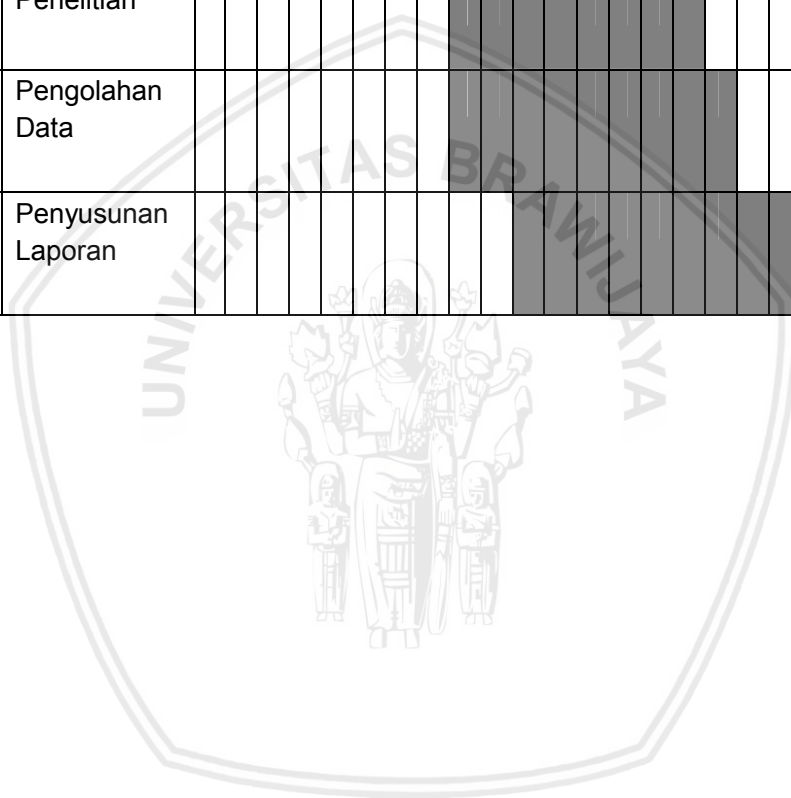


Lampiran 1. Jadwal Penelitian

No	Kegiatan	Okt 2017				Nov 2017				Des 2017				Jan 2018				Feb 2018				Maret 2018			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Penyusunan Proposal																								
2	Persiapan																								
3	Penelitian																								
4	Pengolahan Data																								
5	Penyusunan Laporan																								



Lampiran 2. Hasil Uji Fitokimia Maggot

PEMERINTAH PROVINSI JAWA TIMUR
DINAS KESEHATAN
UPT MATERIA MEDICA BATU
 Jalan Lahor No.87 Telp/Fax (0341) 593396. Batu
KOTA BATU 65313

Nomor : 074 / 093 / 102.7 / 2017 Halaman : 1 dari 1
 Sifat : Biasa
 Perihal : Surat Keterangan Skrining Fitokimia

Memenuhi permohonan saudara :
 Nama : Febi Nadhila
 NIM : 156080100111017
 Fakultas : Pasca Sarjana Perikanan Kelautan
 Universitas Brawijaya

Kami menerangkan bahwa yang bersangkutan telah melakukan Skrining Fitokimia untuk bahan penelitian dari serbuk Maggot. Adapun proses skrining di lakukan di Laboratorium Fitokimia UPT Materia Medica Batu dengan perincian sebagai berikut :

Bahan : Aquadest Pereaksi Dragendrof
 Serbuk Mg Pereaksi Meyer
 HCL pekat FeCl3

Alat : Tabung reaksi Penjepit tabung reaksi Spatula stainlesssteel
 Pipet tetes gelas ukur Bunsen
 Corong gelas Mikropipet Beakerglass

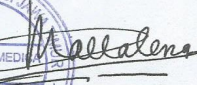
Cara Kerja :

- Identifikasi Flavonoid**
 5g Serbuk ditambahkan aquades 10 ml → dipanaskan selama 5menit → Ditambah HCL pekat beberapa tetes → ditambah sedikit serbuk Mg → Hasil Positif : warna merah tua / merah muda
- Identifikasi Alkaloid**
 5g Serbuk ditambahkan aquades 10 ml → 1ml sampel dalam masing-masing 2 tabung reaksi → ditambahkan Pereaksi Meyer, Dragendrof beberapa tetes → hasil positif : endapan putih meyer, endapan jingga Dragendrof
- Identifikasi Tanin/Polifenol**
 5g Serbuk ditambahkan aquades 10 ml → 1 ml sampel → ditambahkan FeCl3 1% → Warna positif warna coklat kehitaman, biru kehitaman, hijau kehitaman.
- Identifikasi Saponin**
 5g Serbuk ditambahkan aquades 10 ml → 1ml sampel → ditambahkan 2ml air panas → dikocok kuat → hasil positif : terbentuk buih permanen selama tidak kurang dari 10menit setinggi 1cm-10cm → ditambahkan HCL pekat 1tetes → hasil positif : busa permanen tidak hilang

Hasil :

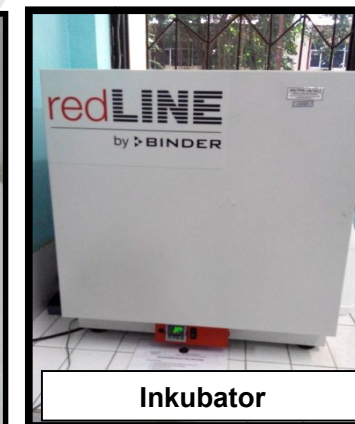
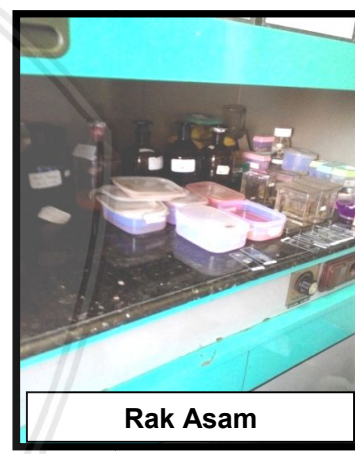
Nama Sampel	Flavonoid	Tanin / Polifenol	Saponin	Alkaloid	
				P.Meyer	P.Dragendrof
Maggot	+	+	-	-	+

Demikian keterangan ini kami buat untuk dipergunakan sebagaimana mestinya.

Batu, 16 Maret 2017
 Kepala UPT Materia Medica Batu

 Dr. Husin RM. Drs. Apt. MKes.
 NIP. 19611102 199103 1 003

Lampiran 3. Alat dan Bahan Penelitian

a) Alat yang digunakan dalam penelitian



Lampiran 3a. (Lanjutan)



Lampiran 3c (Lanjutan)



Lampiran 3d (Lanjutan)



Cuvet



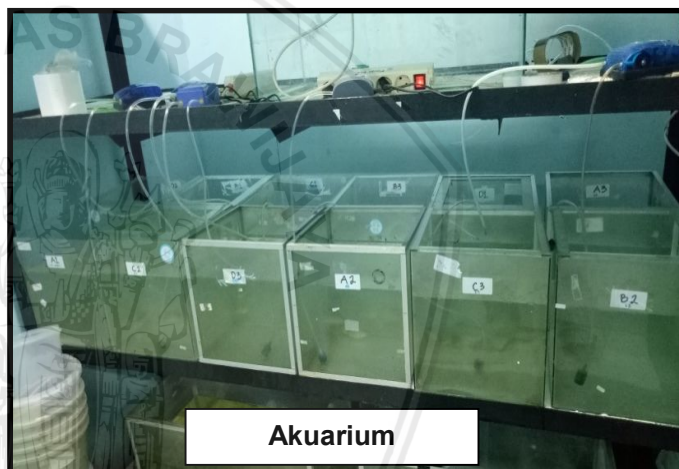
Spatula



Jarum Ose



Tabung Reaksi

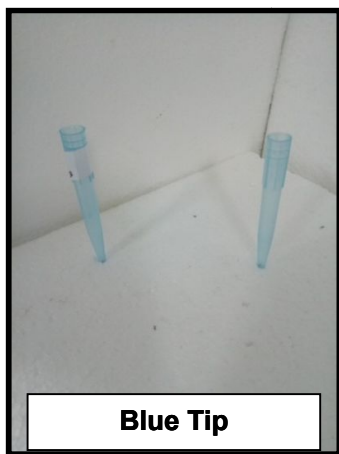


Akuarium



Mikro Pipet

Lampiran 3 e (lanjutan) b) Bahan yang digunakan dalam penelitian



Blue Tip



Object Glass



TSB serbuk



A. hydrophila pada media TSB



A. hydrophila pada media TSA



Alkohol 70%



Aluminium Foil



TSB cair



Turk

Lampiran 3 f (Lanjutan)



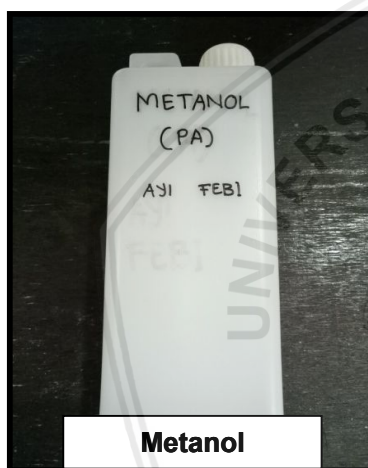
Giemsa



Plastik Wrap



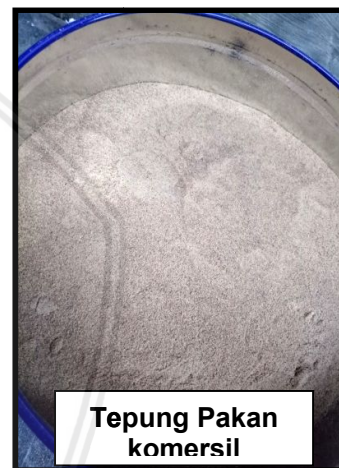
Kapas



Metanol



Aquades



**Tepung Pakan
komersil**



Pakan Komersil F-781



Tepung Maggot



Maggot

Lampiran 3 g (Lanjutan)



Lampiran 4. Nilai Skoring Pada Histopatologi Otot Ikan Mas

Kelainan Patologi	Sampel	Ulangan	Area Lapang Pandang					Rerata LP	Rerata Sampel
			LP 1	LP 2	LP 3	LP 4	LP 5		
Nekrosis	A	1	4	3	3	3	3	3.2	3.57
		2	4	4	3	4	4	3.8	
		3	3	3	4	4	3	3.4	
	B	1	2	3	2	3	3	2.6	2.73
		2	3	3	3	3	2	2.8	
		3	3	2	3	3	3	2.8	
	C	1	2	2	2	2	2	2	1.73
		2	2	2	1	2	1	1.6	
		3	2	1	2	1	2	1.6	
	D	1	2	2	1	1	1	1.4	1.4
		2	2	1	2	1	2	1.6	
		3	1	2	1	1	1	1.2	
	K+	1	4	3	4	4	4	3.8	3.87
		2	4	4	4	4	4	4	
		3	3	4	4	4	4	3.8	
	K-	1	1	1	1	1	1	1	1
		1	1	1	1	1	1	1	
		2	1	1	1	1	1	1	
Vakuolisasi	A	1	4	3	4	4	3	3.6	3.13
		2	3	3	3	3	2	2.8	
		3	3	4	3	2	3	3	
	B	1	3	3	3	2	3	2.8	2.67
		2	3	2	3	3	3	2.8	
		3	3	2	2	3	2	2.4	
	C	1	1	2	2	2	2	1.8	1.67
		2	2	2	1	1	2	1.6	
		3	1	1	2	2	2	1.6	
	D	1	1	2	2	1	1	1.4	1.57
		2	2	1	2	2	2	1.8	
		3	1	1	2	1	1	1.2	
	K+	1	4	4	4	4	4	4	3.67
		2	4	3	3	3	4	3.4	
		3	3	4	4	4	3	3.6	
	K-	1	1	1	1	0	1	0.8	0.87
		1	1	0	1	1	1	0.8	
		2	1	1	1	1	1	1	
Edema	A	1	3	2	3	3	3	2.8	3.17
		2	3	3	3	3	4	3.2	
		3	4	3	3	3	3	3.2	

Edema	B	1	3	2	2	2	2	2.2	2.33
		2	2	2	3	3	2	2.4	
		3	3	2	2	2	3	2.4	
	C	1	2	2	2	2	1	1.8	1.53
		2	1	1	1	2	2	1.4	
		1	1	1	2	1	2	1.4	
	D	1	1	1	2	1	2	1.4	1.37
		2	2	1	1	1	1	1.2	
		3	1	1	2	1	1	1.2	
	K+	1	4	4	4	4	3	3.8	3.6
		2	4	3	3	4	3	3.4	
		3	4	4	3	3	4	3.6	
	K-	1	1	1	1	1	1	1	0.93
		2	1	1	1	0	1	0.8	
		3	1	1	1	1	1	1	

Keterangan :

Nilai 1 = Ringan (Kerusakan 0-5%)

Nilai 2 = Sedang (Kerusakan 6-25%)

Nilai 3 = Berat (Kerusakan 26-50%)

Nilai 4 = Sangat Berat (Kerusakan >50%)



Lampiran 5. Skoring Kerusakan Insang

Kelainan Patologi	Sampel	Ulangan	Area Lapang Pandang					Rerata LP	Rerata Sampel
			LP 1	LP 2	LP 3	LP 4	LP 5		
Nekrosis	A	1	2	3	3	1	3	2.4	2.8
		2	3	4	4	4	4	3.8	
		3	1	3	2	4	1	2.2	
	B	1	4	3	3	1	3	2.8	2.67
		2	2	3	2	1	3	2.2	
		3	3	4	3	2	3	3	
	C	1	1	2	1	1	1	1.2	1.4
		2	2	1	3	1	2	1.8	
		3	1	2	1	1	1	1.2	
	D	1	2	1	1	2	1	1.4	1.6
		2	1	3	1	1	1	1.4	
		3	3	1	1	2	3	2	
	K+	1	3	4	3	3	4	3.4	3.6
		2	4	4	4	3	4	3.8	
		3	3	4	3	4	4	3.6	
	K-	1	1	1	1	1	1	1	1
		2	1	1	1	1	1	1	
		3	1	1	1	1	1	1	
Edema	A	1	4	3	4	2	2	3	2.87
		2	2	3	3	4	4	3.2	
		3	2	3	1	2	4	2.4	
	B	1	3	2	3	1	2	2.2	2.6
		2	2	2	4	3	2	2.6	
		3	4	3	4	1	3	3	
	C	1	1	2	2	1	1	1.4	1.53
		2	2	2	1	2	1	1.6	
		3	2	1	2	2	1	1.6	
	D	1	2	2	1	1	2	1.6	1.7
		2	2	2	1	2	2	1.8	
		3	2	1	2	1	3	1.8	
	K+	1	4	3	4	3	4	3.6	3.53
		2	4	4	4	3	4	3.8	
		3	3	3	4	2	4	3.2	
	K-	1	1	1	1	1	1	1	1
		2	1	1	1	1	1	1	
		3	1	1	1	1	1	1	
Hipertropi	A	1	3	3	4	4	3	3.4	2.93
		2	4	2	4	2	4	3.2	
		3	2	2	3	3	1	2.2	

Hipertropi	B	1	2	4	3	4	3	3.2	2.73
		2	3	1	2	3	4	2.6	
		3	3	2	2	2	3	2.4	
	C	1	2	1	3	3	1	2	1.67
		2	1	1	1	2	1	1.2	
		3	2	1	2	1	3	1.8	
	D	1	2	1	1	2	1	1.4	1.8
		2	2	1	2	3	3	2.2	
		3	1	3	1	2	2	1.8	
	K+	1	4	4	3	4	3	3.6	3.53
		2	4	4	4	3	4	3.8	
		3	3	4	3	4	2	3.2	
	K-	1	1	1	1	1	1	1	1
		2	1	1	1	1	1	1	
		3	1	1	1	1	1	1	

Keterangan :

Nilai 1 = Ringan (Kerusakan 0-5%)

Nilai 2 = Sedang (Kerusakan 6-25%)

Nilai 3 = Berat (Kerusakan 26-50%)

Nilai 4 = Sangat Berat (Kerusakan >50%)



Lampiran 6. Data SPSS Total Leukosit Sebelum Infeksi

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	7.8467	.09074	.05239	7.6213	8.0721	7.75	7.93
K-	3	7.8267	.07095	.04096	7.6504	8.0029	7.75	7.89
A	3	7.7300	.19000	.10970	7.2580	8.2020	7.54	7.92
B	3	7.5467	.12014	.06936	7.2482	7.8451	7.43	7.67
C	3	7.8600	.06245	.03606	7.7049	8.0151	7.81	7.93
D	3	7.8200	.01000	.00577	7.7952	7.8448	7.81	7.83
Total	18	7.7717	.14329	.03377	7.7004	7.8429	7.43	7.93

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.433	5	12	.281

Nilai Sig = 0281, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.213	5	.043	3.778	.028
Within Groups	.136	12	.011		
Total	.349	17			

Keterangan :tidak berbeda sangat nyata (sig>0.01)

Post Hoc Tests

Homogeneous Subsets

		Subset for alpha = 0.05		
Tukey HSD ^a	Perlakuan	N	1	2
	K-	3	7.5467	
	C	3	7.7300	7.7300
	D	3	7.8200	7.8200
	B	3	7.8267	7.8267
	A	3		7.8467
	K+	3		7.8600
	Sig.		.062	.672

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 7. Data SPSS Total Leukosit Sesudah Infeksi

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	17.3300	.09539	.05508	17.0930	17.5670	17.23	17.42
K-	3	8.4267	.11504	.06642	8.1409	8.7124	8.31	8.54
A	3	15.8700	.07937	.04583	15.6728	16.0672	15.81	15.96
B	3	15.2533	.52814	.30492	13.9414	16.5653	14.68	15.72
C	3	13.1033	.02082	.01202	13.0516	13.1550	13.08	13.12
D	3	14.2500	.01000	.00577	14.2252	14.2252	14.24	14.26
Total	18	14.0389	2.91895	.68800	12.5873	15.4904	8.31	17.42

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
5.272	5	12	.090

Nilai Sig = 0,090, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	144.228	5	28.846	561.746	.000**
Within Groups	.616	12	.051		
Total	144.845	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05							
Tukey HSD ^a	Perlakuan	N	1	2	3	4	5
	K-	3	8.4267				
	C	3		13.7067			
	D	3			14.2500		
	B	3				15.2533	
	A	3				15.8700	
	K+	3					17.3300
	Sig.		1.000	1.000	1.000	.052	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 8. Data SPSS Diferensial Leukosit Sesudah Infeksi

a. Monosit

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	17.2533	.22301	.12875	16.6993	17.8073	17.00	17.42
K-	3	8.2833	.27099	.15645	7.6102	8.9565	8.00	8.54
A	3	15.5500	.47655	.27514	14.3662	16.7338	15.00	15.84
B	3	15.0267	.90716	.52375	12.7732	17.2802	14.00	15.72
C	3	13.3467	.30827	.17798	12.5809	14.1125	13.00	13.59
D	3	14.2200	1.06038	.61221	11.5859	16.8541	13.00	14.92
Total	18	13.9467	2.93381	.69150	12.4877	15.4056	8.00	17.42

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
4.268	5	12	.018

Nilai Sig = 0.018, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	141.538	5	28.308	70.987	.000
Within Groups	4.785	12	.399		
Total	146.323	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05						
Tukey HSD ^a	Perlakuan	N	1	2	3	4
	K-	3	8.2833			
	C	3		13.3467		
	D	3		14.2200	14.2200	
	B	3		15.0267	15.0267	
	A	3			15.5500	15.5500
	K+	3				17.2533
	Sig.		1.000	.059	.176	.055

b. Limfosit

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	13.0000	1.00000	.57735	10.5159	15.4841	12.00	14.00
K-	3	24.3333	.57735	.33333	22.8991	25.7676	24.00	25.00
A	3	14.3333	.57735	.33333	12.8991	15.7676	14.00	15.00
B	3	16.6667	1.52753	.88192	12.8721	20.4612	15.00	18.00
C	3	18.3333	.57735	.33333	16.8991	19.7676	18.00	19.00
D	3	17.6667	.57735	.33333	16.2324	19.1009	17.00	18.00
Total	18	17.3889	3.79068	.89347	15.5038	19.2740	12.00	25.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.354	5	12	.308

Nilai Sig = 0,308, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	234.944	5	46.989	60.414	.000
Within Groups	9.333	12	.778		
Total	244.278	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05						
Tukey HSD ^a	Perlakuan	N	1	2	3	4
	K-	3	13.0000			
	C	3	14.3333	14.3333		
	D	3		16.6667	16.6667	
	B	3			17.6667	
	A	3			18.3333	
	K+	3				24.3333
	Sig.		.472	.061	.260	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

c. Neutrofil

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	2.3333	1.52753	.88192	-1.4612	6.1279	1.00	4.00
K-	3	2.6667	2.51661	1.45297	-3.5849	8.9183	.00	5.00
A	3	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
B	3	.6667	.57735	.33333	-.7676	2.1009	.00	1.00
C	3	.3333	.57735	.33333	-1.1009	1.7676	.00	1.00
D	3	.3333	.57735	.33333	-1.1009	1.7676	.00	1.00
Total	18	1.2222	1.43714	.33874	.5076	1.9369	.00	5.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
3.322	5	12	.041

Nilai Sig = 0,041, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.778	5	3.156	1.959	.158
Within Groups	19.333	12	1.611		
Total	35.111	17			

Keterangan : Tidak berbeda nyata (sig>0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05			
Tukey HSD ^a	Perlakuan	N	1
	K-	3	.3333
	C	3	.3333
	D	3	.6667
	B	3	1.0000
	A	3	2.3333
	K+	3	2.6667
	Sig.		.284

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 9. Aktivitas Fagositosis

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	52.0000	1.00000	.57735	49.5159	54.4841	51.00	53.00
K-	3	22.0000	1.00000	.57735	19.5159	24.4841	21.00	23.00
A	3	49.6667	2.08167	1.20185	44.4955	54.8378	48.00	52.00
B	3	41.8200	.91000	.52539	39.5594	44.0806	40.91	42.73
C	3	29.0000	1.00000	.57735	26.5159	31.4841	28.00	30.00
D	3	34.0000	1.00000	.57735	31.5159	36.4841	33.00	35.00
Total	18	38.0811	11.16010	2.63046	32.5313	43.6309	21.00	53.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.057	5	12	.430

Nilai Sig = 0,43, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2098.992	5	419.798	274.934	.000
Within Groups	18.323	12	1.527		
Total	2117.315	17			

Keterangan : berbeda sangat nyata ($\text{sig} < 0.01$)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05							
Tukey HSD ^a	Perlakuan	N	1	2	3	4	5
	K-	3	22.0000				
	C	3		29.0000			
	D	3			34.0000		
	B	3				41.8200	
	A	3					49.6667
	K+	3					52.0000
	Sig.		1.000	1.000	1.000	1.000	.261

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 10. Data SPSS Skoring Kerusakan Otot Ikan Mas

a. Edema

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	3.6000	.20000	.11547	3.1032	4.0968	3.40	3.80
K-	3	.9333	.11547	.06667	.6465	1.2202	.80	1.00
A	3	2.7333	.80829	.46667	.7254	4.7412	1.80	3.20
B	3	2.3333	.11547	.06667	2.0465	2.6202	2.20	2.40
C	3	1.2667	.11547	.06667	.9798	1.5535	1.20	1.40
D	3	1.5333	.23094	.13333	.9596	2.1070	1.40	1.80
Total	18	2.0667	.99410	.23431	1.5723	2.5610	.80	3.80

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
8.234	5	12	.066

Nilai Sig = 0,066, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.227	5	3.045	23.227	.000
Within Groups	1.573	12	.131		
Total	16.800	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05						
Tukey HSD ^a	Perlakuan	N	1	2	3	4
	K-	3	.9333			
	C	3	1.2667			
	D	3	1.5333	1.5333		
	B	3		2.3333	2.3333	
	A	3			2.7333	2.7333
	K+	3				3.6000
	Sig.		.381	.145	.752	.101

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

b. Vakuolisasi

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	3.6667	.30551	.17638	2.9078	4.4256	3.40	4.00
K-	3	.8667	.11547	.06667	.5798	1.1535	.80	1.00
A	3	3.1333	.41633	.24037	2.0991	4.1676	2.80	3.60
B	3	2.6667	.23094	.13333	2.0930	3.2404	2.40	2.80
C	3	1.6667	.11547	.06667	1.3798	1.9535	1.60	1.80
D	3	1.4667	.30551	.17638	.7078	2.2256	1.20	1.80
Total	18	2.2444	1.03936	.24498	1.7276	2.7613	.80	4.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.773	5	12	.193

Nilai Sig = 0.193, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.484	5	3.497	47.685	.000
Within Groups	.880	12	.073		
Total	18.364	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05						
Tukey HSD ^a	Perlakuan	N	1	2	3	4
	K-	3	.8667			
	C	3	1.4667	1.4667		
	D	3		1.6667		
	B	3			2.6667	
	A	3			3.1333	3.1333
	K+	3				3.6667
	Sig.		.143	.938	.343	.226

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

c. Nekrosis Otot

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	3.8667	.11547	.06667	3.5798	4.1535	3.80	4.00
K-	3	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
A	3	3.4667	.30551	.17638	2.7078	4.2256	3.20	3.80
B	3	2.7333	.11547	.06667	2.4465	3.0202	2.60	2.80
C	3	1.7333	.23094	.13333	1.1596	2.3070	1.60	2.00
D	3	1.4000	.20000	.11547	.9032	1.8968	1.20	1.60
Total	18	2.3667	1.10666	.26084	1.8163	2.9170	1.00	4.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.629	5	12	.079

Nilai Sig = 0,079, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.393	5	4.079	114.713	.000
Within Groups	.427	12	.036		
Total	20.820	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05						
Tukey HSD ^a	Perlakuan	N	1	2	3	4
	K-	3	1.0000			
	C	3	1.4000	1.4000		
	D	3		1.7333		
	B	3			2.7333	
	A	3				3.4667
	K+	3				3.8667
	Sig.		.171	.320	1.000	.171

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 11. Data Skoring kerusakan Insang Ikan Mas

a. Edema Insang

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	3.5333	.30551	.17638	2.7744	4.2922	3.20	3.80
K-	3	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
A	3	2.8667	.41633	.24037	1.8324	3.9009	2.40	3.20
B	3	2.6000	.40000	.23094	1.6063	3.5937	2.20	3.00
C	3	1.4000	.20000	.11547	.9032	1.8968	1.20	1.60
D	3	1.7333	.11547	.06667	1.4465	2.0202	1.60	1.80
Total	18	2.1889	.93927	.22139	1.7218	2.6560	1.00	3.80

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.144	5	12	.130

Nilai Sig = 0,130, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.038	5	2.808	35.094	.000
Within Groups	.960	12	.080		
Total	14.998	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05					
Tukey HSD ^a	Perlakuan	N	1	2	3
	K-	3	1.0000		
	C	3	1.4000		
	D	3	1.7333		
	B	3		2.6000	
	A	3		2.8667	2.8667
	K+	3			3.5333
	Sig.		.068	.849	.109

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

b. Hipertropi Insang

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximun
K+	3	3.5333	.30551	.17638	2.7744	4.2922	3.20	3.80
K-	3	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
A	3	2.9333	.64291	.37118	1.3363	4.5304	2.20	3.40
B	3	2.7333	.41633	.24037	1.6991	3.7676	2.40	3.20
C	3	1.6667	.41633	.24037	.6324	2.7009	1.20	2.00
D	3	1.8000	.40000	.23094	.8063	2.7937	1.40	2.20
Total	18	2.2778	.95089	.22413	1.8049	2.7506	1.00	3.80

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.477	5	12	.092

Nilai Sig = 0,092, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.344	5	2.669	15.803	.000
Within Groups	2.027	12	.169		
Total	15.371	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05					
Tukey HSD ^a	Perlakuan	N	1	2	3
	K-	3	1.0000		
	C	3	1.6667	1.6667	
	D	3	1.8000	1.8000	
	B	3		2.7333	2.7333
	A	3			2.9333
	K+	3			3.5333
	Sig.		.235	.067	.235

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

c. Nekrosis Insang

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
K+	3	3.5333	.30551	.17638	2.7744	4.2922	3.20	3.80
K-	3	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
A	3	2.8000	.87178	.50332	.6344	4.9656	2.20	3.80
B	3	2.6667	.41633	.24037	1.6324	3.7009	2.20	3.00
C	3	1.4000	.34641	.20000	.5395	2.2605	1.20	1.80
D	3	1.6000	.34641	.20000	.7395	2.4605	1.40	2.00
Total	18	2.1667	.99705	.23501	1.6708	2.6625	1.00	3.80

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
4.991	5	12	.011

Nilai Sig = 0,011 $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.367	5	2.873	13.611	.000
Within Groups	2.533	12	.211		
Total	16.900	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests

Homogeneous Subsets

Subset for alpha = 0.05					
Tukey HSD ^a	Perlakuan	N	1	2	3
	K-	3	1.0000		
	C	3	1.6667	1.6667	
	D	3	1.8000	1.8000	
	B	3		2.7333	2.7333
	A	3			2.9333
	K+	3			3.5333
	Sig.		.235	.067	.235

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 12. Data SPSS Kelulushidupan

Oneway

95% Confidence Interval for Mean								
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximun
K+	3	1.00002	.00000	.00000	10.0000	100.000	100.00	100.00
K-	3	33.3333	5.77350	3.33333	18.9912	47.6755	30.00	40.00
A	3	46.6667	5.77350	3.33333	32.3245	61.0088	40.00	50.00
B	3	56.6667	5.77350	3.33333	42.3245	71.0088	50.00	60.00
C	3	93.3333	5.77350	3.33333	78.9912	107.675	90.00	100.00
D	3	73.3333	5.77350	3.33333	58.9912	87.6755	70.00	80.00
Total	18	67.2222	25.15962	5.93018	54.7106	79.7338	30.00	100.00

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
3.200	5	12	.046

Nilai Sig = 0,046, $\alpha > 0,05$, Sehingga data normal

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10427.778	5	2085.556	75.080	.000**
Within Groups	333.333	12	27.778		
Total	10761.111	17			

Keterangan : **berbeda sangat nyata (sig<0.01)

Post Hoc Tests Homogeneous Subsets

Subset for alpha = 0.05						
	Perlakuan	N	1	2	3	4
Tukey HSD ^a	K+	3	33.3333			
	A	3	46.6667	46.6667		
	B	3		56.6667		
	D	3			73.3333	
	C	3				93.3333
	K-	3				1.00002
	Sig.		.077	.257	1.000	.643

