**Table S1. Reactions and respective stoichiometry of biological processes used in the models**

| Process | Solute | | Biomass | | Rate expression |
|---|---|---|---|---|---|
| | ***R*** | ***E*** | $X_A$ | $X_B$ | |
| Growth of producer, A | -1 | $Y_{E,A}$ | $Y_{R,A}$ | - | $\mu_{\max,A}\frac{R}{K_{R,A}+R}\frac{K_{i,E}}{K_{i,E}+E}X_A$ |
| Growth of cross-feeder, B | -1 | -1 | - | $Y_{R,B}+Y_{E,B}$ | $\mu_{\max,B}\left(\frac{R}{K_{R,B}+R}+\frac{E}{K_E+E}\right)X_B$ |