SCIENTIFIC NOTES

COLLECTION OF ORIUS SPECIES
(HEMIPTERA: ANTHOCORIDAE) IN SOME COUNTIES OF YAZD PROVINCE, IRAN

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Recently, the use of predatory bugs of the genus Orius Wolff has greatly increased in many greenhouses and horticultural crops. These are generalist predators able to control pest outbreaks on different crops. To evaluate a natural enemy for biological control, is first necessary to search in the area of origin to determine if an efficient predator, parasitoid or pathogen is present (Luck et al., 1988). Therefore, it is necessary to explore the local fauna for indigenous Orius species which are adapted to the local climatic conditions of a region.

Until now, 14 Orius species has recorded from various parts of Iran (Ghahari et al., 2009), but not a single species from Yazd province, located in the centre of the country with an area of 131.575 km². In order to determine distribution and abundance of Orius species in this area, we investigated greenhouses, fruit gardens, crop fields and ornamental plants in counties of Yazd, Saduq, Taft, Mehriz and Abarkuh in Yazd province, during growing season in 2010-2011 (April-September). Samplings were done mainly by beating flowers or terminal buds onto a white plastic plate and specimens were taken back to the laboratory. Using genital preparations, specimens were identified based on available resources and keys (see e.g. Pericart, 1995; Ostovan, 1998; Linnavuori & Hosseini, 2000).

Totally, 5 species belonging to the tribe Oriini and the genus Orius were collected and identified. All of them are first report from Yazd province.

Relative abundance for each species among total collected specimens was also calculated.

Orius (Dimorphella) albidipennis (Reuter)
Material examined: 230♂♂, 340♀♀, from all of the sampling areas throughout the sampling period.
Host plants: sunflower, alfalfa, sorghum, almond, green onion and ornamental flowers.
Relative abundance: %85.

Orius (Orius) niger (Wolff)
Material examined: 4♂♂, 5♀♀, Yazd, August 2010, sunflower; 1♂, 2♀♀, Mehriz, August 2010, sunflower; 6♂♂, 10♀♀, Yazd, July 2010 & 2011, alfalfa; 5♂♂, 7♀♀, Mehriz, August 2010, alfalfa; 2♂♂, 3♀♀, Yazd, June 2011, millet; 3♂♂, 4♀♀, Saduq, June 2011, alfalfa.
Relative abundance: %7.8.
Orius (O.) pallidicornis (Reuter)
Material examined: 2♂♂, 3♀♀, Yazd, July 2010, zinnia flowers; 5♂♂, 7♀♀, Yazd, August 2010 & 2011, sunflower; 2♂♂, 2♀♀, Yazd, June 2010, alfalfa; 2♂♂, 4♀♀, Saduq, June 2011, sunflower.
Relative abundance: %3.8.

Orius (O.) laevigatus (Fiber)
Material examined: 2♂♂, 3♀♀, Abarkuh, July 2010, sunflower; 2♂♂, 3♀♀, Mehriz, August 2010, alfalfa; 1♂, 1♀, Yazd, August 2010, sorghum.
Relative abundance: %1.7.

Orius (Heterorius) vicinus (Ribaut)
Material examined: 3♂♂, 5♀♀, Taft, September 2010, almond; 2♂♂, 2♀♀, Taft, June 2011, green onion.
Relative abundance: % 1.7.

The survey indicates that O. albidipennis is well adapted to the investigated area which may make it good candidate for biological control programs.

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LITERATURE CITED


