

Supplementary material

Temporal and spatial differences in the reproductive biology of the sea urchin *Arbacia dufresnii*

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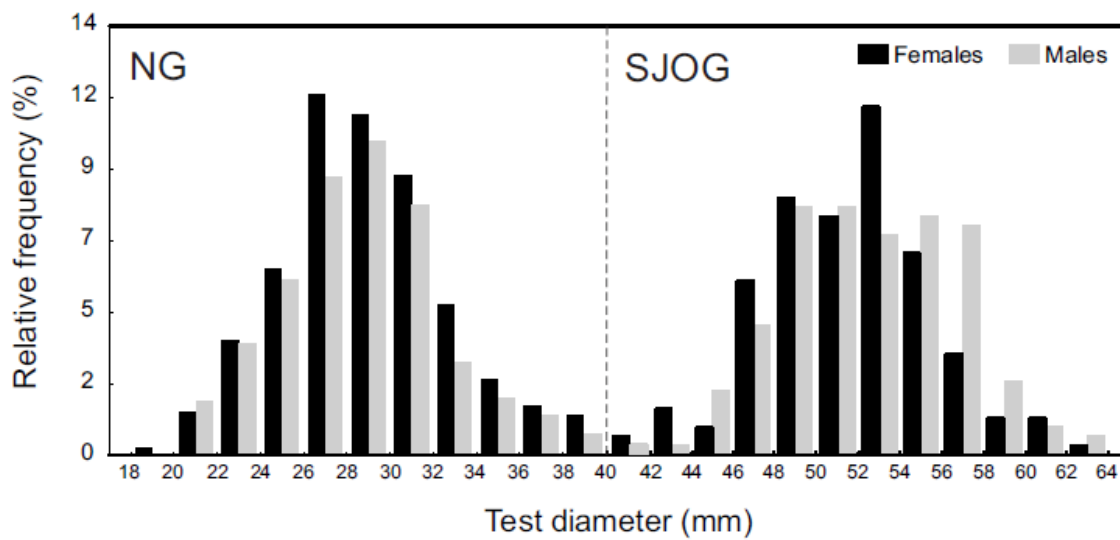


Fig. S1. Test diameter frequency distribution of males and females of *Arbacia dufresnii* at Nuevo Gulf (NG) and San Jorge Gulf (SJOG) populations.

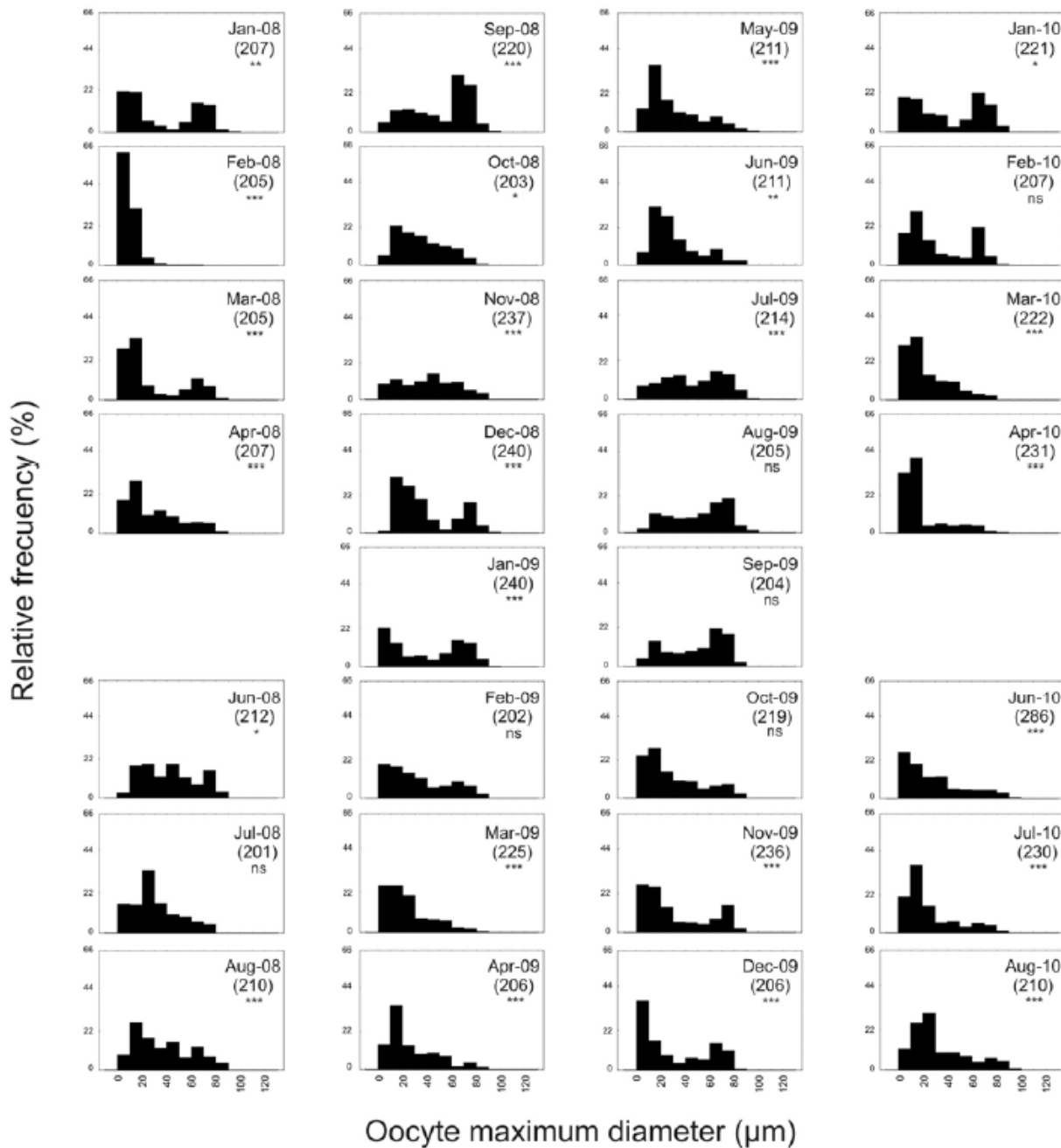


Fig. S2. Oocyte maximum diameter frequency distribution of *Arbacia dufresnii* in Nuevo Gulf population. Asterisks denote significant differences between females at each month. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$; ns, not significant (Kruskal–Wallis test).

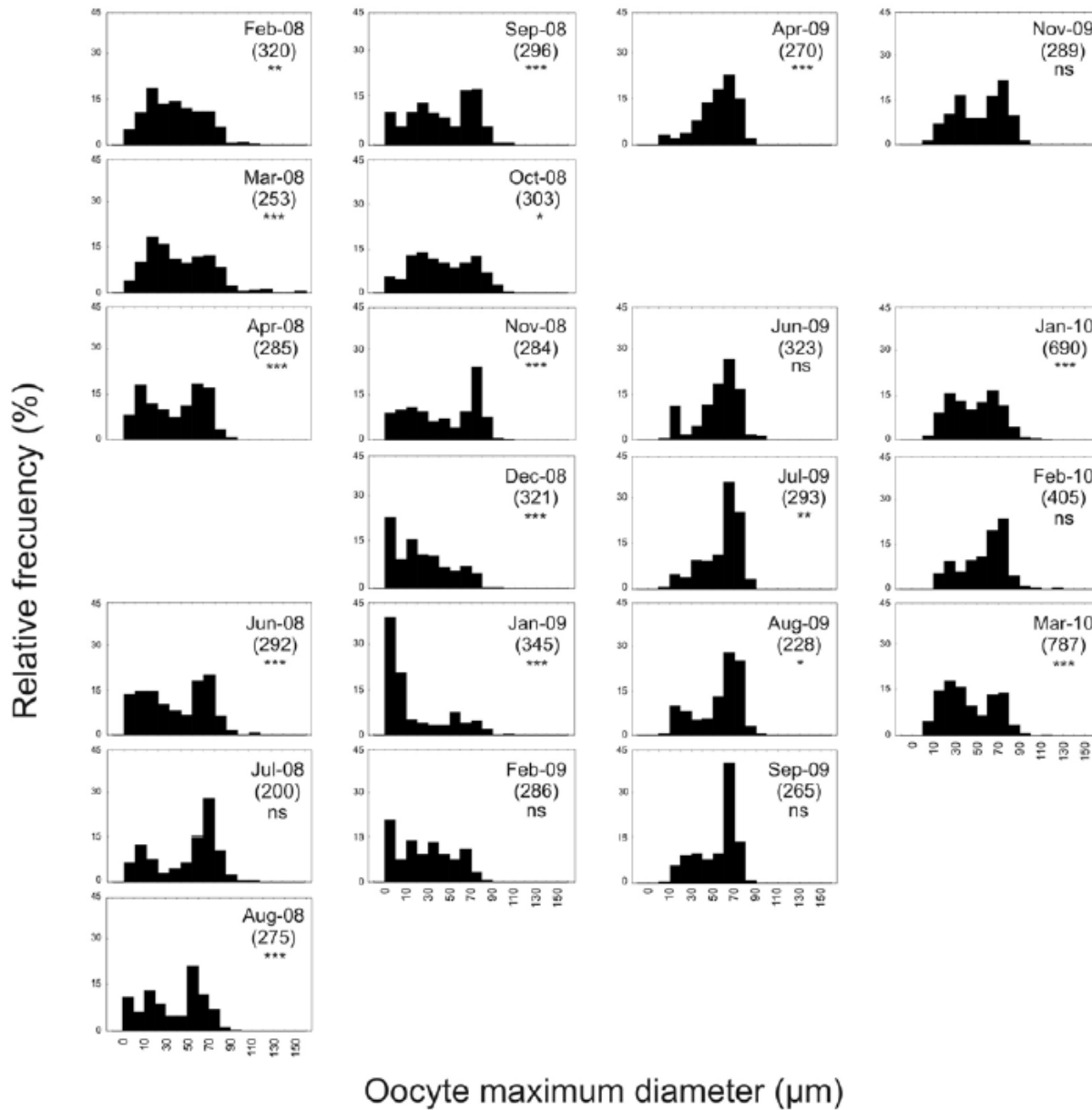


Fig. S3. Oocyte maximum diameter frequency distribution of *Arbacia dufresnii* in San Jorge Gulf population. Asterisks denote significant differences between females at each month. * $P < 0.05$; ** $P < 0.01$; $P < 0.001$; ns, not significant (Kruskal–Wallis test).

Table S1. One way ANCOVAs for differences in adjusted thickness means of the spermatogenic, spermatozoa, and nutritive layers of *Arbacia dufresnii* between months in studied sites

The effect of acini radius (μm) was included as a covariate

	NG population					SJOG population				
	SS	d.f.	MS	F	P	SS	d.f.	MS	F	P
Spermatogenic layer										
Intercept	0.053	1	0.053	132.08	<0.0001	0.014	1	0.014	24.44	<0.0001
Acini radius (cov)	0.017	1	0.017	42.50	<0.0001	0.005	1	0.005	9.59	<0.005
Month	0.129	29	0.004	11.05	<0.0001	0.050	20	0.002	4.27	<0.0001
Error	0.142	353	0.0004			0.101	173	0.0005		
Nutritive layer										
Intercept	0.022	1	0.022	173.32	<0.0001	0.007	1	0.007	63.60	<0.0001
Acini radius (cov)	0.0005	1	0.0005	4.37	<0.05	0.0001	1	0.0001	1.37	0.24
Month	0.016	29	0.0005	4.43	<0.0001	0.012	20	0.0006	5.32	<0.0001
Error	0.046	353	0.0001			0.020	173	0.0001		
Spermatozoa layer										
Intercept	0.146	1	0.146	252.51	<0.0001	0.042	1	0.042	52.63	<0.0001
Acini radius (cov)	1.412	1	1.412	2442.3	<0.0001	1.070	1	1.070	1320.6	<0.0001
Month	0.137	29	0.004	8.22	<0.0001	0.071	20	0.003	4.39	<0.0001
Error	0.204	353	0.0005			0.140	173	0.0008		