

Does sediment composition sort kinorhynch communities? An ecomorphological approach through geometric morphometrics

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Supplementary Material

Supplementary Material 1. Information on sampling stations and species and number of specimens per species found in each locality that were used in the present study.

Abbreviations: *n*, number of specimens per species.

Locality	Date	Coordinates	Depth	Species	<i>n</i>
Algeciras Bay 1	11.02.07	36°05.805'N	30	<i>Echinoderes cantabricus</i>	1
		5°26.284'W		<i>Echinoderes hispanicus</i>	4
				<i>Echinoderes sp. 1</i>	6
Algeciras Bay 2	11.02.07	36°07.229'N	24	<i>Echinoderes sp. 1</i>	3
		5°25.114'W			
Algeciras Bay 3	11.02.08	36°09.272'N	12	<i>Echinoderes hispanicus</i>	1
		5°26.296'W		<i>Setaphyes dentatus</i>	8
Algeciras Bay 4	11.02.08	36°10.348'N	16	<i>Dracoderes gallaicus</i>	3
		5°26.464'W			
Algeciras Bay 5	11.02.08	36°10.583'N	25	<i>Echinoderes cantabricus</i>	2
		5°24.620'W			
Algeciras Bay 6	11.02.08	36°10.741'N	8	<i>Echinoderes dujardinii</i>	1
		5°23.243'W		<i>Echinoderes hispanicus</i>	1
				<i>Setaphyes dentatus</i>	3
Algeciras Bay 7	11.02.08	36°09.630'N	12	<i>Echinoderes dujardinii</i>	2
		5°22.256'W		<i>Echinoderes hispanicus</i>	6
Isla Cristina 1	11.04.11	37°11.940'N	2	<i>Echinoderes dujardinii</i>	2
		7°21.236'W		<i>Setaphyes dentatus</i>	1
Isla Cristina 2	11.04.11	37°10.963'N	11	<i>Pycnophyes communis</i>	2
		7°16.549'W		<i>Setaphyes dentatus</i>	6
Isla Cristina 3	11.04.11	37°11.527'N	12	<i>Setaphyes dentatus</i>	5
		7°14.601'W			
Isla Cristina 4	11.04.11	37°12.320'N	4	<i>Setaphyes dentatus</i>	5
		7°20.534'W			
Isla Cristina 5	11.04.11	37°11.887'N	7	<i>Setaphyes dentatus</i>	6
		7°13.019'W			
Isla Cristina 6	11.04.12	37°08.324'N	15	<i>Pycnophyes communis</i>	2
		7°20.308'W			
Cádiz 1	11.11.10	36°33.755'N	13	<i>Leiocanthus lageria</i>	1
		6°18.500'W		<i>Pycnophyes communis</i>	7
				<i>Setaphyes dentatus</i>	2
Cádiz 2	11.11.10	36°35.791'N	10	<i>Setaphyes dentatus</i>	3
		6°17.888'W			

Cádiz 3	11.11.10	36°34.117'N	7	<i>Echinoderes dujardinii</i>	1
		6°15.141'W		<i>Pycnophyes communis</i>	1
				<i>Setaphyes dentatus</i>	1
Cádiz 4	11.11.10	36°32.761'N	11	<i>Echinoderes hispanicus</i>	2
		6°15.141'W		<i>Pycnophyes almansae</i>	1
				<i>Pycnophyes communis</i>	3
				<i>Setaphyes dentatus</i>	1
Cádiz 5	11.11.10	36°32.310'N 6°14.245'W	4	<i>Echinoderes worthingi</i>	1
Cádiz 6	11.11.10	36°31.930'N	4	<i>Echinoderes dujardinii</i>	2
		6°12.960'W		<i>Echinoderes worthingi</i>	1
Cádiz 7	11.11.11	36°31.124'N	11	<i>Echinoderes dujardinii</i>	2
		6°15.692'W		<i>Echinoderes hispanicus</i>	1
				<i>Echinoderes sp. 1</i>	1
Cádiz 8	11.11.11	36°28.304'N 6°10.936'W	4	<i>Echinoderes hispanicus</i>	1
Cádiz 9	11.11.11	36°29.798'N	1	<i>Echinoderes cantabricus</i>	4
		6°12.871'W		<i>Echinoderes hispanicus</i>	1
				<i>Leiocanthus lageria</i>	1
Kingston Harbor 1	76.03.10	17°56.24'N 76°50.00'W	2	<i>Echinoderes imperforatus</i>	1
				<i>Echinoderes parahorni</i>	1
				<i>Echinoderes sp. 2</i>	2
Kingston Harbor 2	76.03.10	17°56.30'N 76°49.12'W	1	<i>Echinoderes parahorni</i>	3
				<i>Echinoderes sp. 2</i>	3
Kingston Harbor 3	76.03.11	17°57.18'N 76°50.24'W	4	<i>Echinoderes astridae</i>	6
				<i>Echinoderes parahorni</i>	3

Supplementary Material 2

Table 1. Granulometry of sediment samples. Abbreviations: *K*, kurtosis; *Sk*, skewness; *X*, average size; σ , sorting.

Sample	Textural group	%Gravel	%Sand	%Mud	<i>X</i>	σ	<i>Sk</i>	<i>K</i>
Algeciras Bay 1	Slightly gravelly sand	0.6	91.6	7.8	229.5	3.488	-0.262	2.103
Algeciras Bay 2	Muddy sandy gravel	66.8	23.5	9.8	1353.9	3.699	-1.644	4.463
Algeciras Bay 3	Slightly gravelly sand	0	93.1	6.9	133.7	3.007	-0.301	2.536
Algeciras Bay 4	Slightly gravelly sandy mud	0	31.2	68.8	10.42	7.011	0.286	0.557
Algeciras Bay 5	Slightly gravelly sandy mud	0	49.9	50.1	23.56	7.072	-0.566	0.519
Algeciras Bay 6	Slightly gravelly sand	0.1	94.9	5	210.5	1.918	-0.273	0.869
Algeciras Bay 7	Gravelly sand	9.5	82.5	7.9	292.3	4.313	0.024	2.254
Cádiz 1	Slightly gravelly muddy sand	0	88.6	11.4	126.3	1.712	-0.325	0.923
Cádiz 2	Slightly gravelly muddy sand	0	82.7	17.3	99.54	2.725	-0.269	2.679
Cádiz 3	Slightly gravelly muddy sand	0	82.6	17.4	101.9	2.735	-0.268	2.674
Cádiz 4	Slightly gravelly sand	0	95.8	4.2	199.4	1.863	-0.081	0.954
Cádiz 5	Slightly gravelly sand	0	92.8	7.1	140.9	2.531	-0.373	2.22
Cádiz 6	Gravelly sand	7.2	88.6	4.1	327.8	2.638	0.038	2.368
Cádiz 7	Slightly gravelly sand	2.4	90.5	7.1	305.2	2.798	-0.415	3.384
Cádiz 8	Slightly gravelly sandy mud	0	41.8	58.1	16.06	8.372	0.181	0.537
Cádiz 9	Slightly gravelly mud	3.2	4.7	92.1	19.85	3.146	-0.389	2.152
Isla Cristina 1	Muddy gravel	38.9	11.1	50	56.96	16.54	-0.088	0.594

Isla Cristina 2	Slighly muddy sand	gravelly	3.2	80.9	15.9	108.6	2.658	-0.164	2.301
Isla Cristina 3	Slighly muddy sand	gravelly	0	86.7	13.3	114.3	1.677	-0.005	0.778
Isla Cristina 4	Slighly sand	gravelly	0	93.5	6.5	163.9	2.238	-0.15	1.103
Isla Cristina 5	Slighly muddy sand	gravelly	0	86.6	13.4	122.7	1.901	0.138	0.913
Isla Cristina 6	Gravelly mud		7.2	15.7	77.1	19.52	7.639	-0.036	1.541
Kingston Harbor 1	Slighly sandy mud	gravelly	0	11	89	9.502	4.639	-0.225	0.609
Kingston Harbor 2	Slighly mud	gravelly	0	2.8	97.2	27.52	2.09	-0.437	2.367
Kingston Harbor 3	Slighly muddy sand	gravelly	0	59.9	40	49.44	3.715	-0.468	1.198

Table 2. Organic matter content and pH of sediment samples. Abbreviations: *C*, carbon; *C/N*, carbon-nitrogen ratio, *N*, nitrogen; *NC*, not calculated.

Sample	% <i>C</i>	% <i>N</i>	<i>C/N</i>	pH
Algeciras Bay 1	0.8624	0.0423	20.39	8.311
Algeciras Bay 2	1.0984	0.0849	12.94	8.883
Algeciras Bay 3	0.3722	0.0204	18.25	8.084
Algeciras Bay 4	2.2821	0.1821	12.53	6.691
Algeciras Bay 5	2.2356	0.1649	13.56	6.677
Algeciras Bay 6	0.3397	0.0141	24.09	8.311
Algeciras Bay 7	0.6805	0.0646	10.53	8.883
Cádiz 1	0.4309	0.0359	12	8.349
Cádiz 2	0.4633	0.0193	24.01	8.432
Cádiz 3	0.7522	0.0246	30.58	8.027
Cádiz 4	0.5392	0.0157	34.34	8.293
Cádiz 5	0.5452	0.0089	61.26	8.403
Cádiz 6	0.8622	0.0171	50.42	8.219
Cádiz 7	0.6309	0.0377	18.72	8.252
Cádiz 8	1.8445	0.0789	23.38	7.419
Cádiz 9	<i>NC</i>	<i>NC</i>	<i>NC</i>	7.681
Isla Cristina 1	1.2274	0.0758	16.19	7.543
Isla Cristina 2	0.6058	0.0312	19.42	7.942

Isla Cristina 3	0.3232	0.0158	20.46	7.775
Isla Cristina 4	0.4708	0.0195	24.14	8.081
Isla Cristina 5	0.3717	0.0234	15.88	8.3
Isla Cristina 6	1.5441	0.1415	10.91	6.84
Kingston Harbor 1	<i>NC</i>	<i>NC</i>	<i>NC</i>	7.53
Kingston Harbor 2	5.3474	0.6932	7.71	<i>NC</i>
Kingston Harbor 3	4.3655	0.2906	15.02	7.877
