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Lampiran 1 : Perhitungan dan Pemberian Dosis Ekstrak kelopak Bunga Rosela (*hibiscus Sabdariffa*)

Perhitungan Dosis Ekstrak kelopak bunga rosela (*hibiscus sabdariffa*).

Berat Badan Tikus rata – rata = 200 gram.

1. Dosis ekstrak rosela 100 mg/KgBB

Konversi BB Ideal 200 gr BB

Jadi=== 100 mg/kg BB

20 mg/200 grBB === 20 mg/200 gr BB/2 ml

Stok 50 ml=== 20 mg/2 ml

=== 500 mg/50 ml NaCMC

=== 0,5 gr/50 ml

2. Dosis ekstrak rosela 300 mg/KgBB

Jadi ===300 mg/KgBB

60 mg/200 gr BB === 60 mg/200 gr BB/2 ml

Stok 50 ml === 60 mg/2 ml

=== 1500mg/50 ml NaCMC

=== 1,5 gr/50 ml

3. Dosis ekstrak rosela 500

Jadi === 500 mg/KgBB

100 mg/200 gr BB === 100 mg/200 gr BB/2 ml

Stok 50 ml === 100 mg/2ml

=== 2500 mg/50 ml NaCMC

=== 2,5 gr/50 ml

Lampiran 2 : Tabel Dosis Konversi Ekstrak Dari Tikus Ke Manusia

Dicari Diketahui	Mencit 20 g	Tikus 200 g	Marmut 400 g	Kelinci 1,5 kg	Kucing 1,5 kg	Kera 4 kg	Anjing 12 kg	Manusia 70kg
Mencit 20 g	1,0	7,0	12,23	27,8	29,7	64,1	124,2	387,9
Tikus 200 g	0,14	1,0	1,74	3,9	4,2	9,2	17,8	56,0
Marmut 400 g	0,18	0,57	1,0	2,25	2,4	5,2	10,2	31,5
Kelinci 1,5 kg	0,04	0,25	0,44	1,0	1,08	2,4	4,5	14,2
Kucing 1,5 kg	0,03	0,23	0,41	0,92	1,0	2,2	4,1	13,0
Kera 4 kg	0,016	0,11	0,19	0,42	0,45	1,0	1,9	6,1
Anjing 12 kg	0,008	0,06	0,10	0,22	0,24	0,52	1,0	3,1
Manusia 70 kg	0,0026	0,018	0,031	0,07	0,76	0,16	0,32	1,0

Sumber : Laurence dan Bacharach (1964)

1. Dosis ekstrak 100 mg/kgBB

Faktor konversi tikus 200g ke manusia 70 kg =56,0

Dosis ekstrak pada tikus 200g = 0,2 kg x 100 mg/kgBB = 20 mg

Dosis pada manusia 70 kg = dosis ekstrak pada tikus 200g x faktor konversi

20 mg x 56,0 = 1,120 = 1,12 g

Rata – rata berat badan tikus = 200 g

$\frac{200 \text{ g}}{200 \text{ g}} \times 1,12 \text{ g} = 1,12 \text{ g per manusia 70 kg}$

2. Dosis ekstrak 300 mg/kgBB

Faktor konversi tikus 200g ke manusia 70 kg =56,0

Dosis ekstrak pada tikus 200g = 0,2 kg x 300 mg/kgBB = 60 mg

Dosis pada manusia 70 kg = dosis ekstrak pada tikus 200g x faktor konversi

$$60 \text{ mg} \times 56,0 = 3360 = 3,36 \text{ g}$$

Rata – rata berat badan tikus = 200 g

$$\frac{200 \text{ g}}{200 \text{ g}} \times 3,36 \text{ g} = 3,36 \text{ g per manusia 70 kg}$$

3. Dosis ekstrak 500 mg/kgBB

Faktor konversi tikus 200g ke manusia 70 kg =56,0

Dosis ekstrak pada tikus 200g = 0,2 kg x 500 mg/kgBB = 100 mg

Dosis pada manusia 70 kg = dosis ekstrak pada tikus 200g x faktor konversi

$$100 \text{ mg} \times 56,0 = 5,600 = 5,6 \text{ g}$$

Rata – rata berat badan tikus = 200 g

$$\frac{200 \text{ g}}{200 \text{ g}} \times 5,6 \text{ g} = 5,6 \text{ g per manusia 70 kg}$$

Lampiran 3 : Dokumentasi Penelitian

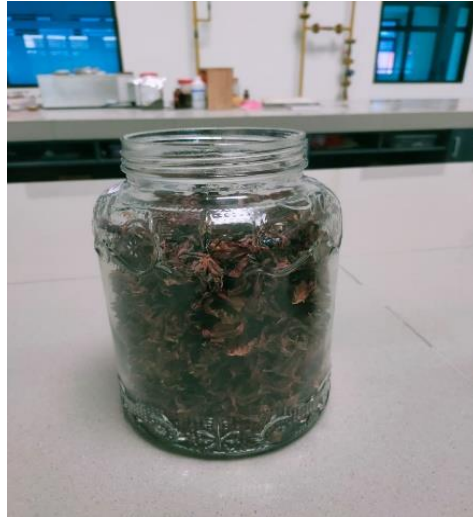


Kelopak Bunga rosela Hibiscus Sabdarifa Kering yang di peroleh dari CV Berkah Mandiri Jaya Jawa timur Indonesia



Bagian dari Kelopak Bunga rosela kering di pisahkan dengan bagian yang keras

Proses Maserasi



Penimbangan, jumlah simplisia kering 3 kg dan di masukkan ke dalam wadah/toples kaca



Kelopak Bunga rosela kering direndam dengan larutan Etanol 96 % (1 toples = 375 gr simplisia + 2,5 liter air etanol)



proses penyaringan dengan menggunakan kertas penyaring (hasil 11 liter)



Proses evaporasi dengan menggunakan vakum evaporator 40°C





Mengelompokkan tikus menjadi 5 kelompok



Menimbang dan memeriksa kondisi tikus



Tikus di induksi phenylhydrazine hydrochloride



Pengambilan Sample darah pada sinus orbitalis



Pemeriksaan hematologi Analyzer, Hasil Pemeriksaan darah rutin (hemoglobin)

Proses Pembuatan larutan NaCMC dan pelarutan ekstrak kelopak
bunga rosela *hibiscus sabdarifa*







Proses Sacrificed





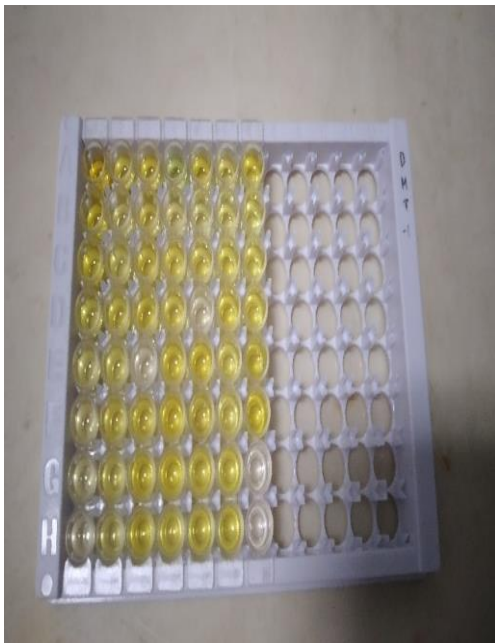
Proses Pemeriksaan Elisa ferritin dan Elisa DMT1











Kelompok	Hb_Pre	Hb_Post	Fer_Pre	Fer_Post	DMT 1_Pre	DMT 1_Post	BB_Pre	BB_Post
1	5.6	5.6	286.8685	286.8685	1.746	1.746	183	186
1	7.6	7.6	244.6205	244.6205	1.881	1.881	199	183
1	7.9	7.9	238.5716	238.5716	2.431	2.431	159	144
1	8.0	8.0	208.3358	208.3358	2.805	2.805	151	141
1	8.5	8.5	199.2358	199.2358	3.364	3.364	206	186
1	9.4	9.4	110.9173	110.9173	4.706	4.706	165	228
1	9.4	9.4	47.10539	47.10539	6.166	6.166	151	133
1	9.8	9.8	9.039271	9.039271	7.536	7.536	201	197
2	8.5	10.8	244.6205	128.1124	1.746	2.105	183	167
2	8.5	12.6	238.5716	56.56958	1.881	2.253	197	180
2	9.7	12.8	208.3358	42.2198	2.431	2.535	208	201
2	9.1	12.9	199.2358	38.96934	2.805	2.905	185	186
2	10.0	13.9	110.9173	33.08468	4.706	4.747	245	246
2	10.0	14.9	47.10539	16.86804	6.166	6.367	163	165
2	7.0	17.0	9.039271	2.64958	7.536	7.858	194	183
3	7.2	10.7	286.8685	185.8621	1.746	1.903	192	195
3	8.5	12.5	244.6205	135.8621	1.881	4.6	181	187
3	5.3	13.7	208.3358	112.2198	2.805	5.516	201	206
3	9.3	14.0	238.5716	88.3976	2.431	5.486	140	180
3	9.4	14.2	199.2358	77.5966	3.364	5.581	180	180
3	8.6	14.4	110.9173	53.96572	4.706	9.511	169	164
3	8.0	14.5	47.10539	30.0851	6.166	11.905	175	168
3	9.5	14.9	9.039271	17.16549	7.536	13.265	146	150
4	6.4	11.0	286.8685	267.8699	1.746	1.504	203	189
4	7.7	11.8	244.6205	237.8699	1.881	1.788	189	202
4	7.9	12.3	238.5716	180.4064	2.431	4.87	192	198
4	8.1	12.7	208.3358	136.4357	2.805	5.569	169	165
4	9.0	13.9	199.2358	121.1891	3.364	5.832	190	203
4	9.2	14.1	110.9173	65.07036	4.706	6.875	190	187
4	9.7	14.6	47.10539	42.02434	6.166	12.913	181	174
4	10.0	15.4	9.039271	32.60264	7.536	13.635	207	217
5	5.3	13.7	286.8685	268.8699	1.746	6.661	196	195
5	7.2	14.0	244.6205	238.8699	1.881	7.253	197	201
5	8.0	14.1	238.5716	181.4064	2.431	7.277	208	229
5	8.5	14.3	208.3358	137.4357	2.805	7.73	159	161
5	8.6	14.4	199.2358	122.1891	3.364	8.758	206	215
5	9.3	14.4	110.9173	69.07036	4.706	10.003	195	200
5	9.4	14.8	47.10539	43.02434	6.166	15.686	195	206
5	9.5	15.0	9.039271	33.60264	7.536	17.214	212	203

Ket Kelompok :

1 = sacrificed

2 = NaCMC

3 = Rosela 100 mg/KgBB/hari

4 = Rosela 300 mg/KgBB/hari

5 = Rosela 500 mg/KgBB/hari

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kadar HB Sebelum Perlakuan	Sacrificed	.183	8	.200 [*]	.909	8	.344
	NaCMC	.188	7	.200 [*]	.889	7	.268
	Ros 100 mg	.202	8	.200 [*]	.858	8	.115
	Ros 300 mg	.162	8	.200 [*]	.954	8	.755
	Ros 500 mg	.202	8	.200 [*]	.858	8	.115
Kadar HB Sesudah Perlakuan	Sacrificed	.183	8	.200 [*]	.909	8	.344
	NaCMC	.202	7	.200 [*]	.954	7	.770
	Ros 100 mg	.275	8	.075	.823	8	.051
	Ros 300 mg	.173	8	.200 [*]	.968	8	.886
	Ros 500 mg	.191	8	.200 [*]	.973	8	.920
Kadar Feritin sebelum Perlakuan	Sacrificed	.247	8	.165	.908	8	.342
	NaCMC	.264	7	.149	.875	7	.205
	Ros 100 mg	.247	8	.165	.908	8	.342
	Ros 300 mg	.247	8	.165	.908	8	.342
	Ros 500 mg	.247	8	.165	.908	8	.342
Kadar Feritin Setelah Perlakuan	Sacrificed	.247	8	.165	.908	8	.342
	NaCMC	.249	7	.200 [*]	.853	7	.132
	Ros 100 mg	.120	8	.200 [*]	.969	8	.893
	Ros 300 mg	.162	8	.200 [*]	.932	8	.531
	Ros 500 mg	.155	8	.200 [*]	.934	8	.557
Kadar DMT 1 Sebelum Perlakuan	Sacrificed	.212	8	.200 [*]	.893	8	.249
	NaCMC	.256	7	.185	.879	7	.223
	Ros 100 mg	.212	8	.200 [*]	.893	8	.249
	Ros 300 mg	.212	8	.200 [*]	.893	8	.249
	Ros 500 mg	.212	8	.200 [*]	.893	8	.249
Kadar DMT 1 Setelah Perlakuan	Sacrificed	.212	8	.200 [*]	.893	8	.249
	NaCMC	.274	7	.122	.855	7	.136
	Ros 100 mg	.287	8	.051	.911	8	.360
	Ros 300 mg	.228	8	.200 [*]	.880	8	.188
	Ros 500 mg	.257	8	.129	.785	8	.020

a. Lilliefors Significance Correction

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

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Kadar HB Sebelum Perlakuan	Based on Mean	.094	4	34	.984
	Based on Median	.058	4	34	.994

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Kadar HB Sebelum Perlakuan	Based on Median and with adjusted df	.058	4	28.957	.993
	Based on trimmed mean	.079	4	34	.988
Kadar HB Sesudah Perlakuan	Based on Mean	2.323	4	34	.077
	Based on Median	1.515	4	34	.220
	Based on Median and with adjusted df	1.515	4	20.477	.235
	Based on trimmed mean	2.217	4	34	.088
Kadar Feritin sebelum Perlakuan	Based on Mean	.005	4	34	1.000
	Based on Median	.001	4	34	1.000
	Based on Median and with adjusted df	.001	4	33.970	1.000
	Based on trimmed mean	.004	4	34	1.000
Kadar Feritin Setelah Perlakuan	Based on Mean	2.480	4	34	.062
	Based on Median	1.579	4	34	.202
	Based on Median and with adjusted df	1.579	4	24.720	.211
	Based on trimmed mean	2.459	4	34	.064
Kadar DMT 1 Sebelum Perlakuan	Based on Mean	.051	4	34	.995
	Based on Median	.014	4	34	1.000
	Based on Median and with adjusted df	.014	4	33.395	1.000
	Based on trimmed mean	.052	4	34	.995
Kadar DMT 1 Setelah Perlakuan	Based on Mean	1.395	4	34	.256
	Based on Median	.553	4	34	.698
	Based on Median and with adjusted df	.553	4	27.065	.699
	Based on trimmed mean	1.296	4	34	.291

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
					Lower	Upper
Pair 1	Hb Post Kel. NaCMC - Hb Pre Kel. NaCMC	4.58571	2.52219	.95330	2.25308	6.91835
Pair 2	Hb Post Kel. Rosella 100 mg - Hb Pre Kel. Rosella 100 mg	5.38750	1.54867	.54754	4.09278	6.68222
Pair 3	Hb Post Kel. Rosella 300 mg - Hb Pre Kel. Rosella 300 mg	4.72500	1.10162	.38948	3.80402	5.64598

Paired Samples Test

		t	df	Sig. (2-tailed)
Pair 1	Hb Post Kel. NaCMC - Hb Pre Kel. NaCMC	4.810	6	.003
Pair 2	Hb Post Kel. Rosella 100 mg - Hb Pre Kel. Rosella 100 mg	9.839	7	.000
Pair 3	Hb Post Kel. Rosella 300 mg - Hb Pre Kel. Rosella 300 mg	12.131	7	.000

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
					Lower	Upper
Pair 4	Hb Post Kel. Rosella 500 mg - Hb Pre Kel. Rosella 500 mg	6.11250	1.51605	.53600	4.84505	7.37995
Pair 5	Kadar Feritin Pre Kel. NaCMC - Kadar Feritin Post Kel. NaCMC	1.0562E2	69.40233176	26.23161575	41.43529727	1.69808200E2
Pair 6	Kadar Feritin Pre Kel. Rosella 100 mg - Kadar Feritin Post Kel. Rosella 100 mg	8.0429E1	54.06605594	19.11523739	35.22892871	1.25629637E2
Pair 7	Kadar Feritin Pre Kel. Rosella 300 mg - Kadar Feritin Post Kel. Rosella 300 mg	3.2640E1	36.27192180	12.82406094	2.31596838	62.96413937
Pair 8	Kadar Feritin Pre Kel. Rosella 500 mg - Kadar Feritin Post Kel. Rosella 500 mg	3.1265E1	36.13111018	12.77427651	1.05868984	61.47141791
Pair 9	Kadar DMT1 Post Kel. NaCMC - Kadar DMT1 Pre Kel. NaCMC	.214143	.137142	.051835	.087308	.340978
Pair 10	Kadar DMT1 Post Kel. Rosella 100 mg - Kadar DMT1 Pre Kel. Rosella 100 mg	3.3915E0	1.921408	.679320	1.785163	4.997837
Pair 11	Kadar DMT1 Post Kel. Rosella 300 mg - Kadar DMT1 Pre Kel. Rosella 300 mg	2.7938E0	2.527707	.893679	.680659	4.907091
Pair 12	Kadar DMT1 Post Kel. Rosella 500 mg - Kadar DMT1 Pre Kel. Rosella 500 mg	6.2433E0	2.082740	.736360	4.502161	7.984589

Paired Samples Test

		t	df	Sig. (2-tailed)
Pair 4	Hb Post Kel. Rosella 500 mg - Hb Pre Kel. Rosella 500 mg	11.404	7	.000
Pair 5	Kadar Feritin Pre Kel. NaCMC - Kadar Feritin Post Kel. NaCMC	4.027	6	.007
Pair 6	Kadar Feritin Pre Kel. Rosella 100 mg - Kadar Feritin Post Kel. Rosella 100 mg	4.208	7	.004
Pair 7	Kadar Feritin Pre Kel. Rosella 300 mg - Kadar Feritin Post Kel. Rosella 300 mg	2.545	7	.038
Pair 8	Kadar Feritin Pre Kel. Rosella 500 mg - Kadar Feritin Post Kel. Rosella 500 mg	2.448	7	.044
Pair 9	Kadar DMT1 Post Kel. NaCMC - Kadar DMT1 Pre Kel. NaCMC	4.131	6	.006
Pair 10	Kadar DMT1 Post Kel. Rosella 100 mg - Kadar DMT1 Pre Kel. Rosella 100 mg	4.992	7	.002
Pair 11	Kadar DMT1 Post Kel. Rosella 300 mg - Kadar DMT1 Pre Kel. Rosella 300 mg	3.126	7	.017
Pair 12	Kadar DMT1 Post Kel. Rosella 500 mg - Kadar DMT1 Pre Kel. Rosella 500 mg	8.479	7	.000

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Kadar HB Sesudah Perlakuan	Between Groups	191.515	4	47.879	24.474	.000
	Within Groups	66.515	34	1.956		
	Total	258.029	38			
Kadar Feritin Setelah Perlakuan	Between Groups	69408.826	4	17352.207	2.793	.042
	Within Groups	211233.125	34	6212.739		
	Total	280641.951	38			
Kadar DMT 1 Setelah Perlakuan	Between Groups	203.242	4	50.811	4.017	.009
	Within Groups	430.067	34	12.649		
	Total	633.310	38			

Multiple Comparisons

Dependent Variable		(I) Kelompok	(J) Kelompok	Mean Difference (I- J)	Std. Error	Sig.	
Kadar HB Sesudah Perlakuan	Bonferroni	Sacrificed	NaCMC	-5.28214 [*]	.72389	.000	
			Ros 100 mg	-5.33750 [*]	.69934	.000	
			Ros 300 mg	-4.95000 [*]	.69934	.000	
			Ros 500 mg	-6.06250 [*]	.69934	.000	
		NaCMC	Sacrificed	5.28214 [*]	.72389	.000	
			Ros 100 mg	-.05536	.72389	1.000	
			Ros 300 mg	.33214	.72389	1.000	
			Ros 500 mg	-.78036	.72389	1.000	
		Ros 100 mg	Sacrificed	5.33750 [*]	.69934	.000	
			NaCMC	.05536	.72389	1.000	
			Ros 300 mg	.38750	.69934	1.000	
			Ros 500 mg	-.72500	.69934	1.000	
		Ros 300 mg	Sacrificed	4.95000 [*]	.69934	.000	
			NaCMC	-.33214	.72389	1.000	
	Ros 100 mg		-.38750	.69934	1.000		
	Ros 500 mg		-1.11250	.69934	1.000		
	Ros 500 mg	Sacrificed	6.06250 [*]	.69934	.000		
		NaCMC	.78036	.72389	1.000		
		Ros 100 mg	.72500	.69934	1.000		
		Ros 300 mg	1.11250	.69934	1.000		
	Games-Howell	Sacrificed	NaCMC	-5.28214 [*]	.88437	.001	
			Ros 100 mg	-5.33750 [*]	.68170	.000	
			Ros 300 mg	-4.95000 [*]	.71577	.000	
			Ros 500 mg	-6.06250 [*]	.49953	.000	
			NaCMC	Sacrificed	5.28214 [*]	.88437	.001
				Ros 100 mg	-.05536	.88994	1.000
				Ros 300 mg	.33214	.91630	.996
				Ros 500 mg	-.78036	.75948	.835
Ros 100 mg			Sacrificed	5.33750 [*]	.68170	.000	
			NaCMC	.05536	.88994	1.000	
			Ros 300 mg	.38750	.72264	.982	
			Ros 500 mg	-.72500	.50933	.631	
Ros 300 mg			Sacrificed	4.95000 [*]	.71577	.000	
			NaCMC	-.33214	.91630	.996	
		Ros 100 mg	-.38750	.72264	.982		
		Ros 500 mg	-1.11250	.55410	.341		
Ros 500 mg		Sacrificed	6.06250 [*]	.49953	.000		
		NaCMC	.78036	.75948	.835		
		Ros 100 mg	.72500	.50933	.631		

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

Multiple Comparisons

Dependent Variable	(I) Kelompok	(J) Kelompok	95% Confidence Interval		
			Lower Bound	Upper Bound	
Kadar HB Sesudah Perlakuan	Bonferroni	Sacrificed	NaCMC	-7.4552	-3.1091
			Ros 100 mg	-7.4369	-3.2381
			Ros 300 mg	-7.0494	-2.8506
			Ros 500 mg	-8.1619	-3.9631
		NaCMC	Sacrificed	3.1091	7.4552
			Ros 100 mg	-2.2284	2.1177
			Ros 300 mg	-1.8409	2.5052
			Ros 500 mg	-2.9534	1.3927
		Ros 100 mg	Sacrificed	3.2381	7.4369
			NaCMC	-2.1177	2.2284
			Ros 300 mg	-1.7119	2.4869
			Ros 500 mg	-2.8244	1.3744
	Ros 300 mg	Sacrificed	2.8506	7.0494	
		NaCMC	-2.5052	1.8409	
		Ros 100 mg	-2.4869	1.7119	
		Ros 500 mg	-3.2119	.9869	
	Ros 500 mg	Sacrificed	3.9631	8.1619	
		NaCMC	-1.3927	2.9534	
		Ros 100 mg	-1.3744	2.8244	
		Ros 300 mg	-.9869	3.2119	
	Games-Howell	Sacrificed	NaCMC	-8.1698	-2.3944
			Ros 100 mg	-7.4618	-3.2132
			Ros 300 mg	-7.1841	-2.7159
			Ros 500 mg	-7.7707	-4.3543
NaCMC		Sacrificed	2.3944	8.1698	
		Ros 100 mg	-2.9538	2.8431	
		Ros 300 mg	-2.6215	3.2857	
		Ros 500 mg	-3.5602	1.9995	
Ros 100 mg		Sacrificed	3.2132	7.4618	
		NaCMC	-2.8431	2.9538	
		Ros 300 mg	-1.8667	2.6417	
		Ros 500 mg	-2.4695	1.0195	
Ros 300 mg	Sacrificed	2.7159	7.1841		
	NaCMC	-3.2857	2.6215		
	Ros 100 mg	-2.6417	1.8667		
	Ros 500 mg	-3.0221	.7971		
Ros 500 mg	Sacrificed	4.3543	7.7707		
	NaCMC	-1.9995	3.5602		
	Ros 100 mg	-1.0195	2.4695		

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

Multiple Comparisons

Dependent Variable	(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	
Kadar HB Sesudah ...	Games-Howell	Ros 500 mg	Ros 300 mg	1.11250	.55410	.341
Kadar Feritin Setelah Perlakuan	Bonferroni	Sacrificed	NaCMC	1.2259056E2 *	4.0793E1	.050
			Ros 100 mg	80.44245638	3.9410E1	.491
			Ros 300 mg	32.65322763	3.9410E1	1.000
			Ros 500 mg	31.27822763	3.9410E1	1.000
		NaCMC	Sacrificed	-1.225905E2 *	4.0793E1	.050
			Ros 100 mg	-42.14811089	4.0793E1	1.000
			Ros 300 mg	-89.93733964	4.0793E1	.343
			Ros 500 mg	-91.31233964	4.0793E1	.319
		Ros 100 mg	Sacrificed	-80.44245638	3.9410E1	.491
			NaCMC	42.14811089	4.0793E1	1.000
			Ros 300 mg	-47.78922875	3.9410E1	1.000
			Ros 500 mg	-49.16422875	3.9410E1	1.000
		Ros 300 mg	Sacrificed	-32.65322763	3.9410E1	1.000
			NaCMC	89.93733964	4.0793E1	.343
	Ros 100 mg		47.78922875	3.9410E1	1.000	
	Ros 500 mg		-1.37500000	3.9410E1	1.000	
	Ros 500 mg	Sacrificed	-31.27822763	3.9410E1	1.000	
		NaCMC	91.31233964	4.0793E1	.319	
		Ros 100 mg	49.16422875	3.9410E1	1.000	
		Ros 300 mg	1.37500000	3.9410E1	1.000	
	Games-Howell	Sacrificed	NaCMC	1.22590567E2	3.8685E1	.064
			Ros 100 mg	80.44245638	4.0711E1	.337
			Ros 300 mg	32.65322763	4.7290E1	.955
			Ros 500 mg	31.27822763	4.7211E1	.961
		NaCMC	Sacrificed	-1.2259056E2	3.8685E1	.064
			Ros 100 mg	-42.14811089	2.5061E1	.478
			Ros 300 mg	-89.93733964	3.4741E1	.146
			Ros 500 mg	-91.31233964	3.4634E1	.135
Ros 100 mg		Sacrificed	-80.44245638	4.0711E1	.337	
		NaCMC	42.14811089	2.5061E1	.478	
		Ros 300 mg	-47.78922875	3.6984E1	.701	
		Ros 500 mg	-49.16422875	3.6884E1	.678	
Ros 300 mg		Sacrificed	-32.65322763	4.7290E1	.955	
		NaCMC	89.93733964	3.4741E1	.146	
	Ros 100 mg	47.78922875	3.6984E1	.701		
	Ros 500 mg	-1.37500000	4.4038E1	1.000		
Ros 500 mg	Sacrificed	-31.27822763	4.7211E1	.961		
	NaCMC	91.31233964	3.4634E1	.135		

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

Multiple Comparisons

Dependent Variable	(I) Kelompok	(J) Kelompok	95% Confidence Interval		
			Lower Bound	Upper Bound	
Kadar HB Sesudah ...	Games-Howell	Ros 500 mg	Ros 300 mg	-7.971	3.0221
Kadar Feritin Setelah Perlakuan	Bonferroni	Sacrificed	NaCMC	.1297401	245.0513944
			Ros 100 mg	-37.8659425	198.7508552
			Ros 300 mg	-85.6551712	150.9616265
			Ros 500 mg	-87.0301712	149.5866265
		NaCMC	Sacrificed	-2.4505139E2	-.1297401
			Ros 100 mg	-1.6460894E2	80.3127162
			Ros 300 mg	-2.1239817E2	32.5234875
			Ros 500 mg	-2.1377317E2	31.1484875
		Ros 100 mg	Sacrificed	-1.9875086E2	37.8659425
			NaCMC	-80.3127162	164.6089380
			Ros 300 mg	-1.6609763E2	70.5191701
			Ros 500 mg	-1.6747263E2	69.1441701
		Ros 300 mg	Sacrificed	-1.5096163E2	85.6551712
			NaCMC	-32.5234875	212.3981668
			Ros 100 mg	-70.5191701	166.0976276
			Ros 500 mg	-1.1968340E2	116.9333988
	Ros 500 mg	Sacrificed	-1.4958663E2	87.0301712	
		NaCMC	-31.1484875	213.7731668	
		Ros 100 mg	-69.1441701	167.4726276	
		Ros 300 mg	-1.1693340E2	119.6833988	
	Games-Howell	Sacrificed	NaCMC	-6.1607558	251.3418904
			Ros 100 mg	-51.2534869	212.1383997
			Ros 300 mg	-1.1503545E2	180.3419071
			Ros 500 mg	-1.1618567E2	178.7421289
		NaCMC	Sacrificed	-2.5134189E2	6.1607558
			Ros 100 mg	-1.2143418E2	37.1379594
			Ros 300 mg	-2.0408851E2	24.2138282
			Ros 500 mg	-2.0506978E2	22.4451045
		Ros 100 mg	Sacrificed	-2.1213840E2	51.2534869
			NaCMC	-37.1379594	121.4341812
			Ros 300 mg	-1.6587629E2	70.2978304
			Ros 500 mg	-1.6688897E2	68.5605146
Ros 300 mg		Sacrificed	-1.8034191E2	115.0354518	
		NaCMC	-24.2138282	204.0885075	
		Ros 100 mg	-70.2978304	165.8762879	
		Ros 500 mg	-1.3859606E2	135.8460630	
Ros 500 mg	Sacrificed	-1.7874213E2	116.1856737		
	NaCMC	-22.4451045	205.0697837		

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

Multiple Comparisons

Dependent Variable	(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.		
Kadar Feritin Setelah Perlakuan	Games-Howell	Ros 500 mg	Ros 100 mg	49.16422875	3.6884E1	.678	
		Ros 500 mg	Ros 300 mg	1.37500000	4.4038E1	1.000	
Kadar DMT 1 Setelah Perlakuan	Bonferroni	Sacrificed	NaCMC	-.280625	1.840689	1.000	
			Ros 100 mg	-3.391500	1.778274	.650	
			Ros 300 mg	-2.793875	1.778274	1.000	
			Ros 500 mg	-6.243375*	1.778274	.013	
		NaCMC	Sacrificed	.280625	1.840689	1.000	
			Ros 100 mg	-3.110875	1.840689	1.000	
			Ros 300 mg	-2.513250	1.840689	1.000	
			Ros 500 mg	-5.962750*	1.840689	.027	
		Ros 100 mg	Sacrificed	3.391500	1.778274	.650	
			NaCMC	3.110875	1.840689	1.000	
			Ros 300 mg	.597625	1.778274	1.000	
			Ros 500 mg	-2.851875	1.778274	1.000	
		Ros 300 mg	Sacrificed	2.793875	1.778274	1.000	
			NaCMC	2.513250	1.840689	1.000	
			Ros 100 mg	-.597625	1.778274	1.000	
			Ros 500 mg	-3.449500	1.778274	.607	
		Ros 500 mg	Sacrificed	6.243375*	1.778274	.013	
			NaCMC	5.962750*	1.840689	.027	
			Ros 100 mg	2.851875	1.778274	1.000	
			Ros 300 mg	3.449500	1.778274	.607	
		Games-Howell	Sacrificed	NaCMC	-.280625	1.138529	.999
				Ros 100 mg	-3.391500	1.574330	.266
				Ros 300 mg	-2.793875	1.765301	.539
				Ros 500 mg	-6.243375*	1.628214	.020
			NaCMC	Sacrificed	.280625	1.138529	.999
				Ros 100 mg	-3.110875	1.629724	.365
				Ros 300 mg	-2.513250	1.814876	.649
				Ros 500 mg	-5.962750*	1.681835	.029
Ros 100 mg	Sacrificed		3.391500	1.574330	.266		
	NaCMC		3.110875	1.629724	.365		
	Ros 300 mg		.597625	2.115665	.998		
	Ros 500 mg		-2.851875	2.002707	.623		
Ros 300 mg	Sacrificed		2.793875	1.765301	.539		
	NaCMC		2.513250	1.814876	.649		
	Ros 100 mg		-.597625	2.115665	.998		
	Ros 500 mg		-3.449500	2.156063	.521		
Ros 500 mg	Sacrificed		6.243375*	1.628214	.020		

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

Multiple Comparisons

Dependent Variable	(I) Kelompok	(J) Kelompok	95% Confidence Interval			
			Lower Bound	Upper Bound		
Kadar Feritin Setelah Perlakuan	Games-Howell	Ros 500 mg	Ros 100 mg	-68.5605146	166.8889721	
			Ros 300 mg	-1.3584606E2	138.5960630	
Kadar DMT 1 Setelah Perlakuan	Bonferroni	Sacrificed	NaCMC	-5.80629	5.24504	
			Ros 100 mg	-8.72980	1.94680	
			Ros 300 mg	-8.13217	2.54442	
			Ros 500 mg	-11.58167	-.90508	
		NaCMC	Sacrificed	-5.24504	5.80629	
			Ros 100 mg	-8.63654	2.41479	
			Ros 300 mg	-8.03891	3.01241	
			Ros 500 mg	-11.48841	-.43709	
		Ros 100 mg	Sacrificed	-1.94680	8.72980	
			NaCMC	-2.41479	8.63654	
			Ros 300 mg	-4.74067	5.93592	
			Ros 500 mg	-8.19017	2.48642	
		Ros 300 mg	Sacrificed	-2.54442	8.13217	
			NaCMC	-3.01241	8.03891	
			Ros 100 mg	-5.93592	4.74067	
			Ros 500 mg	-8.78780	1.88880	
		Ros 500 mg	Sacrificed	.90508	11.58167	
			NaCMC	.43709	11.48841	
			Ros 100 mg	-2.48642	8.19017	
			Ros 300 mg	-1.88880	8.78780	
		Games-Howell	Sacrificed	NaCMC	-3.88976	3.32851
				Ros 100 mg	-8.50268	1.71968
				Ros 300 mg	-8.61234	3.02459
				Ros 500 mg	-11.55358	-.93317
			NaCMC	Sacrificed	-3.32851	3.88976
				Ros 100 mg	-8.34624	2.12449
				Ros 300 mg	-8.42243	3.39593
				Ros 500 mg	-11.38644	-.53906
			Ros 100 mg	Sacrificed	-1.71968	8.50268
				NaCMC	-2.12449	8.34624
				Ros 300 mg	-6.01286	7.20811
				Ros 500 mg	-9.09376	3.39001
			Ros 300 mg	Sacrificed	-3.02459	8.61234
				NaCMC	-3.39593	8.42243
				Ros 100 mg	-7.20811	6.01286
				Ros 500 mg	-10.17681	3.27781
Ros 500 mg	Sacrificed	.93317	11.55358			

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

Multiple Comparisons

Dependent Variable		(I) Kelompok	(J) Kelompok	Mean	Std. Error	Sig.
				Difference (I- J)		
Kadar DMT 1 Setelah Perlakuan	Games-Howell	Ros 500 mg	NaCMC	5.962750*	1.681835	.029
			Ros 100 mg	2.851875	2.002707	.623
			Ros 300 mg	3.449500	2.156063	.521

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

Multiple Comparisons


Dependent Variable		(I) Kelompok	(J) Kelompok	95% Confidence Interval	
				Lower Bound	Upper Bound
Kadar DMT 1 Setelah Perlakuan	Games-Howell	Ros 500 mg	NaCMC	.53906	11.38644
			Ros 100 mg	-3.39001	9.09376
			Ros 300 mg	-3.27781	10.17681

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

Correlations

		Kadar HB Sesudah Perlakuan	Kadar Feritin Setelah Perlakuan	Kadar DMT 1 Setelah Perlakuan
Kadar HB Sesudah Perlakuan	Pearson Correlation	1	-.593**	.644**
	Sig. (2-tailed)		.000	.000
	N	39	39	39
Kadar Feritin Setelah Perlakuan	Pearson Correlation	-.593**	1	-.561**
	Sig. (2-tailed)	.000		.000
	N	39	39	39
Kadar DMT 1 Setelah Perlakuan	Pearson Correlation	.644**	-.561**	1
	Sig. (2-tailed)	.000	.000	
	N	39	39	39

** . Correlation is significant at the 0.01 level (2-tailed).

 LAB. PPS FMIPA UNHAS	FORMULIR NO: FSOP-7.8-LPPS-FMIPAUH-01.1	Tanggal Berlaku : 1 April 2019
	LAPORAN HASIL PENGUJIAN	Edisi/Revisi Ke : 1/0
		Halaman : 1/2

LAPORAN HASIL PENGUJIAN

CERTIFICATE OF ANALYSIS

Nomor Pekerjaan : LPPS.AJ-2104-9/1
Job Number

Dipersembahkan Kepada
Presented To

Kepada Yth <i>Attention</i>	: Sitti Zakiyyah Putri	Jabatan <i>Job Title</i>	: Peneliti
Nama Pelanggan <i>Customer Name</i>	: Sitti Zakiyyah Putri	Tujuan Pengujian <i>Purpose of analysis</i>	: Analisis Unsur
Alamat/Universitas <i>Address/University</i>	:	No. Faks/ Fax No.	: -
Tanggal Sampel Diterima <i>Date of Sample Receipt</i>	: 23 April 2021	No. Telp./ Phone No.	: 081355295515
Email <i>Email</i>	: zakiyyahputri1807@gmail.com	Tanggal Sampel Dianalisis <i>Date of Sample Analysed</i>	: 30 April 2021
Nama Pengujian <i>Name of analysis</i>	: Analisis Logam (Fe, Mn, Zn, Ca) pada Ekstrak Rosella	Total Halaman	: 2

Hasil hanya berhubungan dengan contoh yang diuji dan laporan ini tidak boleh digandakan kecuali seluruhnya.
The result relate only to the samples tested and this report shall not be reproduced except in full



**LABORATORIUM PENELITIAN DAN PENGEMBANGAN SAINS
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
UNIVERSITAS HASANUDDIN**

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Telp. 0411-586016 • Fax. 0411-588551 • Email : lpps.fmipa.unhas@gmail.com

LAPORAN HASIL PENGUJIAN

Nomor: LPPS.AJ-2104-9/1

Nama Pelanggan : Sitti Zakiyyah Putri
Customer Name
Alamat : Jl. Pemuda No. 93 Makassar
Address
Jenis Sampel : Ekstrak Rosella
Type of Sample(s)
Tanggal Penerimaan : 23 April 2021
Received Date
Tanggal Analisis : 30 April 2021
Analysis Date
Email : zakiyyahputri1807@gmail.com
Email

Setelah dilakukan pengujian diperoleh hasil sebagai berikut:

Nomor Sampel	Nama sampel	Konsentrasi Logam (mg/kg=ppm)			
		Fe	Mn	Zn	Ca
LPPS.AJ-2104-9/1	Ekstrak Rosella	75.76	15.06	7.59	49.77094

Makassar, 27 Mei 2021
Wakil Penanggung Jawab Teknis

Mahdala, S.Si, M.Si
Np. 17508261996012001

Catatan:

- Hasil Uji hanya berlaku untuk contoh tersebut di atas
- Dilarang mengutip/menyalin sebagian isi hasil uji ini



LABORATORIUM BOKIMIA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
UNIVERSITAS HASANUDDIN
Kampus UNHAS Tamalanrea, Jl. Perintis Kemerdekaan KM. 10, Makassar 90245
Telp/Fax : 0411-586498

LAPORAN HASIL ANALISIS
No. 15-LHA/IV/BK/K/FMIPA-UH/2022

Nama : Sitti Zakiyah Putri
Asal Institusi : S3 Ilmu Kedokteran Fak. Kedokteran UNHAS
Jenis Sampel : Ekstrak Kelopak Bunga Rosella (*Hibiscus sabdariffa*)
Jumlah : 2 sampel
Analisis : Kadar Vitamin C

No	Parameter	Simplo	Duplo
1	Vitamin C (mg/100 gr)	172	148

Makassar, 5 April 2022
PLP Lab. Biokimia

Mahdalia, S.Si, M.Si
NIP. 19750826 199601 2 001