

Comparing the community structure of *Bacteria* and micro-*Eukarya* from the Hawaiian anchialine ecosystem during wet and dry seasons

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Table S1. Environmental variable (vectors and factors) correlations with NMDS ordination of anchialine microbial community composition from anchialine habitats on the islands of Maui and Hawaii. Significance at $P < 0.05$ based on 999 permutations is indicated by asterisks.

Environmental Variables		V6	Pr(>r)	V9	Pr(>r)
		r^2		r^2	
Vectors	Annual Rainfall	0.6884*	0.001	0.5953*	0.001
	Sample Month Rainfall	0.4260*	0.001	0.3302*	0.001
	15 Month Prior Rainfall	0.1119*	0.001	0.0870*	0.001
	Mean Annual Solar Radiation	0.6709*	0.001	0.5123*	0.001
	Salinity	0.6672*	0.001	0.4611*	0.001
	Nitrite & Nitrate	0.6402*	0.001	0.5114*	0.001
	Phosphate	0.2221*	0.001	0.1870*	0.001
	Si	0.6333*	0.001	0.5214*	0.001
	Ammonium	0.4371*	0.001	0.4094*	0.001
	DOC	0.3550*	0.001	0.2819*	0.001
	TDN	0.5968*	0.001	0.4597*	0.001
	TDP	0.2263*	0.001	0.1978*	0.001
	Latitude	0.8199*	0.001	0.7539*	0.001
	Longitude	0.9029*	0.001	0.6925*	0.001
Factors	Site	0.8157*	0.001	0.7186*	0.001
	Island	0.3583*	0.001	0.2343*	0.001
	Season	0.0157*	0.028	0.0110	0.109
	Season Type	0.0045	0.115	0.0030	0.246
	Fish Presence	0.4524*	0.001	0.2701*	0.001
	Goat Presence	0.2684*	0.001	0.2032*	0.001
	Public Accessibility	0.4346*	0.001	0.2634*	0.001
	Sample Type	0.1593*	0.001	0.2242*	0.001
	DLNR Aquifer	0.7807*	0.001	0.6352*	0.001
	Watershed	0.7976*	0.001	0.6679*	0.001
	Potential Warm Groundwater	0.2684*	0.001	0.2032*	0.001



Fig. S1. Relative abundance of phyla identified in samples grouped by site, habitat type (i.e., benthic material vs. water column), and season (i.e., wet vs. dry) using **a** *Bacteria*-specific V6 rRNA **b** *Eukarya*-biased V9 rRNA from anchialine habitats on the islands of Maui and Hawaii.

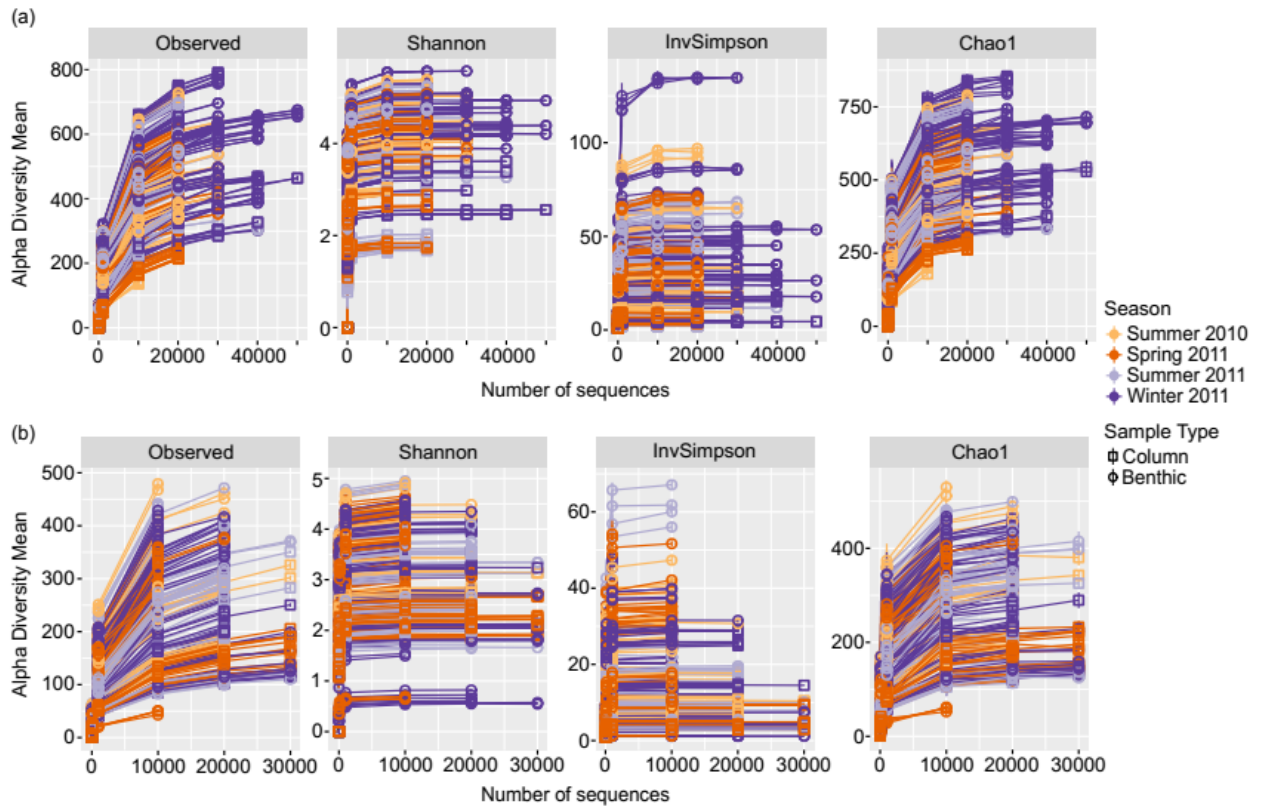


Fig. S2. Diversity estimates, in particular the number of observed OTUs, Shannon diversity, Inverse Simpson diversity, and Chao1 diversity, of **a** *Bacteria*-specific V6 rRNA, and **b** *Eukarya*-biased V9 rRNA from anchialine habitats on the islands of Maui and Hawaii. Samples were grouped by benthic material and water column communities within sites and sampling date, with collections in July of 2010, and March, July, and December of 2011.

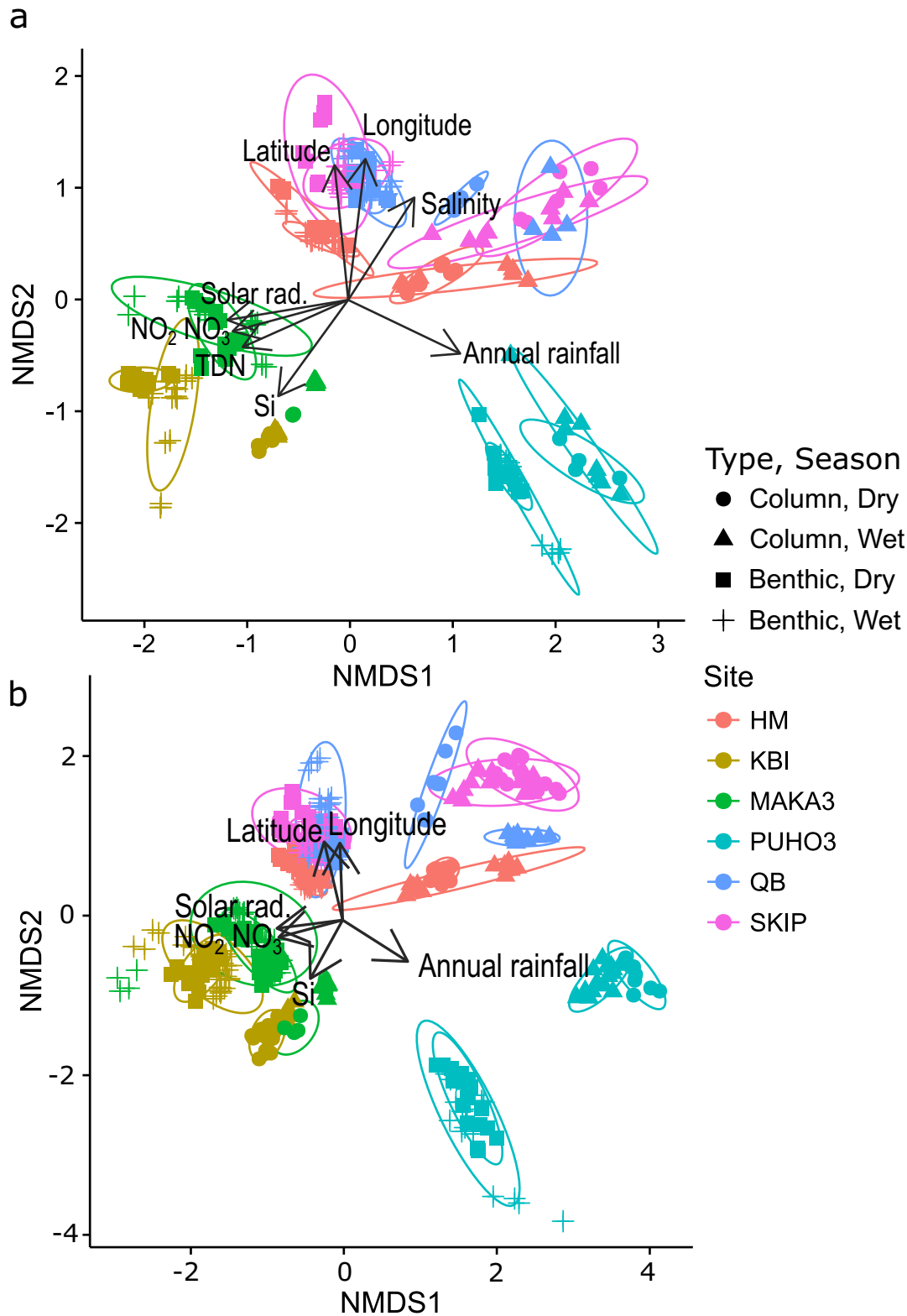


Fig. S3. Non-metric Multidimensional Scaling (NMDS) ordination using the Jaccard Dissimilarity Coefficient of samples grouped by benthic material or water column microbial communities within seasons (i.e., wet vs. dry) and sites from anchialine habitats on the islands of Maui and Hawaii. Ellipses represent 95% confidence intervals grouping samples by benthic material or water column microbial communities within seasons and anchialine habitats. **a** Samples generated using the *Bacteria*-specific V6 rRNA (stress = 0.1315). **b** Samples generated using the *Eukarya*-biased V9 rRNA (stress = 0.1225).