

Model-specific parameters		
Parameter	Description	Value
Size (V)	Length of the environment	1 - 1000
Flow rate (Q)	units of V moved per time step	0.001 - 1
Resource diversity (R)	number of inflowing resource types	10
Resource particle size	Range size for inflowing resource particles	1 - 1000
Immigration rate	per capita probability of immigration per time step	Q
Inflowing resource concentration	probability of a resource particle flowing in per time step	Q
Species-specific traits		
Trait	Description	Value
Intrinsic growth rate	proportional increase per time step	0.001 - 1
Active dispersal rate	units of space traveled against direction of flow per time step	0.001 - 1
Resuscitation rate	probability of resuscitating per time step	0.001 - 1
Basal metabolic rate (BMR)	proportion of endogenous resources lost to maintenance respiration per unit time	0.001 - 1
Reduction of BMR	proportional decrease of BMR when entering dormancy	0.001 - 1
Resource growth efficiencies	proportion of consumed resources assimilated in biomass	0 - 1
Individual-specific variables		
Variable	Description	Value
Resource quota (q_i)	amount of endogenous resources	0 - unconstrained
Body size	Individual biomass (does not include q_i)	0 - unconstrained
x	position along V	0 - V
Species	species of an individual	unconstrained
State	metabolic state	active or dormant