New record of *Brachymeria albicrus* (Klug) (Hymenoptera: Chalcididae), a pupal parasitoid of the cabbage white butterfly, *Pieris rapae* (Linnaeus) from Iran

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ABSTRACT: Small cabbage white butterfly, *Pieris rapae* is the most important insect pest of the plants belonging to family Brassicaceae. In order to identify its parasitoids, sampling was made in the cauliflower fields of southern Tehran from June until October 2011. The pupae were collected from fields and then reared under controlled conditions of 27°C, 60±10% Rh and 14L:10D photoperiod until the emergence of parasitoid adults. These parasitoids were put in alcohol 75°. One parasitoid wasp specimen was collected from the pupal samples. This parasitoid was identified as *Brachymeria albicrus* (Klug) (Hymenoptera: Chalcididae). This species is a new host record from *P. rapae* and distribution record from Tehran for the fauna of Iran.

KEY WORDS: *Brachymeria albicrus*, *Pieris rapae*, pupal parasitoid, Tehran, Iran

Collections of pupae of *P. rapae* were made from cabbage fields of southern Tehran during 2011. The pupae were maintained in clear plastic containers (5 × 20 × 10 cm) with the mouth of the lid closed with a piece of net at 27°C, 60±10% RH and 14L:10D photoperiod till the emergence of host/parasitoids. The parasitoids emerged were preserved in 75% alcohol to enable further identification.

*Brachymeria albicrus* (Klug, 1834) (= *B. amphissa* (Walker), = *B. responsator* (Walker)), belongs to family Chalcididae, was determined by R. R. Askew, and according to the resources available to us this species is reported for the first time from Iran. It was previously recorded as a parasitoid of *Pieris rapae* (Linnaeus) (Lepidoptera: Pieridae) (Fry 1989). Other hosts of this parasitoid are *Acraea acerata* Hewitson (Lepidoptera: Nymphalidae) (Azerefegne et al., 2001), *Danaus chrysippus* (Linnaeus) (Lepidoptera:
Nymphalidae) (Boucek, 1956), Belenois aurota (Fabricius) (Lepidoptera: Pieridae) (Narendran, 1989), Gonometa postica Walker (Lepidoptera: Lasiocampidae) (Fening et al., 2009) and Earias sp. (Lepidoptera: Noctuidae) (Narendran, 1989). This species has been reported from Asian countries such as Pakistan (Fry, 1989), India. Also this species has been reported from Ethiopia, Somalia, Egypt, Israel, India-Orissa; India-Tamil Nadu; Nepal; Papua New Guinea (Noyes, 2012).

Some of the morphological characteristics of B. albicrus, according to Masi (1951) and Narendran (1989) are as follows: 2nd tergite with small fine punctuation, and with some coarser piliferous punctures near the base; apex of scutellum distinctly bilobed or incised, with dense silvery pubescence on two lobes; head with postorbital carina absent or indistinct; tegulae white; hind femora reddish to dark reddish-brown, except the white apex, sometimes with varying black patches of varying size. It is most similar to B. femorata by the shape and pubescence of scutellum and punctuation of 2nd tergite (Boucek, 1956), but differing by the postorbital carina absent (distinct in B. femorata) and legs and tegulae colour (posterior femora black with yellow apex, and yellow tegulae in B. femorata).

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REFERENCES


