

Figure S1:

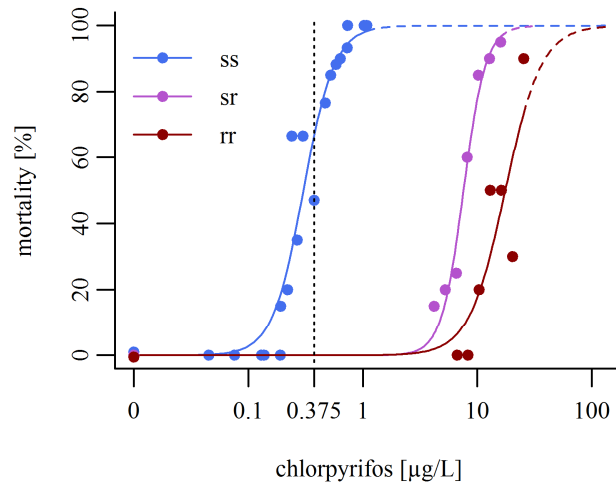


Figure S1. Contamination profiles of the organophosphorous pesticide chlorpyrifos for different *ace-1* genotypes in *Culex quinquefasciatus*. Groups of 5 first-instar larvae that were homozygous for the *ace-1^R* allele (rr), heterozygous (sr) or susceptible (ss) were contaminated in Elendt M4 medium without food. After 24 h, the larvae that did not move after disturbance with a blunt probe for five seconds were considered dead. Dashed lines represent extrapolated data. The dotted line indicates the concentration used for contamination in the main experiment.

Figure S2:

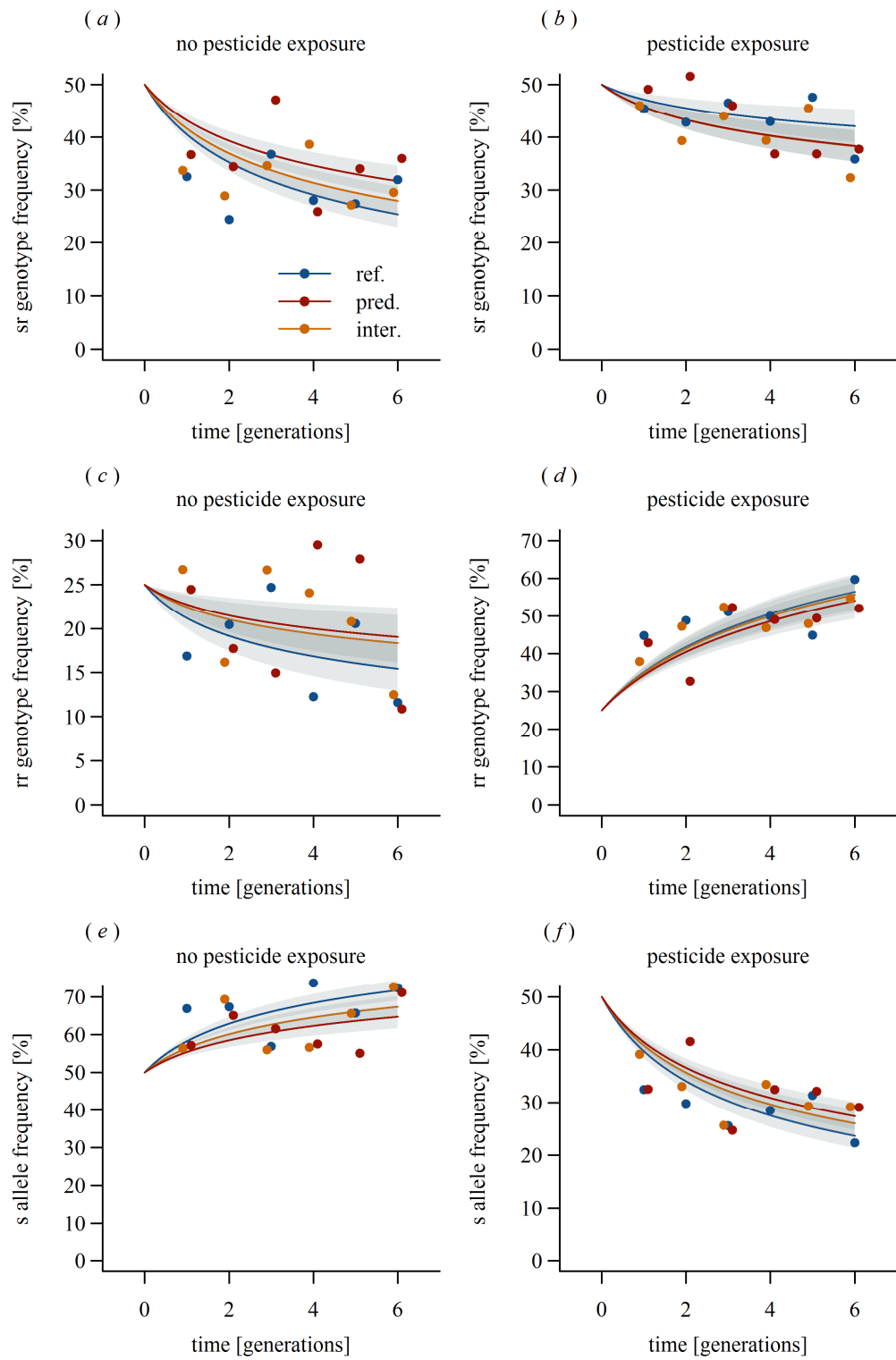


Figure S2. (a) – (b) The effects of non-selective predation (pred.) and interspecific competition (inter.) on the heterozygous genotype frequency under toxic and non-toxic conditions compared to reference populations (ref.) without species interactions. (c) – (d) The effects on the resistant genotype frequency and (e) – (f) on the frequency of the susceptible allele. N = 4 for each group of populations. The points represent the mean values for each generation and were calculated using separate generalised linear models with a binomial error distribution for each generation. The lines represent the trend over all generations, which was analysed using a generalised linear mixed effects model with the log-transformed generations included as a covariate; the intercepts were fixed at the known initial genotype or allele frequency. The means \pm SEM are reported.