

Effect of floral resources on predation of *Myzus persicae* by *Macrolophus pygmaeus* on pepper plants

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Understanding the relative effects of plant feeding by omnivores is essential to elucidate factors that influence the occurrence and strength of herbivore suppression. The omnivorous predator *Macrolophus pygmaeus* (Rambur) (Hemiptera: Miridae) is a major native natural enemy of several serious pests of pepper and other vegetable crops, feeding also on pollen and fully blooming flowers. In this paper, the effect of different plant food sources on its predation rate was examined. In all the experiments, nymphs of the second instar of the aphid *Myzus persicae* (Sulzer) (Homoptera: Aphididae) were used as prey at different densities. Firstly, the consumption rate of the predator was evaluated at different prey densities in microcosms on a single pepper leaf either with or without alternative food (pollen-flower of pepper plant). In addition, these experiments were conducted at a larger scale on whole pepper plants that had 6 leaves with or without the presence of a flower. The results showed that when a flower or pollen was present in the Petri dish arena, predation rate on *M. persicae* was significantly reduced at densities high enough to allow the predator to reach saturation. However, at even higher prey densities the consumption rates did not differ. Contrary there was a significant reduction in predation on aphids on a plant in the presence of a flower compared with a plant of the same cultivar without a flower. The importance of these results in understanding how phytophagy impacts on predation of omnivorous predators is discussed.

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