Table S1. Fixed and variable parameters for the simulation model.

Type	Name	Description	Values
Fixed	Nspecies.pool	Number of species in the species pool	400
	C	Carrying capacity (in number of individuals) of the simulated communities	100
	NBd	Species' niche breadth	10
	Timesteps	Number of full cycle of C random substitution of individuals	10
	n.communities	Number of communities per species pool	1
	Ei	Environmental position of the community *i* on the gradient	50
	B_{abun}	Importance of the recruitment filter	10
	n.rep.null.model	Number of permutations used for each null distributions	1000
Variable	B_{env}	Importance of the abiotic filter	0; 0.1; 0.5; 1; 2
	B_{comp}	Importance of the biotic filter	0; 1; 5; 10
	δ	Rate of trait evolution	0.1; 0.5; 1; 5; 10