

Supplementary material

Patterns of reproduction in two co-occurring Great Barrier Reef sponges

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Table S1. Summary table of mean monthly sea surface temperature (SST; °C) over the study area over the period of the study (2010–11) and 7-year mean monthly SST (± 1 s.e.) (2003–09)

Temperature differences (relative and percentage) between each month of the study period to the 7 year average are also included

Historic SST profile	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7-year average (2003 to 2009)	28.82	28.8	28.3	26.98	25.15	23.29	22.12	22.27	23.8	25.54	26.95	28.24
7-year s.e. (2003 to 2009)	0.13	0.28	0.21	0.24	0.14	0.17	0.29	0.3	0.27	0.25	0.2	0.18
This study's SST profile	Jan-11	Feb-11	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
SST	29.61	29.11	28.63	27.18	25.76	24.2	23.02	23.45	25.88	26.42	26.93	28.69
Difference (°C) from 7-year average	0.79	0.3	0.33	0.2	0.61	0.91	0.9	1.18	2.08	0.88	-0.02	0.44
Percentage difference from 7-year average	2.75	1.06	1.16	0.72	2.43	3.89	4.06	5.28	8.72	3.45	-0.08	1.57

Table S2. Summary of propagule size for *Ianthella basta* and *Ircinia* sp. over the reproductive cycle

Month	<i>I. basta</i> female propagule			<i>Ircinia</i> sp. male propagule			<i>Ircinia</i> sp. female propagule								
	<i>n</i>	Mean	s.e.	<i>n</i>	Mean	s.e.	Oocyte		Embryo			Larva			
							<i>n</i>	Mean	s.e.	<i>n</i>	Mean	s.e.	<i>n</i>	Mean	s.e.
Mar-10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Apr-10	998	1198.852	16.29444	–	–	–	3	1192.398	591.4964	–	–	–	–	–	–
May-10	5916	1330.581	8.227541	–	–	–	8	957.2466	270.4376	–	–	–	–	–	–
Jun-10	5014	1760.883	10.71779	–	–	–	30	2572.005	338.5529	–	–	–	–	–	–
Jul-10	3063	1924	15.02367	–	–	–	32	4345.487	2360.374	–	–	–	–	–	–
Aug-10	9851	2778.985	396.2512	115	1057.521	32.52979	192	18762.11	2402.432	–	–	–	–	–	–
Sep-10	–	–	–	977	1261.539	15.5044	413	18216.96	1468.532	4	96698.25	21588.18	–	–	–
Oct-10	–	–	–	2644	1240.068	9.397423	836	40489.47	1436.127	78	102694.3	4082.418	41	107733.9	6259.462
Nov-10	–	–	–	698	992.8497	14.04668	200	64141.61	3290.999	128	100476.1	3913.561	131	103269.9	4510.053
Dec-10	–	–	–	193	740.2763	23.81843	30	71396.79	6255.053	32	102845.1	10452.45	48	115439.2	9767.715
Jan-11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Feb-11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

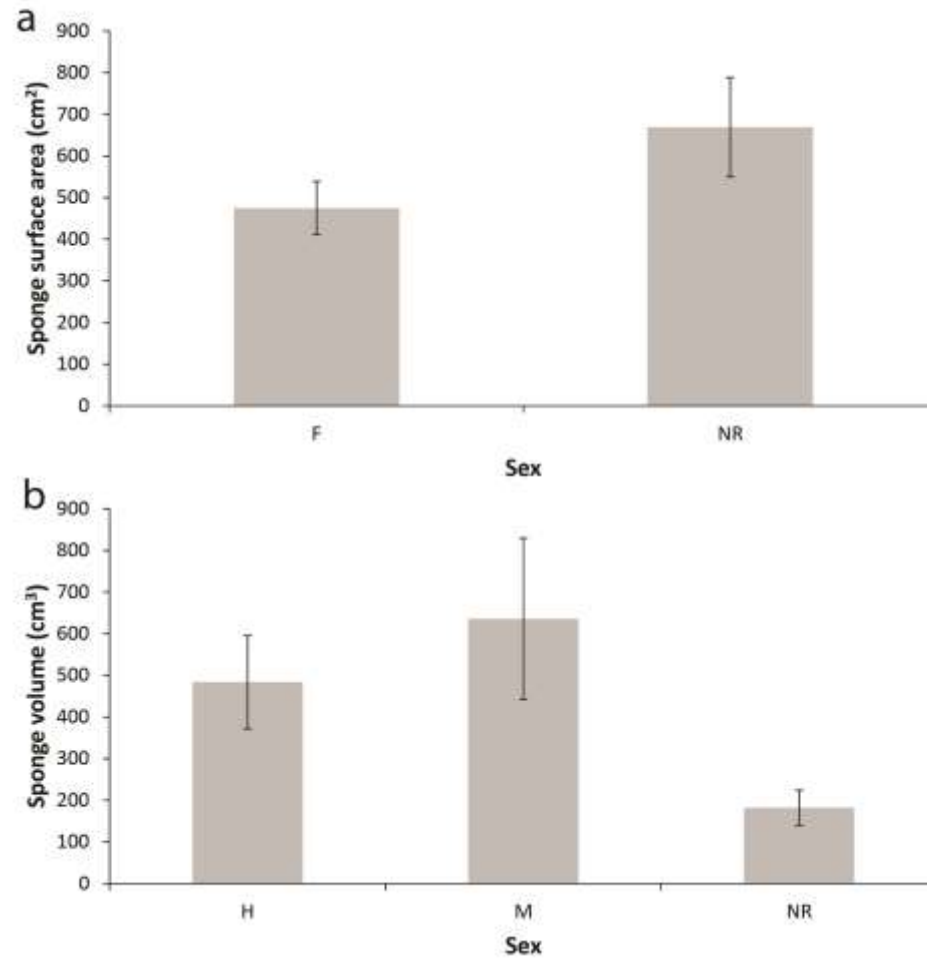


Fig. S1. (a) Mean surface area (cm² ± s.e.) of female (F) and non-reproductive (NR) *Ianthella basta*, and (b) mean volume (cm³ ± s.e.) of hermaphroditic (H), male (M) and non-reproductive *Ircinia* sp., in two of the most reproductive months (July and August 2010 for *I. basta*, and October and November 2010 for *Ircinia* sp.)