

S2 Data. SIMPER analysis for studies. Results of Similarity Percentages test within the sampling group by average abundance of discriminating species by their contribution to the similarity between groups, and the cumulative total (%) of contributions by zones: before the 1990s (RF before 1990s: A1, HG before 1990s: A2), sampling groups by zones for 2019 (RF 2019: B1, HG 2019: B2) and a comparison (Dissimilarities) between the two groups in every period (RF and HG before 1990s: C1, RF and HG 2019: C2). RF: Reef front or accretionary zone; HG: Coral hard ground or non-accretionary zone. Av.Abund: Average Abundance; Contrib%: spp. contribution in percentages; Cum.%: cumulative total (%) of contributions (70% cut-off); Av.Diss: average dissimilarities. SD: standard deviation of data

One-Way Analysis

Data worksheet

Name: Square Root Transformed Data

Data type: Abundance

Sample selection: All

Variable selection: All

Parameters

Resemblance: S17 Bray-Curtis similarity

Cut off for low contributions: 70.00%

Factor Groups

Sample Zone

A1_Group RF Before 1990s

Average similarity: 52.8

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
APAL	2.60	16.80	1.77	31.79	31.79
ACER	1.77	12.98	1.59	24.57	56.36
ATEN	1.92	8.05	1.05	15.24	71.61

A2_Group HG Before 1990s

Average similarity: 42.57

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
MCAV	2.00	13.96	1.55	32.79	32.79
DSTO	0.73	5.65	1.50	13.27	46.06
SSID	0.93	5.08	1.15	11.93	58.00
MANN CX	1.18	3.56	0.56	8.36	66.36
AAGA	0.74	3.44	0.81	8.07	74.43

B1_Group RF 2019

Average similarity: 58.35

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
PAST	6.73	24.83	3.14	42.56	42.56
AAGA	3.45	10.33	1.80	17.70	60.26
SSID	3.16	10.29	3.21	17.63	77.89

B2_Group HG 2019

Average similarity: 70.7

Species	Av.Abund	Av.Sim	Sim/SD	Contrib%	Cum.%
AAGA	5.65	18.27	3.50	25.84	25.84
SSID	3.95	12.33	4.71	17.43	43.27
PAST	3.83	12.17	4.16	17.22	60.49
MCAV	3.16	9.45	2.85	13.36	73.86

C1_Groups RF & HG Before 1990s

Average dissimilarity = 77.7

Species	Av.Abund.RF	Av.Abund.HG	Av.Diss	Diss/SD	Contrib%	Cum.%
APAL	2.60	0.04	12.19	2.28	15.69	15.69
MCAV	0.15	2.00	9.16	1.94	11.78	27.47
ATEN	1.92	0.00	8.78	1.23	11.29	38.76
ACER	1.77	0.66	6.93	1.39	8.92	47.69
MANN CX	0.92	1.18	5.95	1.21	7.65	55.34
SSID	0.51	0.93	4.16	1.24	5.35	60.69
PAST	0.81	0.58	3.98	1.25	5.13	65.81
DSTO	0.00	0.73	3.68	1.94	4.74	70.55
APAL	2.60	0.04	12.19	2.28	15.69	15.69
MCAV	0.15	2.00	9.16	1.94	11.78	27.47

C2_Groups RF & HG 2019

Average dissimilarity = 47.41

Group _HG 2019 Group _RF 2019

Species	Av.Abund.RF	Av.Abund.HG	Av.Diss	Diss/SD	Contrib%	Cum.%
PAST	3.83	6.73	6.14	1.54	12.96	12.96
MCAV	3.16	0.30	5.76	2.32	12.15	25.11
AAGA	5.65	3.45	5.14	1.30	10.84	35.95
ATEN	0.79	2.09	4.09	1.29	8.62	44.57
PSTR	2.11	0.57	3.35	1.76	7.07	51.64
PPOR	2.27	2.12	3.20	1.30	6.74	58.38
SSID	3.95	3.16	2.89	1.43	6.10	64.48