 1 minggu		Setelah terapi 2 minggu	
		BB (gram)	GDP (mg/dl)	BB(gram)	GDP (mg/dl)	SOD (ng/ml)	GDP (mg/dl)	SOD (ng/ml)	GDP (mg/dl)	SOD (ng/ml)
1	normal	163	64.31	169	64.32	1821.54	64.66	1611.28	65.33	1703.59
2	normal	165	64.98	172	65.56	1652.31	66.17	1431.80	66.06	1336.92
3	normal	166	62.63	171	63.07	1716.41	63.91	1547.18	64.23	1383.08
4	normal	171	67	179	68.05	1542.05	69.17	1510.00	69.34	1561.28
5	normal	168	65.66	175	66.8	1557.44	66.92	1430.51	67.88	1580.51
6	diabetes	245	67.68	240	224.90	1334.36	228.2	1199.74	229.2	1152.31
7	diabetes	256	68.01	253	231.54	1224.10	231.2	1265.13	231.75	1345.90
8	diabetes	183	63.64	179	226.56	1466.41	228.2	1292.05	230.58	1226.67
9	diabetes	195	66.67	190	231.12	1303.59	232.33	1320.26	233.58	1249.74
10	diabetes	244	66.33	239	229.46	1265.13	229.7	1479.23	229.93	1397.18
11	Glibenklamid	231	69.36	228	233.20	2033.08	146.62	1581.80	104.38	1360.00
12	Glibenklamid	180	61.95	177	224.07	1374.10	137.22	1321.54	108.76	1572.82
13	Glibenklamid	237	66.67	232	226.14	1422.82	138.35	1415.13	107.3	1410.00
14	Glibenklamid	186	67.68	182	231.12	1374.10	142.86	1385.64	110.22	1697.18
15	Glibenklamid	165	70.71	160	231.95	1522.82	143.23	1356.15	113.14	1251.03
16	Kayu manis 300 mg/kgBB	265	63.64	260	226.14	1038.21	162.41	1247.18	117.52	1412.56
17	Kayu manis 300 mg/kgBB	204	65.99	199	229.05	1510.00	165.04	1603.59	120.44	1101.03
18	Kayu manis 300	158	66.67	154	230.71	1466.41	165.79	1603.59	116.06	1483.08

	mg/kgBB									
19	Kayu manis 300 mg/kgBB	175	67.68	172	231.95	1416.41	169.17	1525.39	119.71	1283.08
20	Kayu manis 300 mg/kgBB	182	65.66	178	232.78	1324.10	165.41	1326.67	127.74	1536.92
21	Kayu manis 150 mg/kgBB	188	67.68	185	227.39	1371.54	178.57	1539.49	145.26	1270.26
22	Kayu manis 150 mg/kgBB	230	65.66	225	229.05	1333.08	180.45	1438.21	148.54	1444.62
23	Kayu manis 150 mg/kgBB	168	68.01	165	227.8	1336.92	177.07	1371.54	150	1406.15
24	Kayu manis 150 mg/kgBB	192	64.65	189	226.14	1375.39	179.32	1675.39	147.08	1662.56
25	Kayu manis 150 mg/kgBB	180	66.33	175	229.46	1294.62	181.2	1522.82	145.62	1551.03

4) Hasil Uji Statistik

1. Uji statistic gula darah sebelum, sesudah induksi Steptozotocin dan setelah pemberian terapi

Descriptives

kelompok			Statistic	Std. Error	
glukosa_pre_stz	normal	Mean	64.9160	.72435	
		95% Confidence Interval for Mean	Lower Bound	62.9049	
			Upper Bound	66.9271	
		5% Trimmed Mean	64.9272		
		Median	64.9800		
		Variance	2.623		
		Std. Deviation	1.61970		
		Minimum	62.63		
		Maximum	67.00		
		Range	4.37		
		Interquartile Range	2.86		
		Skewness	-.265	.913	
		Kurtosis	.466	2.000	
		dm		Mean	66.4660
95% Confidence Interval for Mean	Lower Bound			64.3240	
	Upper Bound			68.6080	
5% Trimmed Mean	66.5372				
Median	66.6700				
Variance	2.976				
Std. Deviation	1.72512				
Minimum	63.64				
Maximum	68.01				
Range	4.37				
Interquartile Range	2.86				

	Skewness		-1.387	.913
	Kurtosis		2.111	2.000
glibenkla	Mean		67.2740	1.50054
mid	95% Confidence Interval for	Lower Bound	63.1078	
	Mean	Upper Bound	71.4402	
	5% Trimmed Mean		67.3789	
	Median		67.6800	
	Variance		11.258	
	Std. Deviation		3.35530	
	Minimum		61.95	
	Maximum		70.71	
	Range		8.76	
	Interquartile Range		5.72	
	Skewness		-1.119	.913
	Kurtosis		1.487	2.000
dosis 300	Mean		65.9280	.66823
	95% Confidence Interval for	Lower Bound	64.0727	
	Mean	Upper Bound	67.7833	
	5% Trimmed Mean		65.9578	
	Median		65.9900	
	Variance		2.233	
	Std. Deviation		1.49421	
	Minimum		63.64	
	Maximum		67.68	
	Range		4.04	
	Interquartile Range		2.53	
	Skewness		-.776	.913
	Kurtosis		1.312	2.000
dosis 150	Mean		66.4660	.62545

		95% Confidence Interval for Mean	Lower Bound	64.7295	
			Upper Bound	68.2025	
		5% Trimmed Mean		66.4811	
		Median		66.3300	
		Variance		1.956	
		Std. Deviation		1.39855	
		Minimum		64.65	
		Maximum		68.01	
		Range		3.36	
		Interquartile Range		2.69	
		Skewness		-.159	.913
		Kurtosis		-1.742	2.000
glukosa_postSTZ	normal	Mean		65.5600	.87964
_sebelum_terapi		95% Confidence Interval for Mean	Lower Bound	63.1177	
			Upper Bound	68.0023	
		5% Trimmed Mean		65.5600	
		Median		65.5600	
		Variance		3.869	
		Std. Deviation		1.96694	
		Minimum		63.07	
		Maximum		68.05	
		Range		4.98	
		Interquartile Range		3.73	
		Skewness		.000	.913
		Kurtosis		-1.185	2.000
	dm	Mean		2.2872E2	1.29456
		95% Confidence Interval for Mean	Lower Bound	2.2512E2	
			Upper Bound	2.3231E2	
		5% Trimmed Mean		2.2877E2	
		Median		2.2946E2	

	Variance		8.379	
	Std. Deviation		2.89473	
	Minimum		224.90	
	Maximum		231.54	
	Range		6.64	
	Interquartile Range		5.60	
	Skewness		-.494	.913
	Kurtosis		-2.108	2.000
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glibenkla	Mean		2.2930E2	1.77318
mid	95% Confidence Interval for	Lower Bound	2.2437E2	
	Mean	Upper Bound	2.3422E2	
	5% Trimmed Mean		2.2937E2	
	Median		2.3112E2	
	Variance		15.721	
	Std. Deviation		3.96495	
	Minimum		224.07	
	Maximum		233.20	
	Range		9.13	
	Interquartile Range		7.47	
	Skewness		-.601	.913
	Kurtosis		-2.244	2.000
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dosis 300	Mean		2.3013E2	1.17809
	95% Confidence Interval for	Lower Bound	2.2686E2	
	Mean	Upper Bound	2.3340E2	
	5% Trimmed Mean		2.3020E2	
	Median		2.3071E2	
	Variance		6.939	
	Std. Deviation		2.63428	
	Minimum		226.14	
	Maximum		232.78	
	Range		6.64	

	Interquartile Range		4.77	
	Skewness		-.903	.913
	Kurtosis		.166	2.000
dosis 150	Mean		2.2797E2	.59585
	95% Confidence Interval for Mean	Lower Bound	2.2631E2	
		Upper Bound	2.2962E2	
	5% Trimmed Mean		2.2799E2	
	Median		2.2780E2	
	Variance		1.775	
	Std. Deviation		1.33236	
	Minimum		226.14	
	Maximum		229.46	
	Range		3.32	
	Interquartile Range		2.49	
	Skewness		-.303	.913
	Kurtosis		-1.017	2.000
glukosa_1minggu normal	Mean		66.1660	.92060
	95% Confidence Interval for Mean	Lower Bound	63.6100	
		Upper Bound	68.7220	
	5% Trimmed Mean		66.1244	
	Median		66.1700	
	Variance		4.238	
	Std. Deviation		2.05853	
	Minimum		63.91	
	Maximum		69.17	
	Range		5.26	
	Interquartile Range		3.76	
	Skewness		.604	.913
	Kurtosis		-.148	2.000
dm	Mean		2.2993E2	.81889
	95% Confidence Interval for Mean	Lower Bound	2.2765E2	

	Mean	Upper Bound	2.3220E2	
	5% Trimmed Mean		2.2989E2	
	Median		2.2970E2	
	Variance		3.353	
	Std. Deviation		1.83109	
	Minimum		228.20	
	Maximum		232.33	
	Range		4.13	
	Interquartile Range		3.56	
	Skewness		.385	.913
	Kurtosis		-2.019	2.000
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glibenkla	Mean		1.4166E2	1.72012
mid	95% Confidence Interval for	Lower Bound	1.3688E2	
	Mean	Upper Bound	1.4643E2	
	5% Trimmed Mean		1.4163E2	
	Median		1.4286E2	
	Variance		14.794	
	Std. Deviation		3.84630	
	Minimum		137.22	
	Maximum		146.62	
	Range		9.40	
	Interquartile Range		7.14	
	Skewness		.033	.913
	Kurtosis		-1.591	2.000
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dosis 300	Mean		1.6556E2	1.07936
	95% Confidence Interval for	Lower Bound	1.6257E2	
	Mean	Upper Bound	1.6856E2	
	5% Trimmed Mean		1.6554E2	
	Median		1.6541E2	
	Variance		5.825	
	Std. Deviation		2.41352	

	Minimum		162.41	
	Maximum		169.17	
	Range		6.76	
	Interquartile Range		3.75	
	Skewness		.456	.913
	Kurtosis		1.877	2.000
dosis 150	Mean		1.7932E2	.72237
	95% Confidence Interval for Mean	Lower Bound	1.7732E2	
		Upper Bound	1.8133E2	
	5% Trimmed Mean		1.7934E2	
	Median		1.7932E2	
	Variance		2.609	
	Std. Deviation		1.61526	
	Minimum		177.07	
	Maximum		181.20	
	Range		4.13	
	Interquartile Range		3.00	
	Skewness		-.374	.913
	Kurtosis		-.637	2.000
glukosa_2minggu normal	Mean		66.5680	.91275
	95% Confidence Interval for Mean	Lower Bound	64.0338	
		Upper Bound	69.1022	
	5% Trimmed Mean		66.5439	
	Median		66.0600	
	Variance		4.166	
	Std. Deviation		2.04097	
	Minimum		64.23	
	Maximum		69.34	
	Range		5.11	
	Interquartile Range		3.83	

	Skewness		.429	.913
	Kurtosis		-1.207	2.000
dm	Mean		2.3101E2	.76746
	95% Confidence Interval for	Lower Bound	2.2888E2	
	Mean	Upper Bound	2.3314E2	
	5% Trimmed Mean		2.3097E2	
	Median		2.3058E2	
	Variance		2.945	
	Std. Deviation		1.71609	
	Minimum		229.20	
	Maximum		233.58	
	Range		4.38	
	Interquartile Range		3.10	
	Skewness		.839	.913
	Kurtosis		.090	2.000
glibenkla	Mean		1.0876E2	1.46000
mid	95% Confidence Interval for	Lower Bound	1.0471E2	
	Mean	Upper Bound	1.1281E2	
	5% Trimmed Mean		1.0876E2	
	Median		1.0876E2	
	Variance		10.658	
	Std. Deviation		3.26466	
	Minimum		104.38	
	Maximum		113.14	
	Range		8.76	
	Interquartile Range		5.84	
	Skewness		.000	.913
	Kurtosis		.200	2.000
dosis 300	Mean		1.2029E2	2.01776
	95% Confidence Interval for	Lower Bound	1.1469E2	

	Mean	Upper Bound	1.2590E2	
	5% Trimmed Mean		1.2012E2	
	Median		1.1971E2	
	Variance		20.357	
	Std. Deviation		4.51185	
	Minimum		116.06	
	Maximum		127.74	
	Range		11.68	
	Interquartile Range		7.30	
	Skewness		1.431	.913
	Kurtosis		2.421	2.000
dosis 150	Mean		1.4730E2	.89051
	95% Confidence Interval for	Lower Bound	1.4483E2	
	Mean	Upper Bound	1.4977E2	
	5% Trimmed Mean		1.4726E2	
	Median		1.4708E2	
	Variance		3.965	
	Std. Deviation		1.99123	
	Minimum		145.26	
	Maximum		150.00	
	Range		4.74	
	Interquartile Range		3.83	
	Skewness		.441	.913
	Kurtosis		-1.576	2.000

Tests of Normality

kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
glukosa_pre_stz	normal	.154	5	.200 [*]	.994	5	.993
	dm	.269	5	.200 [*]	.877	5	.294
	glibenklamid	.229	5	.200 [*]	.930	5	.596
	dosis 300	.229	5	.200 [*]	.961	5	.812
	dosis 150	.207	5	.200 [*]	.946	5	.710
glukosa_postSTZ _sebelum_terapi	normal	.136	5	.200 [*]	.987	5	.969
	dm	.201	5	.200 [*]	.907	5	.450
	glibenklamid	.277	5	.200 [*]	.887	5	.345
	dosis 300	.188	5	.200 [*]	.942	5	.679
	dosis 150	.192	5	.200 [*]	.957	5	.789
glukosa_1minggu	normal	.168	5	.200 [*]	.964	5	.833
	dm	.227	5	.200 [*]	.897	5	.395
	glibenklamid	.223	5	.200 [*]	.932	5	.608
	dosis 300	.263	5	.200 [*]	.938	5	.649
	dosis 150	.158	5	.200 [*]	.980	5	.937
glukosa_2minggu	normal	.198	5	.200 [*]	.966	5	.848
	dm	.198	5	.200 [*]	.953	5	.758
	glibenklamid	.127	5	.200 [*]	.999	5	1.000
	dosis 300	.287	5	.200 [*]	.881	5	.312
	dosis 150	.201	5	.200 [*]	.937	5	.645

a. Lilliefors Significance

Correction

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

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
glukosa_pre_stz	1.026	4	20	.418
glukosa_postSTZ_sebelum_t erapi	3.157	4	20	.036
glukosa_1minggu	1.680	4	20	.194
glukosa_2minggu	.809	4	20	.534

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 glukosa_preSTZ	66.5335	20	2.03018	.45396
Glukosa_postSTZ	2.2903E2	20	2.75061	.61506

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 glukosa_preSTZ & Glukosa_postSTZ	20	.616	.004

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 glukosa_preSTZ - Glukosa_postSTZ	1.62493E-2	2.19336	.49045	-163.51953	-161.46647	331.313	19	.000

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
glukosa_pre_stz	Between Groups	15.086	4	3.771	.896	.485
	Within Groups	84.184	20	4.209		
	Total	99.270	24			
glukosa_postSTZ _sebelum_terapi	Between Groups	106897.678	4	26724.420	3.643E3	.000
	Within Groups	146.735	20	7.337		
	Total	107044.413	24			
glukosa_1minggu	Between Groups	71874.748	4	17968.687	2.915E3	.000
	Within Groups	123.274	20	6.164		
	Total	71998.022	24			
glukosa_2minggu	Between Groups	74781.699	4	18695.425	2.221E3	.000
	Within Groups	168.361	20	8.418		
	Total	74950.060	24			

2. Uji statistik superoksida dismutase sebelum,dan setelah pemberian terapi

Descriptives

kelompok		Statistic	Std. Error	
SOD_sebelum normal _terapi	Mean	1.6580E3	51.83924	
	95% Confidence Interval for Mean	Lower Bound	1.5140E3	
		Upper Bound	1.8019E3	
	5% Trimmed Mean	1.6553E3		
	Median	1.6523E3		
	Variance	1.344E4		

	Std. Deviation		1.15916E2	
	Minimum		1542.05	
	Maximum		1821.54	
	Range		279.49	
	Interquartile Range		219.23	
	Skewness		.536	.913
	Kurtosis		-1.005	2.000
diabetes	Mean		1.3187E3	41.2981 2
	95% Confidence Interval for Mean	Lower Bound	1.2041E3	
		Upper Bound	1.4334E3	
	5% Trimmed Mean		1.3158E3	
	Median		1.3036E3	
	Variance		8.528E3	
	Std. Deviation		9.23454E1	
	Minimum		1224.10	
	Maximum		1466.41	
	Range		242.31	
	Interquartile Range		155.77	
	Skewness		1.175	.913
	Kurtosis		1.700	2.000
Glibenklamid	Mean		1.5454E3	1.24911 E2
	95% Confidence Interval for Mean	Lower Bound	1.1986E3	
		Upper Bound	1.8922E3	
	5% Trimmed Mean		1.5278E3	

	Median		1.4228E3	
	Variance		7.801E4	
	Std. Deviation		2.79309E2	
	Minimum		1374.10	
	Maximum		2033.08	
	Range		658.98	
	Interquartile Range		403.85	
	Skewness		1.990	.913
	Kurtosis		4.019	2.000
Kayu manis 300 mg/kgBB	Mean		1.3510E3	84.0952 2
	95% Confidence Interval for Mean	Lower Bound	1.1175E3	
		Upper Bound	1.5845E3	
	5% Trimmed Mean		1.3596E3	
	Median		1.4164E3	
	Variance		3.536E4	
	Std. Deviation		1.88043E2	
	Minimum		1038.21	
	Maximum		1510.00	
	Range		471.79	
	Interquartile Range		307.05	
	Skewness		-1.554	.913
	Kurtosis		2.407	2.000
Kayu manis 150 mg/kgBB	Mean		1.3423E3	14.7262 7
	95% Confidence Interval for Mean	Lower Bound	1.3014E3	

		Upper Bound	1.3832E3	
	5% Trimmed Mean		1.3431E3	
	Median		1.3369E3	
	Variance		1.084E3	
	Std. Deviation		3.29289E1	
	Minimum		1294.62	
	Maximum		1375.39	
	Range		80.77	
	Interquartile Range		59.62	
	Skewness		-.563	.913
	Kurtosis		-.443	2.000
SOD_1minggu normal _terapi	Mean		1.5062E3	34.6409 7
	95% Confidence Interval for Mean	Lower Bound	1.4100E3	
		Upper Bound	1.6023E3	
	5% Trimmed Mean		1.5045E3	
	Median		1.5100E3	
	Variance		6.000E3	
	Std. Deviation		7.74596E1	
	Minimum		1430.51	
	Maximum		1611.28	
	Range		180.77	
	Interquartile Range		148.08	
	Skewness		.347	.913
	Kurtosis		-1.463	2.000
diabetes	Mean		1.3113E3	46.4912 0

	95% Confidence Interval for Mean	Lower Bound	1.1822E3	
		Upper Bound	1.4404E3	
	5% Trimmed Mean		1.3081E3	
	Median		1.2920E3	
	Variance		1.081E4	
	Std. Deviation		1.03957E2	
	Minimum		1199.74	
	Maximum		1479.23	
	Range		279.49	
	Interquartile Range		167.31	
	Skewness		1.203	.913
	Kurtosis		2.222	2.000
Glibenklamid	Mean		1.4121E3	45.18789
	95% Confidence Interval for Mean	Lower Bound	1.2866E3	
		Upper Bound	1.5375E3	
	5% Trimmed Mean		1.4076E3	
	Median		1.3856E3	
	Variance		1.021E4	
	Std. Deviation		1.01043E2	
	Minimum		1321.54	
	Maximum		1581.80	
	Range		260.26	
	Interquartile Range		159.62	
	Skewness		1.598	.913
	Kurtosis		2.884	2.000
Kayu manis 300 mg/kgBB	Mean		1.3633E3	78.14682

	95% Confidence Interval for Mean	Lower Bound	1.1464E3	
		Upper Bound	1.5803E3	
	5% Trimmed Mean		1.3683E3	
	Median		1.4126E3	
	Variance		3.053E4	
	Std. Deviation		1.74742E2	
	Minimum		1101.03	
	Maximum		1536.92	
	Range		435.89	
	Interquartile Range		317.95	
	Skewness		-.898	.913
	Kurtosis		-.097	2.000
Kayu manis 150 mg/kgBB	Mean		1.4669E3	66.41346
	95% Confidence Interval for Mean	Lower Bound	1.2825E3	
		Upper Bound	1.6513E3	
	5% Trimmed Mean		1.4670E3	
	Median		1.4446E3	
	Variance		2.205E4	
	Std. Deviation		1.48505E2	
	Minimum		1270.26	
	Maximum		1662.56	
	Range		392.30	
	Interquartile Range		268.59	
	Skewness		.031	.913
	Kurtosis		-.226	2.000
SOD_2minggu normal _terapi	Mean		1.5131E3	67.48943

	95% Confidence Interval for Mean	Lower Bound	1.3257E3	
		Upper Bound	1.7005E3	
	5% Trimmed Mean		1.5123E3	
	Median		1.5613E3	
	Variance		2.277E4	
	Std. Deviation		1.50911E2	
	Minimum		1336.92	
	Maximum		1703.59	
	Range		366.67	
	Interquartile Range		282.05	
	Skewness		-.040	.913
	Kurtosis		-1.753	2.000
diabetes	Mean		1.2744E3	43.57718
	95% Confidence Interval for Mean	Lower Bound	1.1534E3	
		Upper Bound	1.3953E3	
	5% Trimmed Mean		1.2743E3	
	Median		1.2497E3	
	Variance		9.495E3	
	Std. Deviation		9.74415E1	
	Minimum		1152.31	
	Maximum		1397.18	
	Range		244.87	
	Interquartile Range		182.05	
	Skewness		.125	.913
	Kurtosis		-1.328	2.000
Glibenklamid	Mean		1.4582E3	79.09964

	95% Confidence Interval for Mean	Lower Bound	1.2386E3	
		Upper Bound	1.6778E3	
	5% Trimmed Mean		1.4564E3	
	Median		1.4100E3	
	Variance		3.128E4	
	Std. Deviation		1.76872E2	
	Minimum		1251.03	
	Maximum		1697.18	
	Range		446.15	
	Interquartile Range		329.49	
	Skewness		.392	.913
	Kurtosis		-1.135	2.000
Kayu manis 300 mg/kgBB	Mean		1.4613E3	73.67938
	95% Confidence Interval for Mean	Lower Bound	1.2567E3	
		Upper Bound	1.6659E3	
	5% Trimmed Mean		1.4653E3	
	Median		1.5254E3	
	Variance		2.714E4	
	Std. Deviation		1.64752E2	
	Minimum		1247.18	
	Maximum		1603.59	
	Range		356.41	
	Interquartile Range		316.66	
	Skewness		-.580	.913
	Kurtosis		-2.457	2.000
Kayu manis 150 mg/kgBB	Mean		1.5095E3	51.33787

95% Confidence Interval for Mean	Lower Bound	1.3670E3	
	Upper Bound	1.6520E3	
5% Trimmed Mean		1.5079E3	
Median		1.5228E3	
Variance		1.318E4	
Std. Deviation		1.14795E2	
Minimum		1371.54	
Maximum		1675.39	
Range		303.85	
Interquartile Range		202.57	
Skewness		.443	.913
Kurtosis		.251	2.000

Tests of Normality

kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SOD_sebelum normal	.207	5	.200 ⁺	.935	5	.628
_terapi diabetes	.233	5	.200 ⁺	.926	5	.572
Glibenklamid	.332	5	.075	.720	5	.015
Kayu manis 300 mg/kgBB	.243	5	.200 ⁺	.856	5	.214
Kayu manis 150 mg/kgBB	.213	5	.200 ⁺	.914	5	.493
SOD_1minggu normal	.231	5	.200 ⁺	.913	5	.483
_terapi diabetes	.266	5	.200 ⁺	.917	5	.509
Glibenklamid	.288	5	.200 ⁺	.858	5	.222
Kayu manis 300 mg/kgBB	.211	5	.200 ⁺	.935	5	.633
Kayu manis 150 mg/kgBB	.160	5	.200 ⁺	.991	5	.984
SOD_2minggu normal	.225	5	.200 ⁺	.932	5	.609
_terapi diabetes	.200	5	.200 ⁺	.966	5	.848

Glibenklamid	.207	5	.200*	.967	5	.857
Kayu manis 300 mg/kgBB	.251	5	.200*	.850	5	.193
Kayu manis 150 mg/kgBB	.197	5	.200*	.972	5	.890

a. Lilliefors Significance Correction

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

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
SOD_1minggu_terapi	1.157	4	20	.359
SOD_2minggu_terapi	1.187	4	20	.347

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SOD_1minggu_terapi	Between Groups	121970.532	4	30492.633	1.915	.147
	Within Groups	318420.905	20	15921.045		
	Total	440391.437	24			
SOD_2minggu_terapi	Between Groups	191680.708	4	47920.177	2.307	.094
	Within Groups	415495.497	20	20774.775		
	Total	607176.205	24			

ANOVA

Kadar kayu manis dosis 150mg/kgBB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	75482.776	2	37741.388	3.118	.081
Within Groups	145263.740	12	12105.312		
Total	220746.517	14			

ANOVA

Kadar 300mg/kgBB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36504.193	2	18252.097	.589	.570
Within Groups	372151.649	12	31012.637		
Total	408655.842	14			

ANOVA

Kadar glibenklamid

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45846.029	2	22923.015	.575	.577
Within Groups	478028.855	12	39835.738		
Total	523874.884	14			

5) Gambar proses penelitian



Gambar 6. Tikus di adaptasi



Gambar 7. Tikus diinduksi dengan STZ+NA



Gambar 8. Pengambil darah melalui vena orbita tikus

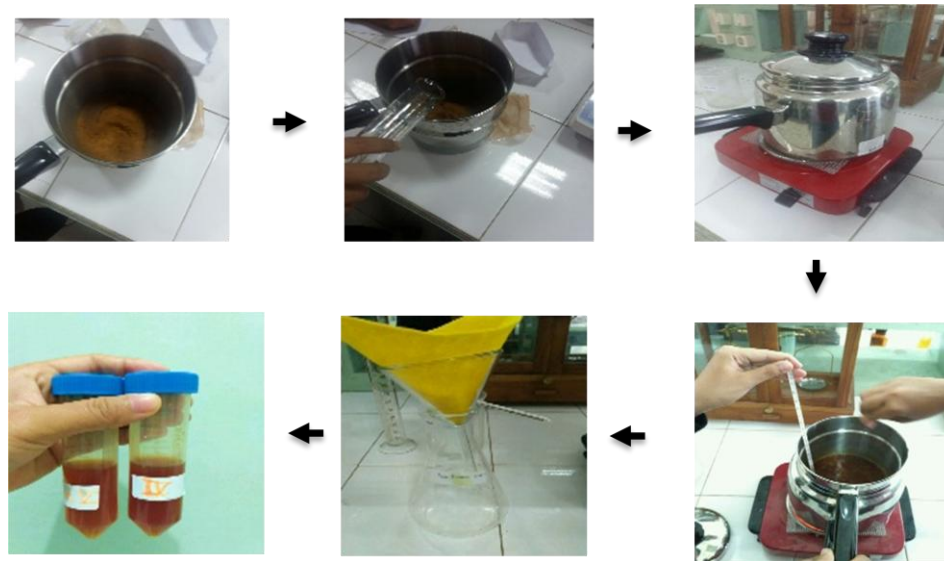


Gambar 9. Darah disentrifuse dengan kecepatan 4000 rpm 15 menit untuk diambil serum nya

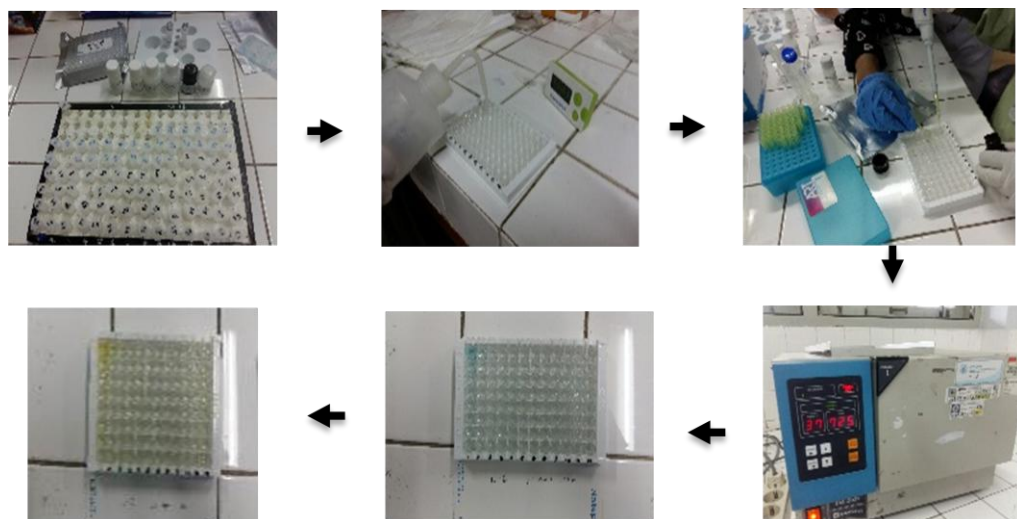


Gambar 10. Timbang kayu manis dan glibenklamid sesuai dosis





Gambar 11. Proses pembuatan infusa kayu manis
Timbang kayu manis





Gambar 12. Proses pemeriksaan SOD menggunakan metode ELISA dengan pembacaan menggunakan microplate reader O.D 450 nm

6) Penghitungan dosis

1. Induksi STZ+NA

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Strain*	Weight (g)/ age at time of diabetes induction	Fasting state before diabetes induction	NA dose (mg/kg)	STZ dose (mg/kg)	Time between NA and STZ injection (min)	Time of blood glucose test after diabetes induction/ fasted or non-fasted	Glucose levels (mg/dL) to be considered diabetics	Reference
Wistar	200–220/NR	Overnight	110 i.p.	45 i.p.	15	30 days/ fasted	262 ± 16 (mean ± SD)	(57)
Wistar	NR/2–3 months	NR	210 i.p.	60 i.v.	15	2 weeks/NR.	149 ± 3.6	(37)
Wistar	250–300/NR	NR	200 i.p.	60 i.v.	15	NR	180	(22)
Sprague-Dawley	NR/8–10 weeks	Overnight	120 i.p.	60 i.v.	15	3 and 7 days/NR.	238 ± 14.4	(74)
Wistar	100–200 g/8weeks	Overnight	110 i.p.	65 i.p.	15	22 h and 7 days/NR.	200	(44)
Wistar	NR/2 months	NR	180 i.p.	50 i.v.	30	8 weeks/NR.	159.6 ± 23.8 (mean ± SD)	(18)

2. Pemberian terapi Glibenklamid

Dosis *glibenclamide* untuk manusia 70 kg: 5 mg

Nilai konversi dosis dari manusia 70 kg kepada tikus 200 g: 0,018

Dosis untuk 200 g tikus: 5 mg x 0,018 = 0,09 mg/200 gBB