

Spatially explicit genetic structure in the freshwater sponge *Ephydatia fluviatilis* (Linnaeus, 1759) within the framework of the monopolisation hypothesis

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Supplementary Table. Genetic diversity population statistics across loci and populations.

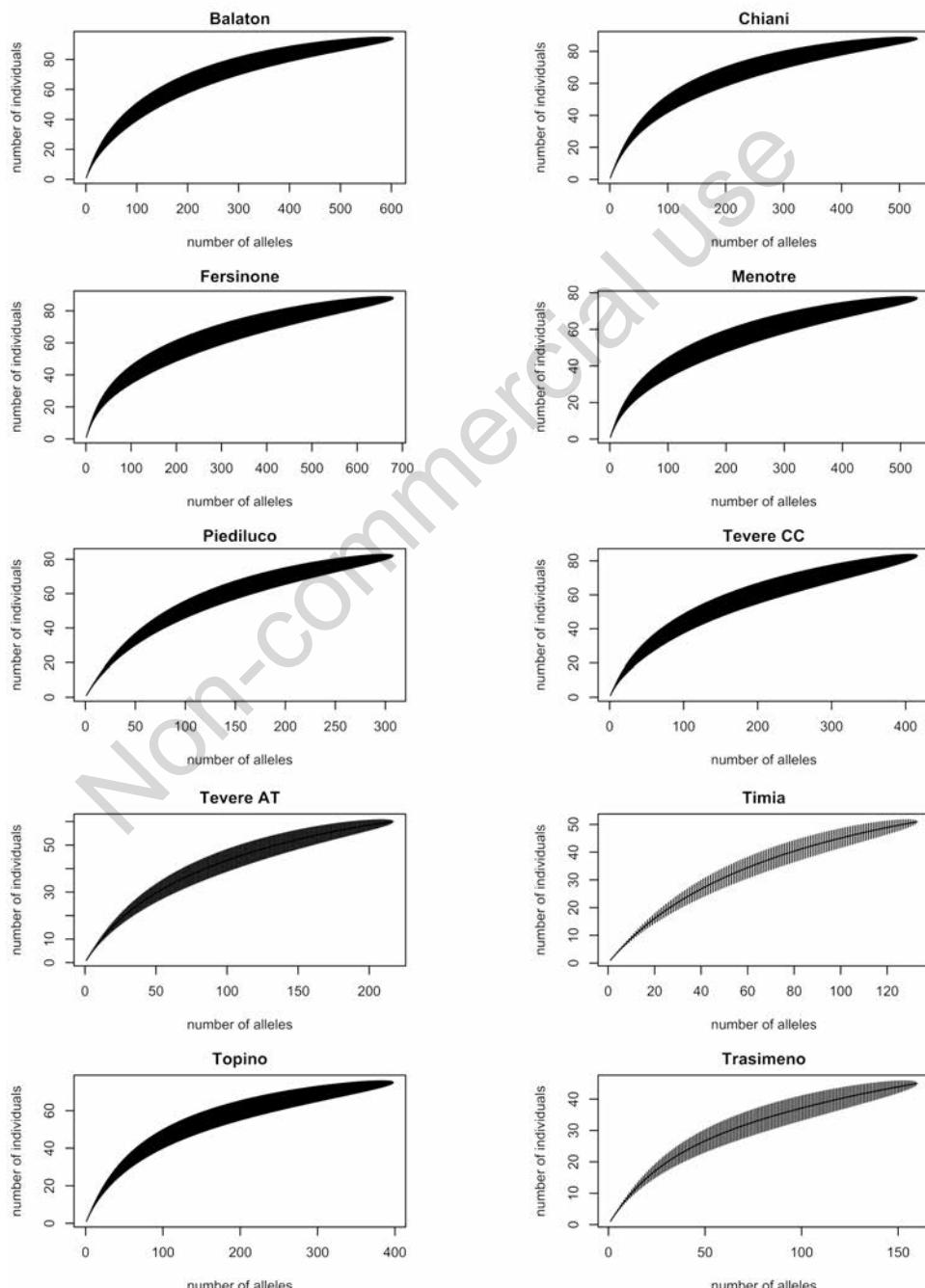
		Efl3	Efl4	Efl5	Efl7	Efl9	Efl10	Efl12	Efl14	Efl17	Efl20	Mean	SD
Piediluco (n=16)	N/null	6/no	7/no	5/no	5/no	5/no	5/yes	9/no	4/yes	6/no	5/no	5.7	1.41
	A	4.77	4.98	5.57	3.43	3.82	4.51	7.34	3.56	5.32	4.11		
	Ho	0.63	0.93	0.81	0.44	0.38	0.21	0.40	0.15	0.75	0.60	0.53	0.24
	He	0.77	0.70	0.79	0.70	0.61	0.76	0.87	0.50	0.80	0.54	0.71	0.11
Trasimeno (n=8) $F_{is} = 0.26$	P value	0.34	0.45	0.66	0.16	0.01	0.00	0.00	0.00	0.04	0.64		
	N/null	8/no	4/no	7/no	3/no	5/no	4/no	4/yes	5/no	6/no	3/no	4.9	1.66
	A	7.37	4.00	6.50	2.98	4.87	3.88	4.74	4.75	5.73	2.99		
	Ho	0.75	0.86	0.50	0.25	0.63	0.25	0.25	0.50	0.75	0.75	0.55	0.22
Fersinone (n=34) $F_{is} = 0.20$	He	0.86	0.78	0.85	0.43	0.81	0.73	0.71	0.77	0.82	0.57	0.73	0.13
	P value	0.07	0.42	0.03	0.14	0.74	0.01	0.00	0.29	0.25	0.70		
	N/null	9/no	5/no	19/yes	4/no	6/no	5/no	14/yes	5/no	8/no	9/no	8.4	4.76
	A	5.77	2.91	7.24	2.92	3.53	3.63	2.64	3.70	5.08	3.73		
Topino (n=17)	Ho	0.59	0.71	0.50	0.47	0.56	0.62	0.13	0.68	0.62	0.26	0.51	0.18
	He	0.76	0.53	0.84	0.62	0.64	0.53	0.43	0.68	0.73	0.67	0.64	0.12
	P value	0.00	0.00	0.00	0.01	0.03	0.07	0.00	0.00	0.05	0.00		
	N/null	9/no	4/no	11/no	6/no	6/no	3/no	2/no	9/no	8/no	6/no	6.4	2.87
Tevere CC (n=20)	A	6.30	3.66	7.59	3.87	5.22	2.66	1.44	6.80	5.81	4.65		
	Ho	0.56	0.53	0.71	0.53	0.88	0.76	0.06	0.76	0.65	0.41	0.59	0.22
	He	0.82	0.68	0.86	0.71	0.77	0.53	0.06	0.87	0.81	0.68	0.68	0.23
	P value	0.05	0.02	0.00	0.27	0.31	0.10	1.00	0.02	0.00	0.00		
Timia (n=7)	N/null	12/no	7/no	9/no	4/no	6/no	4/yes	5/no	7/no	7/no	3/no	6.4	2.67
	A	6.84	4.76	5.89	2.42	4.97	2.64	3.59	5.90	5.26	2.94		
	Ho	0.65	0.70	0.55	0.20	0.70	0.10	0.05	0.70	0.65	0.55	0.48	0.25
	He	0.78	0.72	0.76	0.27	0.80	0.34	0.45	0.84	0.79	0.55	0.63	0.20
Tevere AT (n=11)	P value	0.08	0.01	0.01	0.05	0.01	0.00	0.00	0.10	0.03	0.05		
	N/null	5/no	7/no	8/no	4/no	4/no	4/no	2/no	7/no	5/no	5/no	5.1	1.79
	A	5.00	8.00	7.00	3.00	4.00	4.00	2.00	7.00	5.00	5.00		
	Ho	0.29	1.00	0.57	0.71	0.57	0.43	0.00	0.57	0.57	0.86	0.56	0.27
Chiani (n=27)	He	0.67	0.91	0.90	0.63	0.67	0.63	0.26	0.89	0.79	0.76	0.71	0.18
	P value	0.03	0.68	0.00	1.00	0.68	0.11	0.08	0.08	0.07	0.77		
	N/null	6/no	5/no	7/no	7/no	5/no	6/no	1/no	11/no	4/no	4/no	5.6	2.59
	A	5.24	4.81	5.99	4.76	4.03	5.15	1.00	7.69	3.40	3.87		
Menotre 2.91(n=28)	Ho	0.55	0.82	0.73	0.45	0.55	0.45	-	0.73	0.90	0.91	0.61	0.26
	He	0.69	0.78	0.82	0.79	0.47	0.80	-	0.79	0.62	0.69	0.65	0.24
	P value	0.01	0.11	0.04	0.04	1.00	0.00	-	0.17	0.10	0.40		
	N/null	8/no	9/no	12/no	5/no	6/yes	3/no	14/no	6/no	5/no	4/no	7.2	3.55
pagepress	A	5.97	5.22	7.87	3.84	4.82	2.80	8.52	4.62	3.11	3.05		
	Ho	0.41	0.77	0.56	0.46	0.35	0.15	0.48	0.67	0.22	0.30	0.44	0.18
	He	0.82	0.72	0.89	0.66	0.70	0.44	0.90	0.71	0.36	0.60	0.68	0.17
	P value	0.00	0.16	0.00	0.03	0.00	0.00	0.00	0.11	0.01	0.00		
Menotre 2.91(n=28)	N/null	10/yes	9/no	13/yes	5/no	6/no	3/no	7/no	9/yes	7/no	5/no	7.4	
	A	6.48	6.32	7.43	2.58	4.50	2.55	3.71	5.39	4.79	3.96		
	Ho	0.46	0.54	0.43	0.17	0.54	0.39	0.07	0.38	0.46	0.37	0.38	0.14
	He	0.85	0.84	0.87	0.49	0.72	0.38	0.38	0.68	0.67	0.67	0.66	0.17
Menotre 2.91(n=28)	P value	0.00	0.00	0.00	0.00	0.04	0.06	0.00	0.00	0.00	0.00		

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Supplementary Table. Continued from previous page.

		Efl3	Efl4	Efl5	Efl7	Efl9	Efl10	Efl12	Efl14	Efl17	Efl20	Mean	SD
Balaton (n=31)	N/null	8/no	8/no	10/no	5/no	11/no	6/no	12/yes	14/no	6/no	8/yes	8.7	2.94
	A	5.25	4.52	4.75	2.59	6.63	4.32	7.65	7.82	3.57	3.98		
	Ho	0.74	0.74	0.47	0.28	0.74	0.55	0.52	0.65	0.65	0.20	0.55	0.18
	He	0.77	0.65	0.69	0.35	0.84	0.66	0.89	0.89	0.57	0.55	0.69	0.16
	P value	0.27	0.19	0.03	0.11	0.22	0.00	0.00	0.00	0.56	0.00		
Total alleles		19	18	31	8	13	9	24	23	13	16		

SD, standard deviation; N, number of alleles per population; null, null presence of alleles at each locus; n, number of genotyped individuals; A, allelic richness; Ho, observed heterozygosity; He, expected heterozygosity; -, value not calculated by software.

**Supplementary Figure 1.** Cumulative curves and 95% confidence intervals of the number of alleles for each population.