

Dimboa glucoside, a wheat chemical defense, affects host acceptance and suitability of *Sitobion avenae* to the cereal aphid parasitoid *Aphidius rhopalosiphi*

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The influence of hydroxamic acids (Hx), plant secondary metabolites associated with aphid resistance in wheat, on the host acceptance and suitability of the aphid *Sitobion avenae* to the cereal aphid parasitoid *Aphidius rhopalosiphi* was evaluated. Aphids showed a reduction in mean relative growth rate and in body size in the wheat cultivar with higher Hx level. Reduction in aphid size was related to a decreased success in avoiding parasitoid oviposition. A minor increase in *A. rhopalosiphi* developmental time was observed in aphids feeding on the higher Hx cultivar.

Experiments with different concentrations of DIMBOA glucoside, the main Hx in wheat, in artificial diets showed an increase in parasitoid developmental time at the highest concentration, with no change in other performance variables. The evidence is discussed in relation to the compatible utilization of host-plant resistance and biological control in integrated pest management.