

Short communication

New records of the predatory stinkbugs (Het.: Pentatomidae: Asopinae) from Iran

J. Mohaghegh

Agricultural Entomology Research Department, Iranian Research Institute of Plant Protection, P.O. Box 1454, Tehran 19395, Iran, E-mail: mohaghegh@ppdri.ac.ir

چکیده

تاکنون تعدادی از سن‌های شکارگر زیرخانواده‌ی Asopinae از ایران گزارش شده است. در تحقیق حاضر، گونه‌های *Arma custos* (F.) و *Picromerus bidens* (L.) از این زیرخانواده از کناره‌ی جنوبی دریای خزر به عنوان گزارش جدید برای کشور معرفی می‌گردد. گونه‌ی اخیر در حال تغذیه از لاروهای پروانه‌ی سفید آمریکایی، *Hyphantria cunea* (Drury)، در مرداد ماه مشاهده شد. حشرات کامل این شکارگر نیز در حال زمستان‌گذرانی زیر بقایای گیاهی ملاحظه گردید. اطلاعاتی درباره‌ی مشخصات کلی و پراکنش این سن‌ها نیز ارائه شده است.

Some species of the subfamily Asopinae have already been reported from Iran (Safavi, 1976; Hoberlandt, 1995). In the course of a study on asopine bugs from the south coast of the Caspian Sea (north of Iran), collections were performed from natural and agricultural areas of the region. Besides, asopine specimens of the same region maintained at the Hayk Mirzayans Insect Museum (HMIM) in Iranian Research Institute of Plant Protection (IRIPP), Tehran, Iran, were examined. Taxonomic keys of the related references were used to identify the bugs (eg., Stichel, 1961; Lodos & Önder, 1983; Thomas, 1994). Body measurements were provided using an ocular micrometer (0.1 mm precision). As a result, two species are now newly recorded from Iran:

- *Picromerus bidens* (Linnaeus)

Body oval to elongately oval; antennae almost redish; female body length, humeral width and abdominal width are 14, 8.7 and 8 mm, respectively.

Material examined: 1♀ collected by Ebrahimi and Badii from the forest of Vandarban, Rudbarak, Kalardasht (Mazandaran Province) at altitude of 2000 m on 31/08/1990.

Distribution: the species has been reported from Afghanistan, Azarbaijan, Turkey, Russia, North Africa, many European countries and North America (Thomas, 1994). Larivière & Laroche (1989) based on a literature review stated that in the Old World, *P. bidens* is widely distributed in the western Palearctic Region and throughout Europe, from 64° N

latitude south to North Africa in the west and China in the east; it occurs as far west as Ireland, and as far east as Siberia and China.

Another species of the genus *Picromerus* Amyot & Serville, viz. *P. conformis* (Herrich-Schaeffer), has already been reported by Hérard *et al.* (1979) from Bandar Anzali, Iran, where the predator was relatively abundant preying on larvae of the gypsy moth, *Lymantria dispar* (Linnaeus). A new locality of this predator is now reported based on a female collected by Abaïi from the forest of Asalem (Guilan Province) on 15/06/1983. A distinctive characteristic between *P. bidens* and *P. conformis* is the colour of the antennae, which is usually black with palish portions in the latter and uniformly redish in the former.

Members of the genus *Picromerus* are generalist predators feeding especially on larval stages of leaf eating Lepidoptera, Coleoptera and Hymenoptera (Larivière & Laroche, 1989). However, both *P. bidens* and *P. conformis* can prey on defoliator larvae of different forest pests in the region.

- *Arma custos* (Fabricius)

Body elongately oval, relatively dark; tylus slightly but distinctly shorter than juga; antennae black with palish portions; female body length, humeral width and abdominal width are 13, 7.3 and 7.2 mm, respectively. The respective measurements for the male are 11.1, 6.5 and 6.4 mm.

Material examined: 3♀, 4♂ collected from Guilan Province (Nazoksara, Lasht-e-Nesha: N 37° 19' 25.2"; E 49° 56' 29.3"; Alt. 3.25 m) by the author on 17.08.2005; two overwintering live adults (1♀, 1♂) collected under the plant debris from the same locality on 27.11.2005.

Distribution: Turkey, Russia, North Africa, many European and some Asian countries have been reported as its distribution areas (Thomas, 1994).

At first collection, the fifth instars and adults of *A. custos* were observed feeding on the fall webworm, *Hyphantria cunea* (Drury), on mulberry trees (fig. 1). The latter species has already been reported as a prey for *A. custos* (Herting, 1976).

Hoberlandt (1995) reported *Arma insperata* Horváth for Iran based on specimens collected from Tonekabon and Nowshahr (Mazandaran Province). This species is distinguished from *A. custos* in having equal tylus and juga at apical margin of the head.

In conclusion, 9 species of the predatory stinkbugs are and/or have been hitherto recorded for Iran: *Andrallus spinidens* (F.), *Jalla dumosa* (L.), *Pinthaeus sanguinipes* (F.),

Troilus luridus (F.), *Zicrona coerulea* (L.), *A. insperata*, *A. custos*, *P. conformis* and *P. bidens*.



Figure 1. The predator *A. custos* feeding on a late instar of *H. cunea*.

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