

Appendix 11: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Teluk Kemang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	671	223.6667	9817.333
February	3	788	262.6667	10261.33
March	3	762	254	15231
Plastic	3	692	230.6667	158.3333
Plant	3	1085	361.6667	1072.333
Shell	3	444	148	513

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2516.222	2	1258.111	5.182151	0.077544	6.944272
Columns	69648.22	2	34824.11	143.4403	0.000189	6.944272
Error	971.1111	4	242.7778			
Total	73135.56	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	82.78	27.59333	84.67743
February	3	99.27	33.09	167.5669
March	3	95.5	31.83333	191.0106
Plastic	3	103.32	34.44	17.2287
Plant	3	121.24	40.41333	33.22343
Shell	3	52.99	17.66333	0.338033

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	49.77016	2	24.88508	1.92125	0.260142	6.944272
Columns	834.6998	2	417.3499	32.22146	0.003416	6.944272
Error	51.81018	4	12.95254			
Total	936.2801	8				

Appendix 12: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Teluk Kemang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	219	43.8	2504.7
February	5	246	49.2	2986.7
March	5	230	46	2919.5
Film	3	361	120.3333	69.33333
Foam	3	241	80.33333	0.333333
Fragment	3	93	31	48
Line	3	0	0	0
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	73.73333	2	36.86667	1.825083	0.222347	4.45897
Columns	33482	4	8370.5	414.3812	2.65E-09	3.837853
Error	161.6	8	20.2			
Total	33717.33	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	31.65	6.33	47.2071
February	5	39.19	7.838	89.79472
March	5	32.47	6.494	67.58818
Film	3	52.33	17.44333	13.50303
Foam	3	10.03	3.343333	1.966233
Fragment	3	40.95	13.65	0.2433
Line	3	0	0	0
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	6.845493	2	3.422747	1.11401	0.374277	4.45897
Columns	793.7804	4	198.4451	64.58844	3.97E-06	3.837853
Error	24.57964	8	3.072455			
Total	825.2055	14				

Appendix 13: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Teluk Kemang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	218	72.66667	2704.333
February	3	244	81.33333	3090.333
March	3	229	76.33333	2337.333
Low Tide	3	77	25.66667	25.33333
High Tide	3	227	75.66667	40.33333
Berm	3	387	129	112

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	113.5556	2	56.77778	0.939338	0.462979	6.944272
Columns	16022.22	2	8011.111	132.5368	0.000221	6.944272
Error	241.7778	4	60.44444			
Total	16377.56	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	31.65	10.55	43.6449
February	3	39.21	13.07	68.6311
March	3	32.46	10.82	24.3013
Low Tide	3	12.02	4.006667	1.589633
High Tide	3	47.02	15.67333	7.864133
Berm	3	44.28	14.76	6.5767

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	11.4858	2	5.7429	1.116474	0.411844	6.944272
Columns	252.5795	2	126.2897	24.55192	0.005674	6.944272
Error	20.57513	4	5.143783			
Total	284.6404	8				

Appendix 14: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Teluk Kemang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	219	73	5053
February	3	244	81.33333	16410.33
March	3	229	76.33333	10532.33
>4.75 mm	3	576	192	1407
2.80-4.75 mm	3	95	31.66667	224.3333
1.00-2.80 mm	3	21	7	147

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	105.5556	2	52.77778	0.061172	0.941524	6.944272
Columns	60540.22	2	30270.11	35.08448	0.002909	6.944272
Error	3451.111	4	862.7778			
Total	64096.89	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	31.64	10.54667	178.7754
February	3	39.2	13.06667	511.4297
March	3	32.46	10.82	293.1532
>4.75 mm	3	95.71	31.90333	44.97943
2.80-4.75 mm	3	5.36	1.786667	2.933733
1.00-2.80 mm	3	2.23	0.743333	1.657633

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	11.47262	2	5.736311	0.261726	0.781952	6.944272
Columns	1879.048	2	939.5239	42.86688	0.001987	6.944272
Error	87.66898	4	21.91724			
Total	1978.189	8				

Appendix 15: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Pasir Panjang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	707	235.6667	12254.33
February	3	584	194.6667	3754.333
March	3	686	228.6667	11950.33
Plastic	3	634	211.3333	784.3333
Plant	3	406	135.3333	240.3333
Shell	3	937	312.3333	4724.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2886	2	1443	0.670228	0.561001	6.944272
Columns	47306	2	23653	10.98607	0.023719	6.944272
Error	8612	4	2153			
Total	58804	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	83.55	27.85	166.7803
February	3	70.44	23.48	104.5057
March	3	72.77	24.25667	268.0921
Plastic	3	60.78	20.26	42.0259
Plant	3	46.97	15.65667	2.847233
Shell	3	119.01	39.67	23.5216

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	32.61216	2	16.30608	0.626089	0.580017	6.944272
Columns	974.579	2	487.2895	18.71	0.009326	6.944272
Error	104.1773	4	26.04433			
Total	1111.368	8				

Appendix 16: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Pasir Panjang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	228	45.6	1949.3
February	5	226	45.2	1720.7
March	5	179	35.8	3436.2
Film	3	150	50	871
Foam	3	163	54.33333	732.3333
Fragment	3	0	0	0
Line	3	320	106.6667	874.3333
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	307.6	2	153.8	0.264731	0.773879	4.45897
Columns	23777.07	4	5944.267	10.23168	0.003106	3.837853
Error	4647.733	8	580.9667			
Total	28732.4	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	25.24	5.048	36.17697
February	5	22.61	4.522	24.58467
March	5	12.93	2.586	8.79068
Film	3	15.39	5.13	11.6572
Foam	3	13.18	4.393333	0.889233
Fragment	3	0	0	0
Line	3	32.21	10.73667	16.76223
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	16.81036	2	8.40518	1.608379	0.258756	4.45897
Columns	236.4023	4	59.10058	11.30923	0.002243	3.837853
Error	41.80697	8	5.225872			
Total	295.0196	14				

Appendix 17: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Pasir Panjang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	228	76	4237
February	3	227	75.66667	1025.333
March	3	179	59.66667	5640.333
Low Tide	3	115	38.33333	1312.333
High Tide	3	394	131.3333	444.3333
Berm	3	125	41.66667	1057.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	522.8889	2	261.4444	0.204849	0.822815	6.944272
Columns	16700.22	2	8350.111	6.54255	0.054813	6.944272
Error	5105.111	4	1276.278			
Total	22328.22	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	25.24	8.413333	26.36363
February	3	22.61	7.536667	5.133733
March	3	12.93	4.31	14.2743
Low Tide	3	17.92	5.973333	42.84063
High Tide	3	25.64	8.546667	1.695633
Berm	3	17.22	5.74	7.9671

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	28.01727	2	14.00863	0.727821	0.537562	6.944272
Columns	14.55387	2	7.276933	0.378074	0.707309	6.944272
Error	76.98947	4	19.24737			
Total	119.5606	8				

Appendix 18: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Pasir Panjang Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	227	75.66667	6309.333
February	3	227	75.66667	12484.33
March	3	179	59.66667	10680.33
>4.75 mm	3	548	182.6667	390.3333
2.80-4.75 mm	3	36	12	133
1.00-2.80 mm	3	49	16.33333	800.3333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	512	2	256	0.47955	0.6506	6.944272
Columns	56812.67	2	28406.33	53.21199	0.001312	6.944272
Error	2135.333	4	533.8333			
Total	59460	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	25.25	8.416667	151.5557
February	3	22.61	7.536667	165.4782
March	3	12.93	4.31	55.7283
>4.75 mm	3	57.87	19.29	30.3436
2.80-4.75 mm	3	2.89	0.963333	2.196633
1.00-2.80 mm	3	0.03	0.01	0.0003

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	28.05049	2	14.02524	1.514991	0.323751	6.944272
Columns	708.494	2	354.247	38.26535	0.002467	6.944272
Error	37.03058	4	9.257644			
Total	773.575	8				

Appendix 19: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Batu Burok Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	2735	911.6667	34960.33
February	3	5643	1881	1575847
March	3	2065	688.3333	85472.33
Plastic	3	2340	780	122992
Plant	3	2871	957	192028
Shell	3	5232	1744	1797232

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2411939	2	1205969	2.661354	0.184092	6.944272
Columns	1579994	2	789997	1.743379	0.285452	6.944272
Error	1812565	4	453141.3			
Total	5804498	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	174.15	58.05	906.0357
February	3	513.5	171.1667	25376.67
March	3	162.53	54.17667	503.1976
Plastic	3	204.92	68.30667	1273.826
Plant	3	122.14	40.71333	94.02703
Shell	3	523.12	174.3733	23728.3

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	26497.04	2	13248.52	2.236484	0.222869	6.944272
Columns	29876.53	2	14938.26	2.521729	0.195637	6.944272
Error	23695.27	4	5923.818			
Total	80068.84	8				

Appendix 20: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Batu Burok Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	1064	212.8	41959.7
February	5	888	177.6	20647.8
March	5	387	77.4	11493.8
Film	3	1153	384.3333	20336.33
Foam	3	544	181.3333	12626.33
Fragment	3	491	163.6667	6065.333
Line	3	115	38.33333	2292.333
Pellet	3	36	12	432

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	49353.73	2	24676.87	5.78066	0.027975	4.45897
Columns	262254.3	4	65563.57	15.35854	0.0008	3.837853
Error	34150.93	8	4268.867			
Total	345758.9	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	46.95	9.39	82.8816
February	5	109.53	21.906	542.965
March	5	48.46	9.692	173.2846
Film	3	75.35	25.11667	120.478
Foam	3	12.62	4.206667	9.077633
Fragment	3	95.8	31.93333	539.6169
Line	3	14.58	4.86	24.4747
Pellet	3	6.59	2.196667	14.47603

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	509.8721	2	254.936	2.250161	0.167755	4.45897
Columns	2290.15	4	572.5376	5.05343	0.02499	3.837853
Error	906.3746	8	113.2968			
Total	3706.397	14				

Appendix 21: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Batu Burok Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	1064	354.6667	107442.3
February	3	888	296	88768
March	3	388	129.3333	3077.333
Low Tide	3	288	96	2704
High Tide	3	543	181	91
Berm	3	1509	503	99211

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	81994.67	2	40997.33	1.343984	0.35771	6.944272
Columns	276558	2	138279	4.533094	0.093718	6.944272
Error	122017.3	4	30504.33			
Total	480570	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	46.96	15.65333	51.39343
February	3	109.52	36.50667	1136.2
March	3	48.44	16.14667	218.0901
Low Tide	3	20.48	6.826667	0.266233
High Tide	3	82.43	27.47667	54.64043
Berm	3	102.01	34.00333	1171.799

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	849.6345	2	424.8172	1.059542	0.427314	6.944272
Columns	1207.591	2	603.7955	1.505934	0.325426	6.944272
Error	1603.777	4	400.9442			
Total	3661.002	8				

Appendix 22: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Batu Burok Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	1064	354.6667	79530.33
February	3	888	296	89008
March	3	388	129.3333	21157.33
>4.75 mm	3	1588	529.3333	40869.33
2.80-4.75 mm	3	525	175	17431
1.00-2.80 mm	3	227	75.66667	1776.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	81994.67	2	40997.33	4.297565	0.100859	6.944272
Columns	341232.7	2	170616.3	17.88494	0.010116	6.944272
Error	38158.67	4	9539.667			
Total	461386	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	46.96	15.65333	621.3464
February	3	109.51	36.50333	3829.697
March	3	48.45	16.15	759.4243
>4.75 mm	3	200.35	66.78333	1274.789
2.80-4.75 mm	3	3.72	1.24	0.7009
1.00-2.80 mm	3	0.85	0.283333	0.045033

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	849.2274	2	424.6137	0.998009	0.445035	6.944272
Columns	8719.094	2	4359.547	10.24665	0.02667	6.944272
Error	1701.843	4	425.4606			
Total	11270.16	8				

Appendix 23: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Seberang Takir Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	2934	978	25963
February	3	3545	1181.667	317464.3
March	3	1240	413.3333	19861.33
Plastic	3	2636	878.6667	104325.3
Plant	3	2121	707	50443
Shell	3	2962	987.3333	623920.3

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	950664.7	2	475332.3	3.133822	0.151767	6.944272
Columns	119864.7	2	59932.33	0.395128	0.697272	6.944272
Error	606712.7	4	151678.2			
Total	1677242	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	263.68	87.89333	5007.815
February	3	368.15	122.7167	1170.139
March	3	108.81	36.27	433.4491
Plastic	3	244.86	81.62	4257.951
Plant	3	164.96	54.98667	1375.806
Shell	3	330.82	110.2733	4359.495

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	11350.66	2	5675.33	2.628732	0.186696	6.944272
Columns	4586.963	2	2293.482	1.062308	0.426542	6.944272
Error	8635.843	4	2158.961			
Total	24573.47	8				

Appendix 24: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Seberang Takir Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	1162	232.4	106850.8
February	5	943	188.6	23597.8
March	5	528	105.6	6644.8
Film	3	303	101	351
Foam	3	594	198	1891
Fragment	3	227	75.66667	72.33333
Line	3	1445	481.6667	90952.33
Pellet	3	64	21.33333	1365.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	41476.13	2	20738.07	1.122586	0.371777	4.45897
Columns	400585.7	4	100146.4	5.421091	0.02069	3.837853
Error	147787.9	8	18473.48			
Total	589849.7	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	33.01	6.602	59.35307
February	5	155.8	31.16	315.3654
March	5	56.07	11.214	60.37588
Film	3	48.4	16.13333	143.5361
Foam	3	30.47	10.15667	25.29263
Fragment	3	69.38	23.12667	439.4762
Line	3	82.2	27.4	534.9181
Pellet	3	14.43	4.81	69.4083

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	1703.681	2	851.8407	9.444153	<u>0.007836</u>	4.45897
Columns	1018.796	4	254.6989	2.823786	0.098745	3.837853
Error	721.5814	8	90.19768			
Total	3444.059	14				

Appendix 25: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Seberang Takir Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	1164	388	39088
February	3	943	314.3333	13344.33
March	3	528	176	30288
Low Tide	3	676	225.3333	38117.33
High Tide	3	1204	401.3333	45205.33
Berm	3	755	251.6667	7116.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	69506.89	2	34753.44	1.248203	0.379117	6.944272
Columns	54069.56	2	27034.78	0.97098	0.453169	6.944272
Error	111371.1	4	27842.78			
Total	234947.6	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	33	11	73.2304
February	3	155.78	51.92667	1398.16
March	3	56.04	18.68	336.7024
Low Tide	3	73.67	24.55667	1390.776
High Tide	3	119.28	39.76	1157.766
Berm	3	51.87	17.29	284.7847

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2839.315	2	1419.658	2.008472	0.248944	6.944272
Columns	788.8467	2	394.4233	0.558014	0.6113	6.944272
Error	2827.338	4	706.8345			
Total	6455.5	8				

Appendix 26: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Seberang Takir Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	1164	388	153309
February	3	943	314.3333	90632.33
March	3	528	176	10768
>4.75 mm	3	1731	577	64951
2.80-4.75 mm	3	724	241.3333	15386.33
1.00-2.80 mm	3	180	60	2704

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	69506.89	2	34753.44	1.439427	0.338133	6.944272
Columns	412842.9	2	206421.4	8.549616	0.035941	6.944272
Error	96575.78	4	24143.94			
Total	578925.6	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	33	11	267.64
February	3	155.78	51.92667	7242.863
March	3	37.37	12.45667	424.4704
>4.75 mm	3	216.2	72.06667	4584.295
2.80-4.75 mm	3	9.41	3.136667	4.226033
1.00-2.80 mm	3	0.54	0.18	0.0604

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	3234.995	2	1617.497	1.088826	0.41925	6.944272
Columns	9927.78	2	4963.89	3.341467	0.140197	6.944272
Error	5942.168	4	1485.542			
Total	19104.94	8				

Appendix 27: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Tanjung Aru Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	2768	922.6667	732386.3
February	3	3528	1176	1911033
March	3	1511	503.6667	137376.3
Plastic	3	576	192	333
Plant	3	5528	1842.667	857701.3
Shell	3	1703	567.6667	22921.33

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	691770.9	2	345885.4	1.29286	0.368904	6.944272
Columns	4491451	2	2245725	8.394134	0.037024	6.944272
Error	1070140	4	267535.1			
Total	6253362	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	420.83	140.2767	11178.41
February	3	439.94	146.6467	34057.66
March	3	116.65	38.88333	1842.558
Plastic	3	56.35	18.78333	6.597033
Plant	3	666.09	222.03	18234.89
Shell	3	254.98	84.99333	7568.189

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	21934.12	2	10967.06	1.47778	0.330716	6.944272
Columns	64472.02	2	32236.01	4.343711	0.099397	6.944272
Error	29685.23	4	7421.307			
Total	116091.4	8				

Appendix 28: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Tanjung Aru Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	183	36.6	1302.3
February	5	213	42.6	1634.3
March	5	180	36	1566.5
Film	3	230	76.66667	476.3333
Foam	3	143	47.66667	25.33333
Fragment	3	203	67.66667	537.3333
Line	3	0	0	0
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	133.2	2	66.6	0.273961	0.767216	4.45897
Columns	16067.6	4	4016.9	16.52365	0.000621	3.837853
Error	1944.8	8	243.1			
Total	18145.6	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	20.14	4.028	28.37372
February	5	20.37	4.074	15.46083
March	5	15.83	3.166	17.65503
Film	3	13.6	4.533333	4.585233
Foam	3	10.94	3.646667	1.618633
Fragment	3	31.8	10.6	4.5759
Line	3	0	0	0
Pellet	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	2.61604	2	1.30802	0.552388	0.59605	4.45897
Columns	227.0148	4	56.75371	23.96758	0.000165	3.837853
Error	18.94349	8	2.367937			
Total	248.5744	14				

Appendix 29: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Tanjung Aru Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	182	60.66667	5424.333
February	3	214	71.33333	4600.333
March	3	180	60	5529
Low Tide	3	32	10.66667	22.33333
High Tide	3	107	35.66667	176.3333
Berm	3	437	145.6667	1.333333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	242.6667	2	121.3333	3.084746	0.154711	6.944272
Columns	30950	2	15475	393.4322	2.56E-05	6.944272
Error	157.3333	4	39.33333			
Total	31350	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	20.15	6.716667	15.41213
February	3	20.37	6.79	81.4717
March	3	15.82	5.273333	29.82343
Low Tide	3	12.16	4.053333	34.44363
High Tide	3	9.42	3.14	0.4957
Berm	3	34.76	11.58667	29.49663

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	4.388867	2	2.194433	0.070513	0.933048	6.944272
Columns	128.9315	2	64.46573	2.07147	0.2413	6.944272
Error	124.4831	4	31.12077			
Total	257.8034	8				

Appendix 30: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Tanjung Aru Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	183	61	8047
February	3	213	71	4519
March	3	180	60	2433
>4.75 mm	3	428	142.6667	597.3333
2.80-4.75 mm	3	101	33.66667	161.3333
1.00-2.80 mm	3	47	15.66667	184.3333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	222	2	111	0.266827	0.778437	6.944272
Columns	28334	2	14167	34.05529	0.003077	6.944272
Error	1664	4	416			
Total	30220	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	20.15	6.716667	107.8812
February	3	20.36	6.786667	123.2586
March	3	15.82	5.273333	77.99723
>4.75 mm	3	53.75	17.91667	4.701233
2.80-4.75 mm	3	2.51	0.836667	0.344933
1.00-2.80 mm	3	0.07	0.023333	0.000433

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	4.378289	2	2.189144	1.532233	0.320598	6.944272
Columns	612.5593	2	306.2796	214.3723	8.54E-05	6.944272
Error	5.714911	4	1.428728			
Total	622.6525	8				

Appendix 31: ANOVA Statistical Analysis of Abundance of Small Plastic Debris and Other Debris with Months at Teluk Likas Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	2677	892.3333	1130133
February	3	2921	973.6667	1472901
March	3	1017	339	25396
Plastic	3	747	249	156
Plant	3	851	283.6667	1225.333
Shell	3	5017	1672.333	1007109

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	715594.7	2	357797.3	1.099742	0.416302	6.944272
Columns	3955475	2	1977737	6.078862	0.061286	6.944272
Error	1301387	4	325346.7			
Total	5972456	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	261.07	87.02333	1763.208
February	3	265.81	88.60333	2187.073
March	3	138.35	46.11667	198.5481
Plastic	3	125.68	41.89333	4.833233
Plant	3	217.64	72.54667	1080.455
Shell	3	321.91	107.3033	1590.964

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	3480.969	2	1740.484	3.719904	0.122259	6.944272
Columns	6426.121	2	3213.06	6.867212	0.050873	6.944272
Error	1871.537	4	467.8842			
Total	11778.63	8				

Appendix 32: ANOVA Statistical Analysis of Classification of Small Plastic Debris with Months at Teluk Likas Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	239	47.8	7326.7
February	5	262	52.4	8848.3
March	5	245	49	5001.5
Film	3	591	197	607
Foam	3	94	31.33333	212.3333
Fragment	3	0	0	0
Line	3	46	15.33333	36.33333
Pellet	3	15	5	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	56.93333	2	28.46667	0.137653	0.873421	4.45897
Columns	83051.6	4	20762.9	100.4009	7.16E-07	3.837853
Error	1654.4	8	206.8			
Total	84762.93	14				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	5	40.54	8.108	136.9821
February	5	44.44	8.888	101.0609
March	5	40.71	8.142	62.34072
Film	3	69.21	23.07	12.0739
Foam	3	20.45	6.816667	22.92863
Fragment	3	0	0	0
Line	3	28.82	9.606667	75.87603
Pellet	3	7.21	2.403333	2.326033

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	1.943453	2	0.971727	0.034633	0.966104	4.45897
Columns	977.0693	4	244.2673	8.705732	0.00518	3.837853
Error	224.4657	8	28.05822			
Total	1203.478	14				

Appendix 33: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to tidal zone with Months at Teluk Likas Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	239	79.66667	8649.333
February	3	263	87.66667	905.3333
March	3	245	81.66667	729.3333
Low Tide	3	327	109	4788
High Tide	3	163	54.33333	857.3333
Berm	3	257	85.66667	2433.333

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	104	2	52	0.012957	0.987168	6.944272
Columns	4514.667	2	2257.333	0.562458	0.609181	6.944272
Error	16053.33	4	4013.333			
Total	20672	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	40.54	13.51333	169.9326
February	3	44.43	14.81	100.2316
March	3	40.7	13.56667	14.65583
Low Tide	3	41.32	13.77333	171.1336
High Tide	3	45.84	15.28	44.0203
Berm	3	38.51	12.83667	66.72253

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	3.230067	2	1.615033	0.011525	0.988574	6.944272
Columns	9.117267	2	4.558633	0.032531	0.968246	6.944272
Error	560.5229	4	140.1307			
Total	572.8702	8				

Appendix 34: ANOVA Statistical Analysis of Abundance of Small Plastic Debris according to size with Months at Teluk Likas Beach.

Quantity (items/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	239	79.66667	19040.33
February	3	262	87.33333	22620.33
March	3	245	81.66667	16992.33
>4.75 mm	3	732	244	229
2.80-4.75 mm	3	14	4.666667	52.33333
1.00-2.80 mm	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	94.88889	2	47.44444	0.405701	0.691157	6.944272
Columns	116838.2	2	58419.11	499.5458	1.59E-05	6.944272
Error	467.7778	4	116.9444			
Total	117400.9	8				

Density (g/m²) of debris with months

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
January	3	40.54	13.51333	547.8305
February	3	44.43	14.81	647.4027
March	3	40.7	13.56667	551.7564
>4.75 mm	3	125.42	41.80667	4.265833
2.80-4.75 mm	3	0.25	0.083333	0.018433
1.00-2.80 mm	3	0	0	0

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	3.230067	2	1.615033	1.21011	0.388168	6.944272
Columns	3488.641	2	1744.32	1306.982	2.33E-06	6.944272
Error	5.338467	4	1.334617			
Total	3497.209	8				