

Appendix Table 5. Output for SIMPER analysis for all species (A), parrotfish (B), and wrasse (C). For the all species analysis (A) only the top 50 records are displayed. Comparison is the comparison between different habitat clusters. A.MG/A.Sand is the cluster for area of mangrove and area of sand. Rub/EAM is the cluster describing rubble and EAM. Coral/A.MA is the cluster for coral cover and area of macroalgae. A.SG/Soft Coral describe the cluster for area of seagrass and soft coral cover. A.CR/A.RF is the cluster for area of coral reef and area of reef flat. Average is the average contribution to the overall dissimilarity. Overall is the overall between-group dissimilarity. Sd is the standard deviation of contribution. Ratio is the average to sd ratio. Ava is the average abundance of the first cluster. Avb is the average abundance of the second cluster in the comparison. Ord is an index vector to order vectors by their contribution. Cumsum is the ordered cumulative contribution. P is the p-value from the permutation tests to identify species significantly driving differences between assemblages.

A. All species SIMPER analysis.

Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus nigricans</i>	0.002	0.737	0.007	0.300	0.004	0.000	209	0.022	0.174
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus nigricauda</i>	0.000	0.737	0.000	NA	0.000	0.000	122	0.043	1
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus nigrofuscus</i>	0.007	0.737	0.010	0.663	0.010	0.006	65	0.063	0.003
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus pyroferus</i>	0.006	0.737	0.009	0.654	0.009	0.005	8	0.083	0.374
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus sp.</i>	0.000	0.737	0.000	NA	0.000	0.000	115	0.101	1
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus thompsoni</i>	0.000	0.737	0.000	NA	0.000	0.000	206	0.119	1
A.MG/A.Sand vs Rub/EAM	<i>Acanthurus triostegus</i>	0.000	0.737	0.000	NA	0.000	0.000	162	0.136	1
A.MG/A.Sand vs Rub/EAM	<i>Ctenochaetus binotatus</i>	0.015	0.737	0.011	1.335	0.017	0.035	164	0.153	0.002
A.MG/A.Sand vs Rub/EAM	<i>Ctenochaetus cyanocheilus</i>	0.000	0.737	0.000	NA	0.000	0.000	178	0.169	1
A.MG/A.Sand vs Rub/EAM	<i>Ctenochaetus sp.</i>	0.001	0.737	0.005	0.308	0.003	0.000	11	0.185	0.441
A.MG/A.Sand vs Rub/EAM	<i>Ctenochaetus striatus</i>	0.012	0.737	0.009	1.249	0.024	0.023	133	0.200	0.006
A.MG/A.Sand vs Rub/EAM	<i>Ctenochaetus tominiensis</i>	0.003	0.737	0.007	0.423	0.000	0.006	73	0.215	0.81
A.MG/A.Sand vs Rub/EAM	<i>Naso brevirostris</i>	0.000	0.737	0.000	NA	0.000	0.000	159	0.230	1
A.MG/A.Sand vs Rub/EAM	<i>Naso hexacanthus</i>	0.003	0.737	0.008	0.351	0.005	0.000	131	0.245	0.671
A.MG/A.Sand vs Rub/EAM	<i>Naso lituratus</i>	0.003	0.737	0.006	0.480	0.004	0.002	134	0.260	0.945
A.MG/A.Sand vs Rub/EAM	<i>Naso minor</i>	0.003	0.737	0.005	0.648	0.000	0.007	211	0.275	0.147
A.MG/A.Sand vs Rub/EAM	<i>Naso sp.</i>	0.000	0.737	0.000	NA	0.000	0.000	34	0.289	1
A.MG/A.Sand vs Rub/EAM	<i>Naso unicornis</i>	0.002	0.737	0.005	0.358	0.001	0.003	130	0.304	0.997
A.MG/A.Sand vs Rub/EAM	<i>Naso vlamingii</i>	0.001	0.737	0.004	0.288	0.000	0.002	77	0.318	0.418
A.MG/A.Sand vs Rub/EAM	<i>Zebrasoma scopas</i>	0.005	0.737	0.007	0.687	0.001	0.010	123	0.331	0.988

A.MG/A.Sand vs Rub/EAM	<i>Zebrasoma veliferum</i>	0.000	0.737	0.000	NA	0.000	0.000	91	0.345	1
A.MG/A.Sand vs Rub/EAM	<i>Balistoides viridescens</i>	0.000	0.737	0.000	NA	0.000	0.000	195	0.358	1
A.MG/A.Sand vs Rub/EAM	<i>Caesio caeruleaurea</i>	0.000	0.737	0.000	NA	0.000	0.000	208	0.371	1
A.MG/A.Sand vs Rub/EAM	<i>Caesio sp.</i>	0.000	0.737	0.000	NA	0.000	0.000	205	0.384	1
A.MG/A.Sand vs Rub/EAM	<i>Caesio teres</i>	0.000	0.737	0.000	NA	0.000	0.000	84	0.397	1
A.MG/A.Sand vs Rub/EAM	<i>Pterocaesio pisang</i>	0.002	0.737	0.006	0.304	0.003	0.000	83	0.410	0.436
A.MG/A.Sand vs Rub/EAM	<i>Pterocaesio tile</i>	0.001	0.737	0.004	0.288	0.000	0.002	104	0.423	0.361
A.MG/A.Sand vs Rub/EAM	<i>Caranx melampygus</i>	0.000	0.737	0.000	NA	0.000	0.000	78	0.436	1
A.MG/A.Sand vs Rub/EAM	<i>Caranx sp.</i>	0.000	0.737	0.000	NA	0.000	0.000	129	0.448	1
A.MG/A.Sand vs Rub/EAM	<i>Elagatis bipinnulata</i>	0.000	0.737	0.000	NA	0.000	0.000	190	0.460	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon adiergastos</i>	0.000	0.737	0.000	NA	0.000	0.000	126	0.473	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon auriga</i>	0.000	0.737	0.000	NA	0.000	0.000	70	0.485	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon baronessa</i>	0.007	0.737	0.011	0.664	0.002	0.013	171	0.497	0.974
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon kleinii</i>	0.011	0.737	0.011	0.957	0.018	0.012	128	0.508	0.084
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon lineolatus</i>	0.000	0.737	0.000	NA	0.000	0.000	140	0.519	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon lunula</i>	0.001	0.737	0.005	0.288	0.000	0.003	37	0.529	0.767
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon lunulatus</i>	0.008	0.737	0.011	0.711	0.003	0.014	59	0.539	0.673
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon melannotus</i>	0.000	0.737	0.000	NA	0.000	0.000	79	0.549	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon mertensii</i>	0.000	0.737	0.000	NA	0.000	0.000	33	0.559	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon ocellicaudus</i>	0.003	0.737	0.007	0.358	0.002	0.003	3	0.568	0.133
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon octofasciatus</i>	0.000	0.737	0.000	NA	0.000	0.000	100	0.577	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon ornatissimus</i>	0.001	0.737	0.004	0.213	0.002	0.000	139	0.587	0.883
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon pelewensis</i>	0.000	0.737	0.000	NA	0.000	0.000	97	0.596	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon punctatofasciatus</i>	0.001	0.737	0.003	0.288	0.000	0.002	94	0.605	0.814
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon rafflesii</i>	0.000	0.737	0.000	NA	0.000	0.000	232	0.614	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon sp.</i>	0.002	0.737	0.007	0.213	0.003	0.000	227	0.623	0.191
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon ulietensis</i>	0.000	0.737	0.000	NA	0.000	0.000	106	0.632	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon unimaculatus</i>	0.000	0.737	0.000	NA	0.000	0.000	132	0.641	1
A.MG/A.Sand vs Rub/EAM	<i>Chaetodon vagabundus</i>	0.004	0.737	0.008	0.477	0.005	0.004	188	0.649	0.428
A.MG/A.Sand vs Rub/EAM	<i>Chelmon sp.</i>	0.000	0.737	0.000	NA	0.000	0.000	4	0.658	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p

A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus nigricans</i>	0.003	0.793	0.008	0.342	0.004	0.001	209	0.021677	0.019
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus nigricauda</i>	0.001	0.793	0.003	0.179	0.000	0.001	65	0.04132	0.259
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus nigrofuscus</i>	0.005	0.793	0.010	0.512	0.010	0.000	206	0.059913	0.014
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus pyroferus</i>	0.006	0.793	0.009	0.682	0.009	0.005	115	0.075998	0.353
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus sp.</i>	0.000	0.793	0.000	NA	0.000	0.000	164	0.090321	1
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus thompsoni</i>	0.001	0.793	0.004	0.258	0.000	0.002	34	0.104509	0.476
A.MG/A.Sand vs Coral/A.MA	<i>Acanthurus triostegus</i>	0.000	0.793	0.003	0.179	0.000	0.001	37	0.118119	0.261
A.MG/A.Sand vs Coral/A.MA	<i>Ctenochaetus binotatus</i>	0.010	0.793	0.008	1.128	0.017	0.013	162	0.131584	0.643
A.MG/A.Sand vs Coral/A.MA	<i>Ctenochaetus cyanocheilus</i>	0.001	0.793	0.003	0.179	0.000	0.001	11	0.144856	0.259
A.MG/A.Sand vs Coral/A.MA	<i>Ctenochaetus sp.</i>	0.003	0.793	0.006	0.437	0.003	0.003	73	0.157649	0.017
A.MG/A.Sand vs Coral/A.MA	<i>Ctenochaetus striatus</i>	0.011	0.793	0.006	1.671	0.024	0.026	33	0.170088	0.014
A.MG/A.Sand vs Coral/A.MA	<i>Ctenochaetus tominiensis</i>	0.004	0.793	0.006	0.717	0.000	0.008	178	0.182477	0.398
A.MG/A.Sand vs Coral/A.MA	<i>Naso brevirostris</i>	0.002	0.793	0.005	0.467	0.000	0.005	20	0.194799	0.236
A.MG/A.Sand vs Coral/A.MA	<i>Naso hexacanthus</i>	0.005	0.793	0.008	0.618	0.005	0.006	122	0.206998	0.027
A.MG/A.Sand vs Coral/A.MA	<i>Naso lituratus</i>	0.007	0.793	0.007	0.921	0.004	0.012	8	0.21899	0.007
A.MG/A.Sand vs Coral/A.MA	<i>Naso minor</i>	0.002	0.793	0.004	0.393	0.000	0.003	211	0.230938	0.958
A.MG/A.Sand vs Coral/A.MA	<i>Naso sp.</i>	0.001	0.793	0.004	0.302	0.000	0.003	84	0.242839	0.128
A.MG/A.Sand vs Coral/A.MA	<i>Naso unicornis</i>	0.007	0.793	0.007	0.944	0.001	0.013	83	0.254458	0.054
A.MG/A.Sand vs Coral/A.MA	<i>Naso vlamingii</i>	0.000	0.793	0.003	0.179	0.000	0.001	159	0.265862	0.884
A.MG/A.Sand vs Coral/A.MA	<i>Zebrasoma scopas</i>	0.010	0.793	0.006	1.556	0.001	0.020	208	0.277182	0.001
A.MG/A.Sand vs Coral/A.MA	<i>Zebrasoma veliferum</i>	0.001	0.793	0.003	0.179	0.000	0.001	130	0.288412	0.25
A.MG/A.Sand vs Coral/A.MA	<i>Balistoides viridescens</i>	0.000	0.793	0.003	0.179	0.000	0.001	68	0.299075	0.274
A.MG/A.Sand vs Coral/A.MA	<i>Caesio caerulea</i>	0.000	0.793	0.000	NA	0.000	0.000	139	0.309672	1
A.MG/A.Sand vs Coral/A.MA	<i>Caesio sp.</i>	0.001	0.793	0.003	0.179	0.000	0.001	70	0.320267	0.252
A.MG/A.Sand vs Coral/A.MA	<i>Caesio teres</i>	0.000	0.793	0.000	NA	0.000	0.000	171	0.330445	1
A.MG/A.Sand vs Coral/A.MA	<i>Pterocaesio pisang</i>	0.002	0.793	0.006	0.304	0.003	0.000	134	0.340598	0.363
A.MG/A.Sand vs Coral/A.MA	<i>Pterocaesio tile</i>	0.000	0.793	0.001	0.179	0.000	0.001	217	0.350728	0.903
A.MG/A.Sand vs Coral/A.MA	<i>Caranx melampygus</i>	0.001	0.793	0.004	0.179	0.000	0.001	91	0.360779	0.377
A.MG/A.Sand vs Coral/A.MA	<i>Caranx sp.</i>	0.001	0.793	0.003	0.179	0.000	0.001	98	0.370562	0.484
A.MG/A.Sand vs Coral/A.MA	<i>Elagatis bipinnulata</i>	0.001	0.793	0.003	0.179	0.000	0.001	172	0.38034	0.251
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon adiergastos</i>	0.000	0.793	0.002	0.179	0.000	0.001	203	0.390096	0.639

A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon auriga</i>	0.001	0.793	0.004	0.256	0.000	0.002	104	0.399643	0.176
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon baronessa</i>	0.010	0.793	0.006	1.553	0.002	0.019	118	0.409108	0.056
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon kleinii</i>	0.011	0.793	0.008	1.421	0.018	0.019	232	0.418558	0.002
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon lineolatus</i>	0.001	0.793	0.004	0.179	0.000	0.001	129	0.427999	0.476
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon lunula</i>	0.002	0.793	0.004	0.377	0.000	0.003	100	0.437251	0.83
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon lunulatus</i>	0.011	0.793	0.006	1.847	0.003	0.022	77	0.446472	0.001
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon melannotus</i>	0.002	0.793	0.005	0.365	0.000	0.004	59	0.455661	0.088
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon mertensii</i>	0.000	0.793	0.000	NA	0.000	0.000	188	0.464847	1
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon ocellicaudus</i>	0.001	0.793	0.005	0.213	0.002	0.000	79	0.473813	0.693
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon octofasciatus</i>	0.000	0.793	0.000	NA	0.000	0.000	112	0.482591	1
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon ornatissimus</i>	0.002	0.793	0.006	0.382	0.002	0.003	97	0.491191	0.661
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon pelewensis</i>	0.004	0.793	0.006	0.568	0.000	0.007	18	0.499786	0.007
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon punctatofasciatus</i>	0.001	0.793	0.004	0.316	0.000	0.003	15	0.508001	0.815
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon rafflesii</i>	0.003	0.793	0.006	0.526	0.000	0.007	190	0.516188	0.092
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon sp.</i>	0.002	0.793	0.008	0.265	0.003	0.001	152	0.524207	0.063
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon ulietensis</i>	0.000	0.793	0.000	NA	0.000	0.000	224	0.532011	1
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon unimaculatus</i>	0.000	0.793	0.000	NA	0.000	0.000	94	0.539814	1
A.MG/A.Sand vs Coral/A.MA	<i>Chaetodon vagabundus</i>	0.003	0.793	0.006	0.462	0.005	0.002	4	0.547563	0.803
A.MG/A.Sand vs Coral/A.MA	<i>Chelmon sp.</i>	0.001	0.793	0.003	0.179	0.000	0.001	93	0.554995	0.259
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus nigricans</i>	0.002	0.734	0.007	0.301	0.004	0.000	65	0.019969	0.119
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus nigricauda</i>	0.000	0.734	0.000	NA	0.000	0.000	115	0.036773	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus nigrofuscus</i>	0.005	0.734	0.010	0.512	0.010	0.000	209	0.053282	0.012
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus pyroferus</i>	0.007	0.734	0.009	0.752	0.009	0.008	164	0.068932	0.099
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus sp.</i>	0.001	0.734	0.004	0.192	0.000	0.001	196	0.08458	0.257
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus thompsoni</i>	0.000	0.734	0.000	NA	0.000	0.000	11	0.100176	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Acanthurus triostegus</i>	0.000	0.734	0.000	NA	0.000	0.000	211	0.115653	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Ctenochaetus binotatus</i>	0.009	0.734	0.010	0.948	0.017	0.007	162	0.130589	0.786
A.MG/A.Sand vs A.SG/Soft Coral	<i>Ctenochaetus cyanocheilus</i>	0.000	0.734	0.000	NA	0.000	0.000	73	0.145482	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Ctenochaetus sp.</i>	0.001	0.734	0.005	0.308	0.003	0.000	205	0.160135	0.485
A.MG/A.Sand vs A.SG/Soft Coral	<i>Ctenochaetus striatus</i>	0.011	0.734	0.010	1.205	0.024	0.016	33	0.174593	0.001

A.MG/A.Sand vs A.SG/Soft Coral	<i>Ctenochaetus tominiensis</i>	0.002	0.734	0.005	0.339	0.000	0.003	78	0.188891	0.997
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso brevirostris</i>	0.001	0.734	0.004	0.192	0.000	0.002	159	0.202876	0.944
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso hexacanthus</i>	0.003	0.734	0.008	0.392	0.005	0.001	91	0.21682	0.613
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso lituratus</i>	0.002	0.734	0.005	0.386	0.004	0.000	137	0.230671	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso minor</i>	0.002	0.734	0.004	0.390	0.000	0.003	122	0.244366	0.904
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso sp.</i>	0.000	0.734	0.000	NA	0.000	0.000	34	0.258031	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso unicornis</i>	0.003	0.734	0.007	0.453	0.001	0.005	178	0.271635	0.989
A.MG/A.Sand vs A.SG/Soft Coral	<i>Naso vlamingii</i>	0.000	0.734	0.000	NA	0.000	0.000	206	0.284854	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Zebрасoma scopas</i>	0.004	0.734	0.007	0.542	0.001	0.007	84	0.298006	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Zebрасoma veliferum</i>	0.000	0.734	0.000	NA	0.000	0.000	132	0.311145	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Balistoides viridescens</i>	0.000	0.734	0.000	NA	0.000	0.000	130	0.3242	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Caesio caeruleaurea</i>	0.000	0.734	0.000	NA	0.000	0.000	134	0.337055	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Caesio sp.</i>	0.000	0.734	0.000	NA	0.000	0.000	97	0.349883	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Caesio teres</i>	0.000	0.734	0.000	NA	0.000	0.000	83	0.362555	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Pterocaesio pisang</i>	0.002	0.734	0.007	0.360	0.003	0.002	8	0.37501	0.103
A.MG/A.Sand vs A.SG/Soft Coral	<i>Pterocaesio tile</i>	0.000	0.734	0.000	NA	0.000	0.000	74	0.387081	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Caranx melampygus</i>	0.000	0.734	0.000	NA	0.000	0.000	70	0.399121	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Caranx sp.</i>	0.000	0.734	0.000	NA	0.000	0.000	208	0.411042	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Elagatis bipinnulata</i>	0.000	0.734	0.000	NA	0.000	0.000	232	0.422688	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon adiergastos</i>	0.000	0.734	0.000	NA	0.000	0.000	76	0.433967	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon auriga</i>	0.000	0.734	0.000	NA	0.000	0.000	171	0.444941	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon baronessa</i>	0.011	0.734	0.010	1.112	0.002	0.021	181	0.455806	0.008
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon kleinii</i>	0.010	0.734	0.011	0.934	0.018	0.008	140	0.466622	0.175
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon lineolatus</i>	0.001	0.734	0.003	0.192	0.000	0.001	193	0.477299	0.607
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon lunula</i>	0.002	0.734	0.007	0.340	0.000	0.005	133	0.487791	0.517
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon lunulatus</i>	0.004	0.734	0.007	0.550	0.003	0.005	77	0.498226	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon melannotus</i>	0.000	0.734	0.000	NA	0.000	0.000	79	0.508658	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon mertensii</i>	0.001	0.734	0.005	0.277	0.000	0.003	202	0.518621	0.156
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon ocellicaudus</i>	0.001	0.734	0.005	0.213	0.002	0.000	59	0.52853	0.694
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon octofasciatus</i>	0.001	0.734	0.005	0.192	0.000	0.002	197	0.538421	0.268
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon ornatissimus</i>	0.001	0.734	0.005	0.287	0.002	0.001	172	0.548261	0.862

A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon pelewensis</i>	0.000	0.734	0.000	NA	0.000	0.000	4	0.557882	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon punctatofasciatus</i>	0.001	0.734	0.006	0.192	0.000	0.002	195	0.567355	0.854
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon rafflesii</i>	0.001	0.734	0.003	0.192	0.000	0.001	188	0.576403	0.985
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon sp.</i>	0.002	0.734	0.007	0.213	0.003	0.000	217	0.585117	0.312
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon ulietensis</i>	0.000	0.734	0.000	NA	0.000	0.000	128	0.593793	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon unimaculatus</i>	0.000	0.734	0.000	NA	0.000	0.000	104	0.602457	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chaetodon vagabundus</i>	0.005	0.734	0.008	0.550	0.005	0.006	136	0.61096	0.221
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chelmon sp.</i>	0.000	0.734	0.000	NA	0.000	0.000	105	0.619073	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus nigricans</i>	0.002	0.747	0.007	0.300	0.004	0.000	65	0.019641	0.195
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus nigricauda</i>	0.000	0.747	0.000	NA	0.000	0.000	209	0.038371	1
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus nigrofuscus</i>	0.005	0.747	0.010	0.511	0.010	0.000	206	0.055686	0.076
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus pyroferus</i>	0.006	0.747	0.009	0.665	0.009	0.005	115	0.072209	0.418
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus sp.</i>	0.000	0.747	0.000	NA	0.000	0.000	164	0.087412	1
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus thompsoni</i>	0.002	0.747	0.006	0.301	0.000	0.003	172	0.102348	0.15
A.MG/A.Sand vs A.CR/A.RF	<i>Acanthurus triostegus</i>	0.000	0.747	0.000	NA	0.000	0.000	34	0.117219	1
A.MG/A.Sand vs A.CR/A.RF	<i>Ctenochaetus binotatus</i>	0.010	0.747	0.008	1.204	0.017	0.016	73	0.131898	0.499
A.MG/A.Sand vs A.CR/A.RF	<i>Ctenochaetus cyanocheilus</i>	0.000	0.747	0.000	NA	0.000	0.000	162	0.146554	1
A.MG/A.Sand vs A.CR/A.RF	<i>Ctenochaetus sp.</i>	0.001	0.747	0.005	0.308	0.003	0.000	11	0.16112	0.458
A.MG/A.Sand vs A.CR/A.RF	<i>Ctenochaetus striatus</i>	0.011	0.747	0.008	1.385	0.024	0.022	217	0.175351	0.041
A.MG/A.Sand vs A.CR/A.RF	<i>Ctenochaetus tominiensis</i>	0.002	0.747	0.006	0.445	0.000	0.005	122	0.189481	0.885
A.MG/A.Sand vs A.CR/A.RF	<i>Naso brevirostris</i>	0.001	0.747	0.003	0.301	0.000	0.002	83	0.203214	0.852
A.MG/A.Sand vs A.CR/A.RF	<i>Naso hexacanthus</i>	0.005	0.747	0.009	0.549	0.005	0.005	211	0.216688	0.159
A.MG/A.Sand vs A.CR/A.RF	<i>Naso lituratus</i>	0.006	0.747	0.008	0.784	0.004	0.010	178	0.230081	0.188
A.MG/A.Sand vs A.CR/A.RF	<i>Naso minor</i>	0.001	0.747	0.003	0.434	0.000	0.003	8	0.24313	0.925
A.MG/A.Sand vs A.CR/A.RF	<i>Naso sp.</i>	0.000	0.747	0.000	NA	0.000	0.000	159	0.255944	1
A.MG/A.Sand vs A.CR/A.RF	<i>Naso unicornis</i>	0.003	0.747	0.007	0.493	0.001	0.006	84	0.268489	0.941
A.MG/A.Sand vs A.CR/A.RF	<i>Naso vlamingii</i>	0.003	0.747	0.006	0.446	0.000	0.005	130	0.281014	0.063
A.MG/A.Sand vs A.CR/A.RF	<i>Zebrasoma scopas</i>	0.008	0.747	0.007	1.133	0.001	0.017	128	0.293314	0.113
A.MG/A.Sand vs A.CR/A.RF	<i>Zebrasoma veliferum</i>	0.000	0.747	0.000	NA	0.000	0.000	232	0.305156	1
A.MG/A.Sand vs A.CR/A.RF	<i>Balistoides viridescens</i>	0.000	0.747	0.000	NA	0.000	0.000	70	0.316747	1

A.MG/A.Sand vs A.CR/A.RF	<i>Caesio caeruleaurea</i>	0.002	0.747	0.006	0.301	0.000	0.004	151	0.328032	0.017
A.MG/A.Sand vs A.CR/A.RF	<i>Caesio sp.</i>	0.000	0.747	0.000	NA	0.000	0.000	188	0.339313	1
A.MG/A.Sand vs A.CR/A.RF	<i>Caesio teres</i>	0.001	0.747	0.005	0.301	0.000	0.003	195	0.350452	0.02
A.MG/A.Sand vs A.CR/A.RF	<i>Pterocaesio pisang</i>	0.003	0.747	0.007	0.429	0.003	0.003	20	0.361522	0.089
A.MG/A.Sand vs A.CR/A.RF	<i>Pterocaesio tile</i>	0.002	0.747	0.005	0.430	0.000	0.005	140	0.372381	0.029
A.MG/A.Sand vs A.CR/A.RF	<i>Caranx melampygus</i>	0.001	0.747	0.004	0.301	0.000	0.002	77	0.383232	0.187
A.MG/A.Sand vs A.CR/A.RF	<i>Caranx sp.</i>	0.001	0.747	0.004	0.301	0.000	0.003	171	0.394011	0.209
A.MG/A.Sand vs A.CR/A.RF	<i>Elagatis bipinnulata</i>	0.000	0.747	0.000	NA	0.000	0.000	208	0.404726	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon adiergastos</i>	0.001	0.747	0.005	0.301	0.000	0.003	91	0.415371	0.071
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon auriga</i>	0.000	0.747	0.000	NA	0.000	0.000	134	0.425941	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon baronessa</i>	0.008	0.747	0.008	0.980	0.002	0.014	37	0.43644	0.933
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon kleinii</i>	0.011	0.747	0.009	1.214	0.018	0.017	33	0.44664	0.046
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon lineolatus</i>	0.000	0.747	0.000	NA	0.000	0.000	79	0.456781	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon lunula</i>	0.000	0.747	0.000	NA	0.000	0.000	59	0.466513	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon lunulatus</i>	0.008	0.747	0.008	0.988	0.003	0.015	224	0.475637	0.525
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon melannotus</i>	0.000	0.747	0.000	NA	0.000	0.000	97	0.484745	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon mertensii</i>	0.000	0.747	0.000	NA	0.000	0.000	104	0.493277	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon ocellicaudus</i>	0.003	0.747	0.007	0.487	0.002	0.005	89	0.501705	0.037
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon octofasciatus</i>	0.000	0.747	0.000	NA	0.000	0.000	126	0.510055	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon ornatissimus</i>	0.006	0.747	0.009	0.608	0.002	0.010	92	0.51832	0.014
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon pelewensis</i>	0.000	0.747	0.000	NA	0.000	0.000	93	0.526577	1
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon punctatofasciatus</i>	0.003	0.747	0.006	0.439	0.000	0.005	190	0.534818	0.339
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon rafflesii</i>	0.001	0.747	0.004	0.301	0.000	0.002	203	0.542988	0.896
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon sp.</i>	0.002	0.747	0.007	0.213	0.003	0.000	4	0.551122	0.291
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon ulietensis</i>	0.002	0.747	0.006	0.301	0.000	0.004	160	0.559199	0.015
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon unimaculatus</i>	0.003	0.747	0.007	0.446	0.000	0.006	136	0.567263	0.005
A.MG/A.Sand vs A.CR/A.RF	<i>Chaetodon vagabundus</i>	0.005	0.747	0.007	0.685	0.005	0.006	15	0.575152	0.267
A.MG/A.Sand vs A.CR/A.RF	<i>Chelmon sp.</i>	0.000	0.747	0.000	NA	0.000	0.000	68	0.582964	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs Coral/A.MA	<i>Acanthurus nigricans</i>	0.000	0.724	0.002	0.179	0.000	0.001	8	0.019492	0.707
Rub/EAM vs Coral/A.MA	<i>Acanthurus nigricauda</i>	0.001	0.724	0.003	0.179	0.000	0.001	133	0.037097	0.144

Rub/EAM vs Coral/A.MA	<i>Acanthurus nigrofuscus</i>	0.003	0.724	0.008	0.424	0.006	0.000	130	0.05312	0.339
Rub/EAM vs Coral/A.MA	<i>Acanthurus pyroferus</i>	0.005	0.724	0.007	0.635	0.005	0.005	37	0.068709	0.833
Rub/EAM vs Coral/A.MA	<i>Acanthurus sp.</i>	0.000	0.724	0.000	NA	0.000	0.000	162	0.084112	1
Rub/EAM vs Coral/A.MA	<i>Acanthurus thompsoni</i>	0.001	0.724	0.004	0.257	0.000	0.002	164	0.099455	0.47
Rub/EAM vs Coral/A.MA	<i>Acanthurus triostegus</i>	0.000	0.724	0.003	0.179	0.000	0.001	178	0.114698	0.134
Rub/EAM vs Coral/A.MA	<i>Ctenochaetus binotatus</i>	0.014	0.724	0.010	1.375	0.035	0.013	206	0.129246	0.001
Rub/EAM vs Coral/A.MA	<i>Ctenochaetus cyanocheilus</i>	0.001	0.724	0.003	0.179	0.000	0.001	33	0.143434	0.149
Rub/EAM vs Coral/A.MA	<i>Ctenochaetus sp.</i>	0.001	0.724	0.005	0.305	0.000	0.003	131	0.157543	0.451
Rub/EAM vs Coral/A.MA	<i>Ctenochaetus striatus</i>	0.009	0.724	0.005	1.612	0.023	0.026	34	0.171039	0.685
Rub/EAM vs Coral/A.MA	<i>Ctenochaetus tominiensis</i>	0.006	0.724	0.007	0.827	0.006	0.008	123	0.184434	0.039
Rub/EAM vs Coral/A.MA	<i>Naso brevirostris</i>	0.002	0.724	0.005	0.467	0.000	0.005	139	0.197484	0.298
Rub/EAM vs Coral/A.MA	<i>Naso hexacanthus</i>	0.003	0.724	0.005	0.566	0.000	0.006	77	0.210423	0.619
Rub/EAM vs Coral/A.MA	<i>Naso lituratus</i>	0.006	0.724	0.007	0.893	0.002	0.012	122	0.223217	0.064
Rub/EAM vs Coral/A.MA	<i>Naso minor</i>	0.004	0.724	0.006	0.765	0.007	0.003	211	0.235886	0.034
Rub/EAM vs Coral/A.MA	<i>Naso sp.</i>	0.001	0.724	0.004	0.302	0.000	0.003	195	0.248553	0.182
Rub/EAM vs Coral/A.MA	<i>Naso unicornis</i>	0.007	0.724	0.007	0.963	0.003	0.013	205	0.261076	0.082
Rub/EAM vs Coral/A.MA	<i>Naso vlamingii</i>	0.002	0.724	0.005	0.339	0.002	0.001	20	0.273554	0.182
Rub/EAM vs Coral/A.MA	<i>Zebrasoma scopas</i>	0.009	0.724	0.006	1.438	0.010	0.020	11	0.285778	0.009
Rub/EAM vs Coral/A.MA	<i>Zebrasoma veliferum</i>	0.001	0.724	0.003	0.179	0.000	0.001	104	0.297745	0.134
Rub/EAM vs Coral/A.MA	<i>Balistoides viridescens</i>	0.000	0.724	0.003	0.179	0.000	0.001	68	0.309638	0.123
Rub/EAM vs Coral/A.MA	<i>Caesio caerulea</i>	0.000	0.724	0.000	NA	0.000	0.000	115	0.321484	1
Rub/EAM vs Coral/A.MA	<i>Caesio sp.</i>	0.001	0.724	0.003	0.179	0.000	0.001	134	0.33311	0.134
Rub/EAM vs Coral/A.MA	<i>Caesio teres</i>	0.000	0.724	0.000	NA	0.000	0.000	78	0.344634	1
Rub/EAM vs Coral/A.MA	<i>Pterocaesio pisang</i>	0.000	0.724	0.000	NA	0.000	0.000	100	0.356085	1
Rub/EAM vs Coral/A.MA	<i>Pterocaesio tile</i>	0.001	0.724	0.004	0.334	0.002	0.001	126	0.367382	0.272
Rub/EAM vs Coral/A.MA	<i>Caranx melampygus</i>	0.001	0.724	0.004	0.179	0.000	0.001	98	0.378546	0.321
Rub/EAM vs Coral/A.MA	<i>Caranx sp.</i>	0.001	0.724	0.003	0.179	0.000	0.001	118	0.389595	0.318
Rub/EAM vs Coral/A.MA	<i>Elagatis bipinnulata</i>	0.001	0.724	0.003	0.179	0.000	0.001	111	0.40034	0.128
Rub/EAM vs Coral/A.MA	<i>Chaetodon adiergastos</i>	0.000	0.724	0.002	0.179	0.000	0.001	140	0.411057	0.494
Rub/EAM vs Coral/A.MA	<i>Chaetodon auriga</i>	0.001	0.724	0.004	0.256	0.000	0.002	203	0.421553	0.237
Rub/EAM vs Coral/A.MA	<i>Chaetodon baronessa</i>	0.010	0.724	0.007	1.461	0.013	0.019	190	0.431837	0.041

Rub/EAM vs Coral/A.MA	<i>Chaetodon kleinii</i>	0.010	0.724	0.007	1.478	0.012	0.019	208	0.442117	0.296
Rub/EAM vs Coral/A.MA	<i>Chaetodon lineolatus</i>	0.001	0.724	0.004	0.179	0.000	0.001	172	0.45227	0.317
Rub/EAM vs Coral/A.MA	<i>Chaetodon lunula</i>	0.003	0.724	0.006	0.474	0.003	0.003	86	0.462304	0.358
Rub/EAM vs Coral/A.MA	<i>Chaetodon lunulatus</i>	0.011	0.724	0.006	1.825	0.014	0.022	159	0.472212	0.001
Rub/EAM vs Coral/A.MA	<i>Chaetodon melannotus</i>	0.002	0.724	0.005	0.365	0.000	0.004	18	0.481916	0.137
Rub/EAM vs Coral/A.MA	<i>Chaetodon mertensii</i>	0.000	0.724	0.000	NA	0.000	0.000	112	0.491549	1
Rub/EAM vs Coral/A.MA	<i>Chaetodon ocellicaudus</i>	0.002	0.724	0.006	0.288	0.003	0.000	193	0.501175	0.376
Rub/EAM vs Coral/A.MA	<i>Chaetodon octofasciatus</i>	0.000	0.724	0.000	NA	0.000	0.000	227	0.510265	1
Rub/EAM vs Coral/A.MA	<i>Chaetodon ornatissimus</i>	0.001	0.724	0.004	0.320	0.000	0.003	217	0.51927	0.831
Rub/EAM vs Coral/A.MA	<i>Chaetodon pelewensis</i>	0.004	0.724	0.006	0.568	0.000	0.007	94	0.528176	0.038
Rub/EAM vs Coral/A.MA	<i>Chaetodon punctatofasciatus</i>	0.002	0.724	0.005	0.428	0.002	0.003	129	0.537059	0.449
Rub/EAM vs Coral/A.MA	<i>Chaetodon rafflesii</i>	0.003	0.724	0.006	0.526	0.000	0.007	84	0.545939	0.132
Rub/EAM vs Coral/A.MA	<i>Chaetodon sp.</i>	0.001	0.724	0.003	0.179	0.000	0.001	15	0.554664	0.506
Rub/EAM vs Coral/A.MA	<i>Chaetodon ulietensis</i>	0.000	0.724	0.000	NA	0.000	0.000	242	0.563191	1
Rub/EAM vs Coral/A.MA	<i>Chaetodon unimaculatus</i>	0.000	0.724	0.000	NA	0.000	0.000	224	0.571599	1
Rub/EAM vs Coral/A.MA	<i>Chaetodon vagabundus</i>	0.003	0.724	0.007	0.370	0.004	0.002	120	0.579729	0.783
Rub/EAM vs Coral/A.MA	<i>Chelmon sp.</i>	0.001	0.724	0.003	0.179	0.000	0.001	202	0.587596	0.112
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus nigricans</i>	0.000	0.690	0.000	NA	0.000	0.000	8	0.022825	1
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus nigricauda</i>	0.000	0.690	0.000	NA	0.000	0.000	178	0.039993	1
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus nigrofuscus</i>	0.003	0.690	0.008	0.424	0.006	0.000	162	0.056696	0.37
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus pyroferus</i>	0.006	0.690	0.008	0.704	0.005	0.008	206	0.073177	0.535
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus sp.</i>	0.001	0.690	0.004	0.192	0.000	0.001	33	0.08933	0.146
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus thompsoni</i>	0.000	0.690	0.000	NA	0.000	0.000	196	0.105408	1
Rub/EAM vs A.SG/Soft Coral	<i>Acanthurus triostegus</i>	0.000	0.690	0.000	NA	0.000	0.000	134	0.12121	1
Rub/EAM vs A.SG/Soft Coral	<i>Ctenochaetus binotatus</i>	0.016	0.690	0.011	1.406	0.035	0.007	211	0.136726	0.001
Rub/EAM vs A.SG/Soft Coral	<i>Ctenochaetus cyanocheilus</i>	0.000	0.690	0.000	NA	0.000	0.000	164	0.152242	1
Rub/EAM vs A.SG/Soft Coral	<i>Ctenochaetus sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	122	0.16769	1
Rub/EAM vs A.SG/Soft Coral	<i>Ctenochaetus striatus</i>	0.010	0.690	0.008	1.235	0.023	0.016	131	0.183018	0.126
Rub/EAM vs A.SG/Soft Coral	<i>Ctenochaetus tominiensis</i>	0.004	0.690	0.007	0.542	0.006	0.003	133	0.198086	0.481
Rub/EAM vs A.SG/Soft Coral	<i>Naso brevirostris</i>	0.001	0.690	0.004	0.192	0.000	0.002	11	0.213034	0.88

Rub/EAM vs A.SG/Soft Coral	<i>Naso hexacanthus</i>	0.000	0.690	0.003	0.192	0.000	0.001	140	0.227365	0.998
Rub/EAM vs A.SG/Soft Coral	<i>Naso lituratus</i>	0.001	0.690	0.004	0.288	0.002	0.000	115	0.241674	0.999
Rub/EAM vs A.SG/Soft Coral	<i>Naso minor</i>	0.004	0.690	0.006	0.758	0.007	0.003	132	0.255835	0.032
Rub/EAM vs A.SG/Soft Coral	<i>Naso sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	195	0.269928	1
Rub/EAM vs A.SG/Soft Coral	<i>Naso unicornis</i>	0.004	0.690	0.008	0.494	0.003	0.005	123	0.283993	0.909
Rub/EAM vs A.SG/Soft Coral	<i>Naso vlamingii</i>	0.001	0.690	0.004	0.288	0.002	0.000	78	0.297955	0.35
Rub/EAM vs A.SG/Soft Coral	<i>Zebrasoma scopas</i>	0.006	0.690	0.008	0.817	0.010	0.007	159	0.311788	0.869
Rub/EAM vs A.SG/Soft Coral	<i>Zebrasoma veliferum</i>	0.000	0.690	0.000	NA	0.000	0.000	77	0.325498	1
Rub/EAM vs A.SG/Soft Coral	<i>Balistoides viridescens</i>	0.000	0.690	0.000	NA	0.000	0.000	205	0.339057	1
Rub/EAM vs A.SG/Soft Coral	<i>Caesio caeruleaurea</i>	0.000	0.690	0.000	NA	0.000	0.000	91	0.352314	1
Rub/EAM vs A.SG/Soft Coral	<i>Caesio sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	208	0.365461	1
Rub/EAM vs A.SG/Soft Coral	<i>Caesio teres</i>	0.000	0.690	0.000	NA	0.000	0.000	130	0.378417	1
Rub/EAM vs A.SG/Soft Coral	<i>Pterocaesio pisang</i>	0.001	0.690	0.004	0.192	0.000	0.002	193	0.391187	0.622
Rub/EAM vs A.SG/Soft Coral	<i>Pterocaesio tile</i>	0.001	0.690	0.004	0.288	0.002	0.000	137	0.403783	0.379
Rub/EAM vs A.SG/Soft Coral	<i>Caranx melampygus</i>	0.000	0.690	0.000	NA	0.000	0.000	181	0.416284	1
Rub/EAM vs A.SG/Soft Coral	<i>Caranx sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	202	0.428706	1
Rub/EAM vs A.SG/Soft Coral	<i>Elagatis bipinnulata</i>	0.000	0.690	0.000	NA	0.000	0.000	126	0.44093	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon adiergastos</i>	0.000	0.690	0.000	NA	0.000	0.000	209	0.453029	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon auriga</i>	0.000	0.690	0.000	NA	0.000	0.000	190	0.46472	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon baronessa</i>	0.011	0.690	0.009	1.190	0.013	0.021	37	0.476319	0.009
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon kleinii</i>	0.008	0.690	0.009	0.889	0.012	0.008	76	0.487898	0.959
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon lineolatus</i>	0.001	0.690	0.003	0.192	0.000	0.001	34	0.498969	0.465
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon lunula</i>	0.003	0.690	0.008	0.443	0.003	0.005	104	0.509818	0.16
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon lunulatus</i>	0.008	0.690	0.010	0.784	0.014	0.005	232	0.520264	0.441
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon melannotus</i>	0.000	0.690	0.000	NA	0.000	0.000	129	0.53067	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon mertensii</i>	0.001	0.690	0.005	0.277	0.000	0.003	73	0.541	0.232
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon ocellicaudus</i>	0.002	0.690	0.006	0.288	0.003	0.000	197	0.55079	0.397
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon octofasciatus</i>	0.001	0.690	0.005	0.192	0.000	0.002	227	0.560306	0.142
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon ornatissimus</i>	0.001	0.690	0.003	0.192	0.000	0.001	20	0.569657	0.944
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon pelewensis</i>	0.000	0.690	0.000	NA	0.000	0.000	86	0.579001	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon punctatofasciatus</i>	0.002	0.690	0.006	0.314	0.002	0.002	74	0.588308	0.466

Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon rafflesii</i>	0.001	0.690	0.003	0.192	0.000	0.001	172	0.597553	0.928
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	100	0.606562	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon ulietensis</i>	0.000	0.690	0.000	NA	0.000	0.000	173	0.615399	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon unimaculatus</i>	0.000	0.690	0.000	NA	0.000	0.000	136	0.624089	1
Rub/EAM vs A.SG/Soft Coral	<i>Chaetodon vagabundus</i>	0.004	0.690	0.009	0.488	0.004	0.006	4	0.632304	0.293
Rub/EAM vs A.SG/Soft Coral	<i>Chelmon sp.</i>	0.000	0.690	0.000	NA	0.000	0.000	120	0.640258	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.CR/A.RF	<i>Acanthurus nigricans</i>	0.000	0.705	0.000	NA	0.000	0.000	8	0.018968	1
Rub/EAM vs A.CR/A.RF	<i>Acanthurus nigricauda</i>	0.000	0.705	0.000	NA	0.000	0.000	162	0.035385	1
Rub/EAM vs A.CR/A.RF	<i>Acanthurus nigrofuscus</i>	0.003	0.705	0.008	0.423	0.006	0.000	172	0.051788	0.388
Rub/EAM vs A.CR/A.RF	<i>Acanthurus pyroferus</i>	0.004	0.705	0.007	0.610	0.005	0.005	77	0.068019	0.781
Rub/EAM vs A.CR/A.RF	<i>Acanthurus sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	178	0.083857	1
Rub/EAM vs A.CR/A.RF	<i>Acanthurus thompsoni</i>	0.002	0.705	0.006	0.301	0.000	0.003	164	0.099381	0.118
Rub/EAM vs A.CR/A.RF	<i>Acanthurus triostegus</i>	0.000	0.705	0.000	NA	0.000	0.000	133	0.114711	1
Rub/EAM vs A.CR/A.RF	<i>Ctenochaetus binotatus</i>	0.013	0.705	0.010	1.343	0.035	0.016	131	0.129989	0.009
Rub/EAM vs A.CR/A.RF	<i>Ctenochaetus cyanocheilus</i>	0.000	0.705	0.000	NA	0.000	0.000	217	0.145057	1
Rub/EAM vs A.CR/A.RF	<i>Ctenochaetus sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	130	0.160074	1
Rub/EAM vs A.CR/A.RF	<i>Ctenochaetus striatus</i>	0.009	0.705	0.007	1.366	0.023	0.022	206	0.174525	0.427
Rub/EAM vs A.CR/A.RF	<i>Ctenochaetus tominiensis</i>	0.005	0.705	0.007	0.610	0.006	0.005	211	0.188599	0.289
Rub/EAM vs A.CR/A.RF	<i>Naso brevirostris</i>	0.001	0.705	0.003	0.301	0.000	0.002	37	0.202634	0.751
Rub/EAM vs A.CR/A.RF	<i>Naso hexacanthus</i>	0.003	0.705	0.006	0.430	0.000	0.005	140	0.216606	0.641
Rub/EAM vs A.CR/A.RF	<i>Naso lituratus</i>	0.006	0.705	0.007	0.748	0.002	0.010	123	0.230192	0.293
Rub/EAM vs A.CR/A.RF	<i>Naso minor</i>	0.004	0.705	0.005	0.769	0.007	0.003	34	0.243629	0.109
Rub/EAM vs A.CR/A.RF	<i>Naso sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	11	0.257021	1
Rub/EAM vs A.CR/A.RF	<i>Naso unicornis</i>	0.004	0.705	0.007	0.527	0.003	0.006	33	0.270327	0.826
Rub/EAM vs A.CR/A.RF	<i>Naso vlamingii</i>	0.003	0.705	0.006	0.527	0.002	0.005	115	0.28358	0.014
Rub/EAM vs A.CR/A.RF	<i>Zebrasoma scopas</i>	0.008	0.705	0.007	1.168	0.010	0.017	205	0.296781	0.124
Rub/EAM vs A.CR/A.RF	<i>Zebrasoma veliferum</i>	0.000	0.705	0.000	NA	0.000	0.000	232	0.309042	1
Rub/EAM vs A.CR/A.RF	<i>Balistoides viridescens</i>	0.000	0.705	0.000	NA	0.000	0.000	126	0.321253	1
Rub/EAM vs A.CR/A.RF	<i>Caesio caeruleaurea</i>	0.002	0.705	0.006	0.301	0.000	0.004	78	0.333179	0.009
Rub/EAM vs A.CR/A.RF	<i>Caesio sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	20	0.345093	1

Rub/EAM vs A.CR/A.RF	<i>Caesio teres</i>	0.001	0.705	0.005	0.301	0.000	0.003	128	0.356865	0.003
Rub/EAM vs A.CR/A.RF	<i>Pterocaesio pisang</i>	0.002	0.705	0.005	0.301	0.000	0.003	195	0.368591	0.443
Rub/EAM vs A.CR/A.RF	<i>Pterocaesio tile</i>	0.003	0.705	0.006	0.520	0.002	0.005	227	0.380204	0.008
Rub/EAM vs A.CR/A.RF	<i>Caranx melampygus</i>	0.001	0.705	0.004	0.301	0.000	0.002	151	0.391817	0.234
Rub/EAM vs A.CR/A.RF	<i>Caranx sp.</i>	0.001	0.705	0.004	0.301	0.000	0.003	159	0.403309	0.171
Rub/EAM vs A.CR/A.RF	<i>Elagatis bipinnulata</i>	0.000	0.705	0.000	NA	0.000	0.000	134	0.414751	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon adiergastos</i>	0.001	0.705	0.005	0.301	0.000	0.003	208	0.425927	0.043
Rub/EAM vs A.CR/A.RF	<i>Chaetodon auriga</i>	0.000	0.705	0.000	NA	0.000	0.000	122	0.436689	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon baronessa</i>	0.009	0.705	0.009	1.092	0.013	0.014	129	0.447443	0.364
Rub/EAM vs A.CR/A.RF	<i>Chaetodon kleinii</i>	0.009	0.705	0.008	1.206	0.012	0.017	190	0.458064	0.431
Rub/EAM vs A.CR/A.RF	<i>Chaetodon lineolatus</i>	0.000	0.705	0.000	NA	0.000	0.000	104	0.46866	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon lunula</i>	0.001	0.705	0.005	0.288	0.003	0.000	203	0.478835	0.716
Rub/EAM vs A.CR/A.RF	<i>Chaetodon lunulatus</i>	0.010	0.705	0.009	1.097	0.014	0.015	224	0.488316	0.034
Rub/EAM vs A.CR/A.RF	<i>Chaetodon melannotus</i>	0.000	0.705	0.000	NA	0.000	0.000	68	0.496981	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon mertensii</i>	0.000	0.705	0.000	NA	0.000	0.000	73	0.50556	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon ocellicaudus</i>	0.004	0.705	0.007	0.529	0.003	0.005	160	0.514037	0.04
Rub/EAM vs A.CR/A.RF	<i>Chaetodon octofasciatus</i>	0.000	0.705	0.000	NA	0.000	0.000	89	0.522512	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon ornatissimus</i>	0.005	0.705	0.009	0.570	0.000	0.010	136	0.530792	0.056
Rub/EAM vs A.CR/A.RF	<i>Chaetodon pelewensis</i>	0.000	0.705	0.000	NA	0.000	0.000	15	0.538729	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon punctatofasciatus</i>	0.003	0.705	0.006	0.523	0.002	0.005	71	0.546658	0.226
Rub/EAM vs A.CR/A.RF	<i>Chaetodon rafflesii</i>	0.001	0.705	0.004	0.301	0.000	0.002	100	0.554525	0.845
Rub/EAM vs A.CR/A.RF	<i>Chaetodon sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	209	0.56238	1
Rub/EAM vs A.CR/A.RF	<i>Chaetodon ulietensis</i>	0.002	0.705	0.006	0.301	0.000	0.004	132	0.570189	0.011
Rub/EAM vs A.CR/A.RF	<i>Chaetodon unimaculatus</i>	0.003	0.705	0.007	0.445	0.000	0.006	92	0.577978	0.003
Rub/EAM vs A.CR/A.RF	<i>Chaetodon vagabundus</i>	0.005	0.705	0.008	0.610	0.004	0.006	139	0.585666	0.284
Rub/EAM vs A.CR/A.RF	<i>Chelmon sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	93	0.593322	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus nigricans</i>	0.000	0.734	0.002	0.180	0.001	0.000	206	0.01915	0.919
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus nigricauda</i>	0.001	0.734	0.003	0.180	0.001	0.000	164	0.036499	0.532
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus nigrofuscus</i>	0.000	0.734	0.000	NA	0.000	0.000	196	0.050767	1
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus pyroferus</i>	0.006	0.734	0.008	0.733	0.005	0.008	37	0.064553	0.608

Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus sp.</i>	0.001	0.734	0.004	0.192	0.000	0.001	78	0.078242	0.108
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus thompsoni</i>	0.001	0.734	0.004	0.258	0.002	0.000	205	0.091059	0.606
Coral.A.MA vs A.SG/Soft Coral	<i>Acanthurus triostegus</i>	0.000	0.734	0.003	0.180	0.001	0.000	20	0.103787	0.54
Coral.A.MA vs A.SG/Soft Coral	<i>Ctenochaetus binotatus</i>	0.007	0.734	0.007	1.046	0.013	0.007	130	0.116361	0.999
Coral.A.MA vs A.SG/Soft Coral	<i>Ctenochaetus cyanocheilus</i>	0.001	0.734	0.003	0.180	0.001	0.000	33	0.128916	0.518
Coral.A.MA vs A.SG/Soft Coral	<i>Ctenochaetus sp.</i>	0.001	0.734	0.005	0.305	0.003	0.000	178	0.141055	0.519
Coral.A.MA vs A.SG/Soft Coral	<i>Ctenochaetus striatus</i>	0.009	0.734	0.006	1.415	0.026	0.016	209	0.153133	0.873
Coral.A.MA vs A.SG/Soft Coral	<i>Ctenochaetus tominiensis</i>	0.005	0.734	0.006	0.789	0.008	0.003	68	0.165151	0.072
Coral.A.MA vs A.SG/Soft Coral	<i>Naso brevirostris</i>	0.003	0.734	0.006	0.499	0.005	0.002	208	0.177065	0.023
Coral.A.MA vs A.SG/Soft Coral	<i>Naso hexacanthus</i>	0.003	0.734	0.005	0.599	0.006	0.001	34	0.188887	0.618
Coral.A.MA vs A.SG/Soft Coral	<i>Naso lituratus</i>	0.006	0.734	0.007	0.854	0.012	0.000	11	0.200672	0.029
Coral.A.MA vs A.SG/Soft Coral	<i>Naso minor</i>	0.003	0.734	0.005	0.559	0.003	0.003	132	0.212334	0.342
Coral.A.MA vs A.SG/Soft Coral	<i>Naso sp.</i>	0.001	0.734	0.004	0.302	0.003	0.000	137	0.223885	0.16
Coral.A.MA vs A.SG/Soft Coral	<i>Naso unicornis</i>	0.008	0.734	0.008	0.994	0.013	0.005	193	0.235137	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Naso vlamingii</i>	0.000	0.734	0.003	0.180	0.001	0.000	202	0.246325	0.946
Coral.A.MA vs A.SG/Soft Coral	<i>Zebrasoma scopas</i>	0.009	0.734	0.006	1.468	0.020	0.007	139	0.257337	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Zebrasoma veliferum</i>	0.001	0.734	0.003	0.180	0.001	0.000	76	0.268205	0.539
Coral.A.MA vs A.SG/Soft Coral	<i>Balistoides viridescens</i>	0.000	0.734	0.003	0.180	0.001	0.000	203	0.279047	0.527
Coral.A.MA vs A.SG/Soft Coral	<i>Caesio caerulea</i>	0.000	0.734	0.000	NA	0.000	0.000	98	0.289624	1
Coral.A.MA vs A.SG/Soft Coral	<i>Caesio sp.</i>	0.001	0.734	0.003	0.180	0.001	0.000	181	0.30019	0.546
Coral.A.MA vs A.SG/Soft Coral	<i>Caesio teres</i>	0.000	0.734	0.000	NA	0.000	0.000	172	0.310703	1
Coral.A.MA vs A.SG/Soft Coral	<i>Pterocaesio pisang</i>	0.001	0.734	0.004	0.192	0.000	0.002	118	0.321039	0.786
Coral.A.MA vs A.SG/Soft Coral	<i>Pterocaesio tile</i>	0.000	0.734	0.001	0.180	0.001	0.000	140	0.331342	0.966
Coral.A.MA vs A.SG/Soft Coral	<i>Caranx melampygus</i>	0.001	0.734	0.004	0.180	0.001	0.000	18	0.341597	0.555
Coral.A.MA vs A.SG/Soft Coral	<i>Caranx sp.</i>	0.001	0.734	0.003	0.180	0.001	0.000	195	0.351846	0.663
Coral.A.MA vs A.SG/Soft Coral	<i>Elagatis bipinnulata</i>	0.001	0.734	0.003	0.180	0.001	0.000	91	0.362066	0.505
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon adiergastos</i>	0.000	0.734	0.002	0.180	0.001	0.000	133	0.37214	0.812
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon auriga</i>	0.001	0.734	0.004	0.256	0.002	0.000	217	0.382162	0.283
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon baronessa</i>	0.009	0.734	0.007	1.387	0.019	0.021	8	0.392153	0.337
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon kleinii</i>	0.009	0.734	0.006	1.349	0.019	0.008	112	0.40188	0.869
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon lineolatus</i>	0.001	0.734	0.005	0.263	0.001	0.001	232	0.41133	0.234

Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon lunula</i>	0.004	0.734	0.007	0.495	0.003	0.005	134	0.420716	0.025
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon lunulatus</i>	0.010	0.734	0.006	1.660	0.022	0.005	86	0.430054	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon melannotus</i>	0.002	0.734	0.005	0.365	0.004	0.000	74	0.439138	0.061
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon mertensii</i>	0.001	0.734	0.005	0.277	0.000	0.003	84	0.448161	0.031
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon ocellicaudus</i>	0.000	0.734	0.000	NA	0.000	0.000	100	0.457162	1
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon octofasciatus</i>	0.001	0.734	0.005	0.192	0.000	0.002	159	0.466124	0.128
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon ornatissimus</i>	0.002	0.734	0.005	0.374	0.003	0.001	197	0.474811	0.789
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon pelewensis</i>	0.004	0.734	0.006	0.568	0.007	0.000	162	0.483393	0.003
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon punctatofasciatus</i>	0.002	0.734	0.007	0.346	0.003	0.002	190	0.491964	0.366
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon rafflesii</i>	0.004	0.734	0.007	0.560	0.007	0.001	15	0.500108	0.01
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon sp.</i>	0.001	0.734	0.003	0.180	0.001	0.000	129	0.508229	0.808
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon ulietensis</i>	0.000	0.734	0.000	NA	0.000	0.000	211	0.515957	1
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon unimaculatus</i>	0.000	0.734	0.000	NA	0.000	0.000	122	0.523673	1
Coral.A.MA vs A.SG/Soft Coral	<i>Chaetodon vagabundus</i>	0.003	0.734	0.007	0.462	0.002	0.006	207	0.531324	0.665
Coral.A.MA vs A.SG/Soft Coral	<i>Chelmon sp.</i>	0.001	0.734	0.003	0.180	0.001	0.000	4	0.538923	0.572
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus nigricans</i>	0.000	0.665	0.002	0.179	0.001	0.000	217	0.014614	0.805
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus nigricauda</i>	0.001	0.665	0.003	0.179	0.001	0.000	172	0.028012	0.395
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus nigrofuscus</i>	0.000	0.665	0.000	NA	0.000	0.000	203	0.04092	1
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus pyroferus</i>	0.004	0.665	0.007	0.646	0.005	0.005	98	0.053591	0.849
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus sp.</i>	0.000	0.665	0.000	NA	0.000	0.000	37	0.06615	1
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus thompsoni</i>	0.003	0.665	0.007	0.395	0.002	0.003	178	0.078707	0.038
Coral/A.MA vs A.CR/A.RF	<i>Acanthurus triostegus</i>	0.000	0.665	0.003	0.179	0.001	0.000	68	0.090877	0.433
Coral/A.MA vs A.CR/A.RF	<i>Ctenochaetus binotatus</i>	0.008	0.665	0.007	1.177	0.013	0.016	34	0.102941	0.974
Coral/A.MA vs A.CR/A.RF	<i>Ctenochaetus cyanocheilus</i>	0.001	0.665	0.003	0.179	0.001	0.000	151	0.114966	0.406
Coral/A.MA vs A.CR/A.RF	<i>Ctenochaetus sp.</i>	0.001	0.665	0.005	0.305	0.003	0.000	139	0.126865	0.454
Coral/A.MA vs A.CR/A.RF	<i>Ctenochaetus striatus</i>	0.006	0.665	0.006	0.997	0.026	0.022	33	0.138508	1
Coral/A.MA vs A.CR/A.RF	<i>Ctenochaetus tominiensis</i>	0.005	0.665	0.006	0.835	0.008	0.005	140	0.150091	0.091
Coral/A.MA vs A.CR/A.RF	<i>Naso brevirostris</i>	0.003	0.665	0.005	0.554	0.005	0.002	20	0.161662	0.133
Coral/A.MA vs A.CR/A.RF	<i>Naso hexacanthus</i>	0.005	0.665	0.007	0.705	0.006	0.005	8	0.173218	0.153
Coral/A.MA vs A.CR/A.RF	<i>Naso lituratus</i>	0.007	0.665	0.007	1.033	0.012	0.010	232	0.184622	0.018

Coral/A.MA vs A.CR/A.RF	<i>Naso minor</i>	0.002	0.665	0.004	0.579	0.003	0.003	18	0.195877	0.57
Coral/A.MA vs A.CR/A.RF	<i>Naso sp.</i>	0.001	0.665	0.004	0.302	0.003	0.000	130	0.206967	0.248
Coral/A.MA vs A.CR/A.RF	<i>Naso unicornis</i>	0.007	0.665	0.007	1.009	0.013	0.006	15	0.217941	0.041
Coral/A.MA vs A.CR/A.RF	<i>Naso vlamingii</i>	0.003	0.665	0.006	0.480	0.001	0.005	195	0.228905	0.034
Coral/A.MA vs A.CR/A.RF	<i>Zebrasoma scopas</i>	0.008	0.665	0.006	1.272	0.020	0.017	224	0.239829	0.277
Coral/A.MA vs A.CR/A.RF	<i>Zebrasoma veliferum</i>	0.001	0.665	0.003	0.179	0.001	0.000	162	0.250676	0.427
Coral/A.MA vs A.CR/A.RF	<i>Balistoides viridescens</i>	0.000	0.665	0.003	0.179	0.001	0.000	118	0.261382	0.426
Coral/A.MA vs A.CR/A.RF	<i>Caesio caeruleaurea</i>	0.002	0.665	0.006	0.301	0.000	0.004	112	0.271826	0.055
Coral/A.MA vs A.CR/A.RF	<i>Caesio sp.</i>	0.001	0.665	0.003	0.179	0.001	0.000	208	0.282211	0.4
Coral/A.MA vs A.CR/A.RF	<i>Caesio teres</i>	0.001	0.665	0.005	0.301	0.000	0.003	89	0.291982	0.053
Coral/A.MA vs A.CR/A.RF	<i>Pterocaesio pisang</i>	0.002	0.665	0.005	0.301	0.000	0.003	92	0.301645	0.409
Coral/A.MA vs A.CR/A.RF	<i>Pterocaesio tile</i>	0.002	0.665	0.005	0.461	0.001	0.005	129	0.311135	0.023
Coral/A.MA vs A.CR/A.RF	<i>Caranx melampygus</i>	0.002	0.665	0.005	0.345	0.001	0.002	100	0.320576	0.141
Coral/A.MA vs A.CR/A.RF	<i>Caranx sp.</i>	0.002	0.665	0.005	0.350	0.001	0.003	206	0.330012	0.098
Coral/A.MA vs A.CR/A.RF	<i>Elagatis bipinnulata</i>	0.001	0.665	0.003	0.179	0.001	0.000	84	0.339281	0.404
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon adiergastos</i>	0.002	0.665	0.005	0.350	0.001	0.003	190	0.348216	0.043
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon auriga</i>	0.001	0.665	0.004	0.256	0.002	0.000	160	0.357055	0.311
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon baronessa</i>	0.008	0.665	0.006	1.243	0.019	0.014	128	0.365796	0.936
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon kleinii</i>	0.008	0.665	0.006	1.280	0.019	0.017	42	0.374516	0.897
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon lineolatus</i>	0.001	0.665	0.004	0.179	0.001	0.000	188	0.38323	0.486
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon lunula</i>	0.002	0.665	0.004	0.377	0.003	0.000	111	0.391924	0.739
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon lunulatus</i>	0.008	0.665	0.006	1.364	0.022	0.015	93	0.400591	0.256
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon melannotus</i>	0.002	0.665	0.005	0.365	0.004	0.000	86	0.409143	0.175
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon mertensii</i>	0.000	0.665	0.000	NA	0.000	0.000	11	0.417692	1
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon ocellicaudus</i>	0.003	0.665	0.006	0.447	0.000	0.005	193	0.426161	0.125
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon octofasciatus</i>	0.000	0.665	0.000	NA	0.000	0.000	155	0.434346	1
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon ornatissimus</i>	0.006	0.665	0.009	0.653	0.003	0.010	170	0.442443	0.01
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon pelewensis</i>	0.004	0.665	0.006	0.568	0.007	0.000	164	0.450518	0.053
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon punctatofasciatus</i>	0.003	0.665	0.006	0.542	0.003	0.005	55	0.45857	0.118
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon rafflesii</i>	0.004	0.665	0.007	0.603	0.007	0.002	108	0.466458	0.08
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon sp.</i>	0.001	0.665	0.003	0.179	0.001	0.000	12	0.474244	0.65

Coral/A.MA vs A.CR/A.RF	<i>Chaetodon ulietensis</i>	0.002	0.665	0.006	0.301	0.000	0.004	209	0.482026	0.052
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon unimaculatus</i>	0.003	0.665	0.007	0.446	0.000	0.006	191	0.4897	0.007
Coral/A.MA vs A.CR/A.RF	<i>Chaetodon vagabundus</i>	0.004	0.665	0.006	0.623	0.002	0.006	104	0.497341	0.534
Coral/A.MA vs A.CR/A.RF	<i>Chelmon sp.</i>	0.001	0.665	0.003	0.179	0.001	0.000	77	0.504917	0.426
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus nigricans</i>	0.000	0.705	0.000	NA	0.000	0.000	206	0.01665	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus nigricauda</i>	0.000	0.705	0.000	NA	0.000	0.000	196	0.032825	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus nigrofuscus</i>	0.000	0.705	0.000	NA	0.000	0.000	164	0.048793	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus pyroferus</i>	0.006	0.705	0.008	0.714	0.008	0.005	172	0.063776	0.579
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus sp.</i>	0.001	0.705	0.004	0.192	0.001	0.000	78	0.078361	0.331
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus thompsoni</i>	0.002	0.705	0.006	0.301	0.000	0.003	217	0.092883	0.21
A.SG/Soft Coral vs A.CR/A.RF	<i>Acanthurus triostegus</i>	0.000	0.705	0.000	NA	0.000	0.000	205	0.107123	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Ctenochaetus binotatus</i>	0.008	0.705	0.007	1.157	0.007	0.016	33	0.120841	0.918
A.SG/Soft Coral vs A.CR/A.RF	<i>Ctenochaetus cyanocheilus</i>	0.000	0.705	0.000	NA	0.000	0.000	178	0.134058	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Ctenochaetus sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	130	0.146824	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Ctenochaetus striatus</i>	0.009	0.705	0.007	1.278	0.016	0.022	140	0.159475	0.696
A.SG/Soft Coral vs A.CR/A.RF	<i>Ctenochaetus tominiensis</i>	0.004	0.705	0.006	0.560	0.003	0.005	11	0.171915	0.594
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso brevirostris</i>	0.002	0.705	0.005	0.336	0.002	0.002	132	0.184108	0.605
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso hexacanthus</i>	0.003	0.705	0.006	0.472	0.001	0.005	195	0.196135	0.601
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso lituratus</i>	0.005	0.705	0.007	0.703	0.000	0.010	34	0.208145	0.398
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso minor</i>	0.003	0.705	0.005	0.573	0.003	0.003	137	0.220144	0.477
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	20	0.232107	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso unicornis</i>	0.005	0.705	0.008	0.599	0.005	0.006	162	0.243925	0.681
A.SG/Soft Coral vs A.CR/A.RF	<i>Naso vlamingii</i>	0.002	0.705	0.006	0.446	0.000	0.005	8	0.255428	0.062
A.SG/Soft Coral vs A.CR/A.RF	<i>Zebrasoma scopas</i>	0.008	0.705	0.007	1.163	0.007	0.017	151	0.266893	0.066
A.SG/Soft Coral vs A.CR/A.RF	<i>Zebrasoma veliferum</i>	0.000	0.705	0.000	NA	0.000	0.000	193	0.278316	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Balistoides viridescens</i>	0.000	0.705	0.000	NA	0.000	0.000	76	0.289601	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Caesio caeruleaurea</i>	0.002	0.705	0.006	0.301	0.000	0.004	37	0.300873	0.109
A.SG/Soft Coral vs A.CR/A.RF	<i>Caesio sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	181	0.311718	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Caesio teres</i>	0.001	0.705	0.005	0.301	0.000	0.003	74	0.322538	0.105
A.SG/Soft Coral vs A.CR/A.RF	<i>Pterocaesio pisang</i>	0.002	0.705	0.006	0.356	0.002	0.003	202	0.333187	0.239

A.SG/Soft Coral vs A.CR/A.RF	<i>Pterocaesio tile</i>	0.002	0.705	0.005	0.430	0.000	0.005	159	0.343815	0.032
A.SG/Soft Coral vs A.CR/A.RF	<i>Caranx melampygus</i>	0.001	0.705	0.004	0.301	0.000	0.002	91	0.354428	0.268
A.SG/Soft Coral vs A.CR/A.RF	<i>Caranx sp.</i>	0.001	0.705	0.004	0.301	0.000	0.003	133	0.364937	0.235
A.SG/Soft Coral vs A.CR/A.RF	<i>Elagatis bipinnulata</i>	0.000	0.705	0.000	NA	0.000	0.000	197	0.375365	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon adiergastos</i>	0.001	0.705	0.005	0.301	0.000	0.003	209	0.385337	0.135
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon auriga</i>	0.000	0.705	0.000	NA	0.000	0.000	134	0.395273	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon baronessa</i>	0.010	0.705	0.008	1.236	0.021	0.014	73	0.405134	0.192
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon kleinii</i>	0.008	0.705	0.007	1.154	0.008	0.017	136	0.414995	0.751
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon lineolatus</i>	0.001	0.705	0.003	0.192	0.001	0.000	89	0.424709	0.623
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon lunula</i>	0.002	0.705	0.007	0.340	0.005	0.000	232	0.43442	0.475
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon lunulatus</i>	0.008	0.705	0.008	1.037	0.005	0.015	211	0.444009	0.444
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon melannotus</i>	0.000	0.705	0.000	NA	0.000	0.000	160	0.452997	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon mertensii</i>	0.001	0.705	0.005	0.277	0.003	0.000	128	0.461815	0.265
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon ocellicaudus</i>	0.003	0.705	0.006	0.447	0.000	0.005	203	0.470622	0.132
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon octofasciatus</i>	0.001	0.705	0.005	0.192	0.002	0.000	224	0.479338	0.386
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon ornatissimus</i>	0.005	0.705	0.009	0.602	0.001	0.010	190	0.48803	0.02
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon pelewensis</i>	0.000	0.705	0.000	NA	0.000	0.000	92	0.49664	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon punctatofasciatus</i>	0.003	0.705	0.008	0.461	0.002	0.005	122	0.505026	0.121
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon rafflesii</i>	0.002	0.705	0.005	0.357	0.001	0.002	115	0.513392	0.723
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	55	0.521684	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon ulietensis</i>	0.002	0.705	0.006	0.301	0.000	0.004	77	0.529918	0.097
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon unimaculatus</i>	0.003	0.705	0.007	0.446	0.000	0.006	68	0.538072	0.015
A.SG/Soft Coral vs A.CR/A.RF	<i>Chaetodon vagabundus</i>	0.005	0.705	0.008	0.677	0.006	0.006	4	0.54591	0.163
A.SG/Soft Coral vs A.CR/A.RF	<i>Chelmon sp.</i>	0.000	0.705	0.000	NA	0.000	0.000	93	0.553726	1

B. SIMPER analysis output for parrotfishes

Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs Rub/EAM	<i>Chlorurus bleekeri</i>	0.070	0.697	0.047	1.473	0.079	0.188	9	0.109	0.006
A.MG/A.Sand vs Rub/EAM	<i>Chlorurus bowersi</i>	0.052	0.697	0.055	0.947	0.020	0.098	1	0.209	0.001
A.MG/A.Sand vs Rub/EAM	<i>Chlorurus microrhinos</i>	0.000	0.697	0.000	NA	0.000	0.000	12	0.305	1
A.MG/A.Sand vs Rub/EAM	<i>Chlorurus sp.</i>	0.014	0.697	0.034	0.401	0.027	0.000	13	0.398	0.36
A.MG/A.Sand vs Rub/EAM	<i>Chlorurus spilurus</i>	0.040	0.697	0.042	0.959	0.055	0.057	2	0.472	0.207
A.MG/A.Sand vs Rub/EAM	<i>Hipposcarus longiceps</i>	0.000	0.697	0.000	NA	0.000	0.000	7	0.542	1
A.MG/A.Sand vs Rub/EAM	<i>Scarus chameleon</i>	0.049	0.697	0.107	0.459	0.086	0.022	11	0.612	0.132
A.MG/A.Sand vs Rub/EAM	<i>Scarus dimidiatus</i>	0.041	0.697	0.030	1.341	0.005	0.082	10	0.673	0.831
A.MG/A.Sand vs Rub/EAM	<i>Scarus flavipectoralis</i>	0.076	0.697	0.091	0.834	0.148	0.131	8	0.731	0.242
A.MG/A.Sand vs Rub/EAM	<i>Scarus forsteni</i>	0.043	0.697	0.058	0.729	0.032	0.065	5	0.789	0.058
A.MG/A.Sand vs Rub/EAM	<i>Scarus ghobban</i>	0.048	0.697	0.115	0.420	0.083	0.020	18	0.845	0.438
A.MG/A.Sand vs Rub/EAM	<i>Scarus hypselopterus</i>	0.067	0.697	0.091	0.736	0.094	0.107	16	0.897	0.112
A.MG/A.Sand vs Rub/EAM	<i>Scarus niger</i>	0.065	0.697	0.049	1.321	0.154	0.151	19	0.938	0.451
A.MG/A.Sand vs Rub/EAM	<i>Scarus prasiognathos</i>	0.000	0.697	0.000	NA	0.000	0.000	15	0.964	1
A.MG/A.Sand vs Rub/EAM	<i>Scarus psitticus</i>	0.018	0.697	0.036	0.491	0.029	0.009	4	0.983	0.771
A.MG/A.Sand vs Rub/EAM	<i>Scarus rivulatus</i>	0.036	0.697	0.080	0.458	0.067	0.010	17	1.000	0.695
A.MG/A.Sand vs Rub/EAM	<i>Scarus schlegeli</i>	0.012	0.697	0.036	0.323	0.023	0.000	3	1.000	0.474
A.MG/A.Sand vs Rub/EAM	<i>Scarus sp.</i>	0.039	0.697	0.060	0.656	0.069	0.021	6	1.000	0.884
A.MG/A.Sand vs Rub/EAM	<i>Scarus tricolor</i>	0.029	0.697	0.039	0.728	0.028	0.040	14	1.000	0.93
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs Coral/A.MA	<i>Chlorurus bleekeri</i>	0.077	0.698	0.048	1.583	0.079	0.213	1	0.110	0.001
A.MG/A.Sand vs Coral/A.MA	<i>Chlorurus bowersi</i>	0.016	0.698	0.038	0.431	0.020	0.016	9	0.217	0.848
A.MG/A.Sand vs Coral/A.MA	<i>Chlorurus microrhinos</i>	0.000	0.698	0.000	NA	0.000	0.000	18	0.319	1
A.MG/A.Sand vs Coral/A.MA	<i>Chlorurus sp.</i>	0.014	0.698	0.034	0.401	0.027	0.000	8	0.419	0.334
A.MG/A.Sand vs Coral/A.MA	<i>Chlorurus spilurus</i>	0.037	0.698	0.049	0.759	0.055	0.038	13	0.517	0.275

A.MG/A.Sand vs Coral/A.MA	<i>Hipposcarus longiceps</i>	0.007	0.698	0.026	0.258	0.000	0.013	11	0.589	0.249
A.MG/A.Sand vs Coral/A.MA	<i>Scarus chameleon</i>	0.043	0.698	0.110	0.392	0.086	0.000	12	0.660	0.091
A.MG/A.Sand vs Coral/A.MA	<i>Scarus dimidiatus</i>	0.070	0.698	0.048	1.456	0.005	0.143	7	0.722	0.001
A.MG/A.Sand vs Coral/A.MA	<i>Scarus flavipectoralis</i>	0.075	0.698	0.100	0.750	0.148	0.071	16	0.783	0.223
A.MG/A.Sand vs Coral/A.MA	<i>Scarus forsteni</i>	0.020	0.698	0.056	0.353	0.032	0.010	5	0.837	0.787
A.MG/A.Sand vs Coral/A.MA	<i>Scarus ghobban</i>	0.050	0.698	0.116	0.430	0.083	0.024	19	0.874	0.406
A.MG/A.Sand vs Coral/A.MA	<i>Scarus hypselopterus</i>	0.049	0.698	0.107	0.462	0.094	0.011	10	0.902	0.444
A.MG/A.Sand vs Coral/A.MA	<i>Scarus niger</i>	0.068	0.698	0.052	1.317	0.154	0.250	17	0.927	0.132
A.MG/A.Sand vs Coral/A.MA	<i>Scarus prasiognathos</i>	0.000	0.698	0.000	NA	0.000	0.000	2	0.950	1
A.MG/A.Sand vs Coral/A.MA	<i>Scarus psitticus</i>	0.014	0.698	0.035	0.406	0.029	0.000	15	0.971	0.957
A.MG/A.Sand vs Coral/A.MA	<i>Scarus rivulatus</i>	0.043	0.698	0.081	0.529	0.067	0.027	4	0.990	0.503
A.MG/A.Sand vs Coral/A.MA	<i>Scarus schlegeli</i>	0.017	0.698	0.046	0.364	0.023	0.012	6	1.000	0.158
A.MG/A.Sand vs Coral/A.MA	<i>Scarus sp.</i>	0.071	0.698	0.058	1.239	0.069	0.141	3	1.000	0.003
A.MG/A.Sand vs Coral/A.MA	<i>Scarus tricolor</i>	0.026	0.698	0.044	0.597	0.028	0.032	14	1.000	0.998
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chlorurus bleekeri</i>	0.056	0.723	0.042	1.330	0.079	0.125	9	0.111	0.431
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chlorurus bowersi</i>	0.016	0.723	0.037	0.441	0.020	0.015	11	0.221	0.834
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chlorurus microrhinos</i>	0.000	0.723	0.000	NA	0.000	0.000	16	0.311	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chlorurus sp.</i>	0.023	0.723	0.046	0.505	0.027	0.024	13	0.400	0.01
A.MG/A.Sand vs A.SG/Soft Coral	<i>Chlorurus spilurus</i>	0.035	0.723	0.045	0.778	0.055	0.032	12	0.487	0.453
A.MG/A.Sand vs A.SG/Soft Coral	<i>Hipposcarus longiceps</i>	0.000	0.723	0.000	NA	0.000	0.000	1	0.565	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus chameleon</i>	0.049	0.723	0.112	0.434	0.086	0.015	19	0.634	0.024
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus dimidiatus</i>	0.028	0.723	0.032	0.887	0.005	0.056	7	0.701	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus flavipectoralis</i>	0.081	0.723	0.091	0.889	0.148	0.150	18	0.758	0.044
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus forsteni</i>	0.029	0.723	0.063	0.459	0.032	0.031	5	0.806	0.327
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus ghobban</i>	0.079	0.723	0.108	0.734	0.083	0.104	15	0.850	0.002
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus hypselopterus</i>	0.063	0.723	0.098	0.646	0.094	0.078	10	0.890	0.04
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus niger</i>	0.064	0.723	0.050	1.297	0.154	0.116	8	0.929	0.462
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus prasiognathos</i>	0.000	0.723	0.000	NA	0.000	0.000	4	0.961	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus psitticus</i>	0.032	0.723	0.046	0.687	0.029	0.046	2	0.984	0.072
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus rivulatus</i>	0.065	0.723	0.076	0.852	0.067	0.093	17	1.000	0.003

A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus schlegeli</i>	0.012	0.723	0.036	0.323	0.023	0.000	3	1.000	0.479
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus sp.</i>	0.041	0.723	0.065	0.631	0.069	0.022	6	1.000	0.92
A.MG/A.Sand vs A.SG/Soft Coral	<i>Scarus tricolor</i>	0.050	0.723	0.058	0.862	0.028	0.092	14	1.000	0.064
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.CR/A.RF	<i>Chlorurus bleekeri</i>	0.065	0.697	0.040	1.625	0.079	0.181	9	0.109	0.053
A.MG/A.Sand vs A.CR/A.RF	<i>Chlorurus bowersi</i>	0.010	0.697	0.034	0.294	0.020	0.000	1	0.203	0.937
A.MG/A.Sand vs A.CR/A.RF	<i>Chlorurus microrhinos</i>	0.020	0.697	0.047	0.424	0.000	0.040	12	0.290	0.013
A.MG/A.Sand vs A.CR/A.RF	<i>Chlorurus sp.</i>	0.014	0.697	0.034	0.401	0.027	0.000	13	0.373	0.381
A.MG/A.Sand vs A.CR/A.RF	<i>Chlorurus spilurus</i>	0.037	0.697	0.041	0.908	0.055	0.044	7	0.455	0.356
A.MG/A.Sand vs A.CR/A.RF	<i>Hipposcarus longiceps</i>	0.000	0.697	0.000	NA	0.000	0.000	11	0.528	1
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus chameleon</i>	0.057	0.697	0.103	0.560	0.086	0.052	19	0.592	0.057
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus dimidiatus</i>	0.024	0.697	0.030	0.809	0.005	0.048	16	0.653	1
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus flavipectoralis</i>	0.076	0.697	0.098	0.779	0.148	0.085	18	0.713	0.225
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus forsteni</i>	0.027	0.697	0.057	0.470	0.032	0.027	15	0.767	0.409
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus ghobban</i>	0.051	0.697	0.115	0.440	0.083	0.025	5	0.820	0.373
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus hypselopterus</i>	0.061	0.697	0.100	0.609	0.094	0.065	10	0.859	0.212
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus niger</i>	0.058	0.697	0.042	1.390	0.154	0.189	8	0.894	0.819
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus prasiognathos</i>	0.008	0.697	0.025	0.301	0.000	0.015	17	0.927	0.116
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus psitticus</i>	0.038	0.697	0.049	0.762	0.029	0.061	3	0.955	0.043
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus rivulatus</i>	0.042	0.697	0.083	0.509	0.067	0.025	4	0.975	0.509
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus schlegeli</i>	0.023	0.697	0.042	0.547	0.023	0.028	2	0.989	0.077
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus sp.</i>	0.042	0.697	0.061	0.683	0.069	0.030	14	1.000	0.846
A.MG/A.Sand vs A.CR/A.RF	<i>Scarus tricolor</i>	0.045	0.697	0.046	0.986	0.028	0.082	6	1.000	0.365
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs Coral/A.MA	<i>Chlorurus bleekeri</i>	0.046	0.561	0.035	1.313	0.188	0.213	13	0.123	0.954
Rub/EAM vs Coral/A.MA	<i>Chlorurus bowersi</i>	0.050	0.561	0.053	0.943	0.098	0.016	18	0.243	0.001
Rub/EAM vs Coral/A.MA	<i>Chlorurus microrhinos</i>	0.000	0.561	0.000	NA	0.000	0.000	9	0.347	1
Rub/EAM vs Coral/A.MA	<i>Chlorurus sp.</i>	0.000	0.561	0.000	NA	0.000	0.000	12	0.442	1
Rub/EAM vs Coral/A.MA	<i>Chlorurus spilurus</i>	0.037	0.561	0.043	0.866	0.057	0.038	8	0.536	0.317
Rub/EAM vs Coral/A.MA	<i>Hipposcarus longiceps</i>	0.007	0.561	0.026	0.258	0.000	0.013	2	0.625	0.31
Rub/EAM vs Coral/A.MA	<i>Scarus chameleon</i>	0.011	0.561	0.026	0.426	0.022	0.000	1	0.706	0.917

Rub/EAM vs Coral/A.MA	<i>Scarus dimidiatus</i>	0.053	0.561	0.038	1.401	0.082	0.143	5	0.773	0.095
Rub/EAM vs Coral/A.MA	<i>Scarus flavipectoralis</i>	0.059	0.561	0.043	1.375	0.131	0.071	10	0.833	0.714
Rub/EAM vs Coral/A.MA	<i>Scarus forsteni</i>	0.034	0.561	0.043	0.789	0.065	0.010	19	0.885	0.189
Rub/EAM vs Coral/A.MA	<i>Scarus ghobban</i>	0.019	0.561	0.034	0.558	0.020	0.024	11	0.919	0.997
Rub/EAM vs Coral/A.MA	<i>Scarus hypselopterus</i>	0.053	0.561	0.033	1.588	0.107	0.011	16	0.950	0.258
Rub/EAM vs Coral/A.MA	<i>Scarus niger</i>	0.069	0.561	0.050	1.377	0.151	0.250	7	0.969	0.188
Rub/EAM vs Coral/A.MA	<i>Scarus prasiognathos</i>	0.000	0.561	0.000	NA	0.000	0.000	6	0.981	1
Rub/EAM vs Coral/A.MA	<i>Scarus psitticus</i>	0.005	0.561	0.016	0.288	0.009	0.000	17	0.992	0.996
Rub/EAM vs Coral/A.MA	<i>Scarus rivulatus</i>	0.017	0.561	0.039	0.448	0.010	0.027	15	1.000	0.996
Rub/EAM vs Coral/A.MA	<i>Scarus schlegeli</i>	0.006	0.561	0.033	0.179	0.000	0.012	3	1.000	0.782
Rub/EAM vs Coral/A.MA	<i>Scarus sp.</i>	0.067	0.561	0.054	1.254	0.021	0.141	4	1.000	0.03
Rub/EAM vs Coral/A.MA	<i>Scarus tricolor</i>	0.029	0.561	0.037	0.783	0.040	0.032	14	1.000	0.963
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.SG/Soft Coral	<i>Chlorurus bleekeri</i>	0.053	0.604	0.044	1.217	0.188	0.125	13	0.104	0.622
Rub/EAM vs A.SG/Soft Coral	<i>Chlorurus bowersi</i>	0.050	0.604	0.052	0.952	0.098	0.015	9	0.199	0.001
Rub/EAM vs A.SG/Soft Coral	<i>Chlorurus microrhinos</i>	0.000	0.604	0.000	NA	0.000	0.000	1	0.288	1
Rub/EAM vs A.SG/Soft Coral	<i>Chlorurus sp.</i>	0.012	0.604	0.039	0.309	0.000	0.024	11	0.375	0.43
Rub/EAM vs A.SG/Soft Coral	<i>Chlorurus spilurus</i>	0.034	0.604	0.039	0.890	0.057	0.032	2	0.457	0.493
Rub/EAM vs A.SG/Soft Coral	<i>Hipposcarus longiceps</i>	0.000	0.604	0.000	NA	0.000	0.000	19	0.539	1
Rub/EAM vs A.SG/Soft Coral	<i>Scarus chameleon</i>	0.018	0.604	0.043	0.409	0.022	0.015	16	0.617	0.712
Rub/EAM vs A.SG/Soft Coral	<i>Scarus dimidiatus</i>	0.037	0.604	0.028	1.320	0.082	0.056	12	0.693	0.969
Rub/EAM vs A.SG/Soft Coral	<i>Scarus flavipectoralis</i>	0.058	0.604	0.043	1.345	0.131	0.150	10	0.758	0.759
Rub/EAM vs A.SG/Soft Coral	<i>Scarus forsteni</i>	0.040	0.604	0.048	0.825	0.065	0.031	8	0.819	0.08
Rub/EAM vs A.SG/Soft Coral	<i>Scarus ghobban</i>	0.053	0.604	0.058	0.909	0.020	0.104	5	0.876	0.349
Rub/EAM vs A.SG/Soft Coral	<i>Scarus hypselopterus</i>	0.046	0.604	0.033	1.376	0.107	0.078	15	0.919	0.405
Rub/EAM vs A.SG/Soft Coral	<i>Scarus niger</i>	0.063	0.604	0.048	1.311	0.151	0.116	18	0.951	0.551
Rub/EAM vs A.SG/Soft Coral	<i>Scarus prasiognathos</i>	0.000	0.604	0.000	NA	0.000	0.000	7	0.980	1
Rub/EAM vs A.SG/Soft Coral	<i>Scarus psitticus</i>	0.025	0.604	0.041	0.615	0.009	0.046	4	1.000	0.365
Rub/EAM vs A.SG/Soft Coral	<i>Scarus rivulatus</i>	0.047	0.604	0.056	0.846	0.010	0.093	3	1.000	0.337
Rub/EAM vs A.SG/Soft Coral	<i>Scarus schlegeli</i>	0.000	0.604	0.000	NA	0.000	0.000	6	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Scarus sp.</i>	0.019	0.604	0.040	0.479	0.021	0.022	14	1.000	1

Rub/EAM vs A.SG/Soft Coral	<i>Scarus tricolor</i>	0.050	0.604	0.052	0.953	0.040	0.092	17	1.000	0.161
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.CR/A.RF	<i>Chlorurus bleekeri</i>	0.040	0.562	0.033	1.199	0.188	0.181	9	0.103	0.983
Rub/EAM vs A.CR/A.RF	<i>Chlorurus bowersi</i>	0.049	0.562	0.055	0.895	0.098	0.000	13	0.202	0.001
Rub/EAM vs A.CR/A.RF	<i>Chlorurus microrhinos</i>	0.020	0.562	0.047	0.424	0.000	0.040	2	0.289	0.013
Rub/EAM vs A.CR/A.RF	<i>Chlorurus sp.</i>	0.000	0.562	0.000	NA	0.000	0.000	12	0.373	1
Rub/EAM vs A.CR/A.RF	<i>Chlorurus spilurus</i>	0.035	0.562	0.035	0.985	0.057	0.044	19	0.449	0.494
Rub/EAM vs A.CR/A.RF	<i>Hipposcarus longiceps</i>	0.000	0.562	0.000	NA	0.000	0.000	1	0.519	1
Rub/EAM vs A.CR/A.RF	<i>Scarus chameleon</i>	0.030	0.562	0.037	0.800	0.022	0.052	8	0.586	0.337
Rub/EAM vs A.CR/A.RF	<i>Scarus dimidiatus</i>	0.037	0.562	0.028	1.332	0.082	0.048	10	0.651	0.906
Rub/EAM vs A.CR/A.RF	<i>Scarus flavipectoralis</i>	0.058	0.562	0.044	1.323	0.131	0.085	5	0.712	0.685
Rub/EAM vs A.CR/A.RF	<i>Scarus forsteni</i>	0.037	0.562	0.043	0.856	0.065	0.027	15	0.770	0.186
Rub/EAM vs A.CR/A.RF	<i>Scarus ghobban</i>	0.019	0.562	0.032	0.607	0.020	0.025	7	0.823	0.976
Rub/EAM vs A.CR/A.RF	<i>Scarus hypselopterus</i>	0.047	0.562	0.033	1.445	0.107	0.065	18	0.862	0.305
Rub/EAM vs A.CR/A.RF	<i>Scarus niger</i>	0.056	0.562	0.041	1.348	0.151	0.189	3	0.897	0.843
Rub/EAM vs A.CR/A.RF	<i>Scarus prasiognathos</i>	0.008	0.562	0.025	0.301	0.000	0.015	11	0.932	0.116
Rub/EAM vs A.CR/A.RF	<i>Scarus psitticus</i>	0.032	0.562	0.047	0.682	0.009	0.061	16	0.961	0.167
Rub/EAM vs A.CR/A.RF	<i>Scarus rivulatus</i>	0.017	0.562	0.043	0.388	0.010	0.025	17	0.986	0.961
Rub/EAM vs A.CR/A.RF	<i>Scarus schlegeli</i>	0.014	0.562	0.032	0.445	0.000	0.028	14	1.000	0.38
Rub/EAM vs A.CR/A.RF	<i>Scarus sp.</i>	0.022	0.562	0.036	0.600	0.021	0.030	4	1.000	0.994
Rub/EAM vs A.CR/A.RF	<i>Scarus tricolor</i>	0.042	0.562	0.040	1.060	0.040	0.082	6	1.000	0.502
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral.A.MA vs A.SG/Soft Coral	<i>Chlorurus bleekeri</i>	0.059	0.644	0.043	1.368	0.213	0.125	13	0.120	0.12
Coral.A.MA vs A.SG/Soft Coral	<i>Chlorurus bowersi</i>	0.014	0.644	0.030	0.471	0.016	0.015	18	0.230	0.961
Coral.A.MA vs A.SG/Soft Coral	<i>Chlorurus microrhinos</i>	0.000	0.644	0.000	NA	0.000	0.000	9	0.331	1
Coral.A.MA vs A.SG/Soft Coral	<i>Chlorurus sp.</i>	0.012	0.644	0.039	0.310	0.000	0.024	1	0.423	0.454
Coral.A.MA vs A.SG/Soft Coral	<i>Chlorurus spilurus</i>	0.029	0.644	0.046	0.647	0.038	0.032	8	0.514	0.856
Coral.A.MA vs A.SG/Soft Coral	<i>Hipposcarus longiceps</i>	0.007	0.644	0.026	0.258	0.013	0.000	11	0.598	0.328
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus chameleon</i>	0.007	0.644	0.039	0.192	0.000	0.015	16	0.676	0.993
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus dimidiatus</i>	0.059	0.644	0.043	1.375	0.143	0.056	19	0.754	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus flavipectoralis</i>	0.065	0.644	0.050	1.319	0.071	0.150	12	0.817	0.59

Coral.A.MA vs A.SG/Soft Coral	<i>Scarus forsteni</i>	0.019	0.644	0.043	0.444	0.010	0.031	5	0.862	0.869
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus ghobban</i>	0.054	0.644	0.059	0.905	0.024	0.104	15	0.898	0.32
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus hypselopterus</i>	0.041	0.644	0.043	0.933	0.011	0.078	10	0.928	0.685
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus niger</i>	0.077	0.644	0.054	1.430	0.250	0.116	2	0.950	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus prasiognathos</i>	0.000	0.644	0.000	NA	0.000	0.000	4	0.969	1
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus psitticus</i>	0.023	0.644	0.042	0.552	0.000	0.046	7	0.980	0.495
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus rivulatus</i>	0.051	0.644	0.057	0.888	0.027	0.093	6	0.991	0.147
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus schlegeli</i>	0.006	0.644	0.033	0.180	0.012	0.000	17	1.000	0.881
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus sp.</i>	0.071	0.644	0.056	1.264	0.141	0.022	3	1.000	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Scarus tricolor</i>	0.050	0.644	0.056	0.888	0.032	0.092	14	1.000	0.037
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral/A.MA vs A.CR/A.RF	<i>Chlorurus bleekeri</i>	0.040	0.561	0.030	1.340	0.213	0.181	18	0.120	0.994
Coral/A.MA vs A.CR/A.RF	<i>Chlorurus bowersi</i>	0.008	0.561	0.024	0.320	0.016	0.000	8	0.227	0.976
Coral/A.MA vs A.CR/A.RF	<i>Chlorurus microrhinos</i>	0.020	0.561	0.047	0.424	0.000	0.040	9	0.319	0.013
Coral/A.MA vs A.CR/A.RF	<i>Chlorurus sp.</i>	0.000	0.561	0.000	NA	0.000	0.000	13	0.407	1
Coral/A.MA vs A.CR/A.RF	<i>Chlorurus spilurus</i>	0.033	0.561	0.042	0.791	0.038	0.044	19	0.486	0.548
Coral/A.MA vs A.CR/A.RF	<i>Hipposcarus longiceps</i>	0.007	0.561	0.026	0.258	0.013	0.000	1	0.558	0.31
Coral/A.MA vs A.CR/A.RF	<i>Scarus chameleon</i>	0.026	0.561	0.037	0.704	0.000	0.052	12	0.619	0.474
Coral/A.MA vs A.CR/A.RF	<i>Scarus dimidiatus</i>	0.060	0.561	0.044	1.367	0.143	0.048	5	0.678	0.015
Coral/A.MA vs A.CR/A.RF	<i>Scarus flavipectoralis</i>	0.051	0.561	0.047	1.089	0.071	0.085	15	0.733	0.967
Coral/A.MA vs A.CR/A.RF	<i>Scarus forsteni</i>	0.017	0.561	0.033	0.514	0.010	0.027	7	0.780	0.798
Coral/A.MA vs A.CR/A.RF	<i>Scarus ghobban</i>	0.021	0.561	0.037	0.575	0.024	0.025	16	0.823	0.979
Coral/A.MA vs A.CR/A.RF	<i>Scarus hypselopterus</i>	0.035	0.561	0.043	0.811	0.011	0.065	11	0.861	0.866
Coral/A.MA vs A.CR/A.RF	<i>Scarus niger</i>	0.050	0.561	0.037	1.343	0.250	0.189	3	0.896	0.987
Coral/A.MA vs A.CR/A.RF	<i>Scarus prasiognathos</i>	0.008	0.561	0.025	0.301	0.000	0.015	17	0.931	0.116
Coral/A.MA vs A.CR/A.RF	<i>Scarus psitticus</i>	0.031	0.561	0.048	0.637	0.000	0.061	10	0.961	0.157
Coral/A.MA vs A.CR/A.RF	<i>Scarus rivulatus</i>	0.024	0.561	0.051	0.470	0.027	0.025	2	0.974	0.96
Coral/A.MA vs A.CR/A.RF	<i>Scarus schlegeli</i>	0.019	0.561	0.043	0.451	0.012	0.028	14	0.988	0.121
Coral/A.MA vs A.CR/A.RF	<i>Scarus sp.</i>	0.067	0.561	0.054	1.238	0.141	0.030	6	1.000	0.032
Coral/A.MA vs A.CR/A.RF	<i>Scarus tricolor</i>	0.044	0.561	0.044	1.008	0.032	0.082	4	1.000	0.374
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p

A.SG/Soft Coral vs A.CR/A.RF	<i>Chlorurus bleekeri</i>	0.048	0.625	0.037	1.292	0.125	0.181	9	0.103	0.885
A.SG/Soft Coral vs A.CR/A.RF	<i>Chlorurus bowersi</i>	0.008	0.625	0.022	0.345	0.015	0.000	13	0.200	0.979
A.SG/Soft Coral vs A.CR/A.RF	<i>Chlorurus microrhinos</i>	0.020	0.625	0.047	0.424	0.000	0.040	19	0.289	0.013
A.SG/Soft Coral vs A.CR/A.RF	<i>Chlorurus sp.</i>	0.012	0.625	0.039	0.309	0.024	0.000	11	0.374	0.431
A.SG/Soft Coral vs A.CR/A.RF	<i>Chlorurus spilurus</i>	0.030	0.625	0.036	0.820	0.032	0.044	16	0.457	0.721
A.SG/Soft Coral vs A.CR/A.RF	<i>Hipposcarus longiceps</i>	0.000	0.625	0.000	NA	0.000	0.000	1	0.534	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus chameleon</i>	0.032	0.625	0.047	0.673	0.015	0.052	12	0.606	0.341
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus dimidiatus</i>	0.033	0.625	0.030	1.096	0.056	0.048	15	0.673	0.995
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus flavipectoralis</i>	0.064	0.625	0.049	1.309	0.150	0.085	8	0.725	0.433
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus forsteni</i>	0.026	0.625	0.045	0.569	0.031	0.027	7	0.776	0.475
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus ghobban</i>	0.053	0.625	0.058	0.920	0.104	0.025	5	0.824	0.317
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus hypselopterus</i>	0.046	0.625	0.041	1.122	0.078	0.065	10	0.864	0.425
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus niger</i>	0.061	0.625	0.042	1.443	0.116	0.189	18	0.902	0.678
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus prasiognathos</i>	0.008	0.625	0.025	0.301	0.000	0.015	3	0.934	0.116
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus psitticus</i>	0.041	0.625	0.049	0.839	0.046	0.061	17	0.956	0.012
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus rivulatus</i>	0.052	0.625	0.059	0.877	0.093	0.025	4	0.975	0.225
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus schlegeli</i>	0.014	0.625	0.032	0.445	0.000	0.028	2	0.988	0.307
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus sp.</i>	0.023	0.625	0.045	0.517	0.022	0.030	14	1.000	0.999
A.SG/Soft Coral vs A.CR/A.RF	<i>Scarus tricolor</i>	0.056	0.625	0.049	1.130	0.092	0.082	6	1.000	0.037

C. SIMPER analysis output for wrasses.

Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs Rub/EAM	<i>Anampses caeruleopunctatus</i>	0.000	0.851	0.000	NA	0.000	0.000	41	0.078	1
A.MG/A.Sand vs Rub/EAM	<i>Anampses meleagrides</i>	0.000	0.851	0.000	NA	0.000	0.000	52	0.148	1
A.MG/A.Sand vs Rub/EAM	<i>Anampses sp.</i>	0.012	0.851	0.031	0.398	0.015	0.010	50	0.209	0.952
A.MG/A.Sand vs Rub/EAM	<i>Anampses twistii</i>	0.018	0.851	0.050	0.353	0.014	0.023	14	0.268	0.324
A.MG/A.Sand vs Rub/EAM	<i>Bodianus dictynna</i>	0.037	0.851	0.086	0.426	0.000	0.074	12	0.326	0.016
A.MG/A.Sand vs Rub/EAM	<i>Bodianus mesothorax</i>	0.045	0.851	0.067	0.678	0.016	0.084	16	0.382	0.29
A.MG/A.Sand vs Rub/EAM	<i>Bodianus sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	21	0.437	1
A.MG/A.Sand vs Rub/EAM	<i>Cheilinus chlorourus</i>	0.026	0.851	0.057	0.449	0.026	0.030	6	0.490	0.474
A.MG/A.Sand vs Rub/EAM	<i>Cheilinus fasciatus</i>	0.033	0.851	0.079	0.421	0.025	0.046	11	0.540	0.094
A.MG/A.Sand vs Rub/EAM	<i>Cheilinus oxycephalus</i>	0.002	0.851	0.012	0.192	0.004	0.000	15	0.587	0.969
A.MG/A.Sand vs Rub/EAM	<i>Cheilinus trilobatus</i>	0.042	0.851	0.064	0.658	0.079	0.012	5	0.631	0.349
A.MG/A.Sand vs Rub/EAM	<i>Cheilio inermis</i>	0.049	0.851	0.074	0.663	0.075	0.035	9	0.670	0.026
A.MG/A.Sand vs Rub/EAM	<i>Choerodon anchorago</i>	0.000	0.851	0.000	NA	0.000	0.000	28	0.701	1
A.MG/A.Sand vs Rub/EAM	<i>Choerodon sp.</i>	0.050	0.851	0.064	0.784	0.100	0.000	45	0.732	0.01
A.MG/A.Sand vs Rub/EAM	<i>Coris batuensis</i>	0.041	0.851	0.057	0.711	0.081	0.000	8	0.762	0.368
A.MG/A.Sand vs Rub/EAM	<i>Coris gaimard</i>	0.048	0.851	0.074	0.653	0.007	0.094	19	0.789	0.021
A.MG/A.Sand vs Rub/EAM	<i>Epibulus brevis</i>	0.012	0.851	0.043	0.272	0.023	0.000	37	0.813	0.463
A.MG/A.Sand vs Rub/EAM	<i>Epibulus insidiator</i>	0.000	0.851	0.000	NA	0.000	0.000	27	0.836	1
A.MG/A.Sand vs Rub/EAM	<i>Gomphosus varius</i>	0.023	0.851	0.055	0.419	0.000	0.046	26	0.857	0.102
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres chrysus</i>	0.000	0.851	0.000	NA	0.000	0.000	4	0.878	1
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres hortulanus</i>	0.046	0.851	0.064	0.723	0.031	0.078	39	0.896	0.111
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres marginatus</i>	0.000	0.851	0.000	NA	0.000	0.000	25	0.911	1
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres melanurus</i>	0.008	0.851	0.023	0.338	0.016	0.000	3	0.926	0.534
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres nigrescens</i>	0.000	0.851	0.000	NA	0.000	0.000	17	0.939	1
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres podostigma</i>	0.013	0.851	0.033	0.399	0.027	0.000	47	0.950	0.362

A.MG/A.Sand vs Rub/EAM	<i>Halichoeres prosopeion</i>	0.018	0.851	0.040	0.450	0.024	0.015	23	0.959	0.402
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres richmondi</i>	0.020	0.851	0.048	0.407	0.021	0.022	36	0.967	0.143
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres scapularis</i>	0.027	0.851	0.049	0.552	0.054	0.000	40	0.976	0.653
A.MG/A.Sand vs Rub/EAM	<i>Halichoeres sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	30	0.983	1
A.MG/A.Sand vs Rub/EAM	<i>Hemigymnus fasciatus</i>	0.006	0.851	0.020	0.301	0.000	0.012	38	0.987	0.945
A.MG/A.Sand vs Rub/EAM	<i>Hemigymnus melapterus</i>	0.000	0.851	0.000	NA	0.000	0.000	34	0.991	1
A.MG/A.Sand vs Rub/EAM	<i>Hologymnosus annulatus</i>	0.003	0.851	0.016	0.192	0.006	0.000	32	0.995	0.37
A.MG/A.Sand vs Rub/EAM	<i>Hologymnosus sp.</i>	0.002	0.851	0.012	0.192	0.005	0.000	33	0.997	0.774
A.MG/A.Sand vs Rub/EAM	<i>Labrichthys unilineatus</i>	0.003	0.851	0.018	0.192	0.007	0.000	10	1.000	0.998
A.MG/A.Sand vs Rub/EAM	<i>Labropsis manabei</i>	0.000	0.851	0.000	NA	0.000	0.000	1	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Labropsis xanthonota</i>	0.007	0.851	0.026	0.276	0.014	0.000	2	1.000	0.283
A.MG/A.Sand vs Rub/EAM	<i>Macropharyngodon meleagris</i>	0.020	0.851	0.052	0.393	0.013	0.030	7	1.000	0.798
A.MG/A.Sand vs Rub/EAM	<i>Macropharyngodon negrosensis</i>	0.004	0.851	0.019	0.192	0.007	0.000	13	1.000	0.469
A.MG/A.Sand vs Rub/EAM	<i>Novaculichthys taeniourus</i>	0.015	0.851	0.034	0.446	0.020	0.012	18	1.000	0.474
A.MG/A.Sand vs Rub/EAM	<i>Oxycheilinus celebicus</i>	0.007	0.851	0.025	0.277	0.014	0.000	20	1.000	0.549
A.MG/A.Sand vs Rub/EAM	<i>Oxycheilinus digramma</i>	0.066	0.851	0.065	1.023	0.116	0.047	22	1.000	0.308
A.MG/A.Sand vs Rub/EAM	<i>Oxycheilinus sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	24	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Oxycheilinus unifasciatus</i>	0.000	0.851	0.000	NA	0.000	0.000	29	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Pseudocheilinus hexataenia</i>	0.000	0.851	0.000	NA	0.000	0.000	31	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Pseudodax moluccanus</i>	0.026	0.851	0.085	0.301	0.000	0.051	35	1.000	0.11
A.MG/A.Sand vs Rub/EAM	<i>Stethojulis bandanensis</i>	0.000	0.851	0.000	NA	0.000	0.000	42	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Stethojulis interrupta</i>	0.009	0.851	0.032	0.277	0.018	0.000	43	1.000	0.818
A.MG/A.Sand vs Rub/EAM	<i>Stethojulis strigiventer</i>	0.000	0.851	0.000	NA	0.000	0.000	44	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Thalassoma amblycephalum</i>	0.000	0.851	0.000	NA	0.000	0.000	46	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Thalassoma hardwicke</i>	0.052	0.851	0.093	0.567	0.000	0.105	48	1.000	0.059
A.MG/A.Sand vs Rub/EAM	<i>Thalassoma jansenii</i>	0.000	0.851	0.000	NA	0.000	0.000	49	1.000	1
A.MG/A.Sand vs Rub/EAM	<i>Thalassoma lunare</i>	0.059	0.851	0.039	1.512	0.141	0.173	51	1.000	0.019
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs Coral/A.MA	<i>Anampses caeruleopunctatus</i>	0.002	0.821	0.011	0.179	0.000	0.004	41	0.076	0.52
A.MG/A.Sand vs Coral/A.MA	<i>Anampses meleagrides</i>	0.009	0.821	0.028	0.342	0.015	0.005	6	0.138	0.035
A.MG/A.Sand vs Coral/A.MA	<i>Anampses sp.</i>	0.043	0.821	0.042	1.047	0.087	0.000	50	0.194	0.001

A.MG/A.Sand vs Coral/A.MA	<i>Anampses twistii</i>	0.012	0.821	0.043	0.280	0.000	0.024	3	0.247	0.562
A.MG/A.Sand vs Coral/A.MA	<i>Bodianus dictynna</i>	0.010	0.821	0.027	0.371	0.020	0.000	21	0.297	0.628
A.MG/A.Sand vs Coral/A.MA	<i>Bodianus mesothorax</i>	0.051	0.821	0.041	1.235	0.014	0.106	11	0.344	0.031
A.MG/A.Sand vs Coral/A.MA	<i>Bodianus sp.</i>	0.002	0.821	0.013	0.179	0.000	0.005	16	0.389	0.52
A.MG/A.Sand vs Coral/A.MA	<i>Cheilinus chlorourus</i>	0.034	0.821	0.053	0.648	0.062	0.013	34	0.434	0.097
A.MG/A.Sand vs Coral/A.MA	<i>Cheilinus fasciatus</i>	0.005	0.821	0.025	0.213	0.011	0.000	28	0.478	0.984
A.MG/A.Sand vs Coral/A.MA	<i>Cheilinus oxycephalus</i>	0.017	0.821	0.031	0.543	0.008	0.029	52	0.522	0.039
A.MG/A.Sand vs Coral/A.MA	<i>Cheilinus trilobatus</i>	0.039	0.821	0.046	0.841	0.077	0.007	8	0.563	0.496
A.MG/A.Sand vs Coral/A.MA	<i>Cheilio inermis</i>	0.014	0.821	0.034	0.421	0.022	0.008	37	0.600	0.965
A.MG/A.Sand vs Coral/A.MA	<i>Choerodon anchorago</i>	0.003	0.821	0.014	0.179	0.000	0.005	31	0.636	0.503
A.MG/A.Sand vs Coral/A.MA	<i>Choerodon sp.</i>	0.004	0.821	0.014	0.308	0.008	0.000	15	0.667	1
A.MG/A.Sand vs Coral/A.MA	<i>Coris batuensis</i>	0.026	0.821	0.039	0.673	0.045	0.014	30	0.692	0.975
A.MG/A.Sand vs Coral/A.MA	<i>Coris gaimard</i>	0.037	0.821	0.048	0.768	0.071	0.010	26	0.713	0.089
A.MG/A.Sand vs Coral/A.MA	<i>Epibulus brevis</i>	0.009	0.821	0.024	0.377	0.000	0.018	46	0.734	0.63
A.MG/A.Sand vs Coral/A.MA	<i>Epibulus insidiator</i>	0.005	0.821	0.020	0.257	0.000	0.010	10	0.755	0.276
A.MG/A.Sand vs Coral/A.MA	<i>Gomphosus varius</i>	0.016	0.821	0.031	0.521	0.012	0.024	47	0.774	0.336
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres chrysus</i>	0.005	0.821	0.024	0.213	0.010	0.000	19	0.794	0.196
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres hortulanus</i>	0.041	0.821	0.043	0.946	0.064	0.048	12	0.811	0.264
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres marginatus</i>	0.007	0.821	0.027	0.256	0.000	0.014	4	0.826	0.247
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres melanurus</i>	0.008	0.821	0.024	0.317	0.000	0.015	33	0.840	0.563
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres nigrescens</i>	0.003	0.821	0.015	0.179	0.000	0.005	5	0.852	0.52
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres podostigma</i>	0.009	0.821	0.023	0.382	0.005	0.013	2	0.863	0.74
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres prosopeion</i>	0.017	0.821	0.042	0.408	0.015	0.022	17	0.874	0.448
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres richmondi</i>	0.006	0.821	0.026	0.254	0.000	0.013	25	0.885	0.824
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres scapularis</i>	0.036	0.821	0.062	0.583	0.072	0.000	39	0.895	0.232
A.MG/A.Sand vs Coral/A.MA	<i>Halichoeres sp.</i>	0.005	0.821	0.021	0.258	0.000	0.011	23	0.905	0.248
A.MG/A.Sand vs Coral/A.MA	<i>Hemigymnus fasciatus</i>	0.021	0.821	0.038	0.550	0.017	0.029	22	0.913	0.151
A.MG/A.Sand vs Coral/A.MA	<i>Hemigymnus melapterus</i>	0.029	0.821	0.044	0.665	0.044	0.025	27	0.921	0.212
A.MG/A.Sand vs Coral/A.MA	<i>Hologymnosus annulatus</i>	0.000	0.821	0.000	NA	0.000	0.000	29	0.928	1
A.MG/A.Sand vs Coral/A.MA	<i>Hologymnosus sp.</i>	0.011	0.821	0.031	0.369	0.023	0.000	9	0.934	0.036
A.MG/A.Sand vs Coral/A.MA	<i>Labrichthys unilineatus</i>	0.037	0.821	0.041	0.899	0.004	0.074	44	0.941	0.001

A.MG/A.Sand vs Coral/A.MA	<i>Labropsis manabei</i>	0.003	0.821	0.016	0.179	0.000	0.006	20	0.947	0.495
A.MG/A.Sand vs Coral/A.MA	<i>Labropsis xanthonota</i>	0.000	0.821	0.000	NA	0.000	0.000	18	0.953	1
A.MG/A.Sand vs Coral/A.MA	<i>Macropharyngodon meleagris</i>	0.030	0.821	0.039	0.755	0.032	0.042	42	0.958	0.361
A.MG/A.Sand vs Coral/A.MA	<i>Macropharyngodon negrosensis</i>	0.004	0.821	0.020	0.213	0.009	0.000	51	0.964	0.496
A.MG/A.Sand vs Coral/A.MA	<i>Novaculichthys taeniourus</i>	0.009	0.821	0.022	0.386	0.017	0.000	38	0.969	0.885
A.MG/A.Sand vs Coral/A.MA	<i>Oxycheilinus celebicus</i>	0.000	0.821	0.000	NA	0.000	0.000	14	0.974	1
A.MG/A.Sand vs Coral/A.MA	<i>Oxycheilinus digramma</i>	0.063	0.821	0.045	1.383	0.060	0.138	48	0.979	0.562
A.MG/A.Sand vs Coral/A.MA	<i>Oxycheilinus sp.</i>	0.004	0.821	0.017	0.257	0.000	0.009	43	0.983	0.257
A.MG/A.Sand vs Coral/A.MA	<i>Oxycheilinus unifasciatus</i>	0.003	0.821	0.016	0.213	0.007	0.000	35	0.986	0.217
A.MG/A.Sand vs Coral/A.MA	<i>Pseudocheilinus hexataenia</i>	0.005	0.821	0.021	0.256	0.000	0.011	24	0.989	0.244
A.MG/A.Sand vs Coral/A.MA	<i>Pseudodax moluccanus</i>	0.000	0.821	0.000	NA	0.000	0.000	13	0.992	1
A.MG/A.Sand vs Coral/A.MA	<i>Stethojulis bandanensis</i>	0.017	0.821	0.036	0.465	0.007	0.029	7	0.995	0.165
A.MG/A.Sand vs Coral/A.MA	<i>Stethojulis interrupta</i>	0.016	0.821	0.036	0.446	0.032	0.000	1	0.998	0.565
A.MG/A.Sand vs Coral/A.MA	<i>Stethojulis strigiventer</i>	0.004	0.821	0.021	0.179	0.000	0.007	49	1.000	0.492
A.MG/A.Sand vs Coral/A.MA	<i>Thalassoma amblycephalum</i>	0.002	0.821	0.010	0.179	0.000	0.004	32	1.000	0.507
A.MG/A.Sand vs Coral/A.MA	<i>Thalassoma hardwicke</i>	0.046	0.821	0.041	1.108	0.005	0.093	36	1.000	0.029
A.MG/A.Sand vs Coral/A.MA	<i>Thalassoma jansenii</i>	0.004	0.821	0.020	0.213	0.009	0.000	40	1.000	0.251
A.MG/A.Sand vs Coral/A.MA	<i>Thalassoma lunare</i>	0.036	0.821	0.035	1.014	0.115	0.113	45	1.000	0.966
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.SG/Soft Coral	<i>Anampses caeruleopunctatus</i>	0.000	0.785	0.000	NA	0.000	0.000	41	0.077	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Anampses meleagrides</i>	0.008	0.785	0.026	0.292	0.015	0.000	11	0.149	0.159
A.MG/A.Sand vs A.SG/Soft Coral	<i>Anampses sp.</i>	0.045	0.785	0.042	1.076	0.087	0.015	14	0.214	0.001
A.MG/A.Sand vs A.SG/Soft Coral	<i>Anampses twistii</i>	0.007	0.785	0.037	0.192	0.000	0.014	15	0.276	0.807
A.MG/A.Sand vs A.SG/Soft Coral	<i>Bodianus dictynna</i>	0.010	0.785	0.027	0.370	0.020	0.000	28	0.337	0.6
A.MG/A.Sand vs A.SG/Soft Coral	<i>Bodianus mesothorax</i>	0.014	0.785	0.032	0.448	0.014	0.016	3	0.394	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Bodianus sp.</i>	0.000	0.785	0.000	NA	0.000	0.000	12	0.448	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Cheilinus chlorourus</i>	0.038	0.785	0.055	0.696	0.062	0.026	21	0.497	0.023
A.MG/A.Sand vs A.SG/Soft Coral	<i>Cheilinus fasciatus</i>	0.017	0.785	0.042	0.396	0.011	0.025	8	0.546	0.638
A.MG/A.Sand vs A.SG/Soft Coral	<i>Cheilinus oxycephalus</i>	0.006	0.785	0.017	0.361	0.008	0.004	16	0.593	0.905
A.MG/A.Sand vs A.SG/Soft Coral	<i>Cheilinus trilobatus</i>	0.057	0.785	0.058	0.974	0.077	0.079	52	0.638	0.007
A.MG/A.Sand vs A.SG/Soft Coral	<i>Cheilio inermis</i>	0.042	0.785	0.061	0.692	0.022	0.075	47	0.667	0.022

A.MG/A.Sand vs A.SG/Soft Coral	<i>Choerodon anchorago</i>	0.000	0.785	0.000	NA	0.000	0.000	31	0.695	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Choerodon sp.</i>	0.051	0.785	0.062	0.823	0.008	0.100	37	0.722	0.001
A.MG/A.Sand vs A.SG/Soft Coral	<i>Coris batuensis</i>	0.048	0.785	0.052	0.923	0.045	0.081	26	0.745	0.058
A.MG/A.Sand vs A.SG/Soft Coral	<i>Coris gaimard</i>	0.037	0.785	0.049	0.754	0.071	0.007	39	0.767	0.089
A.MG/A.Sand vs A.SG/Soft Coral	<i>Epibulus brevis</i>	0.012	0.785	0.043	0.273	0.000	0.023	9	0.788	0.449
A.MG/A.Sand vs A.SG/Soft Coral	<i>Epibulus insidiator</i>	0.000	0.785	0.000	NA	0.000	0.000	25	0.807	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Gomphosus varius</i>	0.006	0.785	0.019	0.303	0.012	0.000	6	0.826	0.949
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres chrysus</i>	0.005	0.785	0.024	0.213	0.010	0.000	33	0.842	0.196
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres hortulanus</i>	0.039	0.785	0.046	0.843	0.064	0.031	17	0.857	0.377
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres marginatus</i>	0.000	0.785	0.000	NA	0.000	0.000	27	0.870	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres melanurus</i>	0.008	0.785	0.023	0.338	0.000	0.016	5	0.883	0.556
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres nigrescens</i>	0.000	0.785	0.000	NA	0.000	0.000	30	0.894	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres podostigma</i>	0.015	0.785	0.034	0.450	0.005	0.027	23	0.904	0.178
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres prosopeion</i>	0.018	0.785	0.046	0.397	0.015	0.024	38	0.914	0.378
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres richmondi</i>	0.010	0.785	0.038	0.273	0.000	0.021	2	0.923	0.575
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres scapularis</i>	0.048	0.785	0.063	0.762	0.072	0.054	36	0.933	0.006
A.MG/A.Sand vs A.SG/Soft Coral	<i>Halichoeres sp.</i>	0.000	0.785	0.000	NA	0.000	0.000	4	0.942	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Hemigymnus fasciatus</i>	0.009	0.785	0.028	0.308	0.017	0.000	40	0.950	0.937
A.MG/A.Sand vs A.SG/Soft Coral	<i>Hemigymnus melapterus</i>	0.022	0.785	0.043	0.516	0.044	0.000	10	0.958	0.553
A.MG/A.Sand vs A.SG/Soft Coral	<i>Hologymnosus annulatus</i>	0.003	0.785	0.016	0.192	0.000	0.006	19	0.966	0.438
A.MG/A.Sand vs A.SG/Soft Coral	<i>Hologymnosus sp.</i>	0.013	0.785	0.032	0.415	0.023	0.005	20	0.972	0.006
A.MG/A.Sand vs A.SG/Soft Coral	<i>Labrichthys unilineatus</i>	0.005	0.785	0.019	0.269	0.004	0.007	34	0.979	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Labropsis manabei</i>	0.000	0.785	0.000	NA	0.000	0.000	51	0.984	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Labropsis xanthonota</i>	0.007	0.785	0.026	0.277	0.000	0.014	46	0.989	0.216
A.MG/A.Sand vs A.SG/Soft Coral	<i>Macropharyngodon meleagris</i>	0.021	0.785	0.036	0.579	0.032	0.013	43	0.993	0.849
A.MG/A.Sand vs A.SG/Soft Coral	<i>Macropharyngodon negrosensis</i>	0.008	0.785	0.027	0.287	0.009	0.007	32	0.997	0.166
A.MG/A.Sand vs A.SG/Soft Coral	<i>Novaculichthys taeniourus</i>	0.017	0.785	0.034	0.503	0.017	0.020	50	1.000	0.438
A.MG/A.Sand vs A.SG/Soft Coral	<i>Oxycheilinus celebicus</i>	0.007	0.785	0.025	0.277	0.000	0.014	1	1.000	0.595
A.MG/A.Sand vs A.SG/Soft Coral	<i>Oxycheilinus digramma</i>	0.061	0.785	0.055	1.101	0.060	0.116	7	1.000	0.707
A.MG/A.Sand vs A.SG/Soft Coral	<i>Oxycheilinus sp.</i>	0.000	0.785	0.000	NA	0.000	0.000	13	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Oxycheilinus unifasciatus</i>	0.003	0.785	0.016	0.213	0.007	0.000	18	1.000	0.217

A.MG/A.Sand vs A.SG/Soft Coral	<i>Pseudocheilinus hexataenia</i>	0.000	0.785	0.000	NA	0.000	0.000	22	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Pseudodax moluccanus</i>	0.000	0.785	0.000	NA	0.000	0.000	24	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Stethojulis bandanensis</i>	0.003	0.785	0.016	0.213	0.007	0.000	29	1.000	0.966
A.MG/A.Sand vs A.SG/Soft Coral	<i>Stethojulis interrupta</i>	0.023	0.785	0.043	0.525	0.032	0.018	35	1.000	0.225
A.MG/A.Sand vs A.SG/Soft Coral	<i>Stethojulis strigiventer</i>	0.000	0.785	0.000	NA	0.000	0.000	42	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Thalassoma amblycephalum</i>	0.000	0.785	0.000	NA	0.000	0.000	44	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Thalassoma hardwicke</i>	0.003	0.785	0.012	0.213	0.005	0.000	45	1.000	1
A.MG/A.Sand vs A.SG/Soft Coral	<i>Thalassoma janseni</i>	0.004	0.785	0.020	0.213	0.009	0.000	48	1.000	0.251
A.MG/A.Sand vs A.SG/Soft Coral	<i>Thalassoma lunare</i>	0.035	0.785	0.032	1.088	0.115	0.141	49	1.000	0.978
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.MG/A.Sand vs A.CR/A.RF	<i>Anampses caeruleopunctatus</i>	0.000	0.839	0.000	NA	0.000	0.000	52	0.081	1
A.MG/A.Sand vs A.CR/A.RF	<i>Anampses meleagrides</i>	0.008	0.839	0.026	0.292	0.015	0.000	16	0.154	0.255
A.MG/A.Sand vs A.CR/A.RF	<i>Anampses sp.</i>	0.043	0.839	0.040	1.067	0.087	0.010	50	0.217	0.001
A.MG/A.Sand vs A.CR/A.RF	<i>Anampses twistii</i>	0.011	0.839	0.038	0.301	0.000	0.023	21	0.279	0.546
A.MG/A.Sand vs A.CR/A.RF	<i>Bodianus dictynna</i>	0.043	0.839	0.084	0.519	0.020	0.074	41	0.333	0.004
A.MG/A.Sand vs A.CR/A.RF	<i>Bodianus mesothorax</i>	0.044	0.839	0.064	0.691	0.014	0.084	6	0.386	0.357
A.MG/A.Sand vs A.CR/A.RF	<i>Bodianus sp.</i>	0.000	0.839	0.000	NA	0.000	0.000	5	0.438	1
A.MG/A.Sand vs A.CR/A.RF	<i>Cheilinus chlorourus</i>	0.041	0.839	0.061	0.670	0.062	0.030	3	0.489	0.07
A.MG/A.Sand vs A.CR/A.RF	<i>Cheilinus fasciatus</i>	0.028	0.839	0.078	0.354	0.011	0.046	8	0.537	0.201
A.MG/A.Sand vs A.CR/A.RF	<i>Cheilinus oxycephalus</i>	0.004	0.839	0.013	0.307	0.008	0.000	11	0.584	0.894
A.MG/A.Sand vs A.CR/A.RF	<i>Cheilinus trilobatus</i>	0.040	0.839	0.046	0.853	0.077	0.012	28	0.627	0.501
A.MG/A.Sand vs A.CR/A.RF	<i>Cheilio inermis</i>	0.027	0.839	0.060	0.449	0.022	0.035	37	0.661	0.482
A.MG/A.Sand vs A.CR/A.RF	<i>Choerodon anchorago</i>	0.000	0.839	0.000	NA	0.000	0.000	9	0.694	1
A.MG/A.Sand vs A.CR/A.RF	<i>Choerodon sp.</i>	0.004	0.839	0.014	0.307	0.008	0.000	19	0.726	0.991
A.MG/A.Sand vs A.CR/A.RF	<i>Coris batuensis</i>	0.023	0.839	0.038	0.593	0.045	0.000	12	0.759	0.937
A.MG/A.Sand vs A.CR/A.RF	<i>Coris gaimard</i>	0.061	0.839	0.066	0.928	0.071	0.094	45	0.789	0.002
A.MG/A.Sand vs A.CR/A.RF	<i>Epibulus brevis</i>	0.000	0.839	0.000	NA	0.000	0.000	15	0.816	1
A.MG/A.Sand vs A.CR/A.RF	<i>Epibulus insidiator</i>	0.000	0.839	0.000	NA	0.000	0.000	31	0.842	1
A.MG/A.Sand vs A.CR/A.RF	<i>Gomphosus varius</i>	0.027	0.839	0.055	0.494	0.012	0.046	47	0.862	0.041
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres chrysus</i>	0.005	0.839	0.024	0.213	0.010	0.000	26	0.879	0.303
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres hortulanus</i>	0.052	0.839	0.057	0.903	0.064	0.078	30	0.895	0.037

A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres marginatus</i>	0.000	0.839	0.000	NA	0.000	0.000	39	0.911	1
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres melanurus</i>	0.000	0.839	0.000	NA	0.000	0.000	4	0.925	1
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres nigrescens</i>	0.000	0.839	0.000	NA	0.000	0.000	33	0.938	1
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres podostigma</i>	0.003	0.839	0.013	0.213	0.005	0.000	27	0.951	0.954
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres prosopeion</i>	0.014	0.839	0.040	0.355	0.015	0.015	2	0.960	0.598
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres richmondi</i>	0.011	0.839	0.036	0.301	0.000	0.022	20	0.966	0.501
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres scapularis</i>	0.036	0.839	0.062	0.583	0.072	0.000	51	0.971	0.313
A.MG/A.Sand vs A.CR/A.RF	<i>Halichoeres sp.</i>	0.000	0.839	0.000	NA	0.000	0.000	38	0.977	1
A.MG/A.Sand vs A.CR/A.RF	<i>Hemigymnus fasciatus</i>	0.014	0.839	0.032	0.429	0.017	0.012	14	0.982	0.619
A.MG/A.Sand vs A.CR/A.RF	<i>Hemigymnus melapterus</i>	0.022	0.839	0.043	0.515	0.044	0.000	10	0.986	0.516
A.MG/A.Sand vs A.CR/A.RF	<i>Hologymnosus annulatus</i>	0.000	0.839	0.000	NA	0.000	0.000	46	0.990	1
A.MG/A.Sand vs A.CR/A.RF	<i>Hologymnosus sp.</i>	0.011	0.839	0.031	0.369	0.023	0.000	43	0.995	0.139
A.MG/A.Sand vs A.CR/A.RF	<i>Labrichthys unilineatus</i>	0.002	0.839	0.009	0.213	0.004	0.000	25	0.998	0.998
A.MG/A.Sand vs A.CR/A.RF	<i>Labropsis manabei</i>	0.000	0.839	0.000	NA	0.000	0.000	34	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Labropsis xanthonota</i>	0.000	0.839	0.000	NA	0.000	0.000	1	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Macropharyngodon meleagris</i>	0.028	0.839	0.051	0.553	0.032	0.030	7	1.000	0.458
A.MG/A.Sand vs A.CR/A.RF	<i>Macropharyngodon negrosensis</i>	0.004	0.839	0.020	0.213	0.009	0.000	13	1.000	0.574
A.MG/A.Sand vs A.CR/A.RF	<i>Novaculichthys taeniourus</i>	0.013	0.839	0.027	0.489	0.017	0.012	17	1.000	0.568
A.MG/A.Sand vs A.CR/A.RF	<i>Oxycheilinus celebicus</i>	0.000	0.839	0.000	NA	0.000	0.000	18	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Oxycheilinus digramma</i>	0.045	0.839	0.065	0.697	0.060	0.047	22	1.000	0.992
A.MG/A.Sand vs A.CR/A.RF	<i>Oxycheilinus sp.</i>	0.000	0.839	0.000	NA	0.000	0.000	23	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Oxycheilinus unifasciatus</i>	0.003	0.839	0.016	0.213	0.007	0.000	24	1.000	0.328
A.MG/A.Sand vs A.CR/A.RF	<i>Pseudocheilinus hexataenia</i>	0.000	0.839	0.000	NA	0.000	0.000	29	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Pseudodax moluccanus</i>	0.026	0.839	0.085	0.301	0.000	0.051	32	1.000	0.11
A.MG/A.Sand vs A.CR/A.RF	<i>Stethojulis bandanensis</i>	0.003	0.839	0.016	0.213	0.007	0.000	35	1.000	0.901
A.MG/A.Sand vs A.CR/A.RF	<i>Stethojulis interrupta</i>	0.016	0.839	0.036	0.446	0.032	0.000	36	1.000	0.516
A.MG/A.Sand vs A.CR/A.RF	<i>Stethojulis strigiventer</i>	0.000	0.839	0.000	NA	0.000	0.000	40	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Thalassoma amblycephalum</i>	0.000	0.839	0.000	NA	0.000	0.000	42	1.000	1
A.MG/A.Sand vs A.CR/A.RF	<i>Thalassoma hardwicke</i>	0.053	0.839	0.091	0.584	0.005	0.105	44	1.000	0.05
A.MG/A.Sand vs A.CR/A.RF	<i>Thalassoma janseni</i>	0.004	0.839	0.020	0.213	0.009	0.000	48	1.000	0.357
A.MG/A.Sand vs A.CR/A.RF	<i>Thalassoma lunare</i>	0.068	0.839	0.047	1.428	0.115	0.173	49	1.000	0.001

Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs Coral/A.MA	<i>Anampses caeruleopunctatus</i>	0.002	0.793	0.011	0.179	0.000	0.004	41	0.089	0.42
Rub/EAM vs Coral/A.MA	<i>Anampses meleagrides</i>	0.002	0.793	0.013	0.179	0.000	0.005	6	0.162	0.708
Rub/EAM vs Coral/A.MA	<i>Anampses sp.</i>	0.011	0.793	0.027	0.422	0.023	0.000	52	0.234	0.97
Rub/EAM vs Coral/A.MA	<i>Anampses twistii</i>	0.012	0.793	0.043	0.280	0.000	0.024	15	0.297	0.512
Rub/EAM vs Coral/A.MA	<i>Bodianus dictynna</i>	0.000	0.793	0.000	NA	0.000	0.000	50	0.355	1
Rub/EAM vs Coral/A.MA	<i>Bodianus mesothorax</i>	0.058	0.793	0.046	1.263	0.041	0.106	31	0.413	0.023
Rub/EAM vs Coral/A.MA	<i>Bodianus sp.</i>	0.002	0.793	0.013	0.179	0.000	0.005	37	0.460	0.413
Rub/EAM vs Coral/A.MA	<i>Cheilinus chlorourus</i>	0.011	0.793	0.029	0.360	0.010	0.013	34	0.507	0.966
Rub/EAM vs Coral/A.MA	<i>Cheilinus fasciatus</i>	0.026	0.793	0.048	0.542	0.052	0.000	47	0.541	0.22
Rub/EAM vs Coral/A.MA	<i>Cheilinus oxycephalus</i>	0.014	0.793	0.031	0.460	0.000	0.029	39	0.575	0.2
Rub/EAM vs Coral/A.MA	<i>Cheilinus trilobatus</i>	0.023	0.793	0.055	0.423	0.041	0.007	9	0.608	0.938
Rub/EAM vs Coral/A.MA	<i>Cheilio inermis</i>	0.004	0.793	0.022	0.179	0.000	0.008	21	0.641	0.997
Rub/EAM vs Coral/A.MA	<i>Choerodon anchorago</i>	0.003	0.793	0.014	0.179	0.000	0.005	28	0.673	0.391
Rub/EAM vs Coral/A.MA	<i>Choerodon sp.</i>	0.000	0.793	0.000	NA	0.000	0.000	30	0.705	1
Rub/EAM vs Coral/A.MA	<i>Coris batuensis</i>	0.050	0.793	0.066	0.751	0.096	0.014	40	0.736	0.095
Rub/EAM vs Coral/A.MA	<i>Coris gaimard</i>	0.010	0.793	0.026	0.386	0.012	0.010	46	0.767	0.989
Rub/EAM vs Coral/A.MA	<i>Epibulus brevis</i>	0.009	0.793	0.024	0.377	0.000	0.018	11	0.796	0.562
Rub/EAM vs Coral/A.MA	<i>Epibulus insidiator</i>	0.005	0.793	0.020	0.257	0.000	0.010	10	0.814	0.318
Rub/EAM vs Coral/A.MA	<i>Gomphosus varius</i>	0.012	0.793	0.028	0.422	0.000	0.024	4	0.830	0.586
Rub/EAM vs Coral/A.MA	<i>Halichoeres chrysus</i>	0.000	0.793	0.000	NA	0.000	0.000	19	0.845	1
Rub/EAM vs Coral/A.MA	<i>Halichoeres hortulanus</i>	0.026	0.793	0.040	0.654	0.010	0.048	3	0.859	0.935
Rub/EAM vs Coral/A.MA	<i>Halichoeres marginatus</i>	0.007	0.793	0.027	0.256	0.000	0.014	26	0.872	0.331
Rub/EAM vs Coral/A.MA	<i>Halichoeres melanurus</i>	0.008	0.793	0.024	0.317	0.000	0.015	8	0.886	0.542
Rub/EAM vs Coral/A.MA	<i>Halichoeres nigrescens</i>	0.003	0.793	0.015	0.179	0.000	0.005	16	0.898	0.43
Rub/EAM vs Coral/A.MA	<i>Halichoeres podostigma</i>	0.006	0.793	0.020	0.317	0.000	0.013	17	0.910	0.795
Rub/EAM vs Coral/A.MA	<i>Halichoeres prosopeion</i>	0.011	0.793	0.029	0.365	0.000	0.022	23	0.919	0.768
Rub/EAM vs Coral/A.MA	<i>Halichoeres richmondi</i>	0.006	0.793	0.026	0.254	0.000	0.013	22	0.928	0.771
Rub/EAM vs Coral/A.MA	<i>Halichoeres scapularis</i>	0.025	0.793	0.048	0.526	0.051	0.000	27	0.936	0.665
Rub/EAM vs Coral/A.MA	<i>Halichoeres sp.</i>	0.005	0.793	0.021	0.258	0.000	0.011	25	0.944	0.324
Rub/EAM vs Coral/A.MA	<i>Hemigymnus fasciatus</i>	0.025	0.793	0.040	0.624	0.030	0.029	29	0.951	0.058

Rub/EAM vs Coral/A.MA	<i>Hemigymnus melapterus</i>	0.046	0.793	0.081	0.568	0.078	0.025	44	0.958	0.024
Rub/EAM vs Coral/A.MA	<i>Hologymnosus annulatus</i>	0.000	0.793	0.000	NA	0.000	0.000	18	0.964	1
Rub/EAM vs Coral/A.MA	<i>Hologymnosus sp.</i>	0.000	0.793	0.000	NA	0.000	0.000	42	0.970	1
Rub/EAM vs Coral/A.MA	<i>Labrichthys unilineatus</i>	0.037	0.793	0.042	0.879	0.000	0.074	12	0.975	0.01
Rub/EAM vs Coral/A.MA	<i>Labropsis manabei</i>	0.003	0.793	0.016	0.179	0.000	0.006	48	0.979	0.403
Rub/EAM vs Coral/A.MA	<i>Labropsis xanthonota</i>	0.000	0.793	0.000	NA	0.000	0.000	35	0.983	1
Rub/EAM vs Coral/A.MA	<i>Macropharyngodon meleagris</i>	0.037	0.793	0.057	0.661	0.046	0.042	24	0.986	0.129
Rub/EAM vs Coral/A.MA	<i>Macropharyngodon negrosensis</i>	0.000	0.793	0.000	NA	0.000	0.000	13	0.989	1
Rub/EAM vs Coral/A.MA	<i>Novaculichthys taeniourus</i>	0.027	0.793	0.066	0.407	0.054	0.000	2	0.992	0.088
Rub/EAM vs Coral/A.MA	<i>Oxycheilinus celebicus</i>	0.025	0.793	0.087	0.288	0.050	0.000	7	0.995	0.112
Rub/EAM vs Coral/A.MA	<i>Oxycheilinus digramma</i>	0.070	0.793	0.050	1.411	0.135	0.138	1	0.998	0.131
Rub/EAM vs Coral/A.MA	<i>Oxycheilinus sp.</i>	0.004	0.793	0.017	0.257	0.000	0.009	49	1.000	0.315
Rub/EAM vs Coral/A.MA	<i>Oxycheilinus unifasciatus</i>	0.000	0.793	0.000	NA	0.000	0.000	5	1.000	1
Rub/EAM vs Coral/A.MA	<i>Pseudocheilinus hexataenia</i>	0.005	0.793	0.021	0.255	0.000	0.011	14	1.000	0.306
Rub/EAM vs Coral/A.MA	<i>Pseudodax moluccanus</i>	0.000	0.793	0.000	NA	0.000	0.000	20	1.000	1
Rub/EAM vs Coral/A.MA	<i>Stethojulis bandanensis</i>	0.024	0.793	0.049	0.498	0.024	0.029	32	1.000	0.042
Rub/EAM vs Coral/A.MA	<i>Stethojulis interrupta</i>	0.027	0.793	0.068	0.404	0.055	0.000	33	1.000	0.106
Rub/EAM vs Coral/A.MA	<i>Stethojulis strigiventer</i>	0.004	0.793	0.021	0.179	0.000	0.007	36	1.000	0.416
Rub/EAM vs Coral/A.MA	<i>Thalassoma amblycephalum</i>	0.002	0.793	0.010	0.179	0.000	0.004	38	1.000	0.411
Rub/EAM vs Coral/A.MA	<i>Thalassoma hardwicke</i>	0.046	0.793	0.042	1.101	0.000	0.093	43	1.000	0.106
Rub/EAM vs Coral/A.MA	<i>Thalassoma janseni</i>	0.000	0.793	0.000	NA	0.000	0.000	45	1.000	1
Rub/EAM vs Coral/A.MA	<i>Thalassoma lunare</i>	0.057	0.793	0.044	1.302	0.193	0.113	51	1.000	0.016
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.SG/Soft Coral	<i>Anampses caeruleopunctatus</i>	0.000	0.764	0.000	NA	0.000	0.000	41	0.096	1
Rub/EAM vs A.SG/Soft Coral	<i>Anampses meleagrides</i>	0.000	0.764	0.000	NA	0.000	0.000	15	0.177	1
Rub/EAM vs A.SG/Soft Coral	<i>Anampses sp.</i>	0.017	0.764	0.035	0.501	0.023	0.015	11	0.245	0.787
Rub/EAM vs A.SG/Soft Coral	<i>Anampses twistii</i>	0.007	0.764	0.037	0.192	0.000	0.014	14	0.310	0.756
Rub/EAM vs A.SG/Soft Coral	<i>Bodianus dictynna</i>	0.000	0.764	0.000	NA	0.000	0.000	52	0.375	1
Rub/EAM vs A.SG/Soft Coral	<i>Bodianus mesothorax</i>	0.026	0.764	0.054	0.493	0.041	0.016	28	0.430	0.976
Rub/EAM vs A.SG/Soft Coral	<i>Bodianus sp.</i>	0.000	0.764	0.000	NA	0.000	0.000	31	0.481	1
Rub/EAM vs A.SG/Soft Coral	<i>Cheilinus chlorourus</i>	0.017	0.764	0.040	0.425	0.010	0.026	12	0.530	0.82

Rub/EAM vs A.SG/Soft Coral	<i>Cheilinus fasciatus</i>	0.034	0.764	0.053	0.638	0.052	0.025	39	0.574	0.088
Rub/EAM vs A.SG/Soft Coral	<i>Cheilinus oxycephalus</i>	0.002	0.764	0.012	0.192	0.000	0.004	9	0.618	0.975
Rub/EAM vs A.SG/Soft Coral	<i>Cheilinus trilobatus</i>	0.051	0.764	0.072	0.714	0.041	0.079	47	0.662	0.096
Rub/EAM vs A.SG/Soft Coral	<i>Cheilio inermis</i>	0.037	0.764	0.063	0.592	0.000	0.075	40	0.703	0.18
Rub/EAM vs A.SG/Soft Coral	<i>Choerodon anchorago</i>	0.000	0.764	0.000	NA	0.000	0.000	37	0.738	1
Rub/EAM vs A.SG/Soft Coral	<i>Choerodon sp.</i>	0.050	0.764	0.064	0.784	0.000	0.100	6	0.773	0.004
Rub/EAM vs A.SG/Soft Coral	<i>Coris batuensis</i>	0.062	0.764	0.064	0.977	0.096	0.081	21	0.798	0.007
Rub/EAM vs A.SG/Soft Coral	<i>Coris gaimard</i>	0.009	0.764	0.026	0.345	0.012	0.007	3	0.821	0.987
Rub/EAM vs A.SG/Soft Coral	<i>Epibulus brevis</i>	0.012	0.764	0.043	0.272	0.000	0.023	8	0.843	0.482
Rub/EAM vs A.SG/Soft Coral	<i>Epibulus insidiator</i>	0.000	0.764	0.000	NA	0.000	0.000	30	0.862	1
Rub/EAM vs A.SG/Soft Coral	<i>Gomphosus varius</i>	0.000	0.764	0.000	NA	0.000	0.000	25	0.880	1
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres chrysus</i>	0.000	0.764	0.000	NA	0.000	0.000	26	0.896	1
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres hortulanus</i>	0.019	0.764	0.040	0.480	0.010	0.031	46	0.911	0.982
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres marginatus</i>	0.000	0.764	0.000	NA	0.000	0.000	17	0.927	1
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres melanurus</i>	0.008	0.764	0.023	0.338	0.000	0.016	27	0.940	0.534
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres nigrescens</i>	0.000	0.764	0.000	NA	0.000	0.000	16	0.952	1
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres podostigma</i>	0.013	0.764	0.033	0.399	0.000	0.027	23	0.962	0.339
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres prosopeion</i>	0.012	0.764	0.036	0.338	0.000	0.024	36	0.971	0.707
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres richmondi</i>	0.010	0.764	0.038	0.272	0.000	0.021	4	0.981	0.561
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres scapularis</i>	0.042	0.764	0.054	0.767	0.051	0.054	38	0.986	0.148
Rub/EAM vs A.SG/Soft Coral	<i>Halichoeres sp.</i>	0.000	0.764	0.000	NA	0.000	0.000	34	0.990	1
Rub/EAM vs A.SG/Soft Coral	<i>Hemigymnus fasciatus</i>	0.015	0.764	0.035	0.424	0.030	0.000	32	0.994	0.533
Rub/EAM vs A.SG/Soft Coral	<i>Hemigymnus melapterus</i>	0.039	0.764	0.084	0.465	0.078	0.000	33	0.997	0.083
Rub/EAM vs A.SG/Soft Coral	<i>Hologymnosus annulatus</i>	0.003	0.764	0.016	0.192	0.000	0.006	10	1.000	0.371
Rub/EAM vs A.SG/Soft Coral	<i>Hologymnosus sp.</i>	0.002	0.764	0.012	0.192	0.000	0.005	1	1.000	0.782
Rub/EAM vs A.SG/Soft Coral	<i>Labrichthys unilineatus</i>	0.003	0.764	0.018	0.192	0.000	0.007	2	1.000	0.998
Rub/EAM vs A.SG/Soft Coral	<i>Labropsis manabei</i>	0.000	0.764	0.000	NA	0.000	0.000	5	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Labropsis xanthonota</i>	0.007	0.764	0.026	0.276	0.000	0.014	7	1.000	0.303
Rub/EAM vs A.SG/Soft Coral	<i>Macropharyngodon meleagris</i>	0.027	0.764	0.057	0.479	0.046	0.013	13	1.000	0.51
Rub/EAM vs A.SG/Soft Coral	<i>Macropharyngodon negrosensis</i>	0.004	0.764	0.019	0.192	0.000	0.007	18	1.000	0.462
Rub/EAM vs A.SG/Soft Coral	<i>Novaculichthys taeniourus</i>	0.034	0.764	0.066	0.511	0.054	0.020	19	1.000	0.026

Rub/EAM vs A.SG/Soft Coral	<i>Oxycheilinus celebicus</i>	0.031	0.764	0.087	0.356	0.050	0.014	20	1.000	0.036
Rub/EAM vs A.SG/Soft Coral	<i>Oxycheilinus digramma</i>	0.073	0.764	0.060	1.210	0.135	0.116	22	1.000	0.075
Rub/EAM vs A.SG/Soft Coral	<i>Oxycheilinus sp.</i>	0.000	0.764	0.000	NA	0.000	0.000	24	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Oxycheilinus unifasciatus</i>	0.000	0.764	0.000	NA	0.000	0.000	29	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Pseudocheilinus hexataenia</i>	0.000	0.764	0.000	NA	0.000	0.000	35	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Pseudodax moluccanus</i>	0.000	0.764	0.000	NA	0.000	0.000	42	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Stethojulis bandanensis</i>	0.012	0.764	0.041	0.288	0.024	0.000	43	1.000	0.504
Rub/EAM vs A.SG/Soft Coral	<i>Stethojulis interrupta</i>	0.034	0.764	0.070	0.482	0.055	0.018	44	1.000	0.031
Rub/EAM vs A.SG/Soft Coral	<i>Stethojulis strigiventer</i>	0.000	0.764	0.000	NA	0.000	0.000	45	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Thalassoma amblycephalum</i>	0.000	0.764	0.000	NA	0.000	0.000	48	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Thalassoma hardwicke</i>	0.000	0.764	0.000	NA	0.000	0.000	49	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Thalassoma jansenii</i>	0.000	0.764	0.000	NA	0.000	0.000	50	1.000	1
Rub/EAM vs A.SG/Soft Coral	<i>Thalassoma lunare</i>	0.049	0.764	0.038	1.297	0.193	0.141	51	1.000	0.235
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Rub/EAM vs A.CR/A.RF	<i>Anampses caeruleopunctatus</i>	0.000	0.836	0.000	NA	0.000	0.000	41	0.089	1
Rub/EAM vs A.CR/A.RF	<i>Anampses meleagrides</i>	0.000	0.836	0.000	NA	0.000	0.000	52	0.171	1
Rub/EAM vs A.CR/A.RF	<i>Anampses sp.</i>	0.015	0.836	0.029	0.516	0.023	0.010	50	0.234	0.823
Rub/EAM vs A.CR/A.RF	<i>Anampses twistii</i>	0.011	0.836	0.038	0.301	0.000	0.023	6	0.296	0.561
Rub/EAM vs A.CR/A.RF	<i>Bodianus dictynna</i>	0.037	0.836	0.087	0.425	0.000	0.074	16	0.355	0.035
Rub/EAM vs A.CR/A.RF	<i>Bodianus mesothorax</i>	0.052	0.836	0.070	0.749	0.041	0.084	15	0.412	0.147
Rub/EAM vs A.CR/A.RF	<i>Bodianus sp.</i>	0.000	0.836	0.000	NA	0.000	0.000	9	0.466	1
Rub/EAM vs A.CR/A.RF	<i>Cheilinus chlorourus</i>	0.019	0.836	0.050	0.381	0.010	0.030	21	0.515	0.689
Rub/EAM vs A.CR/A.RF	<i>Cheilinus fasciatus</i>	0.045	0.836	0.079	0.569	0.052	0.046	31	0.562	0.035
Rub/EAM vs A.CR/A.RF	<i>Cheilinus oxycephalus</i>	0.000	0.836	0.000	NA	0.000	0.000	5	0.606	1
Rub/EAM vs A.CR/A.RF	<i>Cheilinus trilobatus</i>	0.025	0.836	0.055	0.450	0.041	0.012	37	0.647	0.844
Rub/EAM vs A.CR/A.RF	<i>Cheilio inermis</i>	0.018	0.836	0.059	0.301	0.000	0.035	39	0.684	0.781
Rub/EAM vs A.CR/A.RF	<i>Choerodon anchorago</i>	0.000	0.836	0.000	NA	0.000	0.000	47	0.717	1
Rub/EAM vs A.CR/A.RF	<i>Choerodon sp.</i>	0.000	0.836	0.000	NA	0.000	0.000	45	0.747	1
Rub/EAM vs A.CR/A.RF	<i>Coris batuensis</i>	0.048	0.836	0.068	0.699	0.096	0.000	28	0.778	0.178
Rub/EAM vs A.CR/A.RF	<i>Coris gaimard</i>	0.049	0.836	0.073	0.672	0.012	0.094	40	0.808	0.033
Rub/EAM vs A.CR/A.RF	<i>Epibulus brevis</i>	0.000	0.836	0.000	NA	0.000	0.000	11	0.838	1

Rub/EAM vs A.CR/A.RF	<i>Epibulus insidiator</i>	0.000	0.836	0.000	NA	0.000	0.000	19	0.865	1
Rub/EAM vs A.CR/A.RF	<i>Gomphosus varius</i>	0.023	0.836	0.055	0.418	0.000	0.046	30	0.888	0.133
Rub/EAM vs A.CR/A.RF	<i>Halichoeres chrysus</i>	0.000	0.836	0.000	NA	0.000	0.000	8	0.911	1
Rub/EAM vs A.CR/A.RF	<i>Halichoeres hortulanus</i>	0.041	0.836	0.063	0.649	0.010	0.078	12	0.932	0.35
Rub/EAM vs A.CR/A.RF	<i>Halichoeres marginatus</i>	0.000	0.836	0.000	NA	0.000	0.000	3	0.950	1
Rub/EAM vs A.CR/A.RF	<i>Halichoeres melanurus</i>	0.000	0.836	0.000	NA	0.000	0.000	46	0.964	1
Rub/EAM vs A.CR/A.RF	<i>Halichoeres nigrescens</i>	0.000	0.836	0.000	NA	0.000	0.000	4	0.978	1
Rub/EAM vs A.CR/A.RF	<i>Halichoeres podostigma</i>	0.000	0.836	0.000	NA	0.000	0.000	27	0.991	1
Rub/EAM vs A.CR/A.RF	<i>Halichoeres prosopeion</i>	0.008	0.836	0.026	0.301	0.000	0.015	26	1.000	0.777
Rub/EAM vs A.CR/A.RF	<i>Halichoeres richmondi</i>	0.011	0.836	0.036	0.301	0.000	0.022	1	1.000	0.438
Rub/EAM vs A.CR/A.RF	<i>Halichoeres scapularis</i>	0.025	0.836	0.049	0.525	0.051	0.000	2	1.000	0.625
Rub/EAM vs A.CR/A.RF	<i>Halichoeres sp.</i>	0.000	0.836	0.000	NA	0.000	0.000	7	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Hemigymnus fasciatus</i>	0.019	0.836	0.037	0.519	0.030	0.012	10	1.000	0.333
Rub/EAM vs A.CR/A.RF	<i>Hemigymnus melapterus</i>	0.039	0.836	0.084	0.465	0.078	0.000	13	1.000	0.154
Rub/EAM vs A.CR/A.RF	<i>Hologymnosus annulatus</i>	0.000	0.836	0.000	NA	0.000	0.000	14	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Hologymnosus sp.</i>	0.000	0.836	0.000	NA	0.000	0.000	17	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Labrichthys unilineatus</i>	0.000	0.836	0.000	NA	0.000	0.000	18	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Labropsis manabei</i>	0.000	0.836	0.000	NA	0.000	0.000	20	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Labropsis xanthonota</i>	0.000	0.836	0.000	NA	0.000	0.000	22	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Macropharyngodon meleagris</i>	0.034	0.836	0.067	0.506	0.046	0.030	23	1.000	0.298
Rub/EAM vs A.CR/A.RF	<i>Macropharyngodon negrosensis</i>	0.000	0.836	0.000	NA	0.000	0.000	24	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Novaculichthys taeniourus</i>	0.031	0.836	0.065	0.477	0.054	0.012	25	1.000	0.099
Rub/EAM vs A.CR/A.RF	<i>Oxycheilinus celebicus</i>	0.025	0.836	0.087	0.288	0.050	0.000	29	1.000	0.216
Rub/EAM vs A.CR/A.RF	<i>Oxycheilinus digramma</i>	0.074	0.836	0.075	0.995	0.135	0.047	32	1.000	0.091
Rub/EAM vs A.CR/A.RF	<i>Oxycheilinus sp.</i>	0.000	0.836	0.000	NA	0.000	0.000	33	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Oxycheilinus unifasciatus</i>	0.000	0.836	0.000	NA	0.000	0.000	34	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Pseudocheilinus hexataenia</i>	0.000	0.836	0.000	NA	0.000	0.000	35	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Pseudodax moluccanus</i>	0.026	0.836	0.086	0.301	0.000	0.051	36	1.000	0.11
Rub/EAM vs A.CR/A.RF	<i>Stethojulis bandanensis</i>	0.012	0.836	0.042	0.288	0.024	0.000	38	1.000	0.532
Rub/EAM vs A.CR/A.RF	<i>Stethojulis interrupta</i>	0.027	0.836	0.068	0.404	0.055	0.000	42	1.000	0.17
Rub/EAM vs A.CR/A.RF	<i>Stethojulis strigiventer</i>	0.000	0.836	0.000	NA	0.000	0.000	43	1.000	1

Rub/EAM vs A.CR/A.RF	<i>Thalassoma amblycephalum</i>	0.000	0.836	0.000	NA	0.000	0.000	44	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Thalassoma hardwicke</i>	0.052	0.836	0.093	0.567	0.000	0.105	48	1.000	0.091
Rub/EAM vs A.CR/A.RF	<i>Thalassoma janseni</i>	0.000	0.836	0.000	NA	0.000	0.000	49	1.000	1
Rub/EAM vs A.CR/A.RF	<i>Thalassoma lunare</i>	0.069	0.836	0.050	1.361	0.193	0.173	51	1.000	0.002
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral.A.MA vs A.SG/Soft Coral	<i>Anampses caeruleopunctatus</i>	0.002	0.800	0.011	0.180	0.004	0.000	41	0.077	0.55
Coral.A.MA vs A.SG/Soft Coral	<i>Anampses meleagrides</i>	0.002	0.800	0.013	0.180	0.005	0.000	6	0.144	0.797
Coral.A.MA vs A.SG/Soft Coral	<i>Anampses sp.</i>	0.008	0.800	0.028	0.277	0.000	0.015	14	0.207	1
Coral.A.MA vs A.SG/Soft Coral	<i>Anampses twistii</i>	0.018	0.800	0.054	0.340	0.024	0.014	50	0.265	0.16
Coral.A.MA vs A.SG/Soft Coral	<i>Bodianus dictynna</i>	0.000	0.800	0.000	NA	0.000	0.000	15	0.319	1
Coral.A.MA vs A.SG/Soft Coral	<i>Bodianus mesothorax</i>	0.054	0.800	0.043	1.253	0.106	0.016	11	0.370	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Bodianus sp.</i>	0.002	0.800	0.013	0.180	0.005	0.000	12	0.419	0.526
Coral.A.MA vs A.SG/Soft Coral	<i>Cheilinus chlorourus</i>	0.018	0.800	0.044	0.414	0.013	0.026	34	0.466	0.902
Coral.A.MA vs A.SG/Soft Coral	<i>Cheilinus fasciatus</i>	0.012	0.800	0.037	0.331	0.000	0.025	21	0.507	0.854
Coral.A.MA vs A.SG/Soft Coral	<i>Cheilinus oxycephalus</i>	0.016	0.800	0.032	0.497	0.029	0.004	52	0.546	0.043
Coral.A.MA vs A.SG/Soft Coral	<i>Cheilinus trilobatus</i>	0.041	0.800	0.065	0.639	0.007	0.079	28	0.580	0.311
Coral.A.MA vs A.SG/Soft Coral	<i>Cheilio inermis</i>	0.039	0.800	0.063	0.618	0.008	0.075	37	0.611	0.032
Coral.A.MA vs A.SG/Soft Coral	<i>Choerodon anchorago</i>	0.003	0.800	0.014	0.180	0.005	0.000	26	0.637	0.547
Coral.A.MA vs A.SG/Soft Coral	<i>Choerodon sp.</i>	0.050	0.800	0.064	0.785	0.000	0.100	17	0.661	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Coris batuensis</i>	0.043	0.800	0.055	0.772	0.014	0.081	4	0.684	0.244
Coral.A.MA vs A.SG/Soft Coral	<i>Coris gaimard</i>	0.008	0.800	0.025	0.321	0.010	0.007	8	0.706	0.999
Coral.A.MA vs A.SG/Soft Coral	<i>Epibulus brevis</i>	0.019	0.800	0.045	0.429	0.018	0.023	25	0.729	0.01
Coral.A.MA vs A.SG/Soft Coral	<i>Epibulus insidiator</i>	0.005	0.800	0.020	0.257	0.010	0.000	27	0.749	0.295
Coral.A.MA vs A.SG/Soft Coral	<i>Gomphosus varius</i>	0.012	0.800	0.028	0.422	0.024	0.000	10	0.769	0.684
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres chrysus</i>	0.000	0.800	0.000	NA	0.000	0.000	30	0.787	1
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres hortulanus</i>	0.033	0.800	0.046	0.716	0.048	0.031	46	0.805	0.795
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres marginatus</i>	0.007	0.800	0.027	0.257	0.014	0.000	23	0.822	0.306
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres melanurus</i>	0.014	0.800	0.030	0.465	0.015	0.016	31	0.838	0.014
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres nigrescens</i>	0.003	0.800	0.015	0.180	0.005	0.000	9	0.854	0.566
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres podostigma</i>	0.018	0.800	0.035	0.509	0.013	0.027	19	0.869	0.008
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres prosopeion</i>	0.021	0.800	0.042	0.498	0.022	0.024	39	0.881	0.205

Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres richmondi</i>	0.016	0.800	0.043	0.370	0.013	0.021	47	0.892	0.156
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres scapularis</i>	0.027	0.800	0.049	0.552	0.000	0.054	16	0.902	0.743
Coral.A.MA vs A.SG/Soft Coral	<i>Halichoeres sp.</i>	0.005	0.800	0.021	0.258	0.011	0.000	3	0.912	0.302
Coral.A.MA vs A.SG/Soft Coral	<i>Hemigymnus fasciatus</i>	0.015	0.800	0.033	0.449	0.029	0.000	36	0.921	0.629
Coral.A.MA vs A.SG/Soft Coral	<i>Hemigymnus melapterus</i>	0.013	0.800	0.030	0.424	0.025	0.000	40	0.930	0.967
Coral.A.MA vs A.SG/Soft Coral	<i>Hologymnosus annulatus</i>	0.003	0.800	0.016	0.192	0.000	0.006	22	0.938	0.251
Coral.A.MA vs A.SG/Soft Coral	<i>Hologymnosus sp.</i>	0.002	0.800	0.012	0.192	0.000	0.005	29	0.945	0.894
Coral.A.MA vs A.SG/Soft Coral	<i>Labrichthys unilineatus</i>	0.038	0.800	0.042	0.900	0.074	0.007	44	0.952	0.001
Coral.A.MA vs A.SG/Soft Coral	<i>Labropsis manabei</i>	0.003	0.800	0.016	0.180	0.006	0.000	18	0.958	0.533
Coral.A.MA vs A.SG/Soft Coral	<i>Labropsis xanthonota</i>	0.007	0.800	0.026	0.277	0.000	0.014	42	0.963	0.059
Coral.A.MA vs A.SG/Soft Coral	<i>Macropharyngodon meleagris</i>	0.025	0.800	0.040	0.621	0.042	0.013	48	0.968	0.695
Coral.A.MA vs A.SG/Soft Coral	<i>Macropharyngodon negrosensis</i>	0.004	0.800	0.019	0.192	0.000	0.007	38	0.973	0.425
Coral.A.MA vs A.SG/Soft Coral	<i>Novaculichthys taeniourus</i>	0.010	0.800	0.030	0.335	0.000	0.020	32	0.977	0.873
Coral.A.MA vs A.SG/Soft Coral	<i>Oxycheilinus celebicus</i>	0.007	0.800	0.025	0.277	0.000	0.014	35	0.980	0.589
Coral.A.MA vs A.SG/Soft Coral	<i>Oxycheilinus digramma</i>	0.062	0.800	0.045	1.368	0.138	0.116	24	0.983	0.629
Coral.A.MA vs A.SG/Soft Coral	<i>Oxycheilinus sp.</i>	0.004	0.800	0.017	0.257	0.009	0.000	13	0.986	0.314
Coral.A.MA vs A.SG/Soft Coral	<i>Oxycheilinus unifasciatus</i>	0.000	0.800	0.000	NA	0.000	0.000	33	0.989	1
Coral.A.MA vs A.SG/Soft Coral	<i>Pseudocheilinus hexataenia</i>	0.005	0.800	0.021	0.256	0.011	0.000	2	0.992	0.305
Coral.A.MA vs A.SG/Soft Coral	<i>Pseudodax moluccanus</i>	0.000	0.800	0.000	NA	0.000	0.000	7	0.995	1
Coral.A.MA vs A.SG/Soft Coral	<i>Stethojulis bandanensis</i>	0.015	0.800	0.035	0.414	0.029	0.000	1	0.998	0.297
Coral.A.MA vs A.SG/Soft Coral	<i>Stethojulis interrupta</i>	0.009	0.800	0.032	0.277	0.000	0.018	49	1.000	0.918
Coral.A.MA vs A.SG/Soft Coral	<i>Stethojulis strigiventer</i>	0.004	0.800	0.021	0.180	0.007	0.000	5	1.000	0.547
Coral.A.MA vs A.SG/Soft Coral	<i>Thalassoma amblycephalum</i>	0.002	0.800	0.010	0.180	0.004	0.000	20	1.000	0.559
Coral.A.MA vs A.SG/Soft Coral	<i>Thalassoma hardwicke</i>	0.046	0.800	0.042	1.102	0.093	0.000	43	1.000	0.008
Coral.A.MA vs A.SG/Soft Coral	<i>Thalassoma janseni</i>	0.000	0.800	0.000	NA	0.000	0.000	45	1.000	1
Coral.A.MA vs A.SG/Soft Coral	<i>Thalassoma lunare</i>	0.031	0.800	0.025	1.266	0.113	0.141	51	1.000	1
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
Coral/A.MA vs A.CR/A.RF	<i>Anampses caeruleopunctatus</i>	0.002	0.807	0.011	0.179	0.004	0.000	41	0.091	0.416
Coral/A.MA vs A.CR/A.RF	<i>Anampses meleagrides</i>	0.002	0.807	0.013	0.179	0.005	0.000	50	0.178	0.686
Coral/A.MA vs A.CR/A.RF	<i>Anampses sp.</i>	0.005	0.807	0.017	0.301	0.000	0.010	52	0.258	0.997
Coral/A.MA vs A.CR/A.RF	<i>Anampses twistii</i>	0.022	0.807	0.053	0.413	0.024	0.023	6	0.334	0.165

Coral/A.MA vs A.CR/A.RF	<i>Bodianus dictynna</i>	0.037	0.807	0.086	0.426	0.000	0.074	16	0.395	0.014
Coral/A.MA vs A.CR/A.RF	<i>Bodianus mesothorax</i>	0.062	0.807	0.052	1.200	0.106	0.084	21	0.455	0.006
Coral/A.MA vs A.CR/A.RF	<i>Bodianus sp.</i>	0.002	0.807	0.013	0.179	0.005	0.000	5	0.501	0.384
Coral/A.MA vs A.CR/A.RF	<i>Cheilinus chlorourus</i>	0.020	0.807	0.053	0.381	0.013	0.030	34	0.546	0.715
Coral/A.MA vs A.CR/A.RF	<i>Cheilinus fasciatus</i>	0.023	0.807	0.077	0.301	0.000	0.046	37	0.586	0.295
Coral/A.MA vs A.CR/A.RF	<i>Cheilinus oxycephalus</i>	0.014	0.807	0.031	0.460	0.029	0.000	19	0.625	0.223
Coral/A.MA vs A.CR/A.RF	<i>Cheilinus trilobatus</i>	0.009	0.807	0.023	0.395	0.007	0.012	45	0.657	0.997
Coral/A.MA vs A.CR/A.RF	<i>Cheilio inermis</i>	0.021	0.807	0.060	0.346	0.008	0.035	9	0.685	0.736
Coral/A.MA vs A.CR/A.RF	<i>Choerodon anchorago</i>	0.003	0.807	0.014	0.179	0.005	0.000	4	0.712	0.414
Coral/A.MA vs A.CR/A.RF	<i>Choerodon sp.</i>	0.000	0.807	0.000	NA	0.000	0.000	12	0.738	1
Coral/A.MA vs A.CR/A.RF	<i>Coris batuensis</i>	0.007	0.807	0.022	0.315	0.014	0.000	8	0.763	1
Coral/A.MA vs A.CR/A.RF	<i>Coris gaimard</i>	0.049	0.807	0.073	0.666	0.010	0.094	30	0.786	0.017
Coral/A.MA vs A.CR/A.RF	<i>Epibulus brevis</i>	0.009	0.807	0.024	0.377	0.018	0.000	26	0.807	0.557
Coral/A.MA vs A.CR/A.RF	<i>Epibulus insidiator</i>	0.005	0.807	0.020	0.257	0.010	0.000	27	0.827	0.294
Coral/A.MA vs A.CR/A.RF	<i>Gomphosus varius</i>	0.031	0.807	0.055	0.567	0.024	0.046	46	0.845	0.018
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres chrysus</i>	0.000	0.807	0.000	NA	0.000	0.000	10	0.863	1
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres hortulanus</i>	0.048	0.807	0.060	0.810	0.048	0.078	31	0.879	0.074
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres marginatus</i>	0.007	0.807	0.027	0.256	0.014	0.000	11	0.890	0.302
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres melanurus</i>	0.008	0.807	0.024	0.317	0.015	0.000	17	0.901	0.527
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres nigrescens</i>	0.003	0.807	0.015	0.179	0.005	0.000	23	0.911	0.411
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres podostigma</i>	0.006	0.807	0.020	0.317	0.013	0.000	15	0.919	0.796
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres prosopeion</i>	0.017	0.807	0.035	0.475	0.022	0.015	22	0.928	0.46
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres richmondi</i>	0.016	0.807	0.041	0.394	0.013	0.022	25	0.936	0.238
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres scapularis</i>	0.000	0.807	0.000	NA	0.000	0.000	39	0.943	1
Coral/A.MA vs A.CR/A.RF	<i>Halichoeres sp.</i>	0.005	0.807	0.021	0.258	0.011	0.000	29	0.950	0.316
Coral/A.MA vs A.CR/A.RF	<i>Hemigymnus fasciatus</i>	0.019	0.807	0.035	0.540	0.029	0.012	44	0.957	0.33
Coral/A.MA vs A.CR/A.RF	<i>Hemigymnus melapterus</i>	0.013	0.807	0.030	0.423	0.025	0.000	3	0.963	0.884
Coral/A.MA vs A.CR/A.RF	<i>Hologymnosus annulatus</i>	0.000	0.807	0.000	NA	0.000	0.000	18	0.970	1
Coral/A.MA vs A.CR/A.RF	<i>Hologymnosus sp.</i>	0.000	0.807	0.000	NA	0.000	0.000	42	0.975	1
Coral/A.MA vs A.CR/A.RF	<i>Labrichthys unilineatus</i>	0.037	0.807	0.042	0.879	0.074	0.000	48	0.980	0.017
Coral/A.MA vs A.CR/A.RF	<i>Labropsis manabei</i>	0.003	0.807	0.016	0.179	0.006	0.000	35	0.983	0.412

Coral/A.MA vs A.CR/A.RF	<i>Labropsis xanthonota</i>	0.000	0.807	0.000	NA	0.000	0.000	24	0.986	1
Coral/A.MA vs A.CR/A.RF	<i>Macropharyngodon meleagris</i>	0.032	0.807	0.053	0.607	0.042	0.030	13	0.990	0.293
Coral/A.MA vs A.CR/A.RF	<i>Macropharyngodon negrosensis</i>	0.000	0.807	0.000	NA	0.000	0.000	2	0.992	1
Coral/A.MA vs A.CR/A.RF	<i>Novaculichthys taeniourus</i>	0.006	0.807	0.021	0.301	0.000	0.012	7	0.995	0.902
Coral/A.MA vs A.CR/A.RF	<i>Oxycheilinus celebicus</i>	0.000	0.807	0.000	NA	0.000	0.000	1	0.998	1
Coral/A.MA vs A.CR/A.RF	<i>Oxycheilinus digramma</i>	0.073	0.807	0.052	1.418	0.138	0.047	49	1.000	0.071
Coral/A.MA vs A.CR/A.RF	<i>Oxycheilinus sp.</i>	0.004	0.807	0.017	0.257	0.009	0.000	14	1.000	0.314
Coral/A.MA vs A.CR/A.RF	<i>Oxycheilinus unifasciatus</i>	0.000	0.807	0.000	NA	0.000	0.000	20	1.000	1
Coral/A.MA vs A.CR/A.RF	<i>Pseudocheilinus hexataenia</i>	0.005	0.807	0.021	0.255	0.011	0.000	28	1.000	0.302
Coral/A.MA vs A.CR/A.RF	<i>Pseudodax moluccanus</i>	0.026	0.807	0.085	0.301	0.000	0.051	32	1.000	0.11
Coral/A.MA vs A.CR/A.RF	<i>Stethojulis bandanensis</i>	0.015	0.807	0.035	0.414	0.029	0.000	33	1.000	0.334
Coral/A.MA vs A.CR/A.RF	<i>Stethojulis interrupta</i>	0.000	0.807	0.000	NA	0.000	0.000	36	1.000	1
Coral/A.MA vs A.CR/A.RF	<i>Stethojulis strigiventer</i>	0.004	0.807	0.021	0.179	0.007	0.000	38	1.000	0.388
Coral/A.MA vs A.CR/A.RF	<i>Thalassoma amblycephalum</i>	0.002	0.807	0.010	0.179	0.004	0.000	40	1.000	0.423
Coral/A.MA vs A.CR/A.RF	<i>Thalassoma hardwicke</i>	0.071	0.807	0.073	0.966	0.093	0.105	43	1.000	0.001
Coral/A.MA vs A.CR/A.RF	<i>Thalassoma janseni</i>	0.000	0.807	0.000	NA	0.000	0.000	47	1.000	1
Coral/A.MA vs A.CR/A.RF	<i>Thalassoma lunare</i>	0.064	0.807	0.045	1.418	0.113	0.173	51	1.000	0.001
Comparison	species	average	overall	sd	ratio	ava	avb	ord	cusum	p
A.SG/Soft Coral vs A.CR/A.RF	<i>Anampses caeruleopunctatus</i>	0.000	0.851	0.000	NA	0.000	0.000	41	0.078	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Anampses meleagrides</i>	0.000	0.851	0.000	NA	0.000	0.000	52	0.148	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Anampses sp.</i>	0.012	0.851	0.031	0.398	0.015	0.010	50	0.209	0.952
A.SG/Soft Coral vs A.CR/A.RF	<i>Anampses twistii</i>	0.018	0.851	0.050	0.353	0.014	0.023	14	0.268	0.324
A.SG/Soft Coral vs A.CR/A.RF	<i>Bodianus dictynna</i>	0.037	0.851	0.086	0.426	0.000	0.074	12	0.326	0.016
A.SG/Soft Coral vs A.CR/A.RF	<i>Bodianus mesothorax</i>	0.045	0.851	0.067	0.678	0.016	0.084	16	0.382	0.29
A.SG/Soft Coral vs A.CR/A.RF	<i>Bodianus sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	21	0.437	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Cheilinus chlorourus</i>	0.026	0.851	0.057	0.449	0.026	0.030	6	0.490	0.474
A.SG/Soft Coral vs A.CR/A.RF	<i>Cheilinus fasciatus</i>	0.033	0.851	0.079	0.421	0.025	0.046	11	0.540	0.094
A.SG/Soft Coral vs A.CR/A.RF	<i>Cheilinus oxycephalus</i>	0.002	0.851	0.012	0.192	0.004	0.000	15	0.587	0.969
A.SG/Soft Coral vs A.CR/A.RF	<i>Cheilinus trilobatus</i>	0.042	0.851	0.064	0.658	0.079	0.012	5	0.631	0.349
A.SG/Soft Coral vs A.CR/A.RF	<i>Cheilio inermis</i>	0.049	0.851	0.074	0.663	0.075	0.035	9	0.670	0.026
A.SG/Soft Coral vs A.CR/A.RF	<i>Choerodon anchorago</i>	0.000	0.851	0.000	NA	0.000	0.000	28	0.701	1

A.SG/Soft Coral vs A.CR/A.RF	<i>Choerodon sp.</i>	0.050	0.851	0.064	0.784	0.100	0.000	45	0.732	0.01
A.SG/Soft Coral vs A.CR/A.RF	<i>Coris batuensis</i>	0.041	0.851	0.057	0.711	0.081	0.000	8	0.762	0.368
A.SG/Soft Coral vs A.CR/A.RF	<i>Coris gaimard</i>	0.048	0.851	0.074	0.653	0.007	0.094	19	0.789	0.021
A.SG/Soft Coral vs A.CR/A.RF	<i>Epibulus brevis</i>	0.012	0.851	0.043	0.272	0.023	0.000	37	0.813	0.463
A.SG/Soft Coral vs A.CR/A.RF	<i>Epibulus insidiator</i>	0.000	0.851	0.000	NA	0.000	0.000	27	0.836	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Gomphosus varius</i>	0.023	0.851	0.055	0.419	0.000	0.046	26	0.857	0.102
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres chrysus</i>	0.000	0.851	0.000	NA	0.000	0.000	4	0.878	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres hortulanus</i>	0.046	0.851	0.064	0.723	0.031	0.078	39	0.896	0.111
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres marginatus</i>	0.000	0.851	0.000	NA	0.000	0.000	25	0.911	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres melanurus</i>	0.008	0.851	0.023	0.338	0.016	0.000	3	0.926	0.534
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres nigrescens</i>	0.000	0.851	0.000	NA	0.000	0.000	17	0.939	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres podostigma</i>	0.013	0.851	0.033	0.399	0.027	0.000	47	0.950	0.362
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres prosopeion</i>	0.018	0.851	0.040	0.450	0.024	0.015	23	0.959	0.402
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres richmondi</i>	0.020	0.851	0.048	0.407	0.021	0.022	36	0.967	0.143
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres scapularis</i>	0.027	0.851	0.049	0.552	0.054	0.000	40	0.976	0.653
A.SG/Soft Coral vs A.CR/A.RF	<i>Halichoeres sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	30	0.983	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Hemigymnus fasciatus</i>	0.006	0.851	0.020	0.301	0.000	0.012	38	0.987	0.945
A.SG/Soft Coral vs A.CR/A.RF	<i>Hemigymnus melapterus</i>	0.000	0.851	0.000	NA	0.000	0.000	34	0.991	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Hologymnosus annulatus</i>	0.003	0.851	0.016	0.192	0.006	0.000	32	0.995	0.37
A.SG/Soft Coral vs A.CR/A.RF	<i>Hologymnosus sp.</i>	0.002	0.851	0.012	0.192	0.005	0.000	33	0.997	0.774
A.SG/Soft Coral vs A.CR/A.RF	<i>Labrichthys unilineatus</i>	0.003	0.851	0.018	0.192	0.007	0.000	10	1.000	0.998
A.SG/Soft Coral vs A.CR/A.RF	<i>Labropsis manabei</i>	0.000	0.851	0.000	NA	0.000	0.000	1	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Labropsis xanthonota</i>	0.007	0.851	0.026	0.276	0.014	0.000	2	1.000	0.283
A.SG/Soft Coral vs A.CR/A.RF	<i>Macropharyngodon meleagris</i>	0.020	0.851	0.052	0.393	0.013	0.030	7	1.000	0.798
A.SG/Soft Coral vs A.CR/A.RF	<i>Macropharyngodon negrosensis</i>	0.004	0.851	0.019	0.192	0.007	0.000	13	1.000	0.469
A.SG/Soft Coral vs A.CR/A.RF	<i>Novaculichthys taeniourus</i>	0.015	0.851	0.034	0.446	0.020	0.012	18	1.000	0.474
A.SG/Soft Coral vs A.CR/A.RF	<i>Oxycheilinus celebicus</i>	0.007	0.851	0.025	0.277	0.014	0.000	20	1.000	0.549
A.SG/Soft Coral vs A.CR/A.RF	<i>Oxycheilinus digramma</i>	0.066	0.851	0.065	1.023	0.116	0.047	22	1.000	0.308
A.SG/Soft Coral vs A.CR/A.RF	<i>Oxycheilinus sp.</i>	0.000	0.851	0.000	NA	0.000	0.000	24	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Oxycheilinus unifasciatus</i>	0.000	0.851	0.000	NA	0.000	0.000	29	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Pseudocheilinus hexataenia</i>	0.000	0.851	0.000	NA	0.000	0.000	31	1.000	1

A.SG/Soft Coral vs A.CR/A.RF	<i>Pseudodax moluccanus</i>	0.026	0.851	0.085	0.301	0.000	0.051	35	1.000	0.11
A.SG/Soft Coral vs A.CR/A.RF	<i>Stethojulis bandanensis</i>	0.000	0.851	0.000	NA	0.000	0.000	42	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Stethojulis interrupta</i>	0.009	0.851	0.032	0.277	0.018	0.000	43	1.000	0.818
A.SG/Soft Coral vs A.CR/A.RF	<i>Stethojulis strigiventer</i>	0.000	0.851	0.000	NA	0.000	0.000	44	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Thalassoma amblycephalum</i>	0.000	0.851	0.000	NA	0.000	0.000	46	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Thalassoma hardwicke</i>	0.052	0.851	0.093	0.567	0.000	0.105	48	1.000	0.059
A.SG/Soft Coral vs A.CR/A.RF	<i>Thalassoma jansinii</i>	0.000	0.851	0.000	NA	0.000	0.000	49	1.000	1
A.SG/Soft Coral vs A.CR/A.RF	<i>Thalassoma lunare</i>	0.059	0.851	0.039	1.512	0.141	0.173	51	1.000	0.019