

Influence of plant resistance at the third trophic level: Interactions between parasitoids and entomopathogenic fungi of cereal aphids

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Host-plant resistance can affect herbivorous insects and their natural enemies such as parasitoids and entomopathogenic fungi. This tritrophic effect acts on interspecific interactions between the two groups of natural enemies distantly related in phylogenetic terms. The intra- and extra-host aspects of the interaction between the cereal aphid parasitoid *Aphidius rhopalosiphii* and the entomopathogenic fungus *Erynia neoaphidis* developing on the grain aphid, *Sitobion avenae*, on resistant and susceptible wheat (*Triticum aestivum*) cultivars, were studied. The competitive outcome of the intra-host interaction depended on the timing of parasitoid oviposition and fungal infection and was affected by wheat resistance. In particular, survival of the parasitoid was lower on the resistant wheat cultivar than the susceptible wheat cultivar, when the competitive outcome of the interaction was favourable for either parasitoid or fungal development. Before and after this period the influence of plant