

Graduate School Faculty of Agriculture

Department of Plant Protection The Thesis Submitted for the Degree of Master of Science (In the Field of Entomology)

Title:

Identification, Species Diversity and Distribution of Aphid Parasitoids (Hym., Braconidae, Aphidiinae) at Southern Zagros, Iran

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Abstract

The present work covers original information on the aphid parasitoids (Hymenoptera: Braconidae: Aphidiinae) of Southern Zagros. The survey was carried out over the period of 2007-2009. Samples from plants bearing aphid colonies consisting of both live and mummified aphids were collected from several localities in Southern Zagros. Identification of the species was made based on several morphological characters. 9 genera and 16 species were identified and 42 parasitoid-plant-aphid associations are recorded. The collected species were: *Adialytus salicaphis, Aphidius colemani, Aphidius funebris, Aphidius matricariae, Aphidius persicus, Aphidius rhopalosiphi, Aphidius salicis, Aphidius transcaspicus, Binodoxys angelicae, Diaeretiella rapa, Ephedrus persicae, Lysaphidus arvensis, Lysiphlebus confuses, Lysiphlebus fabarum, Praon volucre* and *Trioxys pallidus.* Species diversity was studied in three catagories. In mentioned regions (highland more than 1700 m altitude and lowlands fewer than 1700 altitude) the most diversity observed in lowlands. Species diversity in host aphids showed the most diversity in *Metopolophium dirhodum.* Also species diversity in host plants showed the most diversity in Lamiaceae family.

Key words: Parasitoid, Aphid, Morphologic, Species Diversity, Southern Zagros