

**Supplementary Figure S2.** The effect of initial inoculum dose on the relative fitness of competing phenotypes. Inoculum dose provides an alternative means of assessing density depends effects on competitive fitness. While the outcome of competition between phenotype III and IV was largely determined by frequencies, dose dependent effects on fitness were apparent when phenotype III were rare (initial frequency of 10%) and phenotype IV common (initial frequency of 90%) (dose \* frequency interaction  $F_{2,426} = 3.03$ ,  $P = 0.049$ ). Data are means  $\pm$  SE with fitted models for each competition treatment

