

Table S1. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of meiofauna higher taxa in the different biological substrates sampled in a rocky-shore from Araçá Bay, Southeast Brazil.

	TURF	<i>Caulerpa</i>	SPONGE
Nematoda	188 (86.3)	183.3 (40.8)	149.2 (38.5)
Copepod nauplii	72.8 (41.5)	81.2 (61.1)	101.6 (100.6)
Copepoda	46.2 (19.4)	57.2 (28.2)	72.6 (44.6)
Ostracoda	5.1 (3.5)	31.9 (37.8)	22.1 (13.5)
Polychaeta	19.4 (12.5)	12.7 (5.7)	21.6 (11.3)
Amphipoda	15.4 (10.3)	17.6 (7.2)	11.8 (7.4)
Tanaidacea	10.5 (5.1)	4.4 (1.8)	5.1 (2.7)
Tardigrada	1.3 (0.7)	3.3 (2.7)	1.7 (1.3)
Kinorhyncha	0.3 (0.7)	1.9 (1.8)	1.2 (2.2)
Bryozoa	1.7 (3.2)	0 (0)	0 (0)
Halocaridea	0.1 (0.2)	0 (0)	0 (0)
Oligochaeta	0 (0)	0 (0)	3.2 (3)
Rotifera	0 (0)	0 (0)	0.4 (0.9)

Table S2. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of nematode morphospecies in the different biological substrates sampled in a rocky-shore from Araçá Bay, Southeast Brazil.

	TURF	Caulerpa	SPONGE
<i>Spilophorella meyerabichi</i>	101.3 (77.1)	83.9 (27.7)	54.3 (12.2)
<i>Enoplus</i> sp.1	19.8 (12.9)	17.9 (14.6)	9.5 (4.1)
<i>Halaphanolaimus</i> sp.1	11.5 (11.5)	13.4 (9.9)	14.4 (5.5)
<i>Oncholaimellus</i> sp.2	14 (13.3)	13.5 (7.8)	8.5 (7.4)
<i>Acanthonchus</i> sp.1	6.1 (4.8)	3.5 (2.7)	8.8 (4.2)
<i>Camacolaimus</i> sp.1	3.1 (2.6)	2.9 (2.1)	6.3 (7)
<i>Atrochromadora</i> sp.1	2.1 (2.1)	8.1 (5)	1.7 (0.9)
<i>Ptycholaimellus</i> sp.1	1.2 (1.7)	5 (3)	4.5 (6.2)
<i>Syringolaimus</i> sp.2	2.5 (3.3)	2.9 (5.8)	4.6 (4.7)
<i>Viscosia</i> sp.1	3.3 (5.4)	2.8 (1.6)	2.1 (2.9)
<i>Cephalanticoma</i> sp.1	4.1 (2.7)	0.5 (1)	3.5 (4.1)
<i>Paramonhystera</i> sp.3	2.1 (1.1)	4.3 (2.7)	1.3 (0.7)
<i>Prochromadorella</i> sp.1	1 (0.8)	2 (1.5)	3.9 (4.8)
<i>Chromadora</i> sp.1	0.6 (0.7)	3.4 (2.4)	2.2 (2.2)
<i>Phanoderma</i> sp.1	1.4 (1.1)	1.4 (1.2)	3.4 (3.3)
<i>Subsphaerolaimus</i> sp.2	1.6 (1.8)	0.8 (0.6)	2.6 (2.6)
<i>Metalinhomoeus</i> sp.2	0.9 (1.8)	2.7 (3)	1.2 (2.3)
<i>Leptosomatum</i> sp.1	0.2 (0.3)	0.2 (0.5)	3.7 (4.2)
<i>Chromadorina</i> sp.2	0.2 (0.5)	0.2 (0.5)	0.8 (0.6)
<i>Anoplostoma</i> sp.1	0.2 (0.3)	0.9 (1.8)	0 (0)
<i>Halichoanolaimus</i> sp.2	3.5 (5)	0 (0)	1.8 (2.6)
<i>Symplocostoma</i> sp.1	1 (0.8)	0 (0)	0 (0)
<i>Neochromadora</i> sp.2	0.5 (1)	0 (0)	0.5 (0.9)
<i>Adoncholaimus</i> sp.2	0.7 (0.8)	0 (0)	0 (0)
<i>Polygastrophora</i> sp.1	0.2 (0.5)	0 (0)	0.5 (0.9)
<i>Pseudosteineria</i> sp.1	0.7 (1.4)	0 (0)	0 (0)
<i>Halolaimus</i> sp.3	0.5 (0.9)	0 (0)	0 (0)
<i>Microlaimus</i> sp.4	0.2 (0.3)	0 (0)	0.2 (0.4)
<i>Euchromadora</i> sp.1	0.2 (0.3)	0 (0)	0.2 (0.3)
<i>Linhystera</i> sp.1	0.2 (0.5)	0 (0)	0 (0)

<i>Marylinia</i> sp.2	0.2 (0.3)	0 (0)	0 (0)
<i>Terschellingia</i> sp.3	0.2 (0.3)	0 (0)	0 (0)
<i>Pseudosteineria</i> sp.3	0 (0)	4.3 (4.5)	0.4 (0.5)
<i>Dorylaimopsis</i> sp.1	0 (0)	0.7 (1.3)	0.7 (0.6)
<i>Pseudochromadora</i> sp.1	0 (0)	0.5 (1.1)	0.5 (0.6)
<i>Phanoderma</i> sp.2	0 (0)	0.7 (0.5)	0 (0)
<i>Halichoanolaimus</i> sp.3	0 (0)	0.5 (1)	0 (0)
<i>Axonolaimidae</i> Gen.A	0 (0)	0.3 (0.7)	0 (0)
<i>Enoplus</i> sp.2	0 (0)	0.3 (0.5)	0 (0)
<i>Xyalidae</i> Gen.B	0 (0)	0.3 (0.5)	0 (0)
<i>Dichromadora</i> sp.2	0 (0)	0.2 (0.5)	0 (0)
<i>Spilophorella</i> sp.2	0 (0)	0.2 (0.5)	0 (0)
<i>Thalassoalaimus</i> sp.2	0 (0)	0.2 (0.5)	0 (0)
<i>Terschellingia longicaudata</i>	0 (0)	0.2 (0.5)	0 (0)
<i>Trochamus</i> sp.1	0 (0)	0.2 (0.5)	0 (0)
<i>Halolaimus</i> sp.2	0 (0)	0 (0)	0.6 (1.2)
<i>Oncholaimidae</i> Gen.A	0 (0)	0 (0)	0.6 (0.9)
<i>Monhystralla</i> sp.1	0 (0)	0 (0)	0.4 (0.7)
<i>Stylotheristus</i> sp.1	0 (0)	0 (0)	0.3 (0.7)
<i>Chromadorella</i> sp1	0 (0)	0 (0)	0.2 (0.5)
<i>Stygodesmodora</i> sp.1	0 (0)	0 (0)	0.2 (0.5)
<i>Xyalidae</i> Gen.A	0 (0)	0 (0)	0.2 (0.5)
<i>Araeolaimus</i> sp.1	0 (0)	0 (0)	0.2 (0.3)
<i>Metacyatholaimus</i> sp.1	0 (0)	0 (0)	0.2 (0.3)
<i>Odontanticoma</i> sp.1	0 (0)	0 (0)	0.2 (0.3)
<i>Spirinia</i> sp.2	0 (0)	0 (0)	0.2 (0.3)

Table S3. SIMPER analysis showing nematode species ranked according to average Sorenson dissimilarity from presence/absence data between the biological substrates 'Caulerpa' and 'Turf'.

Average dissimilarity: 41%				
	Caulerpa	Turf	Contribution%	Cum. Contribution%
	Av. Abundance	Av. Abundance		
<i>Halichoanolaimus</i> sp.2	0.0	1.0	6.6	6.6
<i>Cephalanticoma</i> sp.1	0.25	1.0	5.1	11.7
<i>Symplocostoma</i> sp.1	0.0	0.75	5.1	16.7
<i>Pseudosteineria</i> sp.3	0.75	0.0	5.0	21.7
<i>Phanoderma</i> sp.2	0.75	0.0	4.8	26.5
<i>Metalinhomoeus</i> sp.2	0.75	0.25	4.1	30.6
<i>Syringolaimus</i> sp.2	0.25	0.75	4.0	64.6
<i>Adoncholaimus</i> sp.2	0.0	0.5	3.6	38.2
<i>Ptycholaimellus</i> sp.1	1.0	0.5	3.6	41.8
<i>Viscosia</i> sp.1	1.0	0.5	3.6	45.5
<i>Chromadora</i> sp.1	0.75	0.5	3.5	49.0
<i>Subsphaerolaimus</i> sp.2	0.75	0.75	2.6	51.6

Table S4. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of macrofauna higher taxa in the different biological substrates sampled in a rocky-shore from Araçá Bay, Southeast Brazil.

	TURF	<i>Caulerpa</i>	SPONGE
Gammarida	47 (13.1)	38 (8)	26.2 (7.2) 14.8
Tanaidacea	20.8 (3.4)	(3.6)	13.8 (3.3)
Polychaeta	16.3 (6)	9.6 (8.3)	16.8 (11.4)
Bivalvia	6.3 (4.7)	6.5 (3.3)	4.2 (1.9)
Nematoda	2.6 (0.8)	2.1 (1.3)	11.3 (11.8)
Isopoda	2.4 (4.1)	2.1 (4.2)	0.6 (1.1)
Ostracoda	0.5 (0.3)	1.3 (1.5)	0.7 (0.4)
Gastropoda	0.5 (0.4)	0.3 (0.3)	0.6 (0.6)
Rhabditophora	0.7 (0.8)	0.3 (0.3)	0.3 (0.3)
Cirripedia	0.1 (0.1)	0.3 (0.4)	0.1 (0.2)
Caprellida	0.1 (0.1)	0.1 (0.1)	0.1 (0.2)
Copepoda	0.1 (0.1)	0.2 (0.4)	0 (0)
Larva Megalopa	0.1 (0.1)	0.1 (0.1)	0 (0)
Oligochaeta	0.1 (0.3)	0 (0)	0.4 (0.4)
Anthozoa	0 (0)	0.1 (0.2)	0 (0)
Collembola	0 (0)	0.1 (0.1)	0 (0)
Ascidiaeae	0 (0)	0 (0)	0.1 (0.1)

Table S5. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of meiofauna higher taxa associated with *Bostrychia* sp. sampled from the habitats rocky shore and mangrove roots at Araçá Bay, Southeast Brazil.

	Rocky Shore	Mangrove
Nematoda	130 (105.4)	445.8 (442)
Halocaridea	39.8 (14.5)	39.8 (38)
Rotifera	10.5 (11.3)	56.8 (62.8)
Copepod nauplii	13 (5.1)	41.6 (26.8)
Copepoda	7.4 (4.6)	12.4 (6.8)
Chironomidae	0.6 (0.5)	4 (1.5)
Bivalve	2.1 (1.2)	1.5 (1.9)
Tanaidacea	0.3 (0.2)	3.3 (4.5)
Tardigrada	0.3 (0.3)	2.2 (2.6)
Oligochaeta	2.7 (3.1)	0 (0)
Ascidia	0.8 (1)	0 (0)
Collembola	0.2 (0.3)	0 (0)
Ostracoda	0 (0)	2 (2.3)
Turbellaria	0 (0)	0.1 (0.3)
Entoprocta	0 (0)	0.1 (0.1)

Table S6. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of nematode species associated with *Bostrychia* sp. sampled from the habitats rocky shore and mangrove roots at Araçá Bay, Southeast Brazil.

	Rocky shore	Mangrove
<i>Thalassomonhystera</i> sp.1	8.7 (7.8)	302.4 (311)
<i>Araeolaimus</i> sp.1	49.3 (48.5)	40.6 (35.3)
<i>Chromadorina</i> sp.3	11 (7.4)	32.5 (44.5)
<i>Paracanthonchus</i> sp.3	0.3 (0.7)	22.8 (31.5)
<i>Chromadorina</i> sp.2	10.1 (10.3)	12.9 (10.5)
<i>Eleutherolaimus</i> sp.1	19.5 (24.3)	2.8 (3)
<i>Microlaimus</i> sp.5	13.5 (8.9)	1.4 (2.4)
<i>Adoncholaims</i> sp.2	8.7 (11.7)	1.4 (2.9)
<i>Halaphanolaimus</i> sp.1	0.1 (0.3)	1.2 (2.5)
<i>Spilophorella meyerabichi</i>	0.8 (1.2)	0 (0)
<i>Enoplus</i> sp.1	0.5 (0.6)	0 (0)
<i>Dorylaimidae</i> sp.2	0.5 (0.6)	0 (0)
<i>Acanthonchus</i> sp.1	0.3 (0.7)	0 (0)
<i>Chromadora</i> sp.2	0.3 (0.7)	0 (0)
<i>Euchromadora</i> sp.1	0.3 (0.7)	0 (0)
<i>Monhystrella</i> sp.1	0.3 (0.6)	0 (0)
<i>Microlaimus</i> sp.1	0.2 (0.3)	0 (0)
<i>Stylotheristus</i> sp.4	0.2 (0.3)	0 (0)
<i>Syringolaimus</i> sp.2	0.2 (0.3)	0 (0)
<i>Prochromadorella</i> sp.1	0.1 (0.3)	0 (0)
<i>Camacolaimus</i> sp.1	0.1 (0.2)	0 (0)
<i>Symplocostoma</i> sp.1	0.1 (0.2)	0 (0)
<i>Actinonema</i> sp.1	0 (0)	2.8 (3)
<i>Anoplostoma</i> sp.1	0 (0)	1.2 (2.5)
<i>Desmodora</i> sp.3	0 (0)	0.7 (1.4)
<i>Diplolaimelloides</i> sp.1	0 (0)	0.7 (1.4)
<i>Metadesmolaimus</i> sp.2	0 (0)	0.7 (1.4)
<i>Oncholaimellus</i> sp.2	0 (0)	0.7 (1.4)

Table S7. SIMPER analysis showing nematode species ranked according to average Bray-Curtis dissimilarity from log (x+1) data between the habitats rocky shore and mangrove roots.

Average dissimilarity: 54.28 %				
	Rocky shore	Mangrove	Contribution%	Cum. Contribution%
	Av. Abundance	Av. Abundance		
<i>Thalassomonhystera</i> sp.1	0.85	2.95	21.1	21.1
<i>Microlaimus</i> sp.5	1.02	0.13	10.4	31.5
<i>Paracanthoncus</i> sp.3	0.02	1.02	9.8	41.3
<i>Eleutherolaimus</i> sp.1	1.00	0.22	9.0	50.3

Table S8. SIMPER analysis showing nematode species ranked according to average Sorenson dissimilarity from presence/absence data between the habitats rocky shore and mangrove roots.

Average dissimilarity: 54.28 %				
	Rocky shore	Mangrove	Contribution%	Cum. Contribution%
	Av. Abundance	Av. Abundance		
<i>Adoncholaimus</i> sp.2	1.00	0.25	8.7	8.77
<i>Paracanthoncus</i> sp.3	0.25	1.00	8.5	17.3
<i>Actinonema</i> sp.1	0.00	0.75	7.8	25.0
<i>Microlaimus</i> sp.1	0.50	0.00	5.8	30.9
<i>Stylotheristus</i> sp.4	0.50	0.00	5.8	36.8
<i>Microlaimus</i> sp.5	1.00	0.50	5.7	42.5
<i>Dorylaimidae</i> sp.2	0.50	0.00	5.6	48.0
<i>Enoplus</i> sp. 1	0.50	0.00	5.3	53.3

Table S9. Mean density (inds.ml⁻¹) and standard deviation (in parenthesis) of macrofauna taxa associated with *Bostrychia* sp. sampled from the habitats rocky shore and mangrove roots at Araçá Bay, Southeast Brazil.

	Rocky shore	Mangrove
Chironomidae	1.27 (1)	3.32 (2.49)
Tanaidacea	1.81 (0.96)	2.45 (1.59)
Bivalvia	0.82 (0.29)	0.06 (0.11)
Acarii	0.02 (0.05)	0.06 (0.11)
Cirripedia	1.1 (1.25)	0 (0)
Collembola	0.42 (0.54)	0 (0)
Polychaeta	0.39 (0.46)	0 (0)
Lepidoptera	0.19 (0.15)	0 (0)
Nematoda	0.05 (0.09)	0 (0)
Gammarida	0.02 (0.04)	0 (0)
Copepoda	0.02 (0.04)	0 (0)
Oligochaeta	0.02 (0.04)	0 (0)
Asciidiacea	0.02 (0.05)	0 (0)

Table S10. SIMPER analysis showing macrofauna groups ranked according to average Bray-Curtis dissimilarity from log (x+1) data between the habitats rocky shore and mangrove roots.

Average dissimilarity: 54.28 %

	Rocky shore	Mangrove	Contribution%	Cum. Contribution%
	Av. Abundance	Av. Abundance		
Chironomidae	0.74	1.36	20.9	20.9
Cirripedia	0.61	0.00	18.9	39.9
Bivalvia	0.59	0.00	17.9	57.8
Tanaidacea	0.98	0.05	13.9	71.7
Collembola	0.30	1.16	9.3	80.9