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LAMPIRAN

Lampiran 1. Dokumentasi penelitian



Gambar 12. Sampel Kerang hijau yang ditempeli *biofouling*



Gambar 13. Preparasi Sampel



Gambar 14. Lokasi pengambilan sampel



Gambar 15. Lokasi sekitar pengambilan sampel



Gambar 16. Penambahan larutan KOH pada sampel

Lampiran 2. Perhitungan jumlah sampel

- **Perhitungan Lemeshow**

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

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

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

$$n = 96,04$$

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

- **Perhitungan kelompok ukuran panjang cangkang kerang**

Panjang terkecil : 2,42 cm

Panjang terbesar : 14,62 cm

Logaritma harga terbesar = Log 14,62 = 1,1649

Logaritma harga terkecil = Log 2,42 = 0,3838

Beda logaritma = 1,1649 – 0,3838 = 0,7811

Banyaknya kelas yang dikehendaki = 3

Beda logaritma tengah-tengah kelas = $\frac{0,7811}{3} = 0,2603$

Logaritma tengah-tengah kelas pertama = $0,3838 + \frac{0,2603}{2} = 0,5139$

Harga-harga yang terdapat didalam kelas panjang yaitu:

Kelas	Logaritma Harga Terendah	Logaritma Tengah Kelas	Antilog Harga Terendah	Antilog Tengah Kelas
I	0,3838	0,5139	2,42	3,27
II	0,6441	0,7742	4,41	5,95
III	0,9044	1,0345	8,02	10,83

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

Kelas I : 2,42 – 4,40 = 44 Individu

Kelas II : 4,41 – 8,01 = 56 Individu

Kelas III : 8,02 – 14,62 = 37 Individu
151 Individu

Jumlah sampel yang dibutuhkan

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

$$n = \frac{151}{1 + 151(0,05^2)}$$

$$n = \frac{151}{1,3775}$$

$$n = 109,6188 \Rightarrow 110$$

Jumlah sampel tiap kelas :

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

$$ni = \frac{44}{151} \times 110 = 32$$



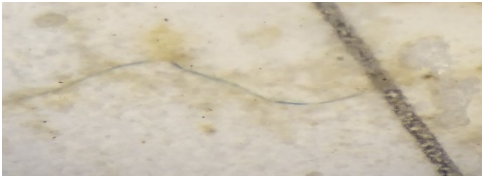

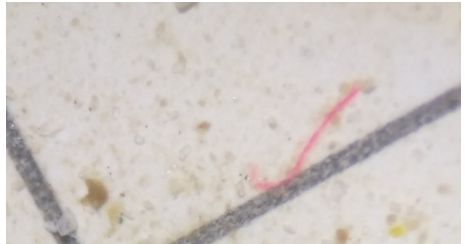

$$ni = \frac{56}{151} \times 110 = 41$$




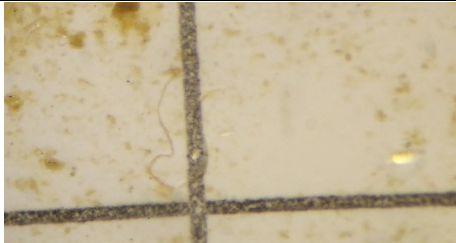


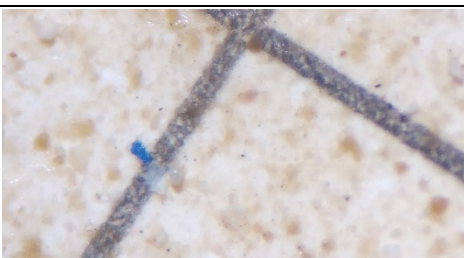
$$ni = \frac{51}{151} \times 110 = 37$$

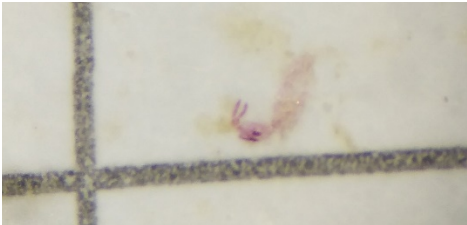

$$\text{Total sampel } 32 + 41 + 37 = 110$$

Lampiran 3. Mikroplastik yang di temukan pada *biofouling*


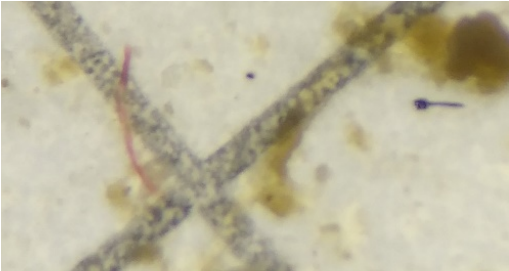
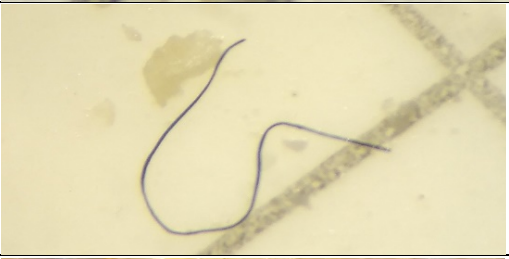

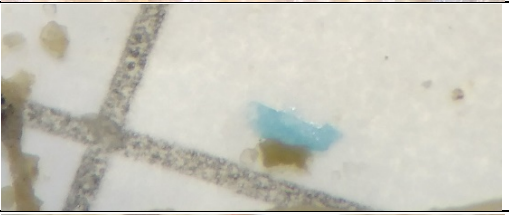

1. Kelompok ukuran panjang cangkang kerang 2.42-4.40 cm





NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
1(1)		Fiber	Merah	2.72
9(1)		Fiber	Hitam	1.18
9(2)		Fiber	Hitam	2.88
10 (1)		Fiber	Merah	3.00
14 (1)		Fiber	Merah	1.11
14 (2)		Fiber	Biru	0.82

14 (3)		Fiber	Biru	4.56
16 (1)		Fragmen	Biru	1.69
16 (2)		Fragmen	Biru	0.26
17 (2)		Fiber	Merah	2.27
21 (1)		Fiber	Biru	1.63
25 (3)		Fiber	Hitam	3.02
26 (2)		Fragmen	Biru	0.15







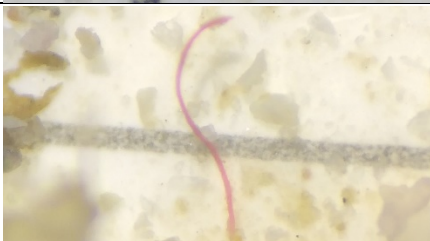
27 (2)		Fiber	Merah	1.03
28 (3)		Fiber	Biru	0.77

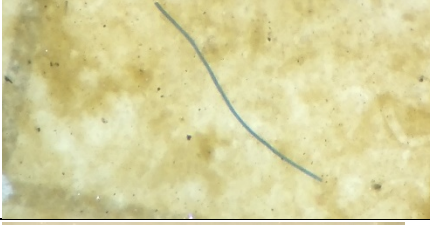
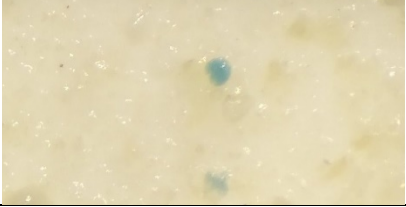
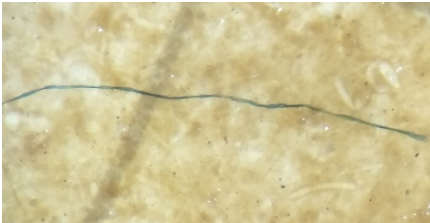
2. Kelompok ukuran panjang cangkang kerang 4.41-8.01

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
33 (1)		Fiber	Merah	1.11
36 (1)		Fiber	Merah	0.66
38 (1)		Fiber	Biru	3.18
42 (2)		Fragmen	Biru	0.76
45 (2)		Fragmen	Biru	0.4
46 (4)		Fiber	Merah	4.72

49 (5)		Fiber	Merah	1.44
52 (1)		Fiber	Biru	0.74
54 (3)		Fragmen	Biru	0.16
55(9)		Fiber	Biru	1.48

3. Kelompok ukuran panjang cangkang kerang 8.02-14.62

NO	GAMBAR	BENTUK	WARNA	UKURAN (mm)
80 (1)		Film	Putih	0.28
85 (1)		Fiber	Merah	0.69
87 (1)		Fragmen	Biru	0.28
93 (1)		Fiber	Merah	1.01
95 (1)		Fragmen	Merah	0.45
98 (1)		Fiber	Merah	1.42
103 (1)		Fiber	Merah	1.45

104 (1)		Fiber	Biru	1.06
105 (3)		Fragmen	Biru	0.16
110 (1)		Fiber	Biru	3.22

Lampiran 3. Hasil uji *one way onova* dengan *Graphad Prism*

1. Konsentrasi mikroplastik berdasarkan panjang cangkang

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Kelas A vs Kelas B	-3.832	0.9810	No	ns	-17.28 to 9.612
Kelas A vs Kelas C	6.617	1.609	No	ns	-7.537 to 20.77
Kelas B vs Kelas C	10.45	2.873	No	ns	-2.069 to 22.97

2. Konsentrasi bentuk mikroplastik pada kerang hijau

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Fiber vs Fragmen	4.866	1.830	No	ns	-4.189 to 13.92
Fiber vs Film	4.112	1.205	No	ns	-7.508 to 15.73
Fragmen vs Film	-0.7541	0.1931	No	ns	-14.05 to 12.54

3. Konsentrasi bentuk mikroplastik disetiap kelas

• Kelas A

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary
Fiber vs Fragmen	6.451	2.320	No	ns
Fiber vs Film	6.532	1.460	No	ns
Fragmen vs Film	0.08164	0.01805	No	ns

• Kelas B

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Fiber vs Fragmen	7.419	1.553	No	ns	-9.506 to 24.34
Fiber vs Film	8.133	1.023	No	ns	-20.04 to 36.31
Fragmen vs Film	0.7136	0.08368	No	ns	-29.50 to 30.93

- **Kelas C**

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Fiber vs Fragmen	0.1934	0.07017	No	ns	-9.933 to 10.32
Fiber vs Film	-1.845	0.5570	No	ns	-14.01 to 10.32
Fragmen vs Film	-2.038	0.5547	No	ns	-15.54 to 11.46

4. Konsentrasi mikroplastik berdasarkan warna

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Biru vs Merah	1.048	0.4455	No	ns	-7.749 to 9.846
Biru vs Putih	3.720	1.213	No	ns	-7.750 to 15.19
Biru vs Hitam	4.077	1.018	No	ns	-10.90 to 19.06
Merah vs Putih	2.672	0.8713	No	ns	-8.798 to 14.14
Merah vs Hitam	3.029	0.7561	No	ns	-11.95 to 18.01
Putih vs Hitam	0.3567	0.07992	No	ns	-16.34 to 17.05

5. Konsentrasi mikroplastik berdasarkan warna pada tiap kelas

- **Kelas A**

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Biru vs Merah	1.631	No	ns
Biru vs Putih	-4.036	No	ns
Biru vs Hitam	1.714	No	ns
Merah vs Putih	-5.667	No	ns
Merah vs Hitam	0.08333	No	ns
Putih vs Hitam	5.750	No	ns

- **Kelas B**

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
Merah vs Biru	-1.356	No	ns
Merah vs Putih	2.542	No	ns
Merah vs Hitam	8.417	No	ns

Biru vs Putih	3.898	No	ns
Biru vs Hitam	9.773	No	ns
Putih vs Hitam	5.875	No	ns

• **Kelas C**

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
Merah vs Biru	-5.140	1.347	No	ns	-20.69 to 10.41
Merah vs Putih	-1.969	0.3997	No	ns	-22.05 to 18.11
Merah vs Hitam	-2.712	0.4739	No	ns	-26.04 to 20.62
Biru vs Putih	3.171	0.6437	No	ns	-16.91 to 23.25
Biru vs Hitam	2.427	0.4241	No	ns	-20.90 to 25.76
Putih vs Hitam	-0.7435	0.1141	No	ns	-27.31 to 25.82

6. Perbandingan konsentrasi mikroplastik pada kerang hijau dan *biofouling*

Dunn's Multiple Comparison Test	Difference in rank sum	Significant? P < 0.05?	Summary
A vs B	-1.203	No	ns
A vs C	-29.98	Yes	***
B vs C	-28.77	Yes	***