

A new record of *Chrysochalcissa oviceps* Bouèek, 1978 (Hymenoptera: Torymidae) from eggs of Heteroptera from Karnataka, India

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ABSTRACT: The torymid wasp *Chrysochalcissa oviceps* Bouèek parasitising undetermined coreid eggs belonging to subfamily Coreinae is recorded for the first time from Nandi hills, Karnataka, in southern India. A diagnosis of the species is provided. Unique phenotypic traits which distinguish it from *C. indica* Narendran include mesoscutum width a little more than 1.2x width of head in dorsal view; exposed parts of gastral tergite third and fourth in length of ratio nearly 1:1.9 and fourth tergite with scattered setae more confined to the basal two-third: minimum distance between the eyes 0.59x as long as the eye.

KEY WORDS: Chrysochalcissa oviceps, Torymidae, egg parasitoid, Coreidae

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The members of the genus *Chrysochalcissa* parasitize eggs of certain pentatomorph heteroptera of relatively large size, (Narendran, 1994). This genus is found in Africa and in Indo-Australian region. Narendran (1994) studied the genus *Chrysochalcissa* in detail and gave a modified key to the species after Bouèek (1978) and described the species *C. indica* Narendran (1994), which was compared with *C. physomeri* Bouèek (1978) and *C. oviceps* Bouèek (1978). *C. oviceps* is reported earlier from Myanmar (Burma) and Malaysia (Bouèek, 1978; Noyes, 2010) and has been recorded as an egg parasitoid of coconut coreid bug *Paradasynus rostratus* (Dist). (Hemiptera: Coreidae) from Kerala (Mohan *et al.*, 2001; Noyes, 2010).

The morphological terminology used in the species description for the various body parts follow Noyes (2010). Figures were produced from stack of images that were combined into a single image with Auto-Montage software (version 3.5). The images were then corrected manually for contrast and brightness. They were further processed in Adobe Photoshop Elements 8.

Chrysochalcissa oviceps Bouèek

Chrysochalcissa oviceps Bouèek, 1978: 109. F. Myanmar (Burma) (BMNH).

Brief Diagnosis

Female

Black with metallic blue shine, scape yellowish brown; pedicel dorsally dark brown and ventrally yellow; flagellum dark brown (Fig. 1), vertex brighter green (Fig. 2), dorsum of thorax mainly olive green; tegulae brownish. Coxae and trochanters blackish blue (Fig. 3). Fore femur black with bluish tinge and a brownish yellow patch at apex; fore tibiae light brown with bluish black infumation at sub basal half; all tarsi pale yellow and wings hyaline (Fig. 4).

Head

Antennae slender; F2 to F6 strongly transverse, each with one row of long longitudinal sensilla.

Mesosoma

Mesoscutum width a little more than 1.2x width of head in dorsal view. Scutellum, a little wider than long.

Metasoma

Black with metallic lustre; distinctly shorter than pronotum, mesoscutum and scutellum combined, highest about the middle and declining posteriorly; First and Record of Chrysochalcissa oviceps from Karnataka, India





Fig. 1- Antenna

Fig. 3- Hind Leg

Fig. 2- Head in frontal view

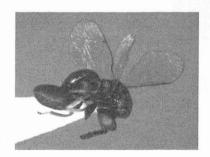


Fig. 5. Chrysochalcissa oviceps Boucek



Fig. 4- Part of forewing Fig. 6- indet. heteropteran eggs

second tergites smooth and shiny without microsculpture; second tergite small; third and fourth tergites in length of ratio 1: 1.9; third tergite with single row of setae; fourth tergite with scattered setae more confined to the basal two-third; fifth tergite small with setae.

Distribution

India: Karnataka (new distribution record); Kerala, Myanmar (Burma) and Malaysia.

Material examined

Six females on card; INDIA, Karnataka, Nandi Hills (13° 232 10.533 N, 77° 422 3.363 E), 07.ix.2010, reared from undetermined coreid eggs, leg. Veenakumari; deposited in National Bureau of Agriculturally Important Insects (NBAII), Bangalore, India. One female partly dissected on card with antennae, left forewing and left hind femur on slide covered with coverslip, deposited in NBAII, Bangalore. Two females deposited in Department of Zoology, University of Calicut, Calicut, Kerala.

Host

Nine parasitoids of *C. oviceps* (Fig. 5) emerged from nine eggs of undetermined coreid (Fig. 6).

Remarks

This species resembles *C. indica* but differs from the latter in having (i) Mesoscutum width a little more than

1.2x width of head in dorsal view, (ii) exposed parts of T3 and T4 in length of ratio nearly 1: 1.9, (iii) fourth tergite with scattered setae more confined to the basal two-third and (iv) minimum distance between the eyes 0.59x as long as the eye.

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REFERENCES

- Bouèek, Z. 1978. A study of the non-podagrionine Torymidae with enlarged hind femora, with a key to the African genera. *Journal of the Entomological Society of Southern Africa*, 41: 109–128.
- Mohan, P., Faizal, M. H., Nalinakumari, T. and Amritha, V. S. 2001. Record of two new egg parasitoids on coconut coreid bug *Paradasynus rostratus* Dist. (Hemiptera: Coreidae). *Insect Environment*, 7: 138.
- Narendran, T. C. 1994. Torymidae and Eurytomidae of Indian subcontinent. University of Calicut, Kerala, India, 500 pp.
- Noyes, J. S. 2010. Universal Chalcidoidea Database. The Natural History Museum, London, http://www.nhm.ac.uk/ entomology/chalcidoids (accessed February, 2011).