



Contribution to the genus *Chrysidea* Bischoff, 1913 from China, with description of a new species (Hymenoptera, Chrysididae)

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The genus *Chrysidea* Bischoff, 1913 belongs to the tribe Chrysidini (Hymenoptera, Chrysididae). Bohart (1988) revalidated the genus after it was considered as subgenus of *Chrysis* Linnaeus, 1761 (Linsenmaier 1959) or *Trichrysis* Lichtenstein, 1876 (Kimsey & Bohart 1981) and synonymised it with *Chrysis* (*Trichrysis*) (Linsenmaier 1984). Kimsey & Bohart (1991) gave a checklist of 19 known species of *Chrysidea*, of which three are known from the Oriental Region, *C. bidenticulata* (Mocsáry, 1913), *C. furiosa* (Cameron, 1897) and *C. monticellii* (du Buysson, 1906). Only one species, *C. pumila* (Klug, 1845), has been recorded for the Palearctic part of China (Hammer 1936; Rosa *et al.* 2014).

At first sight, *Chrysidea falsa* sp. nov. could be identified as *Trichrysis* for fore wing discoidal cell complete, apex of T3 with three sharp teeth, and interval between median tooth and lateral tooth distinctly convex. Nevertheless, TFC topping scapal basin, pronotal shape and S2 black spots distinctly separate it from the species in the genus *Trichrysis*, and place it in the genus *Chrysidea*. This peculiar shape of T3 of *C. falsa* sp. nov. can be clearly separated it from all the other Oriental known species of *Chrysidea*, which show only two lateral teeth on apex of T3.

Material and methods

All specimens were examined and described under stereomicroscope (Leica MZ125). Photographs were taken with a digital camera (CoolSNAP) attached to a Zeiss Stemi 2000-CS stereomicroscope. Images were processed using Image-Pro Plus software.

Morphological terminology follows that of Kimsey & Bohart (1991). Abbreviations used in the descriptions as follows: **BOL**= brow-ocellar line, the shortest distance between the mid ocellus and the **TFC**; **F1**, **F2**, **F3**, etc. = flagellomeres 1, 2, 3, etc.; **lw** = length/ width; **MOD** = mid ocellar diameter; **MS** = malar space, the shortest distance between the base of mandible and the margin of compound eye; **OOL**= oculo-ocellar line, the shortest distance between the lateral ocellus and the compound eye; **P** = pedicel; **PD** = puncture diameter; **POL** = the shortest distance between posterior ocelli; **S2** = metasomal sternum 2; **TFC** = transverse frontal carina; **T1**, **T2**, **T3** = metasomal tergites 1, 2, 3.

Types and other specimens have been examined from the following institutions: NMLS–NaturMuseum Luzern, Switzerland; SCAU–Hymenopteran Collection, South China Agricultural University, Guangzhou, China.

Genus *Chrysidea* Bischoff, 1913

Chrysidea Bischoff, 1913: 34. Type species: *Chrysis pumila* Klug, 1845, by original designation.

Chrysis (*Chrysidea*) Linnaeus, 1761: Linsenmaier 1959: 170; Linsenmaier 1984: 196 (synonym of *Chrysis* (*Trichrysis*)).

Trichrysis (*Chrysidea*) Lichtenstein, 1876: Kimsey & Bohart 1981: 77.

Chrysidea Bischoff: Bohart 1988: 129; Kimsey & Bohart 1991: 310; Rosa *et al.* 2014: 38.

Diagnosis. Head broader than high. Scapal basin hollowed, striate or microridged, topped by convex TFC, sometimes with a second upper TFC; F1 longer than F2 or F3, usually less than twice breadth; MS subequal or shorter than 1 MOD; pronotum with weak median groove and without sublateral carina; mesopleuron with episternal and scrobal sulci, omaulus and verticulus; metanotum rounded, rarely projected posteriorly; fore wing discoidal cell usually with outer veins faint; T3 usually with only two lateral teeth, sometimes with one median tooth; S2 black spots oval or round, usually separated by 1–2 MOD. Genital capsule with gonocoxa notched apically, thus appearing bilobate.

Biology. *Chrysidea* are known as hosts of sphecoid and crabronid wasps (Zimmermann 1961; Kimsey & Bohart 1991).