

## **Infestation Rates and Natural Enemies of *Mercetaspis halli* (Green) (Homoptera: Diaspididae) with New Records from Turkey**

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### **ABSTRACT**

The present study carried out in Diyarbakır, Elazığ and Mardin during 2002-2004 on almond trees infested with the diaspidid *Mercetaspis halli* (Green). *M. halli* is considered an important pest and is in the domestic quarantine list of Turkey. The infestation level is described as “low level” in almond orchard. One parasitoid species and eleven predator species were recorded as natural enemies of *M. halli*. The parasitoid *Thysanus ater* Walker (Hymenoptera: Signiphoridae) are first records of *M. halli* from Turkey. Among these predators, *Scymnus araraticus* Khrzorian (%34.26 of the adult), *Oenopia conglabata* (L.) (%25.56 of adults) and *Adalia fasciatopunctata reveliieri* Muls. (%12.62 of adults) were found to be the most common predators of *N. halli*.

*Key words:* *Mercetaspis halli*, pest quarantine, *Thysanus ater*, almond, new record, Turkey

### **INTRODUCTION**

Almond culture is considered as having a great economic importance in Turkey. Approximately 13% of total almond production of Turkey is obtained from Diyarbakır, Elazığ and Mardin (Anonymous, 1999).

Although most species belonging to superfamily Coccoidea have a large host range, they are widespread and harmful on trees and bushes. Instars of adult and preadult are feeding on the stem, branch, leaf, fruit, sucker and root of plants. Armoured scale insects are important agricultural, horticultural and forestry pests. Therefore, their harm on fruit-trees is significant.

Even though, there have been some studies on the *M. halli* there is none on their natural enemies (Archangelskaya, 1937; Green, 1934; Hosbrook & Hogden, 1955;