

Macroalgal biomass, growth rates, and diversity are influenced by submarine groundwater discharge and local hydrodynamics in tropical reefs

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Supplemental Tables

Supplemental Table S1. Herbivory and growth experiment results by site and species. A two way ANOVA was run with zone and herbivory treatment as main factors, including an interaction between zone and herbivory treatment. F-ratio (F), degrees of freedom (df), and p value (p) are presented in the table.

Species	Site	Factor: F (df), p
<i>Acanthophora spicifera</i>	Black Point	Zone: 32.16 (3), 0.029* Treatment: 2.06 (2), 0.134 Zone*Treatment: 22.57 (5), 0.101
	Wailupe	Zone: 41.66 (3), 0.019* Treatment: 5.20 (2), 0.381 Zone*Treatment: 4.87 (5), 0.346
<i>Avrainvillea amadelpha</i>	Black Point	Zone: 1.45 (3), 0.562 Treatment: 0.433 (2), 0.894 Zone*Treatment: 0.938 (5), 0.722
	Wailupe	Zone: 30.01 (3), 0.059 Treatment: 4.05 (2), 0.284 Zone*Treatment: 16.73 (5), 0.221
<i>Bryopsis pennata</i>	Black Point	Zone: 82.09 (3), 0.006* Treatment: 2.19 (2), 0.831 Zone*Treatment: 6.2 (5), 0.601
<i>Gracilaria salicornia</i>	Wailupe	Zone: 95.77 (3), 0.001* Treatment: 10.95 (2), 0.420 Zone*Treatment: 14.20 (5), 0.291
<i>Halimeda discoidea</i>	Black Point	Zone: 6.72 (3), 0.678 Treatment: 16.12 (2), 0.221 Zone*Treatment: 4.12 (5), 0.599
	Wailupe	Zone: 26.23 (3), 0.039* Treatment: 3.08 (2), 0.495 Zone*Treatment: 6.10 (5), 0.319

Supplemental Table S2. Pearson's correlation matrix for predictors in GAMs. The output includes correlation coefficients (cor), degrees of freedom (df), and p values.

	SGD	Wind exposure	Wave exposure
Depth	cor = -0.080 df = 80 p = 0.477	cor = -0.127 df = 80 p = 0.460	cor = 0.046 df = 80 p = 0.682
Wave exposure	cor = -0.094 df = 80 p = 0.340	cor = 0.103 df = 80 p = 0.494	
Wind exposure	cor = -0.143 df = 80 p = 0.342		