The following appendix accompanies the article

Ectosymbiosis is a critical factor in the local benthic biodiversity of the Antarctic deep sea

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Appendix 1

Table S1. Distribution and abundance of sessile fauna (referred to as taxa in the first column from the left) according to geographic areas (E: eastern stations; W: western stations without cidaroids; W*: western stations with cidaroids), sampling stations and type of replicates (r: rocks; c: cidaroids). The number of replicates (i.e. the number of rocks or cidaroids per station) is given, as well as the total number of specimens of each taxon found on these replicates. We identified the sessile fauna to the lowest taxonomic level possible. O: order; S.O.: sub-order; F.: family; G.: genus; sp.: species

Sessile taxa	Lowest taxonomic unit identified	Geographic area	E	E	E	E	E	W	W	W	W*	W*	W*	W*
		Sampling station	57	59	78	80	94	121	150	152	142	151	142	151
		Type of replicates	r	r	r	r	r	r	r	r	r	r	c	c
		No. of replicates	7	10	11	10	7	27	14	17	8	27	25	23
Foraminifera A	G. *Cibicides*		1	1	6	3	2	7	8	18	14	27	0	473
Porifera A			0	0	0	0	0	0	0	0	0	0	0	7
Porifera C			0	1	0	0	0	0	0	0	3	0	0	0
Porifera D			0	0	0	0	0	0	0	0	0	0	0	8
Porifera E			0	0	0	0	0	0	0	0	0	1	0	0
Porifera F			0	0	0	0	0	0	0	0	2	0	0	0
Porifera G			9	14	6	3	1	13	10	10	0	32	0	0
Porifera H			0	0	0	0	6	0	0	0	0	0	0	0
Porifera J			0	0	3	1	0	9	5	8	11	4	0	0
Porifera K			0	0	0	0	0	3	4	2	0	0	0	0
Porifera L			0	0	0	1	0	0	0	0	0	0	0	0
Anthozoa A	O. Actinaria		1	2	0	0	0	0	0	0	0	0	0	0
Anthozoa B	O. Scleractinia		0	0	0	0	0	0	2	0	0	0	0	0
Hydrozoa A	G. *Clytia*		0	0	0	0	0	0	0	0	0	0	142	0
Hydrozoa B	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	0	0	7	0
Hydrozoa C	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	0	0	5	0
Hydrozoa D	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	0	0	72	0
Hydrozoa E	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	0	0	21	2
Hydrozoa F	G. *Filellum*		0	3	7	1	0	1	1	1	0	10	0	21
Hydrozoa G	S.O. Leptomedusae[a]		7	3	8	2	0	11	2	4	0	0	0	62
Hydrozoa H	S.O. Leptomedusae[a]		0	0	0	0	0	4	2	0	0	0	0	21
Hydrozoa I	S.O. Leptomedusae[a]		0	0	3	1	0	0	0	1	0	0	0	0
Hydrozoa J	S.O. Leptomedusae[a]		0	0	0	5	0	0	0	2	0	0	0	0
Hydrozoa K	S.O. Leptomedusae[a]		0	0	0	0	0	4	0	1	0	0	0	0
Hydrozoa L	S.O. Leptomedusae[a]		0	0	0	0	0	2	0	1	0	0	0	0
Hydrozoa M	S.O. Leptomedusae[a]		0	0	2	0	0	0	0	0	0	0	0	0
Hydrozoa N	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	3	0	0	0
Hydrozoa O	S.O. Leptomedusae[a]		0	0	0	0	0	0	0	0	2	0	0	0
Hydrozoa P	F. Clavidae		0	0	0	0	0	0	0	0	6	7	0	7
Polychaeta A	G. *Sabella* sp. *branchia*		0	0	0	0	0	0	0	0	3	1	5	0
Polychaeta B	F. Oweniidae		0	0	0	0	0	0	0	0	4	41	12	3
Polychaeta C	F. Sabellidae		0	0	0	0	0	0	0	0	0	0	0	0
Polychaeta D			0	0	0	0	0	0	0	0	5	0	0	0
Polychaeta E			0	3	10	3	2	16	21	20	0	0	0	0
Polychaeta F			0	0	0	0	0	0	1	0	0	0	0	0
Polychaeta G	F. Serpulidae		5	0	14	6	18	16	28	30	2	0	16	36
Polychaeta H			0	0	0	0	0	0	0	0	2	0	0	0

Appendix 1 (continued)

Table S1. (continued)

Sessile taxa	Lowest taxonomic unit identified	Geographic area	E	E	E	E	E	W	W	W	W*	W*	W*	W*
		Sampling station	57	59	78	80	94	121	150	152	142	151	142	151
		Type of replicates	r	r	r	r	r	r	r	r	s	s	c	c
		No. of replicates	7	10	11	10	7	27	14	17	8	27	25	23
Gastropoda A	F. Capulidae		0	0	0	0	0	0	3	1	0	0	0	0
Gastropoda B			0	0	0	0	0	0	0	0	1	0	0	0
Bivalvia A			0	0	0	0	0	0	3	1	0	0	0	0
Cirripeda A	F. Scalpellidae		0	0	0	0	0	0	0	3	0	0	0	6
Pycnogonida A	F. Nymphonidae		0	0	0	0	0	0	0	0	0	0	0	2
Isopoda A	F. Arcturidae		0	0	0	0	0	0	0	0	0	0	0	2
Bryozoa A	O. Cheilostomata		0	0	0	0	0	0	0	2	0	0	4	0
Bryozoa B	O. Cheilostomata		0	0	1	0	0	0	0	0	0	0	3	0
Bryozoa C	O. Cheilostomata		0	0	0	0	0	0	0	0	0	0	3	0
Bryozoa D	O. Cheilostomata		0	1	0	2	0	0	0	0	18	12	0	9
Bryozoa E	O. Cheilostomata		0	0	1	1	0	0	0	2	3	0	0	62
Bryozoa F	O. Cheilostomata		0	0	0	0	0	0	0	0	0	0	0	2
Bryozoa G	O. Cheilostomata		0	0	0	0	0	0	1	0	2	0	0	0
Bryozoa H	O. Cheilostomata		0	0	1	10	0	0	7	0	0	0	0	0
Bryozoa I	O. Cheilostomata		0	0	0	0	0	0	0	0	0	8	0	0
Bryozoa J	O. Cheilostomata		0	0	0	0	0	0	0	0	3	0	0	0
Bryozoa K	O. Cheilostomata		0	0	0	0	0	0	0	0	1	0	0	0
Bryozoa L	O. Cyclostomatida		0	0	0	0	7	0	0	0	0	0	0	0
Ophiuroidea A	F. Amphiuridae		0	0	0	0	0	0	0	0	0	0	0	3
Ophiuroidea B	O. Euryalina		0	0	0	0	0	0	0	0	0	0	0	1
Holothuroidea A	G. *Echinopsolus* sp. *parvipes*		0	0	0	0	0	0	0	0	0	0	0	9
Holothuroidea B	G. *Taeniogyrus* sp. *magnibaculus*		0	0	0	0	0	0	0	0	0	0	0	2

[a]Thecata

Appendix 1 (continued)

Table S2. Observed (Obs) and expected (Exp) density distributions for the sessile species assemblages by sampling station (see 'Results' for details). T: total available subtrates (cidaroids + rocks); c: cidaroids; r: rocks. The expected distribution (null model) was calculated using the algorithm of Janovy et al. (1995)

Sampling	No. of different ectosymbiont taxa/ host class																											
station	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
57 Obs	93	3	4	0	0	0																						
57 Exp	89	10	1	0	0	0																						
59 Obs	190	5	4	1	0	0	0	0	0																			
59 Exp	170	28	2	0	0	0	0	0	0																			
78 Obs	189	3	3	4	0	1	0	0	0	0	0	0	0															
78 Exp	154	41	5	0	0	0	0	0	0	0	0	0	0															
80 Obs	240	2	5	2	1	0	0	0	0	0	0	0	0															
80 Exp	200	46	4	0	0	0	0	0	0	0	0	0	0															
94 Obs	93	1	5	1	0	0	0	0																				
94 Exp	87	12	1	0	0	0	0	0																				
121 Obs	73	16	9	1	1	0	0	0	0	0	0	0																
121 Exp	66	28	5	1	0	0	0	0	0	0	0	0																
150 Obs	86	2	7	1	4	0	0	0	0	0	0	0	0	0	0	0												
150 Exp	70	25	4	1	0	0	0	0	0	0	0	0	0	0	0	0												
152 Obs	133	3	6	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
152 Exp	114	31	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
151T Obs	233	10	10	9	9	8	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151T Exp	158	94	26	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151c Obs	0	0	6	1	6	6	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
151c Exp	0	1	2	5	6	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
151r Obs	223	10	4	8	3	2	0	0	0	0	0																	
151r Exp	192	52	6	0	0	0	0	0	0	0	0																	
142T Obs	99	9	12	6	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
142T Exp	70	46	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
142c Obs	7	8	9	8	0	0	0	0	0	0	0	0																
142c Exp	5	12	10	4	1	0	0	0	0	0	0	0																
142r Obs	92	0	4	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
142r Exp	72	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				