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Abundance of parasitoids associated with two major stink bugs on pistachio trees. M. R. Mehrnejad. Pistachio Research Institute P. O. Box 77175.435, Rafsanjan, Iran, reza_mehrnejad@hotmail.com.

Several species of hemipteran bugs belonging to Pentatomidae were known as the major pistachio pests (1, 2, 3). They are suitable hosts for a number of parasitoid wasps, which play a key role to decrease bugs population, although insecticides have been considered the major means of pest control for the last 65 years in pistachio orchards. The abundance and diversity of parasitoids attacking two stink bugs e.g., Brachynema germari (Kolenati) and Acrosternum arabicum Wagner were surveyed at the pistachio plantation areas of Kerman province, southern part of Iran. Samplings were carried out in July, August and September 2009 and 2010. The egg masses of two pentatomid bugs species were collected from pistachio fruit clusters and were separately reserved under laboratory conditions. At the same time, the adult stink bugs were also collected from pistachio trees. A total of 2660 pentatomid bug eggs were collected through two years out of which, four species of hymenopterous parasitoids were identified including three primary parasitoids belong to Scelionidae (62.7%) and 37.3% represented Ooencyrtus sp. (Hym.: Encyrtidae), a facultative parasitoid for stink bug eggs. The parasitoid Trissolcus agriope (Kozlov & Lê) was the most abundant scelionid (32.9%), followed by Trissolcus volgensis (Viktorov) (21.6%) and Psix saccharicola (Mani) (8.2%).
The natural parasitism rate varied from year to year as 95% and 88% in 2009 and 2010, respectively. Based on available references, *Acrosternum heegeri* Fieber and *Acrosternum millieri* (Mulsant and Rey) (both Hemiptera: Pentatomidae) have been reported from pistachio trees (1, 3). However, these two stink bugs were not collected in the present survey. It was found that *A. arabicum* is widely distributed on pistachio trees in Kerman province feed on pistachio fruits, and it is reported for the first time. In addition, two scelionid wasps including *T. volgensis* and *P. saccharicola* are considered as the active parasitoids for *B. germari* and *A. arabicum*. It is the first report for presence of these two scelionid wasps attacking stink bugs in pistachio plantations. The scelionid parasitoids were examined and identified by Prof. N. F. Johnson, the Ohio State University, and the pentatomid bugs were identified by Dr. R. E. Linnavuori, Finland.