

Influence of wheat and oat cultivars on the development of the cereal aphid parasitoid *Aphidius rhopalosiphi* and the generalist aphid parasitoid *Ephedrus plagiator*

Fuentes-Contreras, J. E.

Powell, W.

Wadhams, L. J.

Pickett, J. A.

Niemeyer, H. M.

The effects of three wheat cultivars and two oat cultivars on the development of the cereal aphid parasitoid *Aphidius rhopalosiphi* De Steph, and the generalist aphid parasitoid *Ephedrus plagiator* (Nees) (Hymenoptera: Braconidae) were evaluated in the laboratory. The level of hydroxamic acids, a family of secondary metabolites that can affect the mean relative growth rate of cereal aphids in cereals, were measured in the different cultivars. The parasitoids were reared in *Sitobion avenae* (F.) (Homoptera: Aphididae), using plants grown under greenhouse conditions. *A. rhopalosiphi* showed a longer developmental time on wheat relative to oat cultivars. This effect was accounted for by a significant increase in the time from oviposition to pupation (mummy formation), while the duration of the pupal stage remained constant between treatments. No further effects were observed in other variables evaluating *A. rhopalosiphi* performance, such as adult longevity, adult body weight and secondary sex