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LAMPIRAN

Lampiran 1. Dokumentasi penelitian

Gambar 30. Pengambilan sampel kerang hijau di perairan Pulau Lae-Lae

Gambar 31. Sampel kerang hijau

Gambar 32. Preparasi Sampel

Gambar 33. Menimbang bobot kerang hijau dan epibion

Gambar 34. Penambahan larutan KOH pada sampel

Gambar 35. Menyaring mikroplastik

Gambar 36. Pengamatan Mikroplastik

Lampiran 2. Perhitungan jumlah sampel

- **Perhitungan Lemeshow**

$$n = \frac{Z\alpha^2 \times P \times Q}{\mathrm{L}^2}$$

$$n = \frac{1{,}96^2 \times 0{,}5 \times (1 - 0{,}5)}{0{,}1^2}$$

$$n = \frac{3{,}8416 \times 0{,}25}{0{,}01}$$

$$n = 96{,}04$$

96 merupakan jumlah minimal sampel yang harus diambil di lapangan sedangkan pada penelitian ini jumlah sampel yang terambil sebanyak 151 individu.

- **Perhitungan kelompok ukuran panjang cangkang kerang**

Panjang terkecil : 3,75 cm

Panjang terbesar : 9,86 cm

Logaritma harga terbesar = Log 9,86 = 0,9940

Logaritma harga terkecil = Log 3,75 = 0,5740

Beda logaritma = 0,9940 – 0,5740 = 0,4200

Banyaknya kelas yang dikehendaki = 3

Beda logaritma tengah-tengah kelas = $\frac{0{,}4200}{3}$ = 0,1400

Logaritma tengah-tengah kelas pertama = 0,5740 + $\frac{0{,}1400}{2}$ = 0,6440

Harga-harga yang terdapat didalam kelas panjang yaitu:

Kelas	Logaritma Harga Terendah	Logaritma Tengah Kelas	Antilog Harga Terendah	Antilog Tengah Kelas
I	0,5740	0.6440	3.75	4.41
II	0.7140	0.7840	5.18	6.08
III	0.8540	0.9240	7.14	8.39

Kelas-kelas panjang yang terbentuk dan jumlah sampel tiap kelas:

Kelas I : 3,75 – 5,17 = 73 Individu

Kelas II : 5,18 – 7,13 = 66 Individu

Kelas III : 7,14 – 9,86 = 13 Individu

152 Individu

Jumlah sampel yang dibutuhkan

$$n = \frac{N}{1 + N\ (d^2)}$$

$$n = \frac{152}{1 + 152\ (0{,}05^2)}$$

$$n = \frac{152}{1{,}3800}$$

$$n = 110{,}144 \Rightarrow 110$$

Jumlah sampel tiap kelas :

$$ni = \frac{Ni}{N} \times n$$

$$ni = \frac{73}{152} \times 110 \ = 53$$

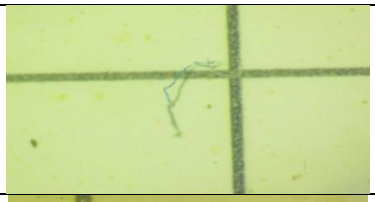
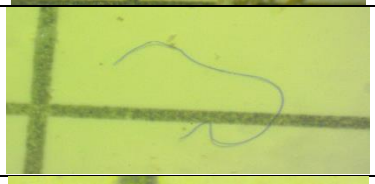
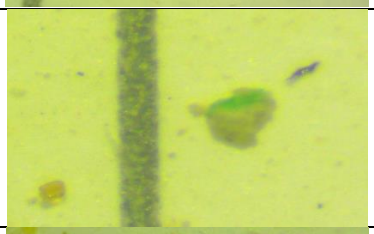
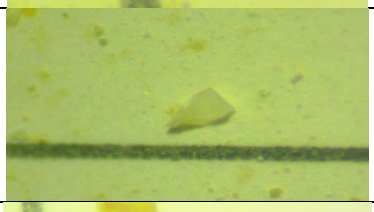
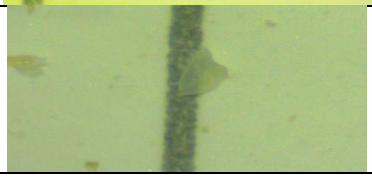
$$ni = \frac{66}{152} \times 110 \ = 48$$

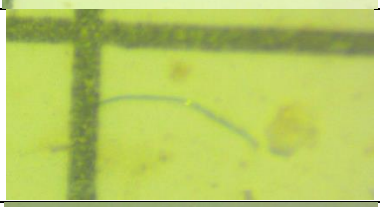
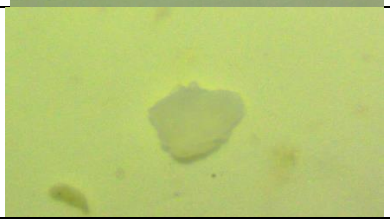
$$ni = \frac{13}{152} \times 110 \ = 9$$

Total sampel 53 + 48 + 9 = 110

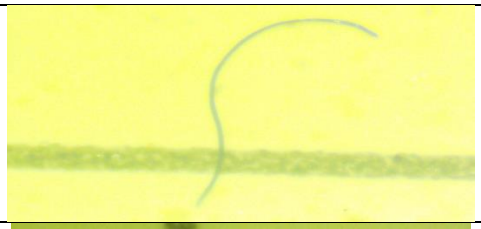
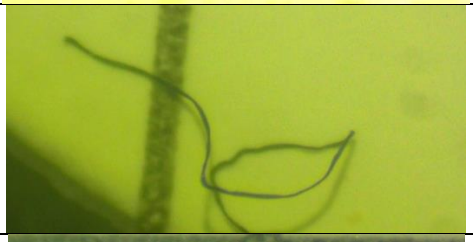
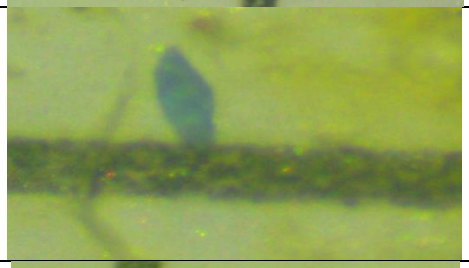
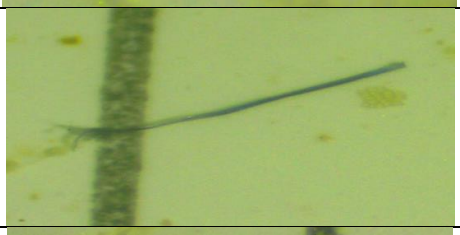
Lampiran 3. Mikroplastik yang di temukan pada epibion

1. *Amphibalanus reticulatus*

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
1		Serat	Biru	0,97
2		Serat	Biru	2,36
3		Serat	Hitam	1,30
4		Serat	Biru	2,52
5		Pecahan	Hijau	0,18
6		Pecahan	Putih	0,47
7		Serat	Hitam	1,07
8		Lembaran tipis	Putih	0,29

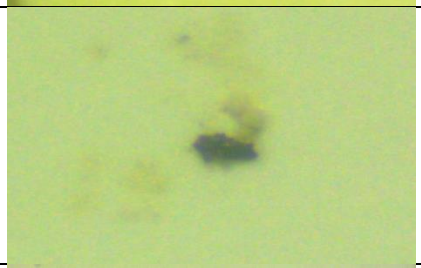
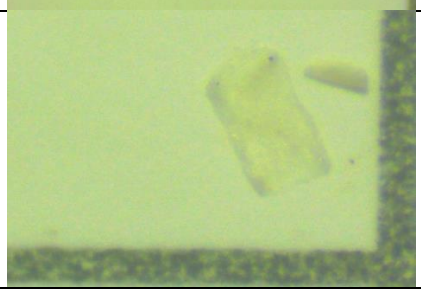
9		Lembaran tipis	Putih	0,25
10		Serat	Biru	1,58
11		Serat	Biru	0,55
12		Serat	Merah	2,25
13		Serat	Biru	3,51
14		Serat	Hitam	0,95
15		Pecahan	Putih	0,32

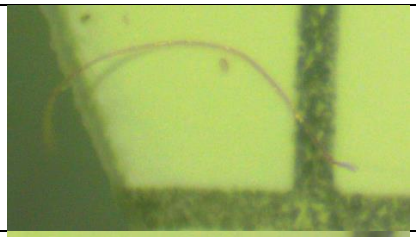
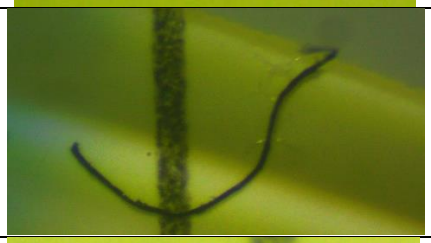
2. *Amphibalanus amphitrite*

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
1		Serat	Biru	1.29
2		Serat	Hitam	1,56
3		Lembaran tipis	Putih	0,53
4		Pecahan	Biru	0,23
5		Serat	Hitam	0,99
7		Lembaran tipis	Putih	0,47
8		Pecahan	Hitam	0,13

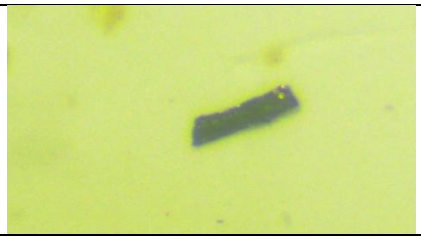
9		Pecahan	Biru	0.11
10		Serat	Hitam	0.75

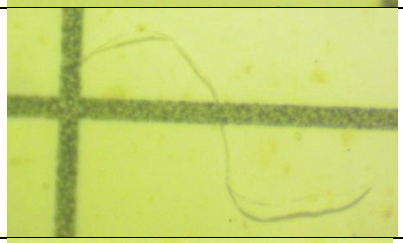
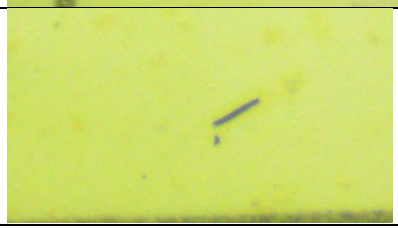
3. *Balanus trigonus*

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
1		Serat	Hitam	0,79
2		Pecahan	Hitam	0,11
3		Serat	Hitam	1,96
4		Lembaran tipis	Putih	0,43

5		Serat	Merah	1,05
6		Serat	Merah	0,59
7		Serat	Hitam	0,98
8		Serat	Hitam	1,61
9		Serat	Putih	1,24

4. *Sargassum muticum*

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
1		Pecahan	Hitam	0,29

2		Pecahan	Putih	0,67
3		Serat	Hitam	0,13
4		Pecahan	Putih	0,5
5		Serat	Putih	2,37
6		Serat	Hitam	0,13

Lampiran 4. Hasil Uji statistik *oneway* Anova

1. Konsentrasi mikroplastik berdasarkan jenis epibion

Uji Normalitas

KS normality test				
KS distance	0.09853	0.1114	0.1801	N too small
P value	> 0.10	> 0.10	> 0.10	
Passed normality test (alpha=0.05)?	Yes	Yes	Yes	
P value summary	ns	ns	ns	

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.376	3	113	.254

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
A. reticulatus vs A. amphitrite	-20.36	No	ns
A. reticulatus vs B. trigonus	5.948	No	ns
A. reticulatus vs S. muticum	16.80	No	ns
A. amphitrite vs B. trigonus	26.31	No	ns
A. amphitrite vs S. muticum	37.16	No	ns
B. trigonus vs S. muticum	10.85	No	ns

2. Konsentrasi mikroplastik pada *A. reticulatus* berdasarkan kelas

Uji Normalitas

KS normality test			
KS distance	0.1206	0.1338	0.2363
P value	> 0.10	> 0.10	> 0.10
Passed normality test (alpha=0.05)?	Yes	Yes	Yes
P value summary	ns	ns	ns

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
3.941	2	70	.024

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Kelas A vs Kelas B	-0.03199	0.1719	No	ns	-0.6615 to 0.5976
Kelas A vs Kelas C	-1.257	4.026	Yes	*	-2.313 to -0.2008
Kelas B vs Kelas C	-1.225	3.845	Yes	*	-2.303 to -0.1471

3. Konsentrasi mikroplastik pada *A. reticulatus* berdasarkan bentuk

Uji Normalitas

KS normality test			
KS distance	0.1257	0.1334	0.2178
P value	0.0718	0.0641	0.0238
Passed normality test (alpha=0.05)?	Yes	Yes	No
P value summary	ns	ns	*

Uji Homogenis

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.296	2	91	.279

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Serat vs Pecahan	12.88	No	ns
Serat vs Lembaran tipis	27.47	Yes	**
Pecahan vs Lembaran tipis	14.59	No	ns

4. Konsentrasi mikroplastik pada *A. reticulatus* berdasarkan warna

Uji Normalitas

KS normality test						
KS distance	0.1124	0.1644	0.1184	0.1647	0.2671	0.2209
P value	> 0.10	0.0238	> 0.10	0.0676	> 0.10	> 0.10
Passed normality test (alpha=0.05)?	Yes	No	Yes	Yes	Yes	Yes
P value summary	ns	*	ns	ns	ns	ns

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
.166	2	74	.848

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Hitam vs Putih	0.4533	No	ns
Hitam vs Merah	21.07	No	ns
Hitam vs Biru	17.29	No	ns
Hitam vs Hijau	19.91	No	ns
Hitam vs Kuning	12.91	No	ns
Putih vs Merah	20.62	No	ns
Putih vs Biru	16.84	No	ns
Putih vs Hijau	19.45	No	ns
Putih vs Kuning	12.45	No	ns
Merah vs Biru	-3.782	No	ns
Merah vs Hijau	-1.167	No	ns
Merah vs Kuning	-8.167	No	ns
Biru vs Hijau	2.615	No	ns
Biru vs Kuning	-4.385	No	ns
Hijau vs Kuning	-7.000	No	ns

5. Konsentrasi mikroplastik pada *A. amphitrite* berdasarkan kelas

Uji Normalitas

KS normality test			
KS distance	0.1816	0.1583	N too small
P value	> 0.10	> 0.10	
Passed normality test (alpha=0.05)?	Yes	Yes	
P value summary	ns	ns	

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
.743	2	22	.487

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Kelas A vs Kelas B	-0.4305	0.6324	No	ns	-2.835 to 1.974
Kelas A vs Kelas C	1.089	1.251	No	ns	-1.986 to 4.164
Kelas B vs Kelas C	1.520	1.796	No	ns	-1.469 to 4.508

6. Konsentrasi mikroplastik pada *A. amphitrite* berdasarkan Bentuk

Uji Normalitas

KS normality test			
KS distance	0.09278	0.1139	0.2215
P value	> 0.10	> 0.10	> 0.10
Passed normality test (alpha=0.05)?	Yes	Yes	Yes
P value summary	ns	ns	ns

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.221	2	47	.304

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Serat vs Pecahan	0.03191	0.1256	No	ns	-0.8389 to 0.9027
Serat vs Lembaran tipis	0.6026	1.667	No	ns	-0.6360 to 1.841
Pecahan vs Lembaran tipis	0.5707	1.570	No	ns	-0.6750 to 1.816

7. Konsentrasi mikroplastik pada *A. amphitrite* berdasarkan warna

Uji Normalitas

KS normality test				
KS distance	0.1467	0.1538	0.1610	0.1451
P value	> 0.10	> 0.10	> 0.10	> 0.10
Passed normality test (alpha=0.05)?	Yes	Yes	Yes	Yes
P value summary	ns	ns	ns	ns

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.

.560	3	49	.644

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Hitam vs Putih	0.4139	1.521	No	ns	-0.6114 to 1.439
Hitam vs Merah	0.9872	3.021	No	ns	-0.2437 to 2.218
Hitam vs Biru	0.9082	3.097	No	ns	-0.1964 to 2.013
Putih vs Merah	0.5733	1.656	No	ns	-0.7309 to 1.877
Putih vs Biru	0.4942	1.570	No	ns	-0.6914 to 1.680
Merah vs Biru	-0.07906	0.2178	No	ns	-1.446 to 1.288

8. Konsentrasi mikroplastik pada *B. trigonus* berdasarkan kelas

Uji Normalitas

KS normality test			
KS distance	N too small	0.2582	N too small
P value		> 0.10	
Passed normality test (alpha=0.05)?		Yes	
P value summary		ns	

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
11.544	1	14	.004

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Kelas A vs Kelas B	-1.333	No	ns
Kelas A vs Kelas C	-2.833	No	ns
Kelas B vs Kelas C	-1.500	No	ns

9. Konsentrasi mikroplastik pada *B. trigonus* berdasarkan bentuk

Uji Normalitas

KS normality test			
KS distance	0.2695	0.2294	N too small
P value	0.0899	> 0.10	
Passed normality test (alpha=0.05)?	Yes	Yes	
P value summary	ns	ns	

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
11.081	2	13	.002

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Serat vs Pecahan	0.4250	No	ns
Serat vs Lembaran tipis	2.625	No	ns
Pecahan vs Lembaran tipis	2.200	No	ns

10. Konsentrasi mikroplastik pada *B. trigonus* berdasarkan warna

Uji Normalitas

KS normality test				
KS distance	0.2416	0.2249	N too small	N too small
P value	> 0.10	> 0.10		
Passed normality test (alpha=0.05)?	Yes	Yes		
P value summary	ns	ns		

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.629	3	13	.231

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Hitam vs Putih	0.7500	No	ns
Hitam vs Merah	0.2500	No	ns
Hitam vs Biru	1.167	No	ns
Putih vs Merah	-0.5000	No	ns
Putih vs Biru	0.4167	No	ns
Merah vs Biru	0.9167	No	ns

11. Perbandingan konsentrasi mikroplastik *A. reticulatus* vs Kerang hijau

Uji Normalitas

KS normality test		
KS distance	0.09853	0.1483
P value	> 0.10	0.0113

Passed normality test (alpha=0.05)?	Yes	No
P value summary	ns	*

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.169	1	144	.281

Table Analyzed	
Column A	A. reticulatus
Vs	vs
Column B	kerang hijau

Mann Whitney test	
P value	0.3219
Exact or approximate P value?	Gaussian Approximation
P value summary	ns
Are medians signif. different? (P < 0.05)	No
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	5153 , 5725
Mann-Whitney U	2452

12. Perbandingan konsentrasi mikroplastik *A. amphitrite* vs Kerang hijau

Uji Normalitas

KS normality test		
KS distance	0.1114	0.1998
P value	> 0.10	0.0354
Passed normality test (alpha=0.05)?	Yes	No
P value summary	ns	*

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
1.246	1	48	.270

Table Analyzed	
Column A	A. amphitrite
Vs	vs

Column B	Kerang Hijau
Mann Whitney test	
P value	0.8689
Exact or approximate P value?	Gaussian Approximation
P value summary	ns
Are medians signif. different? (P < 0.05)	No
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	646.5 , 628.5
Mann-Whitney U	303.5

13. Perbandingan konsentrasi mikroplastik *B. trigonus* vs Kerang hijau

Uji Normalitas

KS normality test		
KS distance	0.1801	0.1786
P value	> 0.10	> 0.10
Passed normality test (alpha=0.05)?	Yes	Yes
P value summary	ns	ns

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
2.416	1	32	.130

Table Analyzed	
Column A	B. trigonus
vs	vs
Column B	Kerang hijau
Paired t test	
P value	0.0812
P value summary	ns
Are means signif. different? (P < 0.05)	No
One- or two-tailed P value?	Two-tailed
t, df	t=1.861 df=16
Number of pairs	17

14. Perbandingan konsentrasi mikroplastik *S. muticum* vs Kerang hijau

Uji Normalitas

KS normality test		
KS distance	0.4013	0.4726
P value	0.0084	0.0005
Passed normality test (alpha=0.05)?	No	No
P value summary	**	***

Uji Homogenitas

Test of Homogeneity of Variances

Nilai

Levene Statistic	df1	df2	Sig.
2.804	1	8	.133

Table Analyzed	
Column A	S. muticum
vs	Vs
Column B	Kerang Hijau

Mann Whitney test	
P value	0.6072
Exact or approximate P value?	Gaussian Approximation
P value summary	ns
Are medians signif. different? (P < 0.05)	No
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	30 , 25
Mann-Whitney U	10.00