LAMPIRAN

Lampiran 1

Cara perhitungan pembagian kelompok hewan uji

Hewan uji tikus dibagi dengan rumus Federer, yaitu (t-1) (r-1) ≥ 15, dimana, t = banyak perlakuan dan r = banyak pengulangan.

Penelitian ini dibagi menjadi 6 kelompok perlakuan sehingga setiap kelompok perlakuan yang digunakan, sebanyak:

(t-1) (r-1) ≥ 15

(6-1) (r-1) ≥ 15

5 (r-1) ≥ 15

5r- 5 ≥ 15

5r ≥ 20

r ≥ 4

Dari hasil perhitungan diperoleh nilai adalah ≥ = 4, sehingga jumlah tikus perkelompok yang digunakan dijadikan 5 ekor.

Maka jumlah hewan uji keseluruhan yang digunakan dalam penelitian ini adalah 30 ekor tikus putih jantan (*Rattus norvegicus*) Galur *Sprague Dawley.*

Lampiran 2

Cara Perhitungan Pembuatan Larutan Fruktosa 10%

Perhitungan Penginduksi Fruktosa 10%

M1 xV1 = M2 x V2

10 x 500 = 56 x V2

$$V2 = \frac{10\% \times 500ml}{56\%}$$

V2 = 89 ml

Larutan fruktosa dibuat dengan konsentrasi 10% sebanyak 89ml fruktosa dilarutkan dengan aquadest ad 500ml dan larutan penginduksi fruktosa diberikan perkandang tikus.

Lampiran 3

Cara Perhitungan Larutan Uji atau sampel jamu

Dosis pada manusia dewasa dengan berat badan 50 kg, berat tikus rata rata 250 gram, berat 1 kampusl jamu A = 0,54 gram, sehingga dilakukan perhitungan konversi:

a. Dosis 1

$$\text{Dosis 1 untuk tikus} = \frac{\text{berat tikus (gram)} \times \text{dosis untuk manusia}}{\text{Berat badan manusia (gram)}}$$

$$\text{Maka} = \frac{250 \text{ gram} \times 0{,}54 \text{ gram}}{50.000 \text{ gram}} = 0{,}0027 \text{ gram}$$

$$\frac{0{,}0027 \text{ gram}}{0{,}25 \text{ kg}} = 0{,}01 \text{ gram/kg BB}$$

Volume Lambung tikus 1 ml, sehingga untuk 10 tikus = 0,010 gram/kg x 10 = 0,1 gram/kg BB

b. Dosis 2

Dosis 2 = 2 x dosis 1

= 2 x 0,01 gram/kg BB

= 0,02 gram/kg BB

c. Dosis 3

Dosis 3 = 3 x dosis 1

= 3 x 0,01 gram/kg BB

= 0,03 gram/kg BB

Lampiran 4

Cara Perhitungan Pembuatan Larutan Kaptopril

Perhitungan dosis Kaptopril

Dosis pada manusia dengan berat badan 50 kg = 25 mg (0,025 gram) diminum 2 kali sehari.

Berat tikus rata-rata = 250 gram

$\frac{250 \text{ gram} \times 0{,}025 \text{ gram}}{50.000 \text{ gram}} = 0{,}000125 \text{ gram}$

$\frac{0{,}000125 \text{gram}}{0{,}25 \text{kg BB}} = 0{,}0005 \text{gram/kg BB (dosis kaptopril)}$

Digerus 1 tablet Kaptopril, kemudian dilarutkan kedalam 40 ml air dingin.

$\frac{0{,}025 \text{ gram}}{40 \text{ ml}} = \frac{0{,}000125 \text{ gram}}{x}$

$0{,}025\ x = 0{,}005 \text{ ml}$

$x = 0{,}2 \text{ ml}$

Volume pemberian Kaptopril = 0,2 ml

Lampiran 5

Data Rata-rata Berat Badan Tikus Per Kelompok Selama Perlakuan

Kel	Induksi (Minggu ke- gram								Treatment	
	1	2	3	4	5	6	7	8	1	2
A1	204	209	234	252	265	273	279	282	285	290
A2	215	233	227	243	254	268	273	277	275	264
A3	208	240	217	219	240	249	253	251	264	264
KP	203	213	226	239	257	267	270	264	271	277
KNF	217	227	238	269	269	270	270	270	270	261
KNF	210	248	241	245	269	248	244	248	248	248

Lampiran 6

Tekanan Darah Tikus Selama Induksi

KEL	HEWAN UJI	PENGUKURAN TD MINGGU KE-							
		1	2	3	4	5	6	7	8
A1 (0,01 g/kgBB)	1	134/83,3 mmHg	110/90 mmHg	117/94 mmHg	126/97 mmHg	135/107,5 mmHg	144/127,3 mmHg	146,5/112 mmHg	131/106,5 mmHg
	2	110,3/77,3 mmHg	109/89,44 mmHg	104,3/79,7 mmHg	97/77,3 mmHg	104,5/81,5 mmh	129/104 mmHg	140/104,5 mmHg	131/110 mmHg
	3	130/96 mmHg	133/103,5 mmHg	109/79 mmHg	114,5/79,5 mmHg	128/92 mmHg	158/118,5 mmHg	137,5/104 mmHg	125,5/96,5 mmHg
	4	95/79 mmHg	112/86,7 mmHg	139/103 mmHg	96/70 mmHg	139/113 mmHg	150/126 mmHg	143/121,5 mmHg	139,7/110 mmHg
	5	142,7/103 mmHg	102,7/78 mmHg	134/98 mmHg	150/104,7 mmHg	126,5/105 mmHg	150,3/101,7 mmHg	143/101,7 mmHg	145/117 mmHg
A2 (0,02 g/kgBB)	1	129/101,5 mmHg	121/95 mmHg	138/113 mmHg	101/83,3 mmHg	116,5/95 mmHg	138,7/112,7 mmHg	127,5/97 mmHg	145/114 mmHg
	2	104/70 mmHg	119/94.2 mmHg	110,5/89,5 mmHg	101/76 mmHg	134/112,5 mmHg	107/88,7 mmHg	117,7/96 mmHg	134/101,3 mmHg
	3	113,3/90,7 mmHg	123/94 mmHg	110,5/87,5 mmHg	128/103,7 mmHg	114.67/91.3 mmHg	144,3/93,7 mmHg	128,3/107,7 mmHg	120,5/99 mmHg
	4	129/99 mmHg	133/105,5 mmHg	126/91 mmHg	126/98,5 mmHg	137,7/107,3 mmHg	116,7/87,3 mmHg	149/115 mmHg	155,5/118,5 mmHg
	5	123/95,3 mmHg	103/83 mmHg	136/98 mmHg	125,5/92 mmHg	122/91 mmHg	149,7/133,3 mmHg	136,5/105 mmHg	136/102,5 mmHg

A3 (0,03 g/kgBB)	1	122,3/88,67 mmHg	106,7/76,7 mmHg	120/52 mmHg	91,5/75,5 mmHg	137/104,5 mmHg	134/68,3 mmHg	146/113 mmHg	129/95,5 mmHg
	2	123/67 mmHg	76.7/108.7 mmHg	117/89 mmHg	119/54,5 mmHg	108,5/73 mmHg	127,5/112 mmHg	139/117 mmHg	154,67/124 mmHg
	3	121/96 mmHg	115/79 mmHg	117,3/86,7 mmHg	137/114,5 mmHg	114,67/91,3 mmHg	126/107 mmHg	124/84 mmHg	126/90 mmHg
	4	118/89 mmHg	106,67/78 mmHg	100/81,5 mmHg	146,67/126 mmHg	132,3/113 mmHg	145/122 mmHg	130,5/101,5 mmHg	145,5/114 mmHg
	5	111/72 mmHg	106,3/72 mmHg	140,3/90,3 mmHg	133,67/104,3 mmHg	123,5/106,5 mmHg	152/133,7 mmHg	126,5/105,5 mmHg	123/110 mmHg
KKP	1	121/93,5 mmHg	125/97 mmHg	127,7/87,3 mmHg	127,5/101,5 mmHg	110,5/86 mmHg	143,5/93 mmHg	154,3//129,3 mmHg	163/127,5 mmHg
	2	108,67/75,67 mmhg	119/82,5 mmhg	143,5/114,5 mmhg	124/96,5 mmhg	118/95 mmhg	134/108 mmhg	147/117 mmHg	124,67/102 mmHg
	3	117/86,3 mmHg	102,7/75,3 mmHg	123/90,3 mmHg	137,3/100 mmHg	137,3/109,7 mmHg	137,3/113 mmHg	135/101 mmHg	137/112 mmHg
	4	110/82,7 mmHg	124,5/95,5 mmHg	130/108,7 mmHg	133,3/99,7 mmHg	139/102 mmHg	125/92 mmHg	150,5/120,5 mmHg	153,7/115,7 mmHg
	5	115/85 mmHg	118/88 mmHg	131/100,2 mmHg	128,3/99 mmHg	126,2/196,4 mmHg	135/102 mmHg	146/116,5 mmHg	144,6/114,3 mmHg
KKN	1	102,5/76,5 mmHg	110/84 mmHg	124,3/102,7 mmHg	139/99,3 mmHg	125/107 mmHg	125/96,7 mmHg	137/118 mmHg	152/115,3 mmHg
	2	127/93 mmHg	105/74 mmHg	122,3/100 mmHg	115,7/86 mmHg	148/121,5 mmHg	121/97,5 mmHg	130/115 mmHg	155/128,3 mmHg
	3	137/92 mmHg	103/4,5 mmH	128/100 mmHg	144,3/116 mmHg	146/103 mmHg	135/111 mmHg	140/124 mmHg	148,5/101,5 mmHg

			g						
	4	108/82 mmHg	111/88,3 mmHg	132,5/112 mmHg	105/79 mmHg	100/64 mmHg	97,5/65,5 mmHg	104,5/84,5 mmHg	152/116 mmHg
	5	136,7/115,7 mmHg	120/88 mmHg	119,3/93,7 mmHg	123,3/100,7 mmHg	128/92 mmHg	113,5/89 mmHg	128/110 mmHg	151/115 mmHg
KN	1	109/86 mmHg	139,7/112 mmHg	120/92 mmHg	106/89 mmHg	104,5/80,5 mmHg	121/99 mmHg	121/99 mmHg	121/99 mmHg
	2	0 mmHg	150/104 mmHg	105/76,7 mmHg	109/73 mmHg	100/73,7 mmHg	100/73,7 mmHg	100/73,7 mmHg	100/73,3 mmHg
	3	117,3/99,7 mmHg	115/84 mmHg	112,3/87,7 mmHg	118,7/85,7 mmHg	109/75 mmHg	109/75 mmHg	109/75 mmHg	109/75 mmHg
	4	121/106 mmHg	118/97 mmHg	128/104 mmHg	124,5/104,5 mmHg	126,3/106,7 mmHg	126,3/106,7 mmHg	126,3/106,7 mmHg	126.3/106,7 mmHg
	5	106/93,5 mmHg	112/89 mmHg	115,7/94,7 mmHg	105,5/93 mmHg	114/89,3 mmHg	114/89,3 mmHg	114/89,3 mmHg	114/89,3 mmHg

Lampiran 7

Tekanan Darah Tikus Selama Treatment

KELOMPOK TIKUS	HEWAN COBA	PENGUKURAN TD TREATMENT MINGGU KE-	
		9	10
A1 (0,01 g/kgBB)	1	131,5/110 mmHg	114/92 mmHg
	2	117,5/99 mmHg	124/108 mmHg
	3	117,5/99 mmHg	113/93,5 mmHg
	4	133/103 mmHg	141,3/99 mmHg
	5	132/109 mmHg	134,5/104,5 mmHg
A2 (0,02 g/kgBB)	1	132/108 mmHg	128,5/108 mmHg
	2	129,3/100,7 mmHg	109/86,5 mmHg
	3	123/105 mmHg	120/104 mmHg
	4	146/114,5 mmHg	110/94,5 mmHg
	5	136,5/116 mmHg	109,3/85 mmHg
A3 (0,03 g/kgBB)	1	114/87,5 mmHg	136,5/109 mmHg
	2	154,5/130,5 mmHg	122/90,5 mmHg
	3	132,7/97,3 mmHg	134,7/113 mmHg
	4	136,7/116,7 mmHg	137/113 mmHg
	5	136,5/116 mmHg	135,7/101,7 mmHg
KKP (0,0005 g/kgBB)	1	135,7/104,3 mmHg	120,7/91,3 mmHg
	2	150/117 mmHg	125/92 mmHg
	3	153,5/106,5 mmHg	130,7/73,3 mmHg
	4	148/113 mmHg	129/114,3 mmHg
	5	147/93 mmHg	126,3/92,7 mmHg
KKN	1	152/115,3 mmHg	152/115,3 mmHg
	2	155/128,3 mmHg	155/ 128,3 mmHg
	3	148,8/101,5 mmHg	148,8/101,5 mmHg
	4	152/116 mmHg	152/116 mmHg
	5	151/115 mmHg	151/115 mmHg
KN	1	121/99 mmHg	121/99 mmHg
	2	100/73,7 mmHg	100/73,3 mmHg
	3	109/75 mmHg	109/75 mmHg
	4	126,3/106,7 mmHg	126,3/106,7 mmHg
	5	114/89,3 mmHg	114/89,3 mmHg

Lampiran 8

Hasil Uji Statistik Tekanan Darah Sistolik

Multivariate Tests[a]						
Effect		Value	F	Hypothesis df	Error df	Sig.
Minggu	Pillai's Trace	.702	5.500[b]	9.000	21.000	.001
	Wilks' Lambda	.298	5.500[b]	9.000	21.000	.001
	Hotelling's Trace	2.357	5.500[b]	9.000	21.000	.001
	Roy's Largest Root	2.357	5.500[b]	9.000	21.000	.001
a. Design: Intercept Within Subjects Design: Minggu						
b. Exact statistic						

Mauchly's Test of Sphericity[a]							
Measure: Kelmpk							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Minggu	.065	70.587	44	.008	.655	.841	.111
Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.							
a. Design: Intercept Within Subjects Design: Minggu							
b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.							

Tests of Within-Subjects Effects						
Measure: Kelmpk						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Minggu	Sphericity Assumed	13059.314	9	1451.035	9.341	.000
	Greenhouse-Geisser	13059.314	5.897	2214.601	9.341	.000
	Huynh-Feldt	13059.314	7.571	1724.972	9.341	.000
	Lower-bound	13059.314	1.000	13059.314	9.341	.005
Error(Minggu)	Sphericity Assumed	40543.051	261	155.337		
	Greenhouse-Geisser	40543.051	171.011	237.079		
	Huynh-Feldt	40543.051	219.551	184.663		
	Lower-bound	40543.051	29.000	1398.036		

Pairwise Comparisons						
Measure: Kelmpk						
(I) Minggu	(J) Minggu	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	2.504	3.150	1.000	-8.899	13.907
	3	-4.004	2.951	1.000	-14.686	6.678
	4	-2.319	2.803	1.000	-12.465	7.827
	5	-5.487	2.769	1.000	-15.510	4.536
	6	-11.764*	3.131	.035	-23.098	-.430
	7	-14.041*	2.836	.001	-24.308	-3.774

	8	-17.559*	3.060	.000	-28.636	-6.482
	9	-15.978*	3.259	.001	-27.774	-4.181
	10	-9.111	3.311	.455	-21.094	2.872
2	1	-2.504	3.150	1.000	-13.907	8.899
	3	-6.509	3.318	1.000	-18.520	5.503
	4	-4.823	3.955	1.000	-19.139	9.492
	5	-7.991	3.780	1.000	-21.672	5.690
	6	-14.269	4.115	.075	-29.162	.625
	7	-16.545*	3.659	.004	-29.791	-3.300
	8	-20.063*	4.047	.001	-34.714	-5.413
	9	-18.482*	4.103	.005	-33.335	-3.629
	10	-11.615	4.197	.438	-26.808	3.577
3	1	4.004	2.951	1.000	-6.678	14.686
	2	6.509	3.318	1.000	-5.503	18.520
	4	1.685	3.324	1.000	-10.346	13.716
	5	-1.482	2.957	1.000	-12.185	9.220
	6	-7.760	3.110	.834	-19.017	3.497
	7	-10.037*	2.719	.041	-19.879	-.194
	8	-13.555*	2.932	.003	-24.168	-2.941
	9	-11.973*	2.535	.002	-21.148	-2.799
	10	-5.107	2.814	1.000	-15.293	5.080
4	1	2.319	2.803	1.000	-7.827	12.465
	2	4.823	3.955	1.000	-9.492	19.139
	3	-1.685	3.324	1.000	-13.716	10.346
	5	-3.168	3.193	1.000	-14.726	8.391
	6	-9.445	3.337	.376	-21.526	2.635
	7	-11.722*	3.223	.048	-23.387	-.057
	8	-15.240*	3.366	.004	-27.423	-3.057
	9	-13.659*	3.004	.004	-24.531	-2.787

	10	-6.792	3.483	1.000	-19.398	5.814
5	1	5.487	2.769	1.000	-4.536	15.510
	2	7.991	3.780	1.000	-5.690	21.672
	3	1.482	2.957	1.000	-9.220	12.185
	4	3.168	3.193	1.000	-8.391	14.726
	6	-6.278	3.081	1.000	-17.431	4.875
	7	-8.554	2.520	.090	-17.676	.567
	8	-12.072*	2.991	.016	-22.900	-1.245
	9	-10.491	2.936	.057	-21.119	.137
	10	-3.624	2.997	1.000	-14.474	7.226
6	1	11.764*	3.131	.035	.430	23.098
	2	14.269	4.115	.075	-.625	29.162
	3	7.760	3.110	.834	-3.497	19.017
	4	9.445	3.337	.376	-2.635	21.526
	5	6.278	3.081	1.000	-4.875	17.431
	7	-2.277	2.378	1.000	-10.885	6.331
	8	-5.795	3.847	1.000	-19.720	8.131
	9	-4.213	3.899	1.000	-18.328	9.901
	10	2.653	3.875	1.000	-11.375	16.682
7	1	14.041*	2.836	.001	3.774	24.308
	2	16.545*	3.659	.004	3.300	29.791
	3	10.037*	2.719	.041	.194	19.879
	4	11.722*	3.223	.048	.057	23.387
	5	8.554	2.520	.090	-.567	17.676
	6	2.277	2.378	1.000	-6.331	10.885
	8	-3.518	2.656	1.000	-13.133	6.097
	9	-1.937	2.901	1.000	-12.438	8.564
	10	4.930	3.470	1.000	-7.631	17.491
8	1	17.559*	3.060	.000	6.482	28.636

	2	20.063*	4.047	.001	5.413	34.714
	3	13.555*	2.932	.003	2.941	24.168
	4	15.240*	3.366	.004	3.057	27.423
	5	12.072*	2.991	.016	1.245	22.900
	6	5.795	3.847	1.000	-8.131	19.720
	7	3.518	2.656	1.000	-6.097	13.133
	9	1.581	1.771	1.000	-4.831	7.994
	10	8.448	2.694	.176	-1.302	18.198
9	1	15.978*	3.259	.001	4.181	27.774
	2	18.482*	4.103	.005	3.629	33.335
	3	11.973*	2.535	.002	2.799	21.148
	4	13.659*	3.004	.004	2.787	24.531
	5	10.491	2.936	.057	-.137	21.119
	6	4.213	3.899	1.000	-9.901	18.328
	7	1.937	2.901	1.000	-8.564	12.438
	8	-1.581	1.771	1.000	-7.994	4.831
	10	6.867	2.450	.402	-2.000	15.733
10	1	9.111	3.311	.455	-2.872	21.094
	2	11.615	4.197	.438	-3.577	26.808
	3	5.107	2.814	1.000	-5.080	15.293
	4	6.792	3.483	1.000	-5.814	19.398
	5	3.624	2.997	1.000	-7.226	14.474
	6	-2.653	3.875	1.000	-16.682	11.375
	7	-4.930	3.470	1.000	-17.491	7.631
	8	-8.448	2.694	.176	-18.198	1.302
	9	-6.867	2.450	.402	-15.733	2.000

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Lampiran 9

Hasil Uji Statistik Tekanan Darah Diastolik

Multivariate Tests[a]						
Effect		Value	F	Hypothesis df	Error df	Sig.
Minggu	Pillai's Trace	.584	3.269[b]	9.000	21.000	.012
	Wilks' Lambda	.416	3.269[b]	9.000	21.000	.012
	Hotelling's Trace	1.401	3.269[b]	9.000	21.000	.012
	Roy's Largest Root	1.401	3.269[b]	9.000	21.000	.012
a. Design: Intercept Within Subjects Design: Minggu						
b. Exact statistic						

Mauchly's Test of Sphericity[a]							
Measure: Kelompk							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Minggu	.027	93.484	44	.000	.608	.766	.111
Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.							
a. Design: Intercept Within Subjects Design: Minggu							
b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.							

Tests of Within-Subjects Effects						
Measure: Kelompk						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Minggu	Sphericity Assumed	12404.483	9	1378.276	7.373	.000
	Greenhouse-Geisser	12404.483	5.471	2267.417	7.373	.000
	Huynh-Feldt	12404.483	6.890	1800.292	7.373	.000
	Lower-bound	12404.483	1.000	12404.483	7.373	.011
Error(Minggu)	Sphericity Assumed	48788.473	261	186.929		
	Greenhouse-Geisser	48788.473	158.652	307.519		
	Huynh-Feldt	48788.473	199.818	244.165		
	Lower-bound	48788.473	29.000	1682.361		

Pairwise Comparisons						
Measure: Kelompk						
(I) Minggu	(J) Minggu	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	-.172	2.509	1.000	-9.255	8.911
	3	-4.145	3.152	1.000	-15.556	7.265
	4	-3.579	2.862	1.000	-13.937	6.780
	5	-10.802	4.809	1.000	-28.208	6.604
	6	-12.509	4.213	.267	-27.759	2.741
	7	-16.419*	3.620	.004	-29.523	-3.315
	8	-17.595*	3.443	.001	-30.059	-5.132

	9	-16.449*	3.529	.003	-29.225	-3.673
	10	-10.442	3.093	.095	-21.638	.754
2	1	.172	2.509	1.000	-8.911	9.255
	3	-3.973	2.943	1.000	-14.625	6.678
	4	-3.407	3.651	1.000	-16.621	9.808
	5	-10.630	4.995	1.000	-28.712	7.452
	6	-12.337	4.063	.226	-27.045	2.371
	7	-16.247*	3.295	.001	-28.174	-4.319
	8	-17.423*	3.291	.001	-29.335	-5.512
	9	-16.277*	3.338	.002	-28.360	-4.193
	10	-10.270	3.320	.196	-22.287	1.747
3	1	4.145	3.152	1.000	-7.265	15.556
	2	3.973	2.943	1.000	-6.678	14.625
	4	.567	3.319	1.000	-11.447	12.580
	5	-6.657	4.551	1.000	-23.130	9.817
	6	-8.363	3.589	1.000	-21.356	4.629
	7	-12.273*	3.120	.022	-23.568	-.979
	8	-13.450*	2.663	.001	-23.089	-3.811
	9	-12.303*	2.457	.001	-21.196	-3.410
	10	-6.297	3.037	1.000	-17.289	4.695
4	1	3.579	2.862	1.000	-6.780	13.937
	2	3.407	3.651	1.000	-9.808	16.621
	3	-.567	3.319	1.000	-12.580	11.447
	5	-7.223	4.267	1.000	-22.668	8.222
	6	-8.930	3.762	1.000	-22.548	4.688
	7	-12.840*	3.505	.045	-25.529	-.151
	8	-14.017*	3.529	.019	-26.791	-1.243
	9	-12.870*	3.457	.038	-25.384	-.356
	10	-6.863	3.239	1.000	-18.587	4.860

5	1	10.802	4.809	1.000	-6.604	28.208
	2	10.630	4.995	1.000	-7.452	28.712
	3	6.657	4.551	1.000	-9.817	23.130
	4	7.223	4.267	1.000	-8.222	22.668
	6	-1.707	4.681	1.000	-18.650	15.237
	7	-5.617	3.931	1.000	-19.845	8.611
	8	-6.793	4.214	1.000	-22.047	8.460
	9	-5.647	4.745	1.000	-22.822	11.529
	10	.360	4.669	1.000	-16.542	17.262
6	1	12.509	4.213	.267	-2.741	27.759
	2	12.337	4.063	.226	-2.371	27.045
	3	8.363	3.589	1.000	-4.629	21.356
	4	8.930	3.762	1.000	-4.688	22.548
	5	1.707	4.681	1.000	-15.237	18.650
	7	-3.910	3.416	1.000	-16.277	8.457
	8	-5.087	3.577	1.000	-18.035	7.862
	9	-3.940	3.159	1.000	-15.376	7.496
	10	2.067	4.194	1.000	-13.115	17.248
7	1	16.419*	3.620	.004	3.315	29.523
	2	16.247*	3.295	.001	4.319	28.174
	3	12.273*	3.120	.022	.979	23.568
	4	12.840*	3.505	.045	.151	25.529
	5	5.617	3.931	1.000	-8.611	19.845
	6	3.910	3.416	1.000	-8.457	16.277
	8	-1.177	2.008	1.000	-8.444	6.091
	9	-.030	2.407	1.000	-8.741	8.681
	10	5.977	3.006	1.000	-4.906	16.859
8	1	17.595*	3.443	.001	5.132	30.059
	2	17.423*	3.291	.001	5.512	29.335

	3	13.450*	2.663	.001	3.811	23.089
	4	14.017*	3.529	.019	1.243	26.791
	5	6.793	4.214	1.000	-8.460	22.047
	6	5.087	3.577	1.000	-7.862	18.035
	7	1.177	2.008	1.000	-6.091	8.444
	9	1.147	1.494	1.000	-4.261	6.554
	10	7.153	2.494	.343	-1.875	16.182
9	1	16.449*	3.529	.003	3.673	29.225
	2	16.277*	3.338	.002	4.193	28.360
	3	12.303*	2.457	.001	3.410	21.196
	4	12.870*	3.457	.038	.356	25.384
	5	5.647	4.745	1.000	-11.529	22.822
	6	3.940	3.159	1.000	-7.496	15.376
	7	.030	2.407	1.000	-8.681	8.741
	8	-1.147	1.494	1.000	-6.554	4.261
	10	6.007	2.486	1.000	-2.993	15.006
10	1	10.442	3.093	.095	-.754	21.638
	2	10.270	3.320	.196	-1.747	22.287
	3	6.297	3.037	1.000	-4.695	17.289
	4	6.863	3.239	1.000	-4.860	18.587
	5	-.360	4.669	1.000	-17.262	16.542
	6	-2.067	4.194	1.000	-17.248	13.115
	7	-5.977	3.006	1.000	-16.859	4.906
	8	-7.153	2.494	.343	-16.182	1.875
	9	-6.007	2.486	1.000	-15.006	2.993

Based on estimated marginal means

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

b. Adjustment for multiple comparisons: Bonferroni.

Lampiran 10

Hasil Uji Statistik SOD

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Jamu A Dosis 1	5	155,848160	7,1518443	144,2056	163,8939
Jamu A Dosis 2	5	303,652380	23,6799704	273,4440	338,4521
Jamu A Dosis 3	5	343,674180	42,8717746	273,4440	384,6609
Kontrol Positif	5	327,266760	11,6127412	310,7772	338,4521
Kontrol Negatif	5	115,824600	9,3625962	102,5115	126,8823
Kontrol Normal	5	336,122780	21,4917906	310,7772	368,6063

Tests of Normality							
	Kelompok tikus	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kadar SOD	A1	.367	5	.027	.837	5	.157
	A2	.202	5	.200*	.957	5	.790
	A3	.252	5	.200*	.897	5	.392
	KKP	.232	5	.200*	.881	5	.315
	KKN	.131	5	.200*	.986	5	.966
	KN	.257	5	.200*	.948	5	.721
*. This is a lower bound of the true significance.							

a. Lilliefors Significance Correction

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Kadar SOD	Based on Mean	2,195	5	24	0,088
	Based on Median	1,453	5	24	0,242
	Based on Median and with adjusted df	1,453	5	9,581	0,290
	Based on trimmed mean	2,101	5	24	0,100

ANOVA					
Kadar SOD					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	253885,008	5	50777,002	97,203	0,000
Within Groups	12537,160	24	522,382		
Total	266422,168	29			

Multiple Comparisons						
Dependent Variable:	Kadar SOD					
LSD						
(I) Kelompok tikus		Mean	Std. Error	Sig.	95% Confidence Interval	

		Difference (I-J)			Lower Bound	Upper Bound
A1	A2	-147.8042200*	14,4551951	0,000	-177,638276	-117,970164
	A3	-187.8260200*	14,4551951	0,000	-217,660076	-157,991964
	KKP	-171.4186000*	14,4551951	0,000	-201,252656	-141,584544
	KKN	40.0235600*	14,4551951	0,011	10,189504	69,857616
	KN	-180.2746200*	14,4551951	0,000	-210,108676	-150,440564
A2	A1	147.8042200*	14,4551951	0,000	117,970164	177,638276
	A3	-40.0218000*	14,4551951	0,011	-69,855856	-10,187744
	KKP	-23,6143800	14,4551951	0,115	-53,448436	6,219676
	KKN	187.8277800*	14,4551951	0,000	157,993724	217,661836
	KN	-32.4704000*	14,4551951	0,034	-62,304456	-2,636344
A3	A1	187.8260200*	14,4551951	0,000	157,991964	217,660076
	A2	40.0218000*	14,4551951	0,011	10,187744	69,855856
	KKP	16,4074200	14,4551951	0,268	-13,426636	46,241476
	KKN	227.8495800*	14,4551951	0,000	198,015524	257,683636
	KN	7,5514000	14,4551951	0,606	-22,282656	37,385456
KKP	A1	171.4186000*	14,4551951	0,000	141,584544	201,252656
	A2	23,6143800	14,4551951	0,115	-6,219676	53,448436
	A3	-16,4074200	14,4551951	0,268	-46,241476	13,426636
	KKN	211.4421600*	14,4551951	0,000	181,608104	241,276216
	KN	-8,8560200	14,4551951	0,546	-38,690076	20,978036
KKN	A1	-40.0235600*	14,4551951	0,011	-69,857616	-10,189504
	A2	-187.8277800*	14,4551951	0,000	-217,661836	-157,993724
	A3	-227.8495800*	14,4551951	0,000	-257,683636	-198,015524
	KKP	-211.4421600*	14,4551951	0,000	-241,276216	-181,608104
	KN	-220.2981800*	14,4551951	0,000	-250,132236	-190,464124
KN	A1	180.2746200*	14,4551951	0,000	150,440564	210,108676
	A2	32.4704000*	14,4551951	0,034	2,636344	62,304456
	A3	-7,5514000	14,4551951	0,606	-37,385456	22,282656
	KKP	8,8560200	14,4551951	0,546	-20,978036	38,690076

	KKN	220.2981800*	14,4551951	0,000	190,464124	250,132236
*. The mean difference is significant at the 0.05 level.						

Lampiran 11

Penetapan Kadar GSH

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Jamu A Dosis 1	5	0,281200	0,0411864	0,2518	0,3498
Jamu A Dosis 2	5	0,352280	0,0201319	0,3253	0,3743
Jamu A Dosis 3	5	0,411100	0,0750483	0,3253	0,5214
Kontrol Positif	5	0,465020	0,0680280	0,3498	0,5214
Kontrol Negatif	5	0,175800	0,0219135	0,1415	0,1905
Kontrol Normal	5	0,494440	0,0757586	0,3743	0,5704

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar GSH	.098	30	.200*	.956	30	.243
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Tests of Normality

	Kelompok tikus	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kadar GSH	A1	.262	5	.200*	.807	5	.093
	A2	.287	5	.200*	.913	5	.488
	A3	.172	5	.200*	.973	5	.896
	KKP	.280	5	.200*	.816	5	.110
	KKN	.349	5	.046	.771	5	.046
	KN	.239	5	.200*	.917	5	.514

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Kadar GSH	Based on Mean	1,601	5	24	0,198
	Based on Median	0,852	5	24	0,527
	Based on Median and with adjusted df	0,852	5	15,663	0,534
	Based on trimmed mean	1,547	5	24	0,213

ANOVA					
Kadar GSH					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0,359	5	0,072	23,200	0,000
Within Groups	0,074	24	0,003		
Total	0,434	29			

Multiple Comparisons						
Dependent Variable:	Kadar GSH					
LSD						
(I) Kelompok tikus		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A1	A2	-0,0710800	0,0351959	0,055	-0,143721	0,001561
	A3	-.1299000*	0,0351959	0,001	-0,202541	-0,057259
	KKKP	-.1838200*	0,0351959	0,000	-0,256461	-0,111179
	KKN	.1054000*	0,0351959	0,006	0,032759	0,178041
	KN	-.2132400*	0,0351959	0,000	-0,285881	-0,140599
A2	A1	0,0710800	0,0351959	0,055	-0,001561	0,143721
	A3	-0,0588200	0,0351959	0,108	-0,131461	0,013821
	KKP	-.1127400*	0,0351959	0,004	-0,185381	-0,040099
	KKN	.1764800*	0,0351959	0,000	0,103839	0,249121
	KN	-.1421600*	0,0351959	0,000	-0,214801	-0,069519

A3	A1	.1299000*	0,0351959	0,001	0,057259	0,202541
	A2	0,0588200	0,0351959	0,108	-0,013821	0,131461
	KKP	-0,0539200	0,0351959	0,139	-0,126561	0,018721
	KKN	.2353000*	0,0351959	0,000	0,162659	0,307941
	KN	-.0833400*	0,0351959	0,026	-0,155981	-0,010699
KKP	A1	.1838200*	0,0351959	0,000	0,111179	0,256461
	A2	.1127400*	0,0351959	0,004	0,040099	0,185381
	A3	0,0539200	0,0351959	0,139	-0,018721	0,126561
	KKN	.2892200*	0,0351959	0,000	0,216579	0,361861
	KN	-0,0294200	0,0351959	0,411	-0,102061	0,043221
KKN	A1	-.1054000*	0,0351959	0,006	-0,178041	-0,032759
	A2	-.1764800*	0,0351959	0,000	-0,249121	-0,103839
	A3	-.2353000*	0,0351959	0,000	-0,307941	-0,162659
	KKP	-.2892200*	0,0351959	0,000	-0,361861	-0,216579
	KN	-.3186400*	0,0351959	0,000	-0,391281	-0,245999
KN	A1	.2132400*	0,0351959	0,000	0,140599	0,285881
	A2	.1421600*	0,0351959	0,000	0,069519	0,214801
	A3	.0833400*	0,0351959	0,026	0,010699	0,155981
	KKP	0,0294200	0,0351959	0,411	-0,043221	0,102061
	KKN	.3186400*	0,0351959	0,000	0,245999	0,391281

*. The mean difference is significant at the 0.05 level.

Lampiran 12

Hasil Uji Statistik MDA

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Jamu A Dosis 1	5	1,799160	0,5642642	1,0489	2,5337
Jamu A Dosis 2	5	1,732780	0,3199564	1,2496	2,1097
Jamu A Dosis 3	5	1,325360	0,1746519	1,1304	1,5786
Kontrol Positif	5	1,303900	0,2018221	0,9704	1,5001
Kontrol Negatif	5	2,850920	0,5857163	2,3315	3,8556
Kontrol Normal	5	1,200720	0,2127597	0,9297	1,5182

Tests of Normality							
	Kelompok tikus	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kadar MDA	A1	.118	5	.200*	.998	5	.999
	A2	.238	5	.200*	.958	5	.793
	A3	.180	5	.200*	.971	5	.880
	KKP	.273	5	.200*	.888	5	.349
	KKN	.343	5	.054	.804	5	.088
	KN	.215	5	.200*	.960	5	.810
*. This is a lower bound of the true significance.							

a. Lilliefors Significance Correction

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Kadar MDA	Based on Mean	1,636	5	24	0,189
	Based on Median	0,964	5	24	0,459
	Based on Median and with adjusted df	0,964	5	10,758	0,481
	Based on trimmed mean	1,479	5	24	0,234

ANOVA					
Kadar MDA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9,410	5	1,882	12,827	0,000
Within Groups	3,521	24	0,147		
Total	12,931	29			

Multiple Comparisons						
Dependent Variable:	Kadar MDA					
LSD						
(I) Kelompok tikus		Mean Difference	Std. Error	Sig.	95% Confidence Interval	

		(I-J)			Lower Bound	Upper Bound
A1	A2	0,0663800	0,2422577	0,786	-0,433615	0,566375
	A3	0,4738000	0,2422577	0,062	-0,026195	0,973795
	KKP	0,4952600	0,2422577	0,052	-0,004735	0,995255
	KKN	-1.0517600*	0,2422577	0,000	-1,551755	-0,551765
	KN	.5984400*	0,2422577	0,021	0,098445	1,098435
A2	A1	-0,0663800	0,2422577	0,786	-0,566375	0,433615
	A3	0,4074200	0,2422577	0,106	-0,092575	0,907415
	KKP	0,4288800	0,2422577	0,089	-0,071115	0,928875
	KKN	-1.1181400*	0,2422577	0,000	-1,618135	-0,618145
	KN	.5320600*	0,2422577	0,038	0,032065	1,032055
A3	A1	-0,4738000	0,2422577	0,062	-0,973795	0,026195
	A2	-0,4074200	0,2422577	0,106	-0,907415	0,092575
	KKP	0,0214600	0,2422577	0,930	-0,478535	0,521455
	KKN	-1.5255600*	0,2422577	0,000	-2,025555	-1,025565
	KN	0,1246400	0,2422577	0,612	-0,375355	0,624635
KKP	A1	-0,4952600	0,2422577	0,052	-0,995255	0,004735
	A2	-0,4288800	0,2422577	0,089	-0,928875	0,071115
	A3	-0,0214600	0,2422577	0,930	-0,521455	0,478535
	KKN	-1.5470200*	0,2422577	0,000	-2,047015	-1,047025
	KN	0,1031800	0,2422577	0,674	-0,396815	0,603175
KKN	A1	1.0517600*	0,2422577	0,000	0,551765	1,551755
	A2	1.1181400*	0,2422577	0,000	0,618145	1,618135
	A3	1.5255600*	0,2422577	0,000	1,025565	2,025555
	KKP	1.5470200*	0,2422577	0,000	1,047025	2,047015
	KN	1.6502000*	0,2422577	0,000	1,150205	2,150195
KN	A1	-.5984400*	0,2422577	0,021	-1,098435	-0,098445
	A2	-.5320600*	0,2422577	0,038	-1,032055	-0,032065

	A3	-0,1246400	0,2422577	0,612	-0,624635	0,375355
	KKP	-0,1031800	0,2422577	0,674	-0,603175	0,396815
	KKN	-1.6502000*	0,2422577	0,000	-2,150195	-1,150205
*. The mean difference is significant at the 0.05 level.						

Lampiran 13

Keterangan Lolos Kaji Etik

DEWAN PENEGAKAN KODE ETIK UNIVERSITAS ESA UNGGUL
KOMISI ETIK PENELITIAN
Jl. Arjuna Utara No.9 Kebon Jeruk Jakarta Barat 11510
Telp. 021-5674223 email: dpke@esaunggul.ac.id

Nomor : 0161-20.152/DPKE-KEP/FINAL-EA/UEU/V/2020

KETERANGAN LOLOS KAJI ETIK
ETHICAL APPROVAL

Komisi Etik Penelitian Universitas Esa Unggul dalam upaya melindungi hak asasi dan kesejahteraan subyek penelitian kesehatan, telah mengkaji dengan teliti protokol berjudul:

SAINTIFIKASI DAN UJI PREKLINIK JAMU ANTIHIPERTENSI DENGAN MEKANISME KERJA SEBAGAI ACE INHIBITOR

Peneliti Utama : Dr. Aprilita Rina Yanti Eff., M.Biomed., Apt.

Nama Institusi : Universitas Esa Unggul

dan telah menyetujui protokol tersebut di atas.

Jakarta, 30 Mei 2020

Ketua

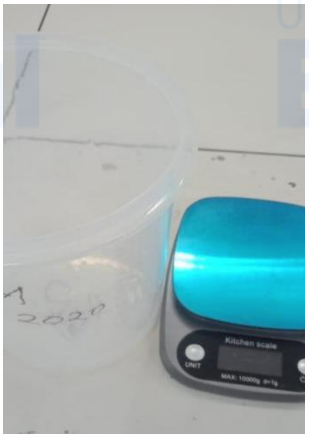
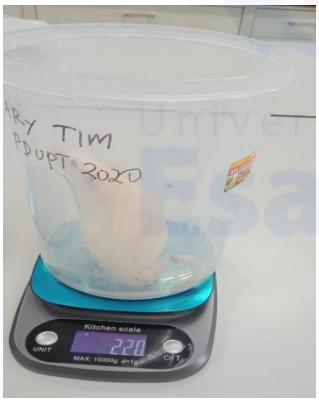
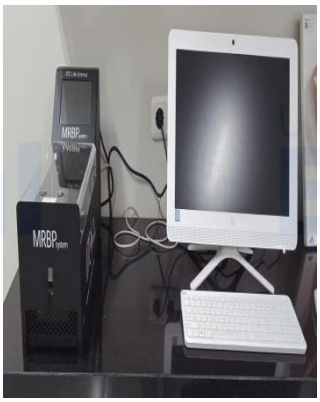
Universitas Esa Unggul
Dewan Penegakan Kode Etik

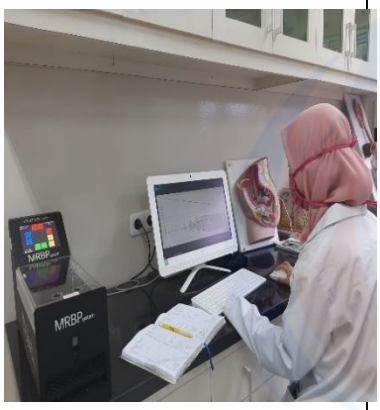
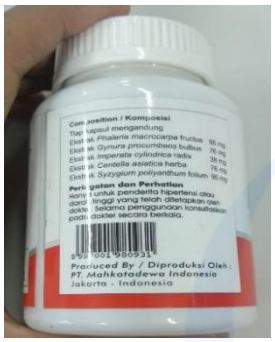
Dr. Rokiah Kusumapradja, SKM., MHA

* *Ethical approval* berlaku satu tahun dari tanggal persetujuan.
** Peneliti berkewajiban
1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila:
   a. Setelah masa berlakunya keterangan lolos kaji etik, penelitian masih belum selesai, dalam hal ini *ethical approval* 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 subyek sebelum penelitian lolos kaji etik dan *informed consent*.

Lampiran 14

Dokumentasi Penelitian

		
Pemberian tanda pada ekor tiikus	Aklimatisasi tikus selama 2 minggu	Timbangan analitik
		
Penimbangan berat badan tikus	Fruktosa	Alat MRBP *System*

		
Untuk Kaliibrasi Alat MRBP *System*	Tikus dimasukkann kedalam restainer	Pengujian tekanan darah tikus
		
Pengujian tekanan darah tikus	Alat gelas	Larutan Fruktosa 10%
		
Jamu A	Kaptopril	Larutan Jamu A dan Larutan Kaptopril

		
Pemberian Treatment	Pembedahan tikus	Organ hati tikus