

Appendix A. Supplemental Material for

Protistan Biogeography: A Snapshot Across A Major Shipping Corridor Spanning Two Oceans

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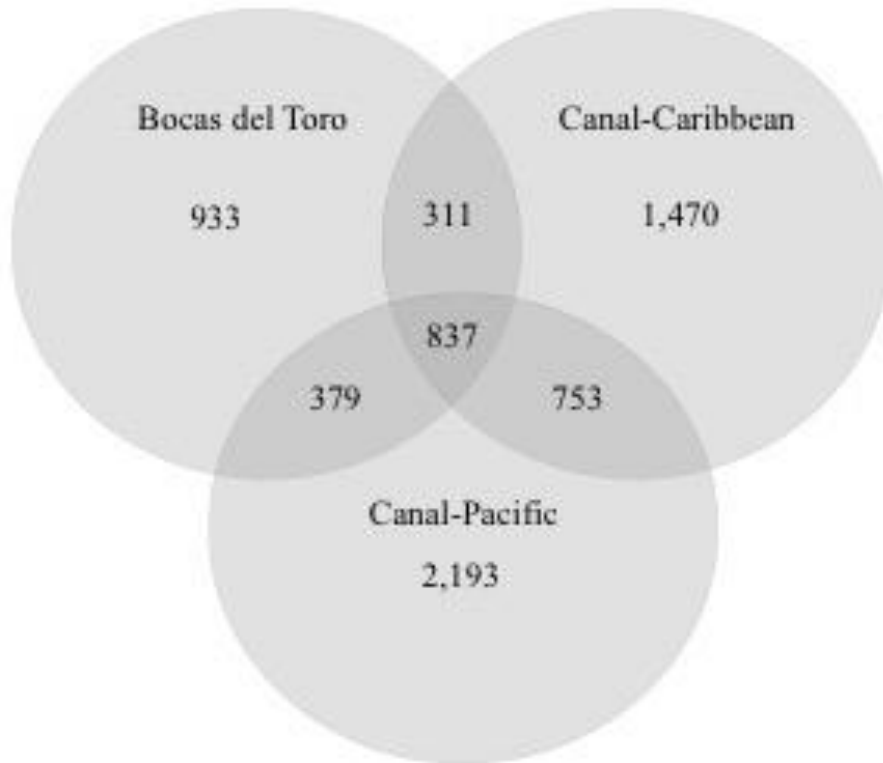
Running title: Protistan Biogeography in Panama

Table A1. Information about location, sample type, number of OTUs and number of sequences for all samples used in this study. Water samples used for diversity calculations indicated with (*) and sediment samples used for diversity calculations indicated with (**). Samples in bold are those that were collected at or near the entrance to the Canal.

Region	Location	Sample	Habitat	Latitude	Longitude	Number of OTUs	Number of Sequences
Bocas del Toro	Casa Blanca/Verde	CVPBT6*	water	N 9°22.342	W 82°16.519	1,031	85,904
	Punta Caracol	PCARPBT1*	water	N 9°23.109	W 82°18.109	768	52,358
		PCARPBT2*	water	N 9°23.109	W 82°18.109	1,244	46,145
	Solarte	PCARPBT3*	water	N 9°23.109	W 82°18.109	851	30,242
		SPBT4	water	N 9°19.023	W 82°11.249	522	22,052
	STRI Dock	DockPBT5*	water	N 9°21.063	W 82°15.443	1,219	113,710
Caribbean-Canal	Ft. Sherman lighthouse	FTSI**	intertidal sediment	N 9° 22.35	W 79°56.914	1,793	123,920
		FTSS**	subtidal sediment	N 9° 22.35	W 79°56.914	990	23,194
		FTSW*	water	N 9° 22.35	W 79°56.914	1,651	59,257
	Ft. Sherman2	FTS2I	intertidal sediment	N 9° 21.048	W 79°56.838	739	6,700
		FTS2S**	subtidal sediment	N 9° 21.048	W 79°56.838	1,583	61,307
		FTS2W*	water	N 9° 21.048	W 79°56.838	1,457	41,787
	Galeta	GALI**	intertidal sediment	N 9°24.18	W 79°51.66	1,274	36,064
		GALS**	subtidal sediment	N 9°24.18	W 79°51.66	1,344	53,296
		GALW*	water	N 9°24.18	W 79°51.66	1,402	63,218
	Gatun-Panama Canal Authority	ACPI	intertidal sediment	N 9° 18.358	W 79°54.948	452	13,481
		ACPW*	water	N 9° 18.358	W 79°54.948	1,340	112,814
	Portobelo	PORS**	subtidal sediment	N 9° 31.024	W 79°41.495	696	41,530
		PORW	water	N 9° 31.024	W 79°41.495	970	29,281
	Rio Alejandro	RAPA2*	water	N 9°22.982	W 79°48.409	645	52,656
	Samba Bonita	SBPA3*	water	N 9°22.658	W 79°49.725	323	33,463
Pacific-Canal	Balboa Yacht Club	BYCW*	water	N 8°56.396	W 79°33.242	1,619	33,769
	Bathroom-Balboa	BATS	subtidal sediment	N 8°55.610	W 79°33.939	285	1,742
		BATW*	water	N 8°55.610	W 79°33.939	1,444	77,404
	Bique Beach	BBPP17*	water	N 8°53.26	W 79°39.41	1,442	77,101
		BBPP18*	water	N 8°53.26	W 79°39.41	810	72,440
	Bique Pond	BPPP16*	water	N 8°53.26	W 79°39.41	1,315	33,753
	Punta Chame	PCHPP21*	water	N 8°36.705	W 79°44.848	1,778	45,942
	Punta Culebra	PCULW	water	N 8°54.72	W 79°31.78	1,166	24,822
	Rio Mar	RMARI	intertidal sediment	not collected		392	5,292
		RMARW*	water	not collected		957	32,111
	Veracruz	VECI1**	intertidal sediment	N 8°53.094	W 79°35.819	643	16,415
		VECI2	intertidal sediment	N 8°53.094	W 79°35.819	578	7,242
		VECS**	subtidal sediment	N 8°53.094	W 79°35.819	796	20,450
	VECW*	water	N 8°53.094	W 79°35.819	760	37,945	
TOTAL						9,048	1,588,807

Figure A1. Shared and unique OTUs in rarified datasets across the three regions sampled.

A. Water



B. Sediment

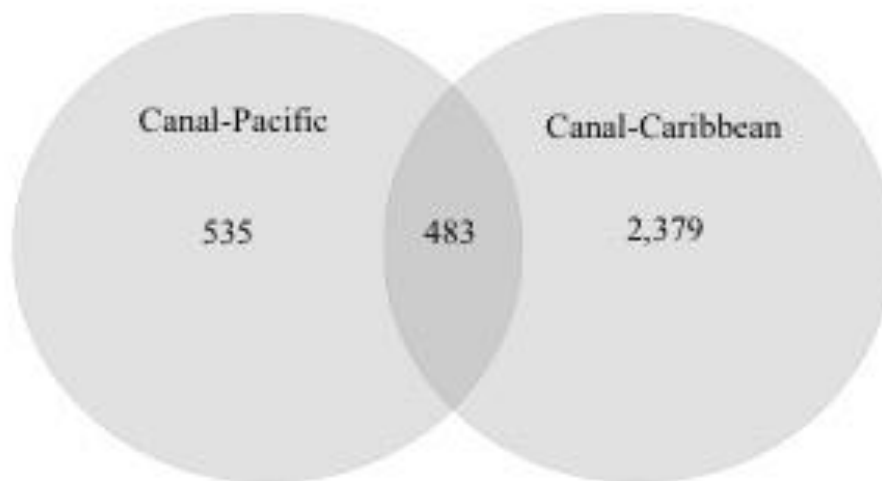


Figure A2. Non-metric multidimensional scaling (NMDS) plot based on the beta diversity analyses using the binary Sorenson Dice index for the (A) water, (B) sediment, and (C) gregarine datasets. In all plots, the samples from the Pacific-Canal are highlighted in blue, samples from the Caribbean-Canal are highlighted in red, and samples from Bocas del Toro are black. See text for additional details

