

Supplemental Material

Table S1. Comparison of germline chromosome inversions in *Belgica antarctica* larvae from the studied locations.

Inversion		Location		Fisher's exact test <i>p</i> -value
		Galindez Island, location 1	Galindez Island, location 2	
Chromosome II: inversion A	present	7	14	0.0364
	absent	28	17	
Chromosome II: inversion B	present	4	8	0.2013
	absent	31	23	
Chromosome III: inversion C	present	0	1	0.4697
	absent	35	30	
Chromosome III: inversion D1	present	7	16	0.0099
	absent	28	15	
Number of examined individuals		35	31	

Table S2. Frequencies of chromosomal polymorphisms in *Belgica antarctica* larvae analyzed in different studies. The confidence interval, generated from Clopper-Pearson's test (at a confidence level of 0.95), is indicated in parentheses after the frequencies.

Location	N	Inversions frequencies			Study	
		Chromosome II: A	Chromosome II: B	Chromosome III: C		
Cormorat Island AA1	58	0.379 (0.255, 0.516)	0.224 (0.125, 0.353)	0.069 (0.0191, 0.167)	Atchley & Davis 1979	
Limitrophe Island AC1	66	0.439 (0.317, 0.567)	0.394 (0.276, 0.522)	0.073 (0.0235, 0.164)		
Hermit Island AE1	63	0.444 (0.319, 0.575)	0.492 (0.364, 0.621)	0.254 (0.153, 0.379)		
Ikes Island AF1	44	0.523 (0.367, 0.676)	0.409 (0.263, 0.567)	0.136 (0.0515, 0.273)		
Shortcut Island AG1	49	0.571 (0.422, 0.711)	0.367 (0.234, 0.517)	0.061 (0.0127, 0.168)		
Shortcut Island AG2	77	0.571 (0.453, 0.683)	0.377 (0.269, 0.495)	0.078 (0.0292, 0.162)		
Bonapart Point AJ1	93	0.613 (0.506, 0.712)	0.247 (0.163, 0.347)	0 (0, 0.0389)		
Bonapart Point AJ3	82	0.524 (0.411, 0.636)	0.317 (0.219, 0.429)	0.061 (0.0201, 0.137)		
Bonapart Point AJ4	64	0.513 (0.402, 0.657)	0.438 (0.314, 0.568)	0.047 (0.00983, 0.131)		
Norsal Pont AM1	55	0.618 (0.477, 0.746)	0.2 (0.104, 0.33)	0.2 (0.104, 0.33)		
Norsal Pont AM5	72	0.542 (0.42, 0.66)	0.306 (0.203, 0.426)	0.431 (0.315, 0.553)		
Norsal Pont AM6	68	0.529 (0.404, 0.651)	0.235 (0.141, 0.353)	0 (0, 0.0528)		
Litchfield Island AO1	70	0.514 (0.391, 0.635)	0.443 (0.324, 0.567)	0.314 (0.208, 0.436)		
Litchfield Island AO4	66	0.53 (0.403, 0.654)	0.288 (0.183, 0.413)	0.121 (0.0537, 0.225)		
Litchfield Island AO5	62	0.452 (0.325, 0.584)	0.5 (0.37, 0.63)	0.258 (0.155, 0.385)		
Litchfield Island AO6	101	0.505 (0.404, 0.606)	0.535 (0.433, 0.635)	0.02 (0.00247, 0.07)		
Strandtmann Island AP1	43	0.419 (0.27, 0.579)	0.512 (0.355, 0.667)	0.372 (0.23, 0.533)		
Port Lockroy	49	0.551 (0.402, 0.693)	0.592 (0.442, 0.73)	0.041 (0.00504, 0.14)		
Gonzalez Videla Base (Danco Coast)	81	0 (0, 0.0445)	0 (0, 0.0445)	0.037 (0.00769, 0.104)		Martin 1962
Near Port Lockroy	8	0.625 (0.245, 0.915)	0.5 (0.157, 0.843)	0 (0, 0.369)		Michailova <i>et al.</i> 2021
Galindez Island 1 (1350)	35	0.2 (0.0844, 0.369)	0.1143 (0.032, 0.267)	0 (0, 0.1)	Current	
Galindez Island 2 (1350)	31	0.4516 (0.273, 0.64)	0.2581 (0.119, 0.446)	0.0323 (0.000821, 0.167)	Current	
Kruskal-Wallis p-value		0.062	0.127	0.185		