

Short communication

First report of *Cryptus inquisitor* (Hym.: Ichneumonidae) from Iran

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چکیده

زنبور پارازیتوئید *Cryptus inquisitor* Tschek (Hym.: Ichneumonidae) برای اولین بار از ایران گزارش می‌شود. زنبور برگ‌خوار ترشک *Kokujewia ectrapela* Konow (Hym.: Argidae) میزبان این پارازیتوئید در منطقه‌ی ارومیه بوده و میزبان جدیدی برای آن محسوب می‌شود. نمونه‌های *C. inquisitor* از شفیله‌های میزبان به‌دست آمدند.

The subfamily Cryptinae is the largest subfamily within the Ichneumonidae and might be encountered in the majority of terrestrial habitats. The nomenclature of this group is complex, e.g. it has been referred as the Phygadeuontinae and Gelinae (Townes, 1969). Almost all Cryptinae have been described as idiobiont ectoparasitoids. The most common hosts of Cryptinae are endopterygote pupae or prepupae enclosed in cocoons or plant tissue. However, there are some endoparasitic species in the Hedycryptina, Phygadeuontina, and Stilpnina. Conversely, a few are koinobionts. Furthermore, some species parasitize the egg sacs of Pseudoscorpionida and Araneae, and many can develop as secondary parasitoids. This subfamily includes 379 genera worldwide (Goulet & Huber, 1993). Although there is a large amount of information known about the host relationships of some Cryptinae, little is known on their biology. Furthermore, because the subfamily is rather large, it is structurally very diverse (Gauld & Hanson, 1995).

The *Kokujewia ectrapela* Konow (Hym.: Argidae) (fig. 1B-D) belongs to the Caspian fauna (Delatin, 1967 cited in Blank & Taeger, 1998) and the larvae of this sawfly were found feeding on *Rumex* spp. (Polygonaceae) in Urmia region, Iran, and were considered as a potential biological control agent of these weeds (Karimpour, 2007a,b).

This study was carried out during the period of May 2006 to September 2007 in Urmia region. The pupae of *K. ectrapela* were collected from a range of plants that were not entirely mentioned as their host plants before. A total of 68 pupae of the host were collected. The pupae were kept in boxes covered by muslin at $24 \pm 1^\circ\text{C}$, $65 \pm 5\%$ R.H. and natural day light conditions, and were checked daily. Emerging parasitoids were collected and identified as *Cryptus inquisitor* Tschek (Ichneumonidae: Cryptinae) (fig. 1A). The *C. inquisitor* is new

record for Iran fauna, as well as *K. ectrapela* represented a new host for the mentioned species.

Diagnosis: hind tarsi of *C. inquisitor* without white ring; antennae brown; clypeus without tooth; head not narrowed behind eyes; metathorax wrinkled, without lateral teeth; margin of eye, vertex, neck, and scutellum white; all femora and fore tibiae red; hind tibiae brown; postpetiolus and segment 2-6 red; 8-10 mm length (Meyer, 1934).

Four males and three females of *C. inquisitor* were preserved in Natural History Museum of Urmia University.

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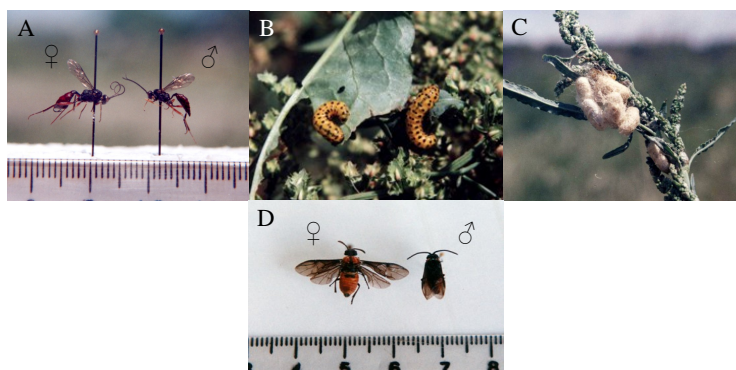


Figure 1. A, *Cryptus inquisitor*. B-D, *Kokujewia ectrapela*. B, larvae; C, pupa; D, adults.

References

- Blank, S. M. & Taeger, A.** (1998) Revision of the sawfly genera *Asiarge* Gussakovskij 1935 and *Kokujewia* Konow 1902 (Hymenoptera: Argidae). *Beiträge zur Entomologie, Berlin*. 48(2): 505-515.
- Gauld, I. D. & Hanson, P. E.** (1995) *The Hymenoptera of Costa Rica*. 893 pp. Oxford University Press.
- Goulet, H. & Huber, J. T.** (1993) *Hymenoptera of the world: an identification guide to families*. 668 pp. Agriculture Canada Publication.

- Karimpour, Y.** (2007a) Biology of the *Rumex* leaf defoliator sawfly *Kokujewia ectrapela* Konow (Hymenoptera: Argidae) in Urmia region. *Proceedings of the XIIth International Symposium on Biological Control of Weeds*, p. 250.
- Karimpour, Y.** (2007b) Host-Specificity and potential of *Kokujewia ectrapela* Konow (Hymenoptera: Argidae) for the control of *Rumex* spp. *Proceedings of the XIIth International Symposium on Biological Control of Weeds*, p. 357.
- Meyer, N. F.** (1934) Zur Kenntnis der Gattungen *Cryptus* F. und *Caenocryptus* Thoms. (Hymenoptera, Ichneumonidae). "Konowia" *Zeitschrift für systematische Insektenkunde* 13, 203-213.
- Townes, H. K.** (1969) The genera of Ichneumonidae, part 2. *Memoirs of the American Entomological Institute*, No. 12, 1-537.

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