## Short communication

## The first record of *Anastatus* (*Anastatus*) tenuipes (Hym.: Eupelmidae), a parasitoid of *Bellatella germanica* (Blattaria: Blattellidae) in Iran

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چکیدہ

در این بررسی، زنبور پارازیتویید (Anastatus (Anastatus) tenuipes Bolivar y Pieltain (Hym.: Eupelmidae) از کپسول تخم سوسری آلمانی جمع آوری و شناسایی گردید. این گونه برای فون حشرات ایران رکورد جدیدی محسوب شده و رابطهی پارازیتیسمی آن با میزبان برای اولینبار گزارش میشود. شناسایی گونه توسط Gary A. P. Gibson از کانادا تأیید شد.

The German cockroach, *Bellatella germanica* (Linnaeus), is one of the most common and prominent household cockroaches in the world, and can be found throughout many human settlements in the world. This insect is particularly fond of inhabiting restaurants, stores, food processing facilities and ships. The German cockroach prefers areas of warmth and high humidity (Mirzayans, 1986). In Shiraz, Fars province, it is the most common cockroach species in Maali-Abad buildings. In order to identify the natural enemies of this cockroach, some egg cases (ootheca) were collected. Samples were placed in Petri dishes under room temperature to allow parasitoids to emerge. A wet filter paper was put inside each Petri dish to maintain the humidity and this was changed every day. Newly emerged parasitoids belonging to the family Eupelmidae were transferred into vials of 70% ethyl alcohol. Among them, the following species is a new record for Iran:

## Anastatus (Anastatus) tenuipes Bolivar y Pieltain

**Material examined** – 6  $\bigcirc$ , Shiraz, Fars province, 22. IV. 2007, leg. R. Asadi, ex: ootheca of *Bellatella germanica*.

**Distribution** – Cosmopolitan species. Afrotropical: Senegal and Sudan; Australasian: Australia (Queensland); Nearctic: Mexico and United States of America; Neotropical: Guatemala; Oriental: India; Palaearctic: Egypt and Italy (Noyes, 2007).

**Hosts** – Blattaria, Ectobiidae: *Phyllodromia* sp.; Blattellidae: *Supella longipalpa* (Fabricius), *S. supellectilium* (Serville); Blattidae: *Periplaneta americana* (L.) (Noyes, 2007).

The female of *A. tenuipes* can be distinguished from other Palaearctic species of the genus, by the following characters: antenna long and slender, all funicular segments longer than wide; thorax yellow, mid lobe of mesoscutum long; head dorsally at most 1.6-1.7 times broader than long, temples longer than in the alternate (Kalina, 1981). This wasp is a gregarious endoparasitoid and the relationship between it and its host (German cockroach) is newly reported.

Species identification was confirmed by Gary A. P. Gibson, Canadian National Collection of Insects. Specimens were deposited in the Department of Plant Protection, Faculty of Agriculture, Marvdasht Islamic Azad University, Fars, Iran, and Canadian National Collection of Insects, Agriculture and Agri-Food Canada.

## References

- Kalina, V. (1981) The Palearctic species of the genus Anastatus Motschulsky, 1860 (Hymenoptera, Chalcidoidea, Eupelmidae), with descriptions of new species. Silvaecultura Tropica et Subtropica 8, 3-25.
- Mirzayans, H. (1986) Fauna of Iranian cockroaches (Orthopteroidea: Blataria). Journal of Entomological Society of Iran, 4<sup>th</sup> Supplement, 84-86.
- Noyes, J. S. (2007) Universal Chalcidoidea Database. Available on: http://www.nhm.ac.uk/ entomology/chalcidoids/index.html (accessed 27 December 2007).

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