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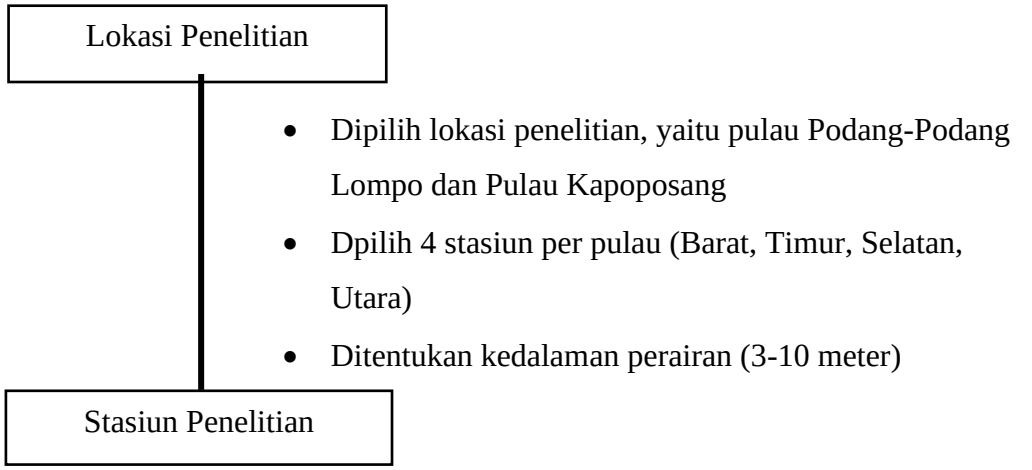
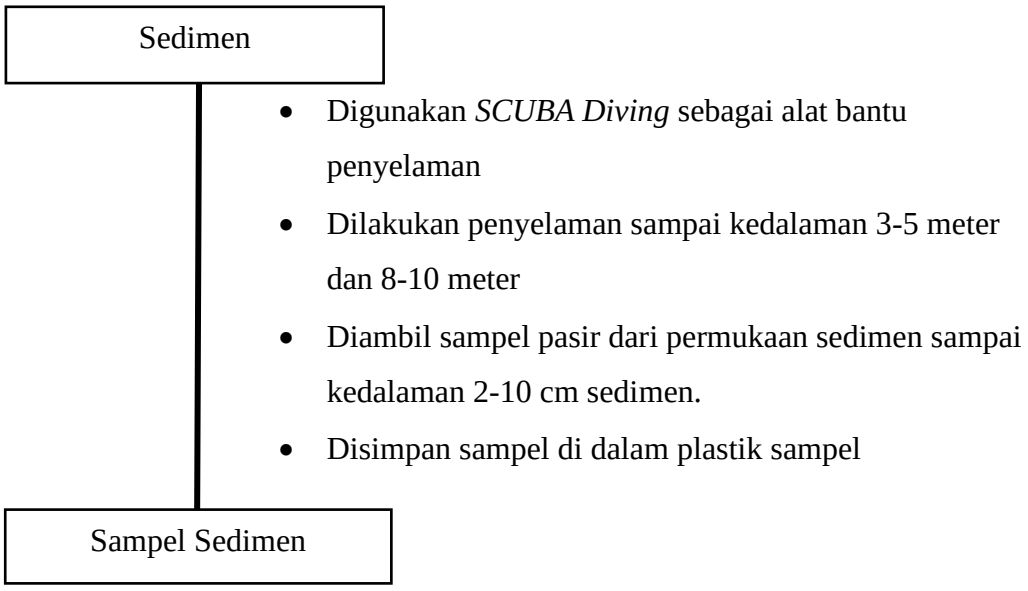
LAMPIRAN

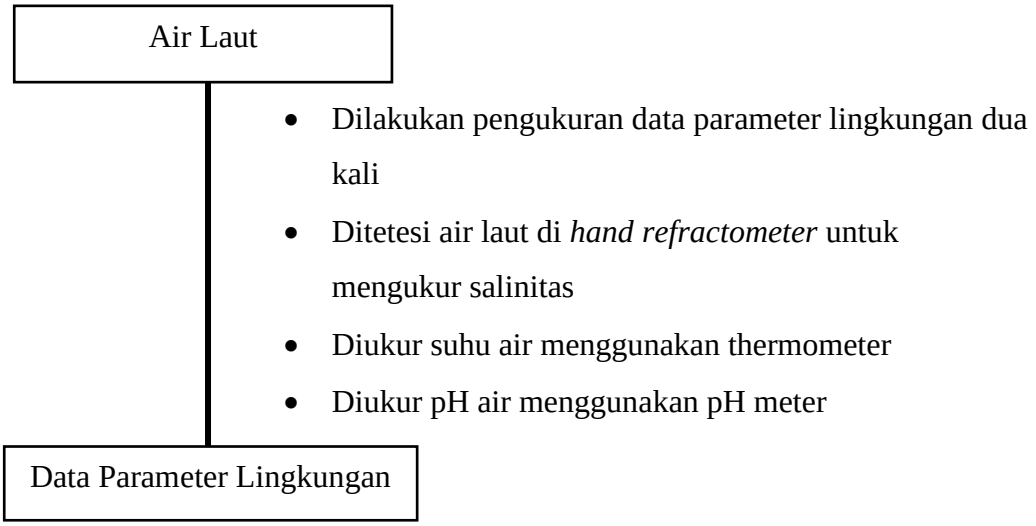
Lampiran 1. Skema kerja penentuan stasiun pengambilan sampel



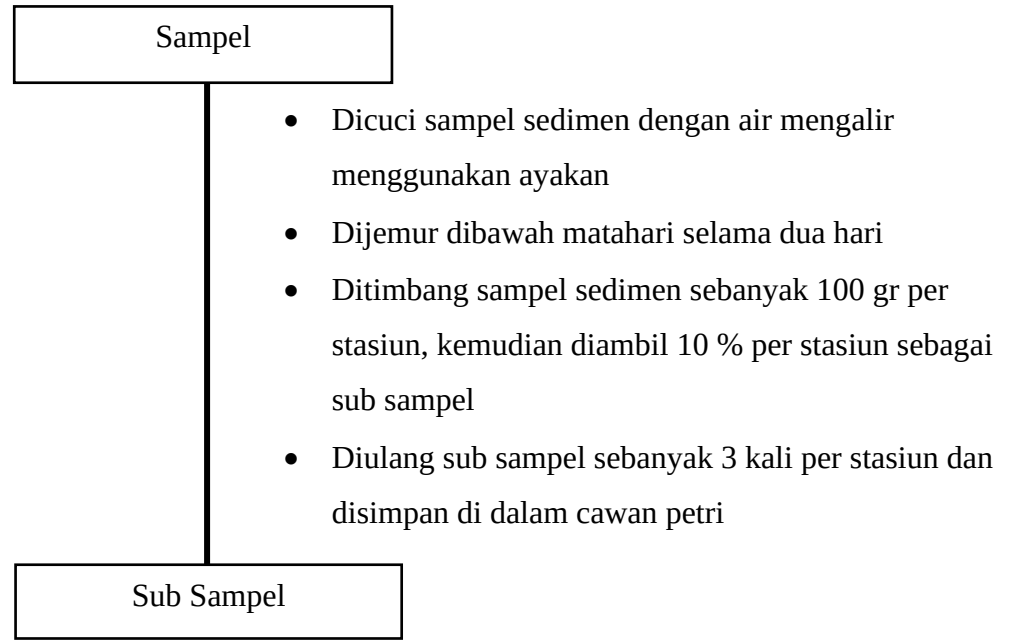
Lampiran 2. Skema kerja pengambilan sampel



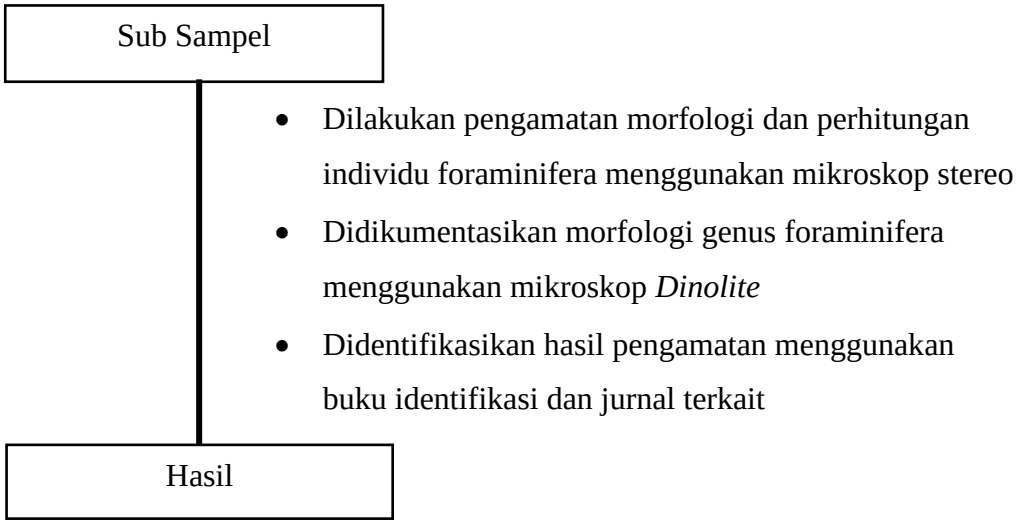
Lampiran 3. Skema kerja pengukuran data parameter lingkungan



Lampiran 4. Skema kerja preparasi sampel



Lampiran 5. Identifikasi dan dokumentasi

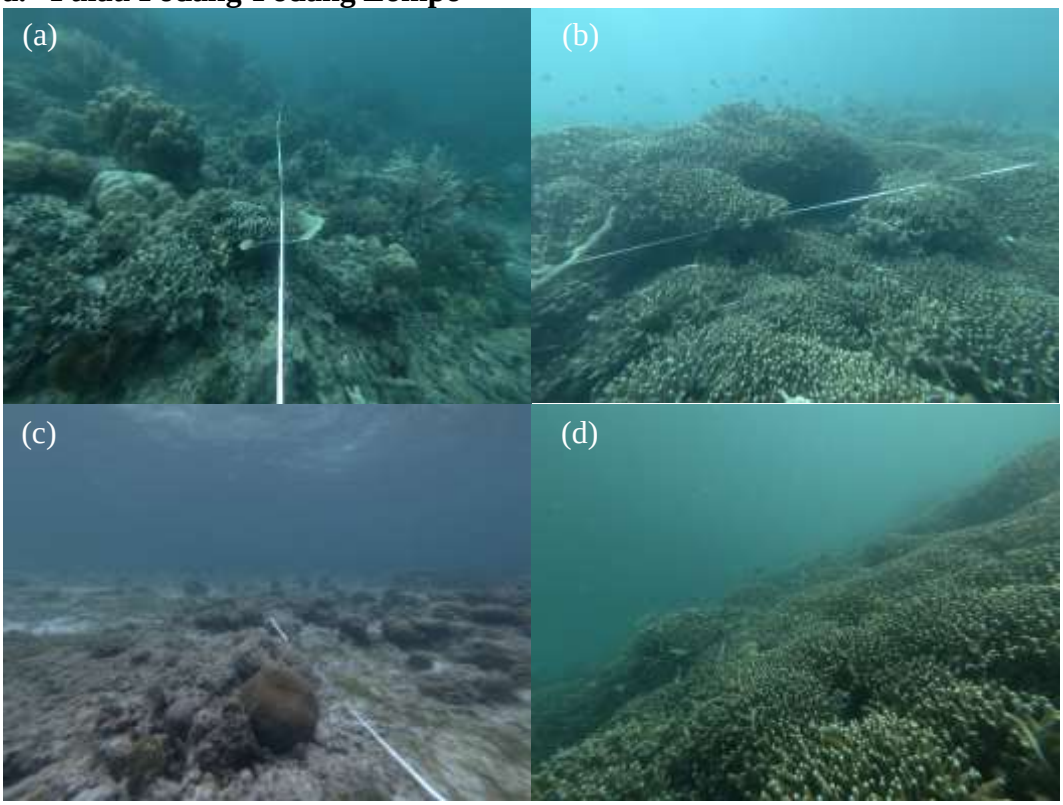


Lampiran 6. Dokumentasi pengambilan sampel

Gambar 13. Proses pengambilan sampel sedimen di area terumbu karang Pulau Podang-Podang Lompo dan Pulau Kapoposang menggunakan SCUBA *Diving*

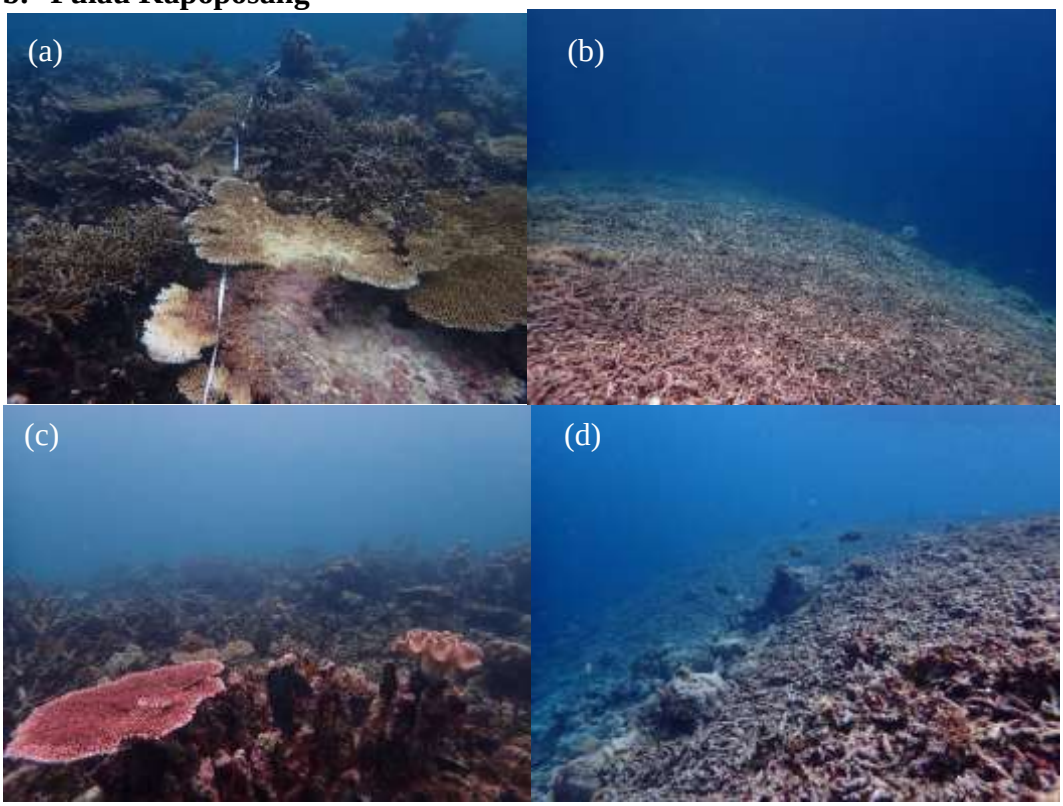
Lampiran 7. Kondisi lingkungan lokasi pengambilan sampel

a. Pulau Podang-Podang Lompo



Gambar 14. Kondisi perairan terumbu karang di Pulau Podang-Podang Lompo (Perairan Barat Pulau menunjukan area terumbu karang yang didominasi karang massif (a), Perairan Timur Pulau menunjukan area terumbu karang yang didominasi oleh karang acropora (b), Perairan Selatan Pulau menunjukan area yang didominasi oleh pecahan karang (rubber) (c), Perairan Utara Pulau menunjukan perairan yang menunjukan kerapatan terumbu karang yang didominasi oleh karang acropora (d)).

b. Pulau Kapoposang



Gambar 15. Kondisi perairan terumbu karang di Pulau Kapoposang (Perairan Barat Pulau menunjukan area terumbu karang yang didominasi oleh karang acropora (a), Perairan Timur Pulau menunjukan area terumbu karang rusak yang mengalami pemutihan karang (b), Perairan Selatan Pulau menunjukan area terumbu karang yang didominasi oleh karang acropora dengan beberapa pecahan karang (c), Perairan Utara Pulau menunjukan area terumbu karang rusak yang didominasi oleh pecahan karang dan bebatuan (d)).

Lampiran 8. Dokumentasi preparasi sampel

Gambar 16. Proses preparasi sampel sedimen dasar perairan (alat dan bahan (a), pencucian dan penyaringan sampel sedimen (b), penjemuran sampel sedimen (c), penimbangan sampel sedimen (d), sampel sedimen 100 gr (e), 10% sampel sedimen untuk sub sampel (e).

Lampiran 9. Pengamatan sampel

Gambar 17. Proses pengamatan morfologi foraminifera pada sampel sedimen dasar perairan.

Lampiran 10. Analisis data Keanekaragaman Genus

$$H' = -\sum_{i=s}^{s} pi \ln pi$$

Keterangan:

H’ :Indeks diversitas Shannon-Weiner

S :jumlah Seluruh Genus

pi :jumlah individu satu genus per jumlah individu seluruh genus.

1. Pulau Podang-Podang Lompo

a. Stasiun Barat I

Genus	Barat I	Pi	Ln Pi	Pi Ln Pi
Peneroplis	5	0.010	-4.584	-0.047
Calcarina	52	0.119	-2.131	-0.253
Amphistegina	316	0.718	-0.331	-0.238
Amphisorus	13	0.029	-3.549	-0.102
Baculogypsina	5	0.010	-4.584	-0.047
Elphidium	9	0.020	-3.891	-0.079
Pygro	4	0.009	-4.702	-0.043
Fissurina	6	0.012	-4.384	-0.055
Textularia	19	0.042	-3.162	-0.134
Quinqueloculina	2	0.005	-5.241	-0.028
Spirosigmoilina	4	0.010	-4.622	-0.045
Spiroloculina	7	0.015	-4.216	-0.062
Total	441			**H’= 1.133**

b. Stasiun Barat II

Genus	Barat II	pi	Ln Pi	Pi Ln Pi
Peneroplis	13	0.031	-3.460	-0.109
Calcarina	17	0.043	-3.146	-0.135
Amphistegina	299	0.741	-0.299	-0.222
Amphisorus	9	0.023	-3.765	-0.087
Baculogypsina	2	0.004	-5.593	-0.021
Ammonia	9	0.023	-3.765	-0.087
Elphidium	15	0.036	-3.313	-0.121

Pygro	5	0.012	-4.389	-0.054
Fissurina	6	0.014	-4.294	-0.059
Textularia	14	0.036	-3.336	-0.119
Quinqueloculina	7	0.018	-4.006	-0.073
Spirosigmoilina	2	0.004	-5.488	-0.023
Spiroloculina	6	0.014	-4.294	-0.059
Total	403			**H'= 1.168**

c. Stasiun Timur I

Genus	Timur I	pi	Ln Pi	Pi Ln Pi
Peneroplis	10	0.041	-3.193	-0.131
Calcarina	9	0.038	-3.262	-0.125
Amphistegina	199	0.818	-0.201	-0.164
Elphidium	5	0.021	-3.886	-0.080
Pygro	7	0.030	-3.503	-0.105
Fissurina	2	0.008	-4.803	-0.039
Textularia	4	0.016	-4.110	-0.067
Quinqueloculina	3	0.012	-4.397	-0.054
Spirosigmoilina	4	0.015	-4.197	-0.063
Total	244			**H'= 0.830**

d. Stasiun Timur II

Genus	Timur II	pi	Ln Pi	Pi Ln Pi
Peneroplis	14	0.037	-3.301	-0.122
Calcarina	13	0.034	-3.374	-0.116
Amphistegina	304	0.781	-0.247	-0.193
Amphisorus	12	0.030	-3.507	-0.105
Baculogypsina	3	0.008	-4.865	-0.038
Ammonia	4	0.010	-4.578	-0.047
Elphidium	6	0.015	-4.172	-0.064
Pygro	4	0.011	-4.498	-0.050
Fissurina	6	0.014	-4.259	-0.060
Textularia	11	0.029	-3.536	-0.103
Quinqueloculina	5	0.014	-4.290	-0.059
Spirosigmoilina	6	0.016	-4.118	-0.067
Total	389			**H'= 1.023**

e. Stasiun Selatan I

Genus	Selatan I	Pi	Ln Pi	Pi Ln Pi
Peneroplis	8	0.046	-3.069	-0.143
Calcarina	5	0.026	-3.649	-0.095
Amphistegina	124	0.691	-0.369	-0.255
Amphisorus	5	0.028	-3.580	-0.100
Baculogypsina	11	0.059	-2.822	-0.168
Ammonia	12	0.067	-2.704	-0.181
Pygro	9	0.048	-3.030	-0.146
Fissurina	3	0.017	-4.091	-0.068
Textularia	3	0.017	-4.091	-0.068
Total	179			**H'= 1.225**

f. Stasiun Selatan II

Genus	Selatan II	pi	Ln Pi	Pi Ln Pi
Peneroplis	7	0.027	-3.604	-0.098
Calcarina	6	0.024	-3.709	-0.091
Amphistegina	173	0.706	-0.348	-0.246
Amphisorus	11	0.044	-3.134	-0.136
Baculogypsina	11	0.045	-3.103	-0.139
Ammonia	6	0.026	-3.655	-0.094
Pygro	5	0.019	-3.961	-0.075
Fissurina	9	0.038	-3.268	-0.124
Textularia	2	0.008	-4.808	-0.039
Quinqueloculina	5	0.019	-3.961	-0.075
Spirosigmoilina	11	0.044	-3.134	-0.136
Total	245			**H'= 1.256**

g. Stasiun Utara I

Genus	Utara I	Pi	Ln Pi	Pi Ln Pi
Peneroplis	22	0.053	-2.937	-0.156
Calcarina	38	0.091	-2.397	-0.218
Amphistegina	308	0.732	-0.312	-0.228
Amphisorus	16	0.037	-3.291	-0.122
Baculogypsina	4	0.009	-4.657	-0.044
Ammonia	2	0.004	-5.638	-0.020

Pygro	11	0.025	-3.676	-0.093
Fissurina	1	0.002	-6.043	-0.014
Textularia	4	0.009	-4.657	-0.044
Quinqueloculina	5	0.013	-4.369	-0.055
Spirosigmoilina	10	0.024	-3.740	-0.089
Total	421			**H'= 1.085**

h. Stasiun Utara II

Genus	Utara II	pi	Ln Pi	Pi Ln Pi
Peneroplis	14	0.076	-2.582	-0.195
Calcarina	4	0.020	-3.897	-0.079
Amphistegina	114	0.629	-0.463	-0.292
Amphisorus	14	0.079	-2.534	-0.201
Baculogypsina	2	0.011	-4.504	-0.050
Ammonia	3	0.014	-4.280	-0.059
Pygro	10	0.055	-2.894	-0.160
Fissurina	2	0.008	-4.791	-0.040
Textularia	1	0.006	-5.197	-0.029
Quinqueloculina	6	0.031	-3.462	-0.109
Spirosigmoilina	13	0.070	-2.658	-0.186
Total	181			**H'= 1.400**

2. Pulau Kapoposang

a. Stasiun Barat I

Genus	Barat I	pi	Ln Pi	Pi Ln Pi
Peneroplis	4	0.007	-4.996	-0.034
Calcarina	188	0.347	-1.059	-0.367
Amphistegina	139	0.257	-1.358	-0.349
Amphisorus	7	0.014	-4.303	-0.058
Baculogypsina	1	0.002	-6.295	-0.012
Neorotalia sp	10	0.018	-3.993	-0.074
Heterostegina	3	0.006	-5.197	-0.029
Elphidium	41	0.076	-2.582	-0.195
Pygro	2	0.004	-5.602	-0.021
Textularia	21	0.038	-3.267	-0.125
Quinqueloculina	23	0.043	-3.145	-0.135
Spirosigmoilina	17	0.031	-3.482	-0.107

Triloculina	62	0.115	-2.163	-0.249
Planorbulinella	16	0.030	-3.523	-0.104
Marsonella	8	0.014	-4.258	-0.060
Total	542			**H'= 1.918**

b. Stasiun Barat II

Genus	Barat II	pi	Ln Pi	Pi Ln Pi
Peneroplis	11	0.024	-3.714	-0.091
Calcarina	129	0.294	-1.224	-0.360
Amphistegina	152	0.348	-1.055	-0.367
Amphisorus	17	0.038	-3.268	-0.124
Baculogypsina	11	0.024	-3.730	-0.089
Neorotalia sp	16	0.037	-3.309	-0.121
Heterostegina	1	0.002	-6.081	-0.014
Elphidium	17	0.039	-3.248	-0.126
Pygro	1	0.002	-6.081	-0.014
Textularia	11	0.026	-3.654	-0.095
Quinqueloculina	13	0.030	-3.517	-0.104
Spirosigmoilina	11	0.025	-3.684	-0.093
Triloculina	45	0.103	-2.275	-0.234
Planorbulinella	2	0.003	-5.676	-0.019
Marsonella	2	0.005	-5.388	-0.025
Total	438			**H'= 1.876**

c. Stasiun Timur I

Genus	Timur I	pi	Ln Pi	Pi Ln Pi
Peneroplis	3	0.012	-4.397	-0.054
Calcarina	8	0.038	-3.257	-0.125
Amphistegina	139	0.642	-0.443	-0.284
Amphisorus	7	0.034	-3.385	-0.115
Baculogypsina	1	0.006	-5.090	-0.031
Heterostegina	4	0.020	-3.911	-0.078
Ammonia	2	0.007	-4.972	-0.034
Elphidium	6	0.026	-3.643	-0.095
Pygro	10	0.046	-3.075	-0.142
Fissurina	1	0.005	-5.378	-0.025
Textularia	12	0.057	-2.865	-0.163

Quinqueloculina	2	0.009	-4.684	-0.043
Spiroloculina	4	0.018	-3.991	-0.074
Cymbaloporetta	3	0.014	-4.279	-0.059
Triloculina	9	0.040	-3.218	-0.129
Planorbulinella	3	0.015	-4.174	-0.064
Polystomammina sp	2	0.009	-4.684	-0.043
Total	217			**H'= 1.561**

d. Atasiun Timur II

Genus	Timur II	pi	Ln Pi	Pi Ln Pi
Peneroplis	1	0.005	-5.374	-0.025
Calcarina	15	0.068	-2.688	-0.183
Amphistegina	117	0.541	-0.614	-0.332
Amphisorus	9	0.040	-3.214	-0.129
Baculogypsina	3	0.014	-4.275	-0.059
Heterostegina	5	0.021	-3.870	-0.081
Ammonia	3	0.015	-4.170	-0.064
Elphidium	5	0.023	-3.764	-0.087
Pygro	15	0.070	-2.666	-0.185
Fissurina	2	0.009	-4.681	-0.043
Textularia	7	0.034	-3.381	-0.115
Quinqueloculina	6	0.028	-3.582	-0.100
Spirosigmoilina	6	0.028	-3.582	-0.100
Spiroloculina	8	0.039	-3.253	-0.126
Cymbaloporetta	4	0.017	-4.074	-0.069
Triloculina	4	0.017	-4.074	-0.069
Planorbulinella	2	0.011	-4.526	-0.049
Polystomammina sp	5	0.021	-3.870	-0.081
Total	216			**H'= 1.898**

e. Stasiun Selatan I

Genus	Selatan I	pi	Ln Pi	Pi Ln Pi
Peneroplis	3	0.012	-4.451	-0.052
Amphistegina	132	0.578	-0.549	-0.317
Amphisorus	20	0.089	-2.419	-0.215
Heterostegina	5	0.023	-3.758	-0.088

Pygro	8	0.034	-3.395	-0.114
Fissurina	1	0.004	-5.432	-0.024
Textularia	6	0.024	-3.727	-0.090
Quinqueloculina	2	0.009	-4.738	-0.041
Spirosigmoilina	14	0.061	-2.792	-0.171
Spiroloculina	10	0.044	-3.129	-0.137
Cymbaloporetta	4	0.018	-4.045	-0.071
Triloculina	17	0.073	-2.618	-0.191
Planorbulinella	2	0.009	-4.738	-0.041
Polystomammina sp	5	0.023	-3.758	-0.088
Total	229			**H'= 1.640**

f. Stasiun Selatan II

Genus	**Selatan II**	**pi**	**Ln Pi**	**Pi Ln Pi**
Peneroplis	7	0.031	-3.459	-0.109
Amphistegina	171	0.732	-0.312	-0.228
Amphisorus	13	0.054	-2.913	-0.158
Heterostegina	6	0.026	-3.660	-0.094
Pygro	10	0.044	-3.116	-0.138
Fissurina	2	0.006	-5.046	-0.032
Textularia	4	0.016	-4.152	-0.065
Quinqueloculina	6	0.024	-3.717	-0.090
Spirosigmoilina	4	0.017	-4.065	-0.070
Spiroloculina	3	0.013	-4.353	-0.056
Triloculina	6	0.027	-3.606	-0.098
Polystomammina sp	2	0.009	-4.759	-0.041
Total	233			**H'= 1.180**

g. Stasiun Utara I

Genus	**Utara I**	**pi**	**Ln Pi**	**Pi Ln Pi**
Calcarina	3	0.010	-4.611	-0.046
Amphistegina	166	0.660	-0.415	-0.274
Ammonia	13	0.052	-2.962	-0.153
Elphidium	2	0.009	-4.680	-0.043
Pygro	22	0.087	-2.436	-0.213
Textularia	7	0.028	-3.582	-0.100

Spirosigmoilina	1	0.004	-5.527	-0.022
Cymbaloporetta	21	0.082	-2.499	-0.205
Triloculina	10	0.038	-3.259	-0.125
Planorbulinella	7	0.029	-3.535	-0.103
Total	252			**H'= 1.285**

h. Stasiun Utara II

Genus	**Utara II**	**pi**	**Ln Pi**	**Pi Ln Pi**
Calcarina	6	0.022	-3.800	-0.085
Amphistegina	222	0.784	-0.243	-0.191
Ammonia	8	0.028	-3.567	-0.101
Elphidium	5	0.019	-3.972	-0.075
Pygro	16	0.057	-2.873	-0.162
Textularia	5	0.016	-4.142	-0.066
Spirosigmoilina	4	0.013	-4.347	-0.056
Cymbaloporetta	5	0.016	-4.106	-0.068
Triloculina	5	0.019	-3.972	-0.075
Planorbulinella	7	0.026	-3.654	-0.095
Total	283			**H'= 0.973**

Lampiran 11. Analisis data indeks foram (FI)

$$FI= (10\times P_s) + (P_o) + (2\times P_h)$$

Keterangan:

FI : FORAM *Index*

$P_s= N_s/ T$: Proporsi spesimen kelompok s ("s" adalah jumlah individu genus foraminifera yang berasosiasi dengan terumbu karang.

$P_o= N_o/T$:Proposrsi spesimen kelompok o ("o" adalah jumlah individu genus foraminifera oportunis

$P_h= N_h/T$:Proporsi spesimen kelompok h ("h" adalah jumlah individu genus foraminifera kecil lain yang heterotrofik

1. Pulau Podang-Podang Lompo

Stasiun	Simbion	Oportunistik	Heterotrofik
K.T.I	218	5	20
K.B.I	390	9	41
K.S.I	153	12	15
K.U.I	389	2	31
K.T.II	346	10	33
K.B.II	340	24	39
K.S.II	207	6	31
K.U.II	147	3	31

$(10\times P_s) + (P_o) + (2\times P_h)$

Stasiun	10*Ps	Po	2*Ph	FI
K.T.I	8.90	0.02	0.16	9.08
K.B.I	8.80	0.02	0.18	9.00
K.S.I	8.50	0.06	0.16	8.72
K.U.I	9.20	0.00	0.14	9.34
K.T.II	8.80	0.02	0.16	8.98
K.B.II	8.40	0.05	0.18	8.63
K.S.II	8.40	0.02	0.24	8.66
K.U.II	8.10	0.01	0.34	8.45

2. Pulau Kapoposang

Stasiun	Simbion	Oportunistik	Heterotrofik
K.T.I	163	7	46
K.B.I	352	41	149
K.S.I	160		68
K.U.I	169	15	68
K.T.II	149	8	59
K.B.II	336	17	85
K.S.II	197		37
K.U.II	228	13	42

$$(10\times P_s) + (P_o) + (2\times P_h)$$

Stasiun	10*Ps	Po	2*Ph	FI
K.T.I	7.50	0.03	0.42	7.95
K.B.I	6.40	0.07	0.54	7.01
K.S.I	7.00	0.00	0.58	7.58
K.U.I	6.70	0.05	0.52	7.27
K.T.II	6.80	0.03	0.54	7.37
K.B.II	7.60	0.03	0.38	8.01
K.S.II	8.40	0.00	0.30	8.70
K.U.II	8.00	0.04	0.28	8.32