L A M P I R A N

Lampiran 1. Surat keterangan hasil identifikasi sarang burung walet

UNIVERSITAS GADJAH MADA
FAKULTAS BIOLOGI
LABORATORIUM SISTEMATIKA HEWAN
Jl. Teknika Selatan, Sekip Utara, Yogyakarta 55281. Telp. (0274) 580839

SURAT KETERANGAN
No : BI/SH/14/V/22

Yang bertanda tangan di bawah ini, menerangkan bahwa mahasiswa S1, Fakultas Farmasi, Universitas Setia Budi, Solo

Nama	:	Muhammad Ichsanuddin
NIM	:	24185607A
Fakultas	:	Farmasi
Program Studi	:	S1 Farmasi
Judul Penelitian	:	Formulasi Tablet Hisap Sarang Burung Walet (*Aerodramus fuciphagus*) Dan Uji Efek Tonikum pada Mencit Putih Jantan (*Mus Musculus L.*)

telah selesai melakukan identifikasi Burung Walet di Laboratorium Sistematika Hewan, Fakultas Biologi, Universitas Gadjah Mada, dibantu oleh Drs . Bambang Agus Suripto, S.Su, M.Sc dengan hasil sebagai berikut (deskripsi terlampir):

1. walet putih (*Aerodromus fuciphagus*)

Demikian surat keterangan ini dibuat, untuk dipergunakan seperlunya.

Mengetahui,
Wakil Dekan Bidang P2MKSA
Fakultas Biologi UGM

Dr. Eko Agus Suyono, S.Si., M.App.Sc.
NIP. 197112181997021001

Yogyakarta, 23 Mei 2022
Kepala

Dr. Dra. Rr. Upiek Ngesti W. Astuti, DAP&E, M. Biomed
NIP. 196403281990032001

Lampiran 2. Surat keterangan ethical clearance

HEALTH RESEARCH ETHICS COMITTE
KOMISI ETIK PENELITIAN KESEHATAN

Dr. Moewardi General Hospital
RSUD Dr. Moewardi

ETHICAL CLEARANCE
KELAIKAN ETIK

Nomor : 473 / IV / HREC / 2022

The Health Research Ethics Committee Dr. Moewardi
Komisi Etik Penelitian Kesehatan RSUD Dr. Moewardi

after reviewing the proposal design, herewith to certify
setelah menilai rancangan penelitian yang diusulkan, dengan ini menyatakan

That the research proposal with topic :
Bahwa usulan penelitian dengan judul

FORMULASI TABLET HISAP SARANG BURUNG WALET (Aerodramus fuciphagus) DAN UJI EFEK TONIKUM PADA MENCIT PUTIH JANTAN (Mus Musculus L.)

Principal investigator
Peneliti Utama : MUHAMMAD ICHSANUDDIN
24185607A

Location of research
Lokasi Tempat Penelitian : UNIVERSITAS SETIA BUDI SURAKARTA

Is ethically approved
Dinyatakan layak etik

Issued on : 11 April 2022

Chairman
Ketua

Dr. Wahyu Dwi Atmoko., Sp.F
19770224 201001 1 004

Lampiran 3. Surat keterangan hewan uji

"ABIMANYU FARM"

√ Mencit putih jantan √ Tikus Wistar √ Swis Webster √ Cacing
√ Mencit Balb/C √ Kelinci New Zaeland

Ngampon RT 04 / RW 04. Mojosongo Kec. Jebres Surakarta. Phone 085 629 994 33 / Lab USB Ska

Yang bertanda tangan di bawah ini:
Nama : Sigit Pramono

Selaku pengelola Abimanyu Farm, menerangkan bahwa hewan uji yang digunakan untuk penelitian, oleh:

Nama	: Muhammad Ichsanuddin
NIM	: 24185607A
Institusi	: Universitas Setia Budi Surakarta

Merupakan hewan uji dengan spesifikasi sebagai berikut:

Jenis hewan	: Mencit Swiss
Umur	: 2-3 bulan
Jumlah	: 20 ekor
Jenis kelamin	: Jantan
Keterangan	: Sehat
Asal-usul	: Unit Pengembangan Hewan Percobaan UGM Yogyakarta

Yang pengembangan dan pengelolaannya disesuaikan standar baku penelitian. Demikian surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Surakarta, 24 Mei 2022
Hormat kami

Sigit Pramono
"ABIMANYU FARM"

Lampiran 4. Pengolahan simplisia

Pemilihan sarang walet

Perendaman dan pembersihan

Penirisan

Pengukusan

Pengeringan

Penyerbukan

Lampiran 5. Foto indentifikasi kandungan sarang burung walet

Pengujian	Hasil	Keterangan
Karbohidrat		Positif
Asam amino		Positif
Protein		Positif

Lampiran 6. Perhitungan pengambilan bahan

Pengambilan dilebihkan 10 gram untuk meminimalisir granul yang tertinggal di alat uji

Formula I

Sarang burung walet	$\frac{100\ mg}{1000\ mg}$ X 110 g = 11 g
Manitol	$\frac{395\ mg}{1000\ mg}$ X 110 g = 43,45 g
Laktosa	$\frac{395\ mg}{1000\ mg}$ X 110 g = 43,45 g
Aspartam	$\frac{50\ mg}{1000\ mg}$ X 110 g = 5,5 g
Pvp	$\frac{50\ mg}{1000\ mg}$ X 110 g = 5,5 g
Magnesium strearat	$\frac{10\ mg}{1000\ mg}$ X 110 g = 1,1 g
Perisa dan pewarna	10 tetes

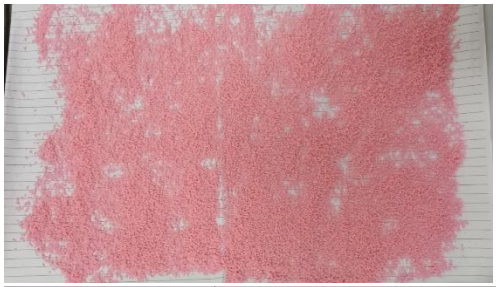
Formula II

Sarang burung walet	$\frac{200\ mg}{1000\ mg}$ X 110 g = 22 g
Manitol	$\frac{345\ mg}{1000\ mg}$ X 110 g = 37.95 g
Laktosa	$\frac{345\ mg}{1000\ mg}$X 110 g = 37.95 g
Aspartam	$\frac{50\ mg}{1000\ mg}$ X 110 g = 5.5 g
Pvp	$\frac{50\ mg}{1000\ mg}$ X 110 g = 5.5 g
Magnesium strearat	$\frac{10\ mg}{1000\ mg}$ X 110 g = 1,1 g
Perisa dan pewarna	10 tetes

Formula III

Sarang burung walet	$\frac{300\ mg}{1000\ mg}$ X 110 g = 33 g
Manitol	$\frac{295\ mg}{1000\ mg}$ X 110 g = 32.45 g
Laktosa	$\frac{295\ mg}{1000\ mg}$ X 110 g = 32.45 g
Aspartam	$\frac{50\ mg}{1000\ mg}$ X 110 g = 5.5 g
Pvp	$\frac{50\ mg}{1000\ mg}$X 110 g = 5.5 g
Magnesium strearat	$\frac{10\ mg}{1000\ mg}$ X 110 g = 1,1 g
Perisa dan pewarna	10 tetes

Lampiran 7. Foto granul tablet sarang burung walet



Lampiran 8. Foto hasil kadar air granul

Lampiran 9. Foto pengujian sifat alir granul

Lampiran 10. Perhitungan pengujian sifat alir

Formula 1

Replikasi 1 = 6,16 detik

Replikasi 2 = 6,20 detik

Replikasi 3 = 6,17 detik

Rata-rata waktu alir = $\frac{6,16+6,20+6,17}{3} = 6,18\ detik$

Formula 2

Replikasi 1 = 6,12 detik

Replikasi 2 = 6,18 detik

Replikasi 3 = 6,15 detik

Rata-rata waktu alir = $\frac{6,12+6,18+6,15}{3} = 6,15\ detik$

Formula 3

Replikasi 1 = 6,41 detik

Replikasi 2 = 6,52 detik

Replikasi 3 = 6,43 detik

Rata-rata waktu alir = $\frac{6,41+6,52+6,43}{3} = 6,45\ detik$

Uji statistik sifat alir granul

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Sifatalir	1.00	.292	3	.	.923	3	.463
	2.00	.175	3	.	1.000	3	1.000
	3.00	.321	3	.	.881	3	.328
a. Lilliefors Significance Correction							

Descriptives								
Sifat alir								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1.00	3	6.1767	.02082	.01202	6.1250	6.2284	6.16	6.20
2.00	3	6.1500	.03000	.01732	6.0755	6.2245	6.12	6.18
3.00	3	6.4533	.05859	.03383	6.3078	6.5989	6.41	6.52
Total	9	6.2600	.14950	.04983	6.1451	6.3749	6.12	6.52

Test of Homogeneity of Variances			
Sifatalir			
Levene Statistic	df1	df2	Sig.
2.590	2	6	.155

ANOVA					
Sifatalir					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.169	2	.085	53.266	.000
Within Groups	.010	6	.002		
Total	.179	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Sifat alir

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	.02667	.03255	.706	-.0732	.1265
	3.00	-.27667*	.03255	.000	-.3765	-.1768
2.00	1.00	-.02667	.03255	.706	-.1265	.0732
	3.00	-.30333*	.03255	.000	-.4032	-.2035
3.00	1.00	.27667*	.03255	.000	.1768	.3765
	2.00	.30333*	.03255	.000	.2035	.4032

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

Homogeneous Subsets

Sifat alir

Tukey HSD[a]

Formula	N	Subset for alpha = 0.05	
		1	2
2.00	3	6.1500	
1.00	3	6.1767	
3.00	3		6.4533
Sig.		.706	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 11. Pengujian sudut diam

Lampiran 12. Perhitungan Sudut diam

Tan α = $\frac{h}{r}$

Formula 1

Replikasi 1 = Tan α = $\frac{4}{7,5}$

Tan α = 0,53333

Tan α = 28,07

Replikasi 2 = Tan α = $\frac{4}{7}$

Tan α = 0,57142

Tan α = 29,74

Replikasi 3 = Tan α = $\frac{4,1}{7,5}$

Tan α = 0,54666

Tan α = 28,66

Rata-rata sudut diam = $\frac{28,07+29,74+28,66}{3}$ = 28,82

Formula 2

Replikasi 1 = Tan α = $\frac{4}{6,8}$

Tan α = 0,58823

Tan α = 30,46

Replikasi 2 = Tan α = $\frac{4}{6,9}$

Tan α = 0,57971

Tan α = 30,10

Replikasi 3 = Tan α $= \frac{4,5}{6,9}$

Tan α = 0,65217

Tan α = 33,11

Rata-rata sudut diam = $\frac{30,46+30,10+33,11}{3}$ = 31,22

Formula 3

Replikasi 1 = Tan α $= \frac{4,2}{6,8}$

Tan α = 0,61764

Tan α = 31,70

Replikasi 2 = Tan α $= \frac{4,3}{6,8}$

Tan α = 0,62318

Tan α = 31,93

Replikasi 3 = Tan α $= \frac{4,2}{7,2}$

Tan α = 0,58333

Tan α = 30,25

Rata-rata sudut diam = $\frac{31,70+31,93+30,25}{3}$ = 31,29

Uji statistik sudut diam

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
SudutDiam	1.00	.243	3	.	.972	3	.680
	2.00	.345	3	.	.838	3	.210
	3.00	.339	3	.	.850	3	.242

a. Lilliefors Significance Correction

Oneway

Descriptives

SudutDiam

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1.00	3	28.8233	.84690	.48896	26.7195	30.9271	28.07	29.74
2.00	3	31.2233	1.64379	.94904	27.1399	35.3067	30.10	33.11
3.00	3	31.2933	.91084	.52587	29.0307	33.5560	30.25	31.93
Total	9	30.4467	1.59545	.53182	29.2203	31.6730	28.07	33.11

Test of Homogeneity of Variances

SudutDiam

Levene Statistic	df1	df2	Sig.
1.885	2	6	.232

ANOVA					
SudutDiam					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.866	2	5.933	4.189	.073
Within Groups	8.498	6	1.416		
Total	20.364	8			

Post Hoc Tests

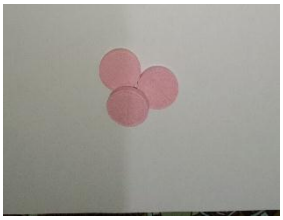
Multiple Comparisons						
Dependent Variable: SudutDiam						
Tukey HSD						
					95% Confidence Interval	
(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1.00	2.00	-2.40000	.97170	.106	-5.3814	.5814
	3.00	-2.47000	.97170	.097	-5.4514	.5114
2.00	1.00	2.40000	.97170	.106	-.5814	5.3814
	3.00	-.07000	.97170	.997	-3.0514	2.9114
3.00	1.00	2.47000	.97170	.097	-.5114	5.4514
	2.00	.07000	.97170	.997	-2.9114	3.0514

Homogeneous Subsets

SudutDiam		
Tukey HSD[a]		
		Subset for alpha = 0.05
Formula	N	1
1.00	3	28.8233
2.00	3	31.2233
3.00	3	31.2933
Sig.		.097
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 3.000.		

Lampiran 13. Foto alat pencetak tablet

Lampiran 14. Foto tablet hisap yang sudah dicetak

Tablet	Gambar	Hasil Organoleptik
Formula I		Bulat lingkaran pipih, berwarna merah muda, mempunyai rasa yang manis
Formula II		Bulat lingkaran pipih, berwarna merah muda, mempunyai rasa yang manis
Formula III		Bulat lingkaran pipih, berwarna merah muda, mempunyai rasa yang manis

Lampiran 15. Perhitungan keseragaman bobot tablet hisap

No	Keseragaman bobot (mg)								
	Formula 1			Formula 2			Formula 3		
	1	2	3	1	2	3	1	2	3
1	1010	1099	1098	1038	1098	1100	1025	1035	1076
2	1067	1017	1057	1104	1105	1041	1082	1055	1093
3	1070	1074	1090	1024	1090	1175	1098	1087	1021
4	1090	1069	1041	1066	1041	1024	1064	1040	1055
5	1036	1075	1076	1096	1076	1070	1068	1083	1084
6	1074	1069	1069	1069	1041	1054	1039	1075	1065
7	1108	1094	1075	1094	1099	1012	1098	1035	1056
8	1017	1075	1035	1075	1017	1062	1104	1076	1093
9	1020	1054	1098	1054	1074	1076	1090	1075	1075
10	1095	1012	1075	1012	1069	1093	1041	1031	1082
11	1079	1062	1020	1062	1075	1041	1076	1071	1043
12	1074	1076	1101	1076	1035	1099	1045	1080	1077
13	1069	1076	1085	1036	1098	1017	1059	1040	1047
14	1062	1093	1038	1053	1075	1074	1098	1077	1093
15	1057	1021	1099	1086	1031	1035	1058	1045	1041
16	1052	1098	1024	1052	1071	1055	1102	1080	1099
17	1099	1098	1066	1049	1076	1087	1041	1073	1017
18	1026	1065	1096	1014	1093	1040	1105	1087	1074
19	1015	1056	1054	1040	1021	1083	1024	1025	1069
20	1025	1093	1012	1086	1055	1078	1070	1075	1075
hasil rata-rata	1057,25	1068,8	1065,45	1059,3	1067	1065,8	1069,35	1062,25	1066,75
SD	30,60	26,43	28,89	26,93	27,52	37,10	27,19	21,23	23,47
CV	2,89%	2,47%	2,71%	2,54%	2,58%	3,48%	2,54%	2,00%	2,20%
Rata-rata	1063,83			1064,03			1066,12		
5%	1011,01 mg – 1117,43 mg			1010,83 mg – 1117,23 mg			1014,98 mg – 1121,82 mg		
10%	957,8 mg – 1170,64 mg			954,75 mg – 1167,55 mg			961,56 mg – 1175,24 mg		

Formula 1

Rata-rata kolom $= \frac{1057,25+1068,8+1065,45}{3} = 1063,83$ mg

Kolom A (5%) $= \frac{5}{100}\ x\ 1063,83 = 53,19$ mg

Batas bawah = 1063,83 – 53,19 = 1010,64 mg

Batas atas = 1063,83 + 53,19 = 1117,02 mg

Jadi bobot yang memenuhi syarat kolom A adalah tablet dengan bobot antara 1010,64 mg – 1117,02 mg.

Rata-rata kolom $= \frac{1057,25+1068,8+1065,45}{3} = 1063,83$ mg

Kolom A (10%) $= \frac{10}{100}\ x\ 1063,83 = 106,38$ mg

Batas bawah = 1063,83 – 106,38 = 957,45 mg

Batas atas = 1063,83 + 106,38 = 1170,21 mg

Jadi bobot yang memenuhi syarat kolom B adalah tablet dengan bobot antara 957,45 mg – 1170,21 mg.

Formula 2

Rata-rata kolom = $\frac{1059,3+1067+1065,8}{3} = 1064,03$ mg

Kolom A (5%) = $\frac{5}{100}\ x\ 1064,03 = 53,20$ mg

Batas bawah = 1064,03 – 53,20 = 1010,83 mg

Batas atas = 1064,03 + 53,20 = 1117,23 mg

Jadi bobot yang memenuhi syarat kolom A adalah tablet dengan bobot antara 1010,83 mg – 1117,23 mg.

Rata-rata kolom = $\frac{1059,3+1067+1065,8}{3} = 1064,03$ mg

Kolom A (10%) = $\frac{10}{100}\ x\ 1064,03 = 106,40$ mg

Batas bawah = 1064,03 – 106,40 = 954,75 mg

Batas atas = 1064,03 + 106,40 = 1167,55 mg

Jadi bobot yang memenuhi syarat kolom B adalah tablet dengan bobot antara 954,75 mg – 1167,55 mg.

Formula 3

Rata-rata kolom = $\frac{1069,35+1062,25+1066,75}{3} = 1066,12$ mg

Kolom A (5%) = $\frac{5}{100}\ x\ 1064,22 = 53,31$ mg

Batas bawah = 1066,12 – 53,31 = 1012,81 mg

Batas atas = 1066,12 + 53,31 = 1119,43 mg

Jadi bobot yang memenuhi syarat kolom A adalah tablet dengan bobot antara 1012,81 mg – 1119,43 mg.

Rata-rata kolom = $\frac{1069,35+1062,25+1066,75}{3} = 1066,12$ mg

Kolom A (10%) = $\frac{10}{100}\ x\ 1066,22 = 106,61$ mg

Batas bawah = 1066,12 – 106,61 = 959,51 mg

Batas atas = 1066,12 + 106,61 = 1172,73 mg

Jadi bobot yang memenuhi syarat kolom B adalah tablet dengan bobot antara 959,51 mg – 1172,73 mg.

Uji statistik keseragaman bobot

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
bobotratarata	1.00	.274	3	.	.944	3	.546
	2.00	.332	3	.	.864	3	.278
	3.00	.237	3	.	.977	3	.707
a. Lilliefors Significance Correction							

Descriptives								
Bobot rata-rata								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1.00	3	1063.8333	5.94229	3.43078	1049.0719	1078.5948	1057.25	1068.80
2.00	3	1064.0333	4.14287	2.39188	1053.7419	1074.3248	1059.30	1067.00
3.00	3	1066.1167	3.59212	2.07391	1057.1933	1075.0400	1062.25	1069.35
Total	9	1064.6611	4.18851	1.39617	1061.4415	1067.8807	1057.25	1069.35

Test of Homogeneity of Variances			
Bobot rata-rata			
Levene Statistic	df1	df2	Sig.
.665	2	6	.548

ANOVA					
bobotratarata					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.594	2	4.797	.220	.809
Within Groups	130.755	6	21.793		
Total	140.349	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: bobot rata-rata

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	-.20000	3.81161	.998	-11.8951	11.4951
	3.00	-2.28333	3.81161	.826	-13.9784	9.4117
2.00	1.00	.20000	3.81161	.998	-11.4951	11.8951
	3.00	-2.08333	3.81161	.852	-13.7784	9.6117
3.00	1.00	2.28333	3.81161	.826	-9.4117	13.9784
	2.00	2.08333	3.81161	.852	-9.6117	13.7784

Homogeneous Subsets

Bobot rata-rata

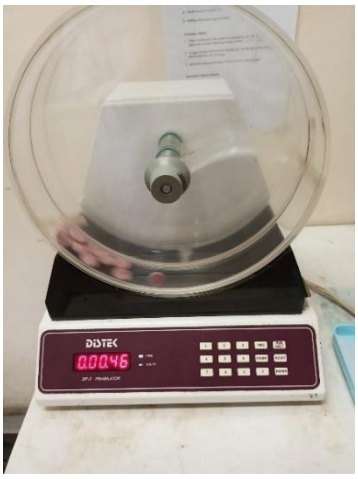
Tukey HSD[a]

Formula	N	Subset for alpha = 0.05
		1
1.00	3	1063.8333
2.00	3	1064.0333
3.00	3	1066.1167
Sig.		.826

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 16. Foto alat friabilitas tablet hisap



Lampiran 17. Perhitungan pengujian friabilitas

% Kerapuhan = $\frac{W1-W2}{W1}$ x 100%

Keterangan: W1 = Bobot awal

W2 = Bobot setelah uji

Formula 1

Replikasi 1: W1 = 10.787 mg

W2 = 10.715 mg

% Kerapuhan = $\frac{10.787-10.715}{10.787}$ x 100%

= 0,66%

Replikasi 2: W1 = 11.773 mg

W2 = 11.705 mg

% Kerapuhan = $\frac{11.773-11.705}{11.773}$ x 100%

= 0,57%

Replikasi 3: W1 = 10.973 mg

W2 = 10.938 mg

% Kerapuhan = $\frac{10.973-10.938}{10.973}$ x 100%

= 0,31%

Rata-rata : $\frac{0,66\%+0,57\%+0,31\%}{3}$ = 0,51%

Formula II

Replikasi 1: W1 = 10.758 mg
W2 = 10.706 mg
% Kerapuhan $= \frac{10.758-10.706}{10.758} x\ 100\%$
= 0,48%
Replikasi 2: W1 = 11.857 mg
W2 = 11.849 mg
% Kerapuhan $= \frac{11.857-11.849}{11.857} x\ 100\%$
= 0,06%
Replikasi 3: W1 = 10.698 mg
W2 = 10.651 mg
% Kerapuhan $= \frac{10.698-10.651}{10.698} x\ 100\%$
= 0,43%
Rata-rata : $\frac{0,48\%+0,06\%+0,43\%}{3}$ = 0,32%

Formula III

Replikasi 1: W1 = 10.190 mg
W2 = 10.158 mg
% Kerapuhan $= \frac{10.190-10.158}{10.190} x\ 100\%$
= 0,31%
Replikasi 2: W1 = 10.187 mg
W2 = 10.173 mg
% Kerapuhan $= \frac{10.187-10.173}{10.187} x\ 100\%$
= 0,13%
Replikasi 3: W1 = 10.193 mg
W2 = 10.189 mg
% Kerapuhan $= \frac{10.193-10.189}{10.193} x\ 100\%$
= 0,04%
Rata-rata : $\frac{0,31\%+0,13\%+0,04\%}{3}$ = 0,16%

Uji statistik friabilitas

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Friabilitas	1.00	.289	3	.	.927	3	.478
	2.00	.346	3	.	.838	3	.209
	3.00	.253	3	.	.964	3	.637
a. Lilliefors Significance Correction							

Descriptives								
Friabilitas								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1.00	3	.5133	.18175	.10493	.0618	.9648	.31	.66
2.00	3	.3233	.22942	.13246	-.2466	.8932	.06	.48
3.00	3	.1600	.13748	.07937	-.1815	.5015	.04	.31
Total	9	.3322	.22270	.07423	.1610	.5034	.04	.66

Test of Homogeneity of Variances			
Friabilitas			
Levene Statistic	df1	df2	Sig.
.815	2	6	.486

ANOVA					
Friabilitas					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.188	2	.094	2.691	.146
Within Groups	.209	6	.035		
Total	.397	8			

Post Hoc Tests

Multiple Comparisons						
Dependent Variable: Friabilitas						
Tukey HSD						
					95% Confidence Interval	
(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
1.00	2.00	.19000	.15244	.472	-.2777	.6577
	3.00	.35333	.15244	.129	-.1144	.8211
2.00	1.00	-.19000	.15244	.472	-.6577	.2777
	3.00	.16333	.15244	.564	-.3044	.6311
3.00	1.00	-.35333	.15244	.129	-.8211	.1144
	2.00	-.16333	.15244	.564	-.6311	.3044

Homogeneous Subsets

Friabilitas		
Tukey HSD[a]		
Formula	N	Subset for alpha = 0.05 1
3.00	3	.1600
2.00	3	.3233
1.00	3	.5133
Sig.		.129
Means for groups in homogeneous subsets are displayed.		
a. Uses Harmonic Mean Sample Size = 3.000.		

Lampiran 18. Foto alat kekerasan tablet hisap

Lampiran 19. Perhitungan pengujian kekerasan tablet hisap

No	Kekerasan (Kg)								
	Fomula 1			Formula 2			Formula 3		
	1	2	3	1	2	3	1	2	3
1	7,5	7,8	8,8	8,7	8,6	8,7	9,3	9,7	8,3
2	7,2	8,3	7,5	7,3	8,8	9,3	7,2	7,9	7,9
3	8,1	8,2	9	7,5	7,9	9,4	7,9	8,3	9,2
4	7,4	8,7	7	7,8	7,9	7,6	8,9	7,9	8,5
5	8,9	8,5	8,6	9,4	8,3	9,2	9,1	8,9	8,3
6	9,7	7,9	8,8	9,9	8,8	8,4	7,9	8,8	9,2
7	7,1	9	7,9	8,5	9,7	7,7	8,5	8,9	7,9
8	8,3	8,5	7,5	8,6	7,8	8,9	8,3	8,5	7,5
9	8,2	7,8	9,8	9,7	9,6	8,5	9,3	7,1	9,3
10	9,9	8,1	7,7	7,3	7,2	7,1	8,7	8,9	8,9
rata-rata	8,23	8,28	8,26	8,47	8,46	8,48	8,51	8,49	8,50
rata-rata kekerasan	8,26			8,47			8,50		
SD	0,03			0,01			0,01		

Formula I

Rata-rata kekerasan $= \frac{8{,}23\ kg + 8{,}28\ kg + 8{,}26\ kg}{3} = 8{,}26$ kg

Formula II

Rata-rata kekerasan $= \frac{8{,}47\ kg + 8{,}46\ kg + 8{,}48\ kg}{3} = 8{,}47$ kg

Formula III

Rata-rata kekerasan $= \frac{8{,}51\ kg + 8{,}49\ kg + 8{,}50\ kg}{3} = 8{,}50$ kg

Uji statistik kekerasan tablet hisap

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Formula	Statistic	df	Sig.	Statistic	df	Sig.
Kekerasan	1.00	.219	3	.	.987	3	.780
	2.00	.175	3	.	1.000	3	1.000
	3.00	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Descriptives

Kekerasan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1.00	3	8.2567	.02517	.01453	8.1942	8.3192	8.23	8.28
2.00	3	8.4700	.01000	.00577	8.4452	8.4948	8.46	8.48
3.00	3	8.5000	.01000	.00577	8.4752	8.5248	8.49	8.51
Total	9	8.4089	.11581	.03860	8.3199	8.4979	8.23	8.51

Test of Homogeneity of Variances

Kekerasan

Levene Statistic	df1	df2	Sig.
1.639	2	6	.270

ANOVA

Kekerasan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.106	2	.053	190.120	.000
Within Groups	.002	6	.000		
Total	.107	8			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Kekerasan

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00	2.00	-.21333*	.01361	.000	-.2551	-.1716
	3.00	-.24333*	.01361	.000	-.2851	-.2016
2.00	1.00	.21333*	.01361	.000	.1716	.2551
	3.00	-.03000	.01361	.149	-.0718	.0118
3.00	1.00	.24333*	.01361	.000	.2016	.2851
	2.00	.03000	.01361	.149	-.0118	.0718

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

Homogeneous Subsets

Kekerasan

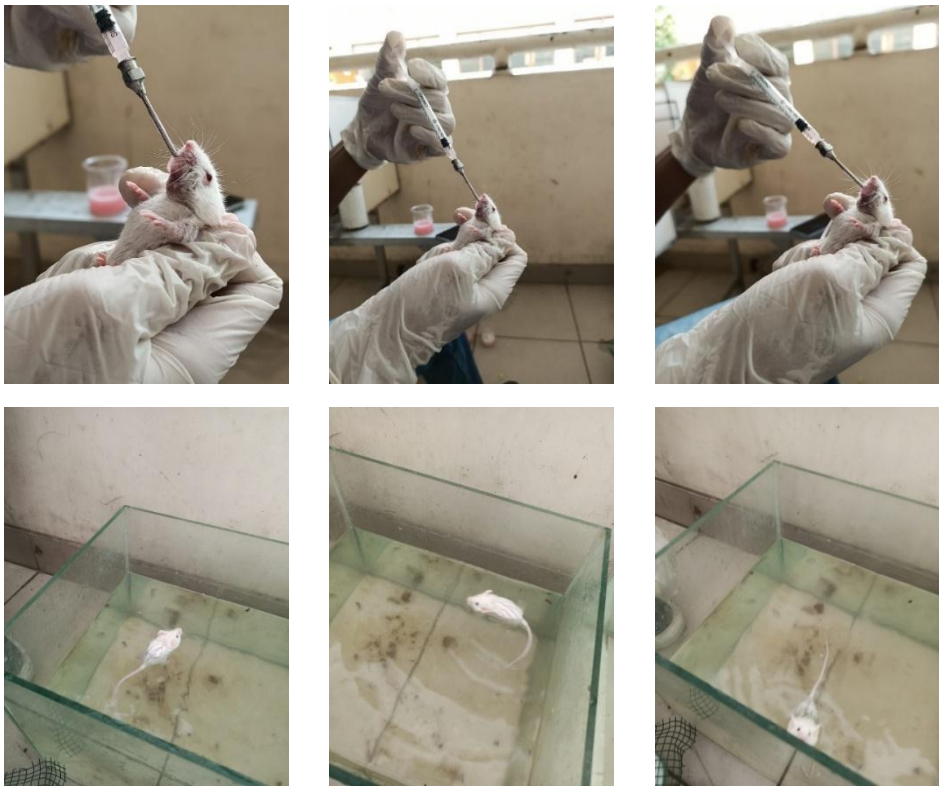
Tukey HSD[a]

Formula	N	Subset for alpha = 0.05	
		1	2
1.00	3	8.2567	
2.00	3		8.4700
3.00	3		8.5000
Sig.		1.000	.149

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 20. Foto perlakuan mecit



Lampiran 21. Perhitungan dosis

Dosis dan volume pemberian CMC Na 0,5%

Replikasi 1. Mencit 19 gram = $\frac{19\ g}{20\ g} x\ 1\ ml = 0{,}95\ ml/19\ gBB\ mencit$

Replikasi 2. Mencit 20 gram = $\frac{20\ g}{20\ g} x\ 1\ ml = 1\ ml/20\ gBB\ mencit$

Replikasi 3. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 1\ ml = 0{,}9\ ml/18\ gBB\ mencit$

Extra joss active (konversi manusia ke mencit)

Dosis extra joss active adalah 3x1 hari 1 sachet = 4 gram dengan faktor konversi manusia ke mencit 0,0026, maka :

Dosis extra joss active = 0,0026 x 4.000 mg/70 KgBB Manusia = 10,4 mg/20gBB Mencit

Larutan stok 4.000 mg/50 ml

Extra joss active sebanyak 4.000 mg disuspensikan dengan aquades sampai 50 ml.

Volume pemberian /20gBB Mencit = $\frac{10{,}4\ mg}{4000\ mg} x50\ ml = 0{,}13\ ml$

Replikasi 1. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 10{,}4\ mg = 9{,}36 mg/18\ gBB\ mencit$

Volume pemberian = $\frac{9{,}36 mg}{4000\ mg} x50\ ml = 0{,}12\ ml$

Replikasi 2. Mencit 19 gram = $\frac{19\ g}{20\ g} x\ 10{,}4\ mg = 9{,}88 mg/19\ gBB\ mencit$

Volume pemberian = $\frac{9{,}88 mg}{4000\ mg} x50\ ml = 0{,}12\ ml$

Replikasi 3. Mencit 20 gram = $\frac{20\ g}{20\ g} x\ 10{,}4\ mg = 10{,}4 mg/20\ gBB\ mencit$

Volume pemberian = $\frac{10{,}4 mg}{4000\ mg} x50\ ml = 0{,}13\ ml$

Tablet hisap sarang burung walet dosis 100 mg/KgBB Mencit (konversi mencit ke manusia)

Dosis 20 g = $\frac{20\ gram}{1000\ gram} x100$ mg $= 2$ mg/20gBB mencit

Konversi ke manusia = $387{,}9\ x\ 2$ mg $= 775{,}8$ mg/70 kgBB manusia = 776 mg/70 kg BB manusia

KgBB manusia = $\frac{776 \text{ mg/70 kg BB manusia}}{70} = 11{,}086$ mg/kg BB manusia $=$ 11 mg/kg BB manusia

Larutan stok 100 mg/50 ml

1 tablet formula 1 diencerkan dengan CMC-Na hingga 50 ml kemudian dimasukan kedalam labu takar 50 ml

Volume pemberian = $\frac{2\ mg}{100\ mg} x50\ ml = 1\ ml$

Replikasi 1. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 2\ mg = 1{,}8\ mg/18\ gBB\ mencit$

Volume pemberian = $\frac{1{,}8\ mg}{100\ mg} x50\ ml = 0{,}9\ ml$

Replikasi 2. Mencit 20 gram = $\frac{20\ g}{20\ g} x\ 2\ mg = 2mg/20\ gBB\ mencit$

Volume pemberian = $\frac{2\ mg}{100\ mg} x50\ ml = 1\ ml$

Replikasi 3. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 2\ mg = 1{,}8\ mg/18\ gBB\ mencit$

Volume pemberian = $\frac{1{,}8\ mg}{100\ mg} x50\ ml = 0{,}9\ ml$

Tablet hisap sarang burung walet dosis 200 mg/KgBB Mencit (konversi mencit ke manusia)

Dosis 20 g = $\frac{20\ g}{1000\ g} x\ 200\ mg = 4\ mg$/20gBB mencit

Konversi ke manusia = $387{,}9\ x\ 4$ mg $= 1551{,}6$ mg/70 kgBB manusia = 1552 mg/70 kg BB manusia

KgBB manusia = $\frac{1552\ \text{mg/70 kg BB manusia}}{70} = 22{,}171$ mg/kg BB manusia = 22 mg/kg BB manusia

Larutan stok 200 mg/50ml

1 tablet formula 2 diencerkan dengan CMC-Na hingga 50 ml kemudian dimasukkan kedalam labu takar 50 ml

Volume pemberian = $\frac{4\ mg}{200\ mg}\ x\ 50\ ml = 1\ ml$

Replikasi 1. Mencit 20 gram = $\frac{20\ g}{20\ g} x\ 4\ mg = 4\ mg/18\ gBB\ mencit$

Volume pemberian = $\frac{4\ mg}{200\ mg} x50\ ml = 1\ ml$

Replikasi 2. Mencit 19 gram = $\frac{19\ g}{20\ g} x\ 4\ mg = 3{,}8mg/20\ gBB\ mencit$

Volume pemberian = $\frac{3{,}8\ mg}{200\ mg} x50\ ml = 0{,}95\ ml$

Replikasi 3. Mencit 19 gram = $\frac{19\ g}{20\ g} x\ 4\ mg = 3{,}8mg/20\ gBB\ mencit$

Volume pemberian = $\frac{3{,}8\ mg}{200\ mg} x50\ ml = 0{,}95\ ml$

Tablet hisap sarang burung walet dosis 300 mg/KgBB Mencit (konversi mencit ke manusia)

Dosis 20 g = $\frac{20\ g}{1000\ g} x\ 300\ mg = 6\ mg$/20gBB mencit

Konversi ke manusia = $387{,}9\ x\ 6$ mg $= 2327{,}4$ mg/70 kg BB manusia = 2327 mg/70 kg BB manusia

KgBB manusia = $\frac{2327\ \text{mg/70 kg BB manusia}}{70} = 33{,}243$ mg/kg BB manusia = 33 mg/kg BB manusia

Larutan stok 300 mg/50ml

1 tablet formula 3 diencerkan dengan CMC-Na hingga 50 ml kemudian dimasukkan kedalam labu takar 50 ml

Volume pemberian = $\frac{6\ mg}{300\ mg}\ x\ 50\ ml = 1\ ml$

Replikasi 1. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 6\ mg = 5{,}4\ mg/18\ gBB\ mencit$

Volume pemberian = $\frac{5{,}4\ mg}{300\ mg} x50\ ml = 0{,}9\ ml$

Replikasi 2. Mencit 20 gram = $\frac{20\ g}{20\ g} x\ 6\ mg = 6\ mg/20\ gBB\ mencit$

Volume pemberian = $\frac{6\ mg}{300\ mg} x50\ ml = 1\ ml$

Replikasi 3. Mencit 18 gram = $\frac{18\ g}{20\ g} x\ 6\ mg = 5{,}4\ mg/18\ gBB\ mencit$

Volume pemberian = $\frac{5{,}4\ mg}{300\ mg} x50\ ml = 0{,}9\ ml$

Lampiran 22. Perhitungan rata-rata berenang mencit

Perlakuan	Berat Badan	sebelum perlakuan T0 (menit)	sesudah perlakuan T1 (menit)	selisih waktu t1 - t0	% Immobility
kontrol negatif	19	6,15	8,25	2,10	25,45
	20	6,23	8,30	2,07	24,94
	18	7,01	8,32	1,31	15,75
kontrol positif	18	7,05	12,45	5,40	43,37
	19	6,10	12,01	5,91	49,21
	20	7,02	13,15	6,13	46,62
Dosis 100 mg/kgBB mencit	18	6,37	8,30	1,93	23,25
	20	6,54	8,27	1,73	20,92
	18	6,24	8,45	2,21	26,15
Dosis 200 mg/kgBB mencit	20	6,43	10,47	4,04	38,59
	19	6,25	11,05	4,80	43,44
	19	7,10	11,20	4,10	36,61
Dosis 300 mg/kgBB mencit	18	6,31	11,37	5,06	44,50
	20	6,49	12,15	5,66	46,58
	18	6,53	12,57	6,04	48,05

Lampiran 23. Hasil uji statistic uji tonikum

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Immobility	Kontrol Negatif	.369	3	.	.789	3	.089
	Kontrol Positif	.197	3	.	.996	3	.876
	Dosis 100 mg/kgBB mencit	.196	3	.	.996	3	.880
	Dosis 200 mg/kgBB mencit	.274	3	.	.944	3	.545
	Dosis 300 mg/kgBB mencit	.212	3	.	.990	3	.811

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

Immobillity

Levene Statistic	df1	df2	Sig.
1.756	4	10	.214

ANOVA

Immobillity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1739.712	4	434.928	35.791	.000
Within Groups	121.519	10	12.152		
Total	1861.230	14			

Multiple Comparisons

Dependent Variable: Immobillity

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Negatif	Kontrol Positif	-24.35333*	2.84627	.000	-33.7206	-14.9860
	Dosis 100 mg/kgBB mencit	-1.39333	2.84627	.987	-10.7606	7.9740
	Dosis 200 mg/kgBB mencit	-17.50000*	2.84627	.001	-26.8673	-8.1327
	Dosis 300 mg/kgBB mencit	-24.33000*	2.84627	.000	-33.6973	-14.9627
Kontrol Positif	Kontrol Negatif	24.35333*	2.84627	.000	14.9860	33.7206
	Dosis 100 mg/kgBB mencit	22.96000*	2.84627	.000	13.5927	32.3273
	Dosis 200 mg/kgBB mencit	6.85333	2.84627	.190	-2.5140	16.2206

	Dosis 300 mg/kgBB mencit	.02333	2.84627	1.000	-9.3440	9.3906
Dosis 100 mg/kgBB mencit	Kontrol Negatif	1.39333	2.84627	.987	-7.9740	10.7606
	Kontrol Positif	-22.96000*	2.84627	.000	-32.3273	-13.5927
	Dosis 200 mg/kgBB mencit	-16.10667*	2.84627	.002	-25.4740	-6.7394
	Dosis 300 mg/kgBB mencit	-22.93667*	2.84627	.000	-32.3040	-13.5694
Dosis 200 mg/kgBB mencit	Kontrol Negatif	17.50000*	2.84627	.001	8.1327	26.8673
	Kontrol Positif	-6.85333	2.84627	.190	-16.2206	2.5140
	Dosis 100 mg/kgBB mencit	16.10667*	2.84627	.002	6.7394	25.4740
	Dosis 300 mg/kgBB mencit	-6.83000	2.84627	.192	-16.1973	2.5373
Dosis 300 mg/kgBB mencit	Kontrol Negatif	24.33000*	2.84627	.000	14.9627	33.6973
	Kontrol Positif	-.02333	2.84627	1.000	-9.3906	9.3440
	Dosis 100 mg/kgBB mencit	22.93667*	2.84627	.000	13.5694	32.3040
	Dosis 200 mg/kgBB mencit	6.83000	2.84627	.192	-2.5373	16.1973

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

Immobillity

Tukey HSD[a]

Kelompok	N	Subset for alpha = 0.05	
		1	2
Kontrol Negatif	3	22.0467	
Dosis 100 mg/kgBB mencit	3	23.4400	
Dosis 200 mg/kgBB mencit	3		39.5467
Dosis 300 mg/kgBB mencit	3		46.3767
Kontrol Positif	3		46.4000
Sig.		.987	.190

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.