

Supplementary information

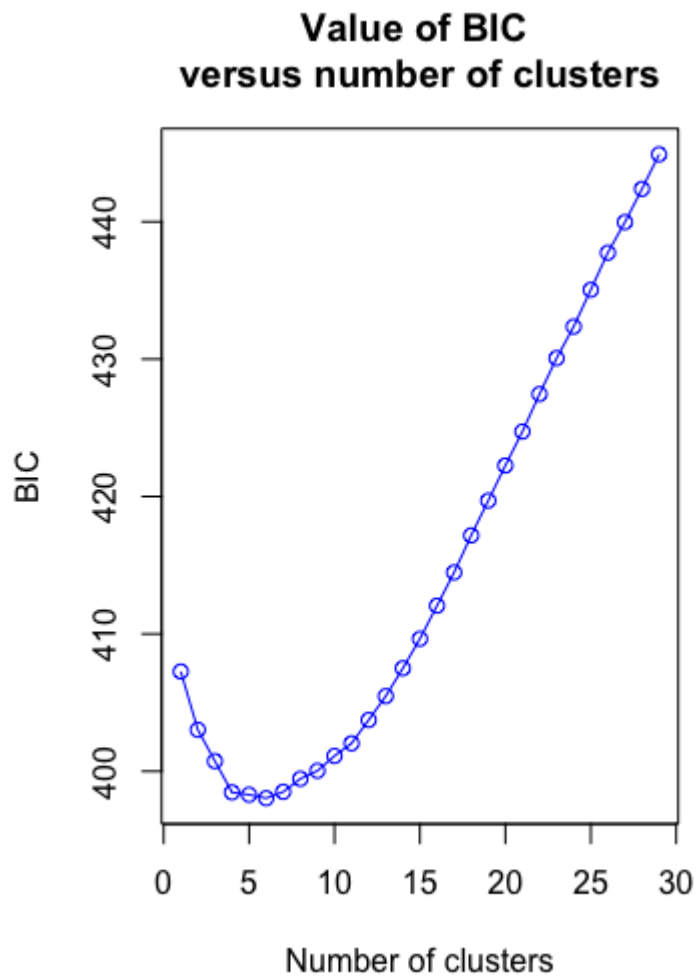
Title of the manuscript:

Strong genetic isolation of the black-lipped pearl oyster (*Pinctada margaritifera*) in the Marquesas archipelago (French Polynesia).

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Supplementary Figure S2: BIC values of the non-supervised hierarchical clustering. The lowest BIC value obtained was for K=6 clusters.



Supplementary Table S1. Diversity statistics of the seven populations sampled, at each of the 9 loci genotyped. Ar: allelic richness, NGEN: number of individuals successfully genotyped, FreqNULL: estimated frequency of null alleles, HO: observed homozygosity, HE: expected heterozygosity, uexpHET: unbiased expected heterozygosity, HWE: p-value of Hardy-Weinberg Equilibrium test, FIS: inbreeding coefficient; 95% CI FIS: 95% confidence interval for FIS. Boldface represent significance at alpha=0.05.

Pop	Locus	Ar	NGEN	FreqNull	Ho	HE	uexpHET	HWE	FIS	95% CI FIS
NHV-D	Pmarg2	18.6	38.0	0.233	0.474	0.915	0.927	0.000	0.482	0.325 - 0.619
	Pmarg7	8.9	40.0	0.132	0.400	0.667	0.675	0.000	0.400	0.233 - 0.553
	Pmarg11	17.8	40.0	0.202	0.500	0.879	0.890	0.000	0.431	0.272 - 0.564
	Pmarg37	14.9	40.0	0.054	0.750	0.855	0.866	0.334	0.123	-0.011 - 0.237
	Pmarg44	7.9	33.0	0.267	0.242	0.686	0.697	0.000	0.647	0.447 - 0.812
	Pmarg45	25.5	38.0	0.143	0.658	0.937	0.949	0.000	0.298	0.156 - 0.419
	Pmarg68	6.9	36.0	0.158	0.444	0.704	0.714	0.012	0.369	0.166 - 0.548
	Pmarg77	12.0	23.0	0.381	0.174	0.892	0.912	0.000	0.805	0.625 - 0.944
	Pmarg79	9.9	40.0	0.003	0.725	0.752	0.762	0.365	0.036	-0.107 - 0.159
overall	13.6	36.4	NA	0.485	0.810	0.821	0.000	0.399	0.334 - 0.440	
NHV-S	Pmarg2	20.3	39.0	0.172	0.590	0.922	0.934	0.000	0.360	0.211 - 0.488
	Pmarg7	8.9	40.0	0.047	0.625	0.737	0.747	0.099	0.152	-0.014 - 0.301
	Pmarg11	17.9	39.0	0.148	0.615	0.890	0.902	0.000	0.309	0.158 - 0.444
	Pmarg37	16.8	40.0	0.076	0.750	0.861	0.872	0.001	0.129	-0.021 - 0.255
	Pmarg44	7.0	31.0	0.153	0.484	0.726	0.738	0.004	0.333	0.107 - 0.527
	Pmarg45	20.6	38.0	0.131	0.658	0.916	0.928	0.000	0.282	0.139 - 0.410
	Pmarg68	5.8	38.0	0.205	0.211	0.498	0.505	0.000	0.577	0.348 - 0.763
	Pmarg77	11.5	27.0	0.361	0.185	0.851	0.867	0.000	0.782	0.620 - 0.911
	Pmarg79	6.0	40.0	0.042	0.600	0.627	0.635	0.097	0.043	-0.160 - 0.224
overall	12.8	36.9	NA	0.524	0.781	0.792	0.000	0.330	0.261 - 0.375	
UAP	Pmarg2	18.7	37.0	0.281	0.378	0.918	0.930	0.000	0.588	0.437 - 0.719
	Pmarg7	9.0	39.0	0.112	0.538	0.686	0.695	0.001	0.215	-0.001 - 0.399
	Pmarg11	15.0	38.0	0.198	0.500	0.873	0.885	0.000	0.427	0.265 - 0.570
	Pmarg37	17.0	39.0	0.069	0.769	0.870	0.881	0.032	0.116	-0.027 - 0.236
	Pmarg44	10.9	32.0	0.266	0.281	0.746	0.758	0.000	0.623	0.443 - 0.782
	Pmarg45	21.0	36.0	0.203	0.528	0.926	0.939	0.000	0.430	0.281 - 0.562
	Pmarg68	5.0	31.0	0.236	0.226	0.588	0.598	0.000	0.616	0.385 - 0.807
	Pmarg77	9.3	29.0	0.370	0.138	0.809	0.823	0.000	0.829	0.693 - 0.952
	Pmarg79	11.0	39.0	0.031	0.718	0.741	0.750	0.052	0.031	-0.132 - 0.166
overall	13.0	35.6	NA	0.453	0.795	0.807	0.000	0.431	0.375 - 0.465	
ART	Pmarg2	19.5	46.0	0.342	0.261	0.917	0.927	0.000	0.715	0.591 - 0.825
	Pmarg7	10.6	50.0	0.130	0.620	0.838	0.847	0.006	0.260	0.110 - 0.391
	Pmarg11	16.5	48.0	0.195	0.542	0.913	0.922	0.000	0.406	0.268 - 0.529
	Pmarg37	16.6	50.0	0.233	0.460	0.908	0.917	0.000	0.494	0.359 - 0.616
	Pmarg44	10.4	47.0	0.201	0.447	0.811	0.819	0.000	0.449	0.297 - 0.585
	Pmarg45	19.1	50.0	0.074	0.760	0.900	0.909	0.204	0.155	0.041 - 0.257
	Pmarg68	6.7	48.0	0.270	0.271	0.742	0.750	0.000	0.635	0.488 - 0.770
	Pmarg77	16.7	46.0	0.235	0.478	0.930	0.940	0.000	0.486	0.346 - 0.612
	Pmarg79	9.5	50.0	0.036	0.780	0.834	0.842	0.727	0.064	-0.054 - 0.173
overall	14.0	48.3	NA	0.513	0.866	0.875	0.000	0.407	0.345 - 0.454	
TKP	Pmarg2	20.6	38.0	0.288	0.368	0.923	0.935	0.000	0.601	0.453 - 0.730
	Pmarg7	9.0	40.0	0.122	0.625	0.845	0.855	0.000	0.260	0.100 - 0.397

	Pmarg11	15.8	40.0	0.109	0.700	0.898	0.909	0.214	0.220	0.076 - 0.347
	Pmarg37	19.0	39.0	0.183	0.564	0.912	0.924	0.000	0.382	0.230 - 0.514
	Pmarg44	7.5	35.0	0.192	0.371	0.702	0.713	0.000	0.471	0.276 - 0.639
	Pmarg45	18.7	40.0	0.136	0.650	0.912	0.924	0.042	0.287	0.145 - 0.415
	Pmarg68	6.6	38.0	0.142	0.500	0.761	0.772	0.009	0.343	0.162 - 0.500
	Pmarg77	18.1	39.0	0.216	0.513	0.930	0.942	0.000	0.448	0.297 - 0.582
	Pmarg79	12.9	40.0	0.068	0.675	0.823	0.833	0.076	0.180	0.040 - 0.303
	overall	14.2	38.8	NA	0.552	0.856	0.867	0.000	0.355	0.293 - 0.393
KAT	Pmarg2	18.6	39.0	0.226	0.487	0.915	0.927	0.000	0.468	0.311 - 0.604
	Pmarg7	9.0	40.0	0.102	0.675	0.854	0.865	0.080	0.210	0.055 - 0.345
	Pmarg11	17.8	40.0	0.186	0.550	0.895	0.907	0.000	0.386	0.229 - 0.522
	Pmarg37	17.8	40.0	0.204	0.500	0.893	0.905	0.000	0.440	0.293 - 0.572
	Pmarg44	9.6	38.0	0.191	0.421	0.762	0.773	0.000	0.448	0.271 - 0.601
	Pmarg45	18.5	40.0	0.071	0.775	0.910	0.921	0.406	0.148	0.020 - 0.256
	Pmarg68	7.5	39.0	0.022	0.538	0.608	0.616	0.777	0.114	-0.074 - 0.286
	Pmarg77	14.7	40.0	0.186	0.550	0.896	0.907	0.000	0.386	0.230 - 0.519
	Pmarg79	12.9	40.0	0.075	0.725	0.848	0.859	0.031	0.145	-0.009 - 0.279
	overall	14.0	39.6	NA	0.580	0.842	0.853	0.000	0.305	0.241 - 0.344
RVV	Pmarg2	17.0	35.0	0.331	0.286	0.921	0.934	0.000	0.690	0.540 - 0.815
	Pmarg7	10.0	39.0	0.099	0.615	0.798	0.809	0.094	0.229	0.066 - 0.372
	Pmarg11	18.8	39.0	0.114	0.667	0.889	0.900	0.007	0.250	0.103 - 0.377
	Pmarg37	16.9	40.0	0.202	0.500	0.893	0.904	0.000	0.440	0.291 - 0.572
	Pmarg44	12.7	35.0	0.350	0.200	0.845	0.857	0.000	0.763	0.616 - 0.890
	Pmarg45	20.5	38.0	0.117	0.684	0.912	0.924	0.005	0.250	0.108 - 0.376
	Pmarg68	5.8	35.0	0.208	0.286	0.624	0.633	0.000	0.542	0.326 - 0.726
	Pmarg77	17.2	37.0	0.228	0.486	0.910	0.922	0.000	0.465	0.296 - 0.607
	Pmarg79	13.0	39.0	0.100	0.667	0.848	0.859	0.039	0.214	0.058 - 0.355
	overall	14.7	37.4	NA	0.488	0.849	0.860	0.000	0.427	0.365 - 0.467