Table S2. Model parameters

Symbol	Description	Value	Unit
$\mu_{max,\,A}$	Maximum cell growth rate of species A	1*	h^{-1}
$\mu_{max,\,B}$	Maximum cell growth rate of species B	1*	h^{-1}
$Y_{R,\,A}$	Biomass yield of species A on R	0.5*	$g \cdot g^{-1}$
$Y_{E,\,A}$	Yield of E produced per R consumed	2	$g \cdot g^{-1}$
$Y_{R,\,B}$	Biomass yield of species B on R	0.125 (B_{facW}) 0.25 (B_{facI}) 0.375 (B_{facS}) 0.5 (B_{ncf})	$g \cdot g^{-1}$
$Y_{E,\,B}$	Biomass yield of species B on E	0.125 (B_{facS}) 0.25 (B_{facI}) 0.375 (B_{facW}) 0.5 (B_{obl})	$g \cdot g^{-1}$
$K_{R,\,A}$	Species A half-saturation constant for R	3.5×10^{-5} *	$g \cdot L^{-1}$
$K_{R,\,B}$	Species B half-saturation constant for R	3.5×10^{-4}	$g \cdot L^{-1}$
K_E	Species B half-saturation constant for E	3.5×10^{-5} (B_{fac}) 3.5×10^{-6} (B_{obl})	$g \cdot L^{-1}$
$K_{i,\,E}$	Half-saturation inhibition constant of E on species A	3.5×10^{-2} (low tox.) 3.5×10^{-3} (inter tox.) 3.5×10^{-4} (high tox.)	$g \cdot L^{-1}$
R_{Bulk}	Concentration of R in the bulk	0.125*	$g \cdot L^{-1}$
D_R	R diffusivity	9.6×10^{-7} *	$m^2 \cdot day^{-1}$
D_E	E diffusivity	7.2×10^{-6} *	$m^2 \cdot day^{-1}$

*Values from [1]

References

1. Mitri S, Xavier JB, Foster KR (2011) Social evolution in multispecies biofilms. Proc Natl Acad Sci U S A 108 Suppl 2: 10839-10846.