

Supplementary Table 1. Novel growth medium mixtures and $\lambda_{expected}$ for populations in the fluctuating treatment. Mixture 5, with 0.95% natal medium and 99.05% corn flour, (bold) was used in each generation for populations in the stable treatment.

Mixture	% Natal	% Corn	$\lambda_{expected}$
1	0.580	99.420	0.877
2	0.72	99.328	0.981
3	0.765	99.235	1.070
4	0.857	99.143	1.141
5	0.950	99.050	1.20
6	1.042	98.958	1.245
7	1.135	98.865	1.282
8	1.228	98.772	1.311
9	1.320	98.680	1.333
natal	100	0	3.36

Supplementary Table 2. Estimates from the Bayesian hierarchical model fit for the parameters in the NBBg model. A full text file of the burned-in samples that comprise the posterior distributions of these parameters is available. Note that a smaller k_E value corresponds to a greater environmental stochasticity because it is the shape parameter of the gamma distribution. Similarly, small values of k_D correspond to a greater demographic heterogeneity.

	Parameter mean	Standard deviation
R_0	1.132	0.0631
α	0.00874	0.00073
k_E (<i>stable</i>)	19.742	3.863
k_E (<i>fluctuating</i>)	16.316	3.192
k_D	2.250	1.021

Supplementary Table 3. Number of experimental replicates for each combination of introduction regime and environmental variability.

		Introduction regime			
		20x1	10x2	5x4	4x5
Environmental variability	Stable	120	98	95	105
	Fluctuating	120	96	101	107