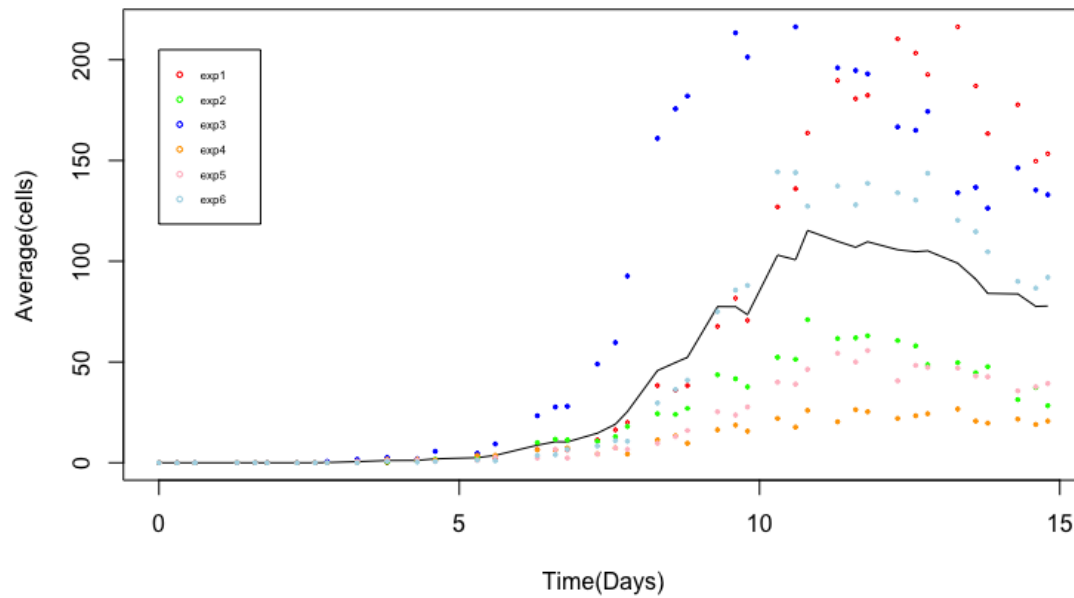
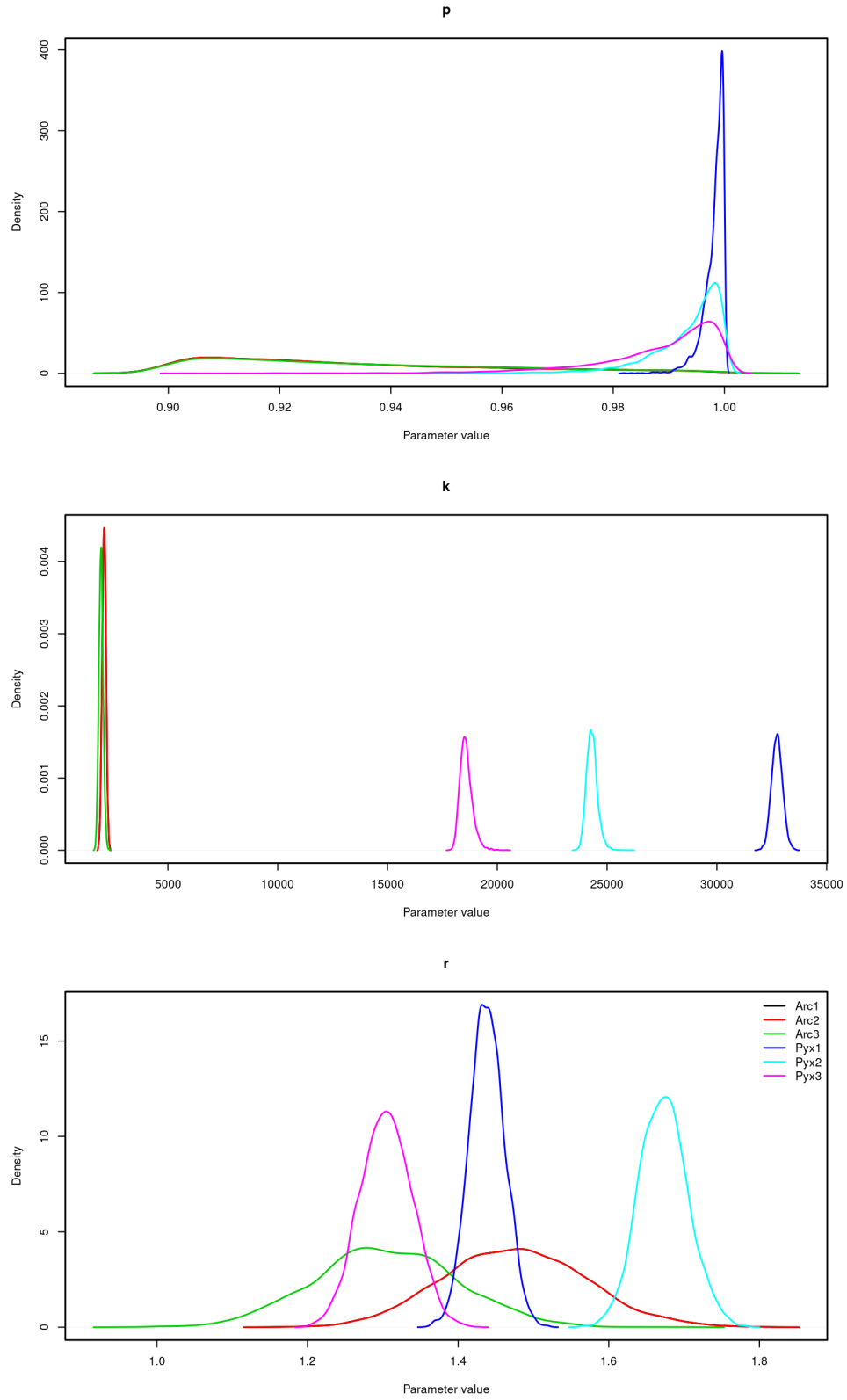


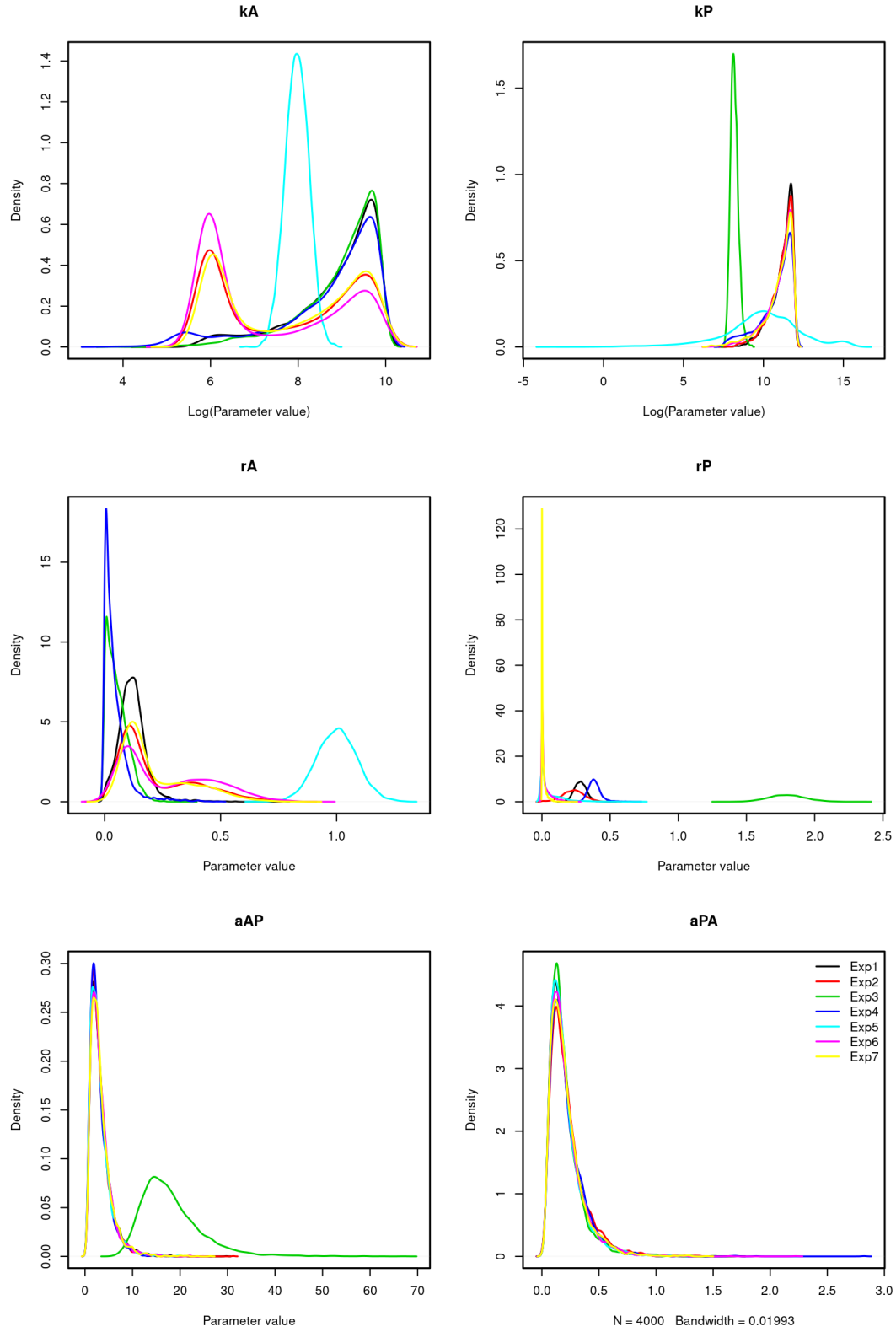
Supplementary figures:



**Figure S1:** Growth curves for *A.intermedia* when started the experiment with a single cell. Color points represents each one of the single-cell experiments, color legend is in the left corner of the figure. Black line correspond to the average growth between experiments.



**Figure S2:** Posterior distributions of the logistic model parameters. The values of  $K$  are in cells  $\text{cm}^{-2}$ ,  $r = \text{d}^{-1}$ .  $P$  is the detection probability.  $P$  has a fixed range between 0.9 and 1. Color lines represents each one of the single-species experiments, color legend is in the right corner of the figure. *A.intermedia* experiments are Arc 1,2 and 3. *P.operculata* experiments are Pyx 1,2 and 3.



**Figure S3:** Posterior distributions of the competition model parameters for the species *Arcella intermedia* (A) and *Pyxidicula operculata* (P). Each colored line represent one of the replicates of the competition experiment (color legend shown in the last figure). The values of  $k$  are in a logarithmic scale of cells  $\text{cm}^{-2}$ ,  $r$  are in days $^{-1}$ .  $aAP$  is the competition coefficient of the influence of A species on P (Eq. 3), whereas  $aPA$  is the competition coefficient of the influence of P on A (Eq.4).