

Table S1. Parameters for the mathematical model

Parameters	Values
N	2.6
Q	0.95
D_u	0.00625
D_v	0.13333
D_n	0.00007
X	0.00008
k_u	15
k_v	35
k_p	0.006
k_d	0.005
$c1$	100
$c2$	40
$c3$	6
$c4$	4500
Functions	Expression
$n_{1,0}(x)$	$0.25+1.7*\exp(-(x)^2*5)+0.2*\exp(-(x)^2*200)$
$n_{2,0}(x)$	$0.05+2*\exp(-(x)^2*200)$
$n_{1,0}(x)$	0
$n_{2,0}(x,y)$	$q+\text{fluctuations}$

Presented are the various constants and parameters used in the numerical resolution of the mathematical model.