

**Seasonal parasitism of *Empoasca decipiens* by *Anagrus atomus*
on four bean species in Tehran area**

B. NASERI, Y. FATHIPOUR* and A. A. TALEBI

Department of Entomology, Faculty of Agriculture, Tarbiat Modares University

ABSTRACT

Empoasca decipiens (Hom.: Cicadellidae) is one of the important pests of different crops in Iran. The field studies were conducted for determining the seasonal parasitism caused by *Anagrus atomus* (Hym.: Mymaridae) on the leafhopper eggs and relationship between parasitism rate and population density of the leafhopper on four bean species including *Phaseolus vulgaris* L. var. Talash, *P. lunatus* L. var. Sadaf, *P. calcaratus* Roxb var. Goli and *Vigna sinensis* L. var. Parastoo in Tehran area, during 2004-2005. The samples (bean leaves) were kept in laboratory conditions ($26 \pm 1^\circ\text{C}$, RH: $70 \pm 5\%$ and a photoperiod 16:8 L:D h.) until the parasitoids emerged, and the number of leafhopper nymphs and emerged wasps were counted. The maximum parasitism rate was occurred on Parastoo variety during two years that was in 2004 (24.34%) and in 2005 (33.33%). The parasitism was not observed on the other varieties except Goli in two sampling dates. The parasitism rate of *A. atomus* was determined as density independent to its host density, partly because of its wide host range among other cicadellids.

Key words: *Empoasca decipiens*, *Anagrus atomus*, seasonal parasitism, bean species

* Corresponding author: fathi@modares.ac.ir

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Seasonal parasitism of *Empoasca decipiens* by *Anagrus atomus* on four bean species in Tehran area

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B. Naseri, Y. Fathipour and A. A. Talebi

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Address of the authors: Eng. B. NASERI, Dr. Y. FATHIPOUR and Dr. A. A. TALEBI, Department of Entomology, Faculty of Agriculture, Tarbiat Modares University, P. O. Box 14115-336, Tehran, Iran.