A new species of the genus *Homolobus* Foerster from China, with a checklist of the Chinese species (Hymenoptera: Braconidae)

XUEXIN CHEN

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Abstract: Homolobus (H.) chinensis spec. nov. is described from China (Shaanxi Province), and a check-list of the Chinese species of the genus Homolobus Foerster is added.

Zhejiang Agricultural University, Hangzhou, 310029, P.R. China.

Introduction

In 1979 van Achterberg published the revision of the world species of the genus Homolobus Foerster in his fine monograph on the subfamily Zelinae auct. and recognized 43 valid species, including three species reported to occur in China. Chen et al. (in press) reviewed the Chinese species of this genus and recognized 12 species, belonging to five subgenera, of which nine species are new to China. In the present paper an additional species, Homolobus (H.) chinensis spec. nov., is described. For the morphological terms Richards (1977) and van Achterberg (1979) are followed. For the wing venation I use the modified Comstock-Needham system as proposed by van Achterberg (1979). The abbreviation "DO" stands for the maximum diameter of the posterior ocellus.

Homolobus (Homolobus) sinensis spec. nov. Figs. 1-5

Holotype: Q, Huashan (34°4'N, 110°0'E), Shaanxi Province, 21.viii.1962, Yang Jikun, No. 871929, deposited in Zhejiang Agricultural University (ZAU), Hangzhou.

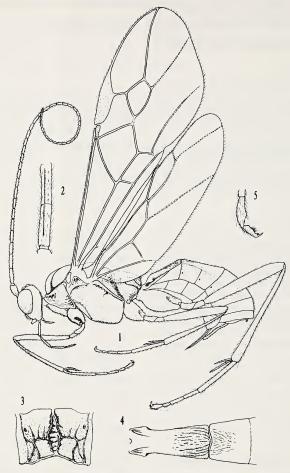
Holotype Q, length of body 8.1 mm, length of fore wing 9.0 mm.

Head: Antenna 46-segmented, 3rd segment 1.2 times 4th segment; length of 3rd, 4th and penultimate segments 4.1, 3.5 and 3.0 times

their width, respectively; 3rd to 11th segments with an obvious ridge. Length of maxillary palp 1.6 times height of head. Length of temple 1.7 times length of eye. POL:DO:OOL = 5:7:8. Frons rather flat, finely longitudinally striate. Vertex almost smooth, directly narrowed posteriad. Face flat, transversely striate-rugose. Clypeus rather convex, punctulate, its apical margin thin, rounded medially. Length of malar space 0.7 times basal width of mandible.

Mesosoma: Length of mesosoma 1.6 times its height. Side of pronotum shiny, crenulate anteromedially and posteriorly, more or less finely transversely striate ventrally. Mesopleuron almost smooth, shallowly punctulate; precoxal sulcus represented only by a shallow depression; epicnemial area almost smooth. Metapleuron punctate, somewhat rugose ventrally; metapleural flange large, rounded apically. Mesoscutum and scutellum finely punctulate, almost smooth; notauli complete, narrowed and crenulate. Propodeum with a pair of irregular median longitudinal carinae, forming a suboval median longitudinal area; surface of propodeum smooth basally, irregularly rugose medio-posteriorly.

Wings: Fore wing: r: 3-SR:SR1 = 10:19:65; SR1 slightly curved; 2-SR:3-SR:r-m = 21:19:10; cu-a inclivous, postfurcal; 1-CU1:2-CU1 = 2:29; 2A short, sclerotized basally.



Figs. 1-5, Homolobus (H.) sinensis spec. nov., Q, holotype. 1, habitus, lateral aspect; 2, third-fourth antennal segments, inner aspect; 3, propodeum, dorsal aspect; 4, first and second metasomal tergites, dorsal aspect; 5, hind claw.

Hind wing: r present, 1-SR 0.85 times 2-SR; 2-SC+R vertical; SC+R1 straight.

Legs: Hind coxa almost smooth; length of hind femur, tibia and basitarsus 7.4, 11.5 and 8.9 times their width, respectively; claw with a small and sharp subapical tooth (fig. 5).

Metasoma: Length of 1st tergite 2.8 times its apical width; surface of 1st tergite somewhat rugose on basal half, more or less longitudinally striate-rugose on its apical half; dorsal carinae present in front of spiracles. Basal half of 2nd tergite finely rugulose, the rest of 2nd

tergite and the following tergites almost smooth. Length of ovipositor sheath 0.1 times fore wing.

Colour: Brownish-yellow; apex of mandible brown; stemmaticum black, 1st-3rd metasomal tergites brownish with black spots; hind femur reddish-brown; wing membrane hyaline; pterostigma yellow.

Remarks

This new species closely resembles H. (H.) discolor (Wesmael), H. (H.) dauricus (Shestakov), H. (H.) rufiventralis Maetô and H. (H.) luteifasciatus Maetô in the presence of vein r of the hind wing and the smooth precoxal sulcus. It differs, however, from the four species mentioned above in the brownish yellow body, the vein r of hind wing situated near middle of marginal cell, the vertical vein 2—SC+R, the straight vein SC+R1 (fig. 1) and the basomedial rugulose second tergite (fig. 4).

The following is a list of the species known from China of the genus *Homolobus* in addition to the new species described above.

- 1. Homolobus (Apatia) elagabalus (Nixon, 1938)
 - Distribution: Fujian.
- Homolobus (Apatia) truncator (Say, 1828)
 Hosts: Agrotis ypsilon: Ascotis selenaris.
 Distribution: Heilongjiang, Jilin, Liaoning,
 Inner Mongolia, Hebei, Beijing, Shaanxi,
 Shanxi, Gansu, Ningxia, Xinjiang, Jiangsu,
 Zhejiang, Jiangxi, Sichuan, Guizhou and
 Taiwan.
- Homolobus (Apatia) truncatoides Achterberg, 1979
 Distribution: Anhui, Hubei, Hunan, Fu-
- jian, Hainan, Yunnan. 4. Homolobus (Homolobus) rufiventralis Maetô, 1982
 - Distribution: Hunan.
- 5. Homolobus (Chartolobus) infumator (Lyle, 1914)

Host: Dendrolimus superans

Distribution: Heilongjiang, Jilin, Shaanxi, Gansu, Xinjiang, Zhejiang, Jiangxi, Hu-

- nan, Fujian, Guizhou, Yunnan and Taiwan.
- 6. Homolobus (Phylacter) annulicornis (Nees, 1834)

Distribution: Hubei.

- 7. Homolobus (Phylacter) bifurcatus Achterberg, 1979
- Distribution: Hunan, Fujian. 8. *Homolobus* (Oulophus)
- Homolobus (Oulophus) carbonator (Shestakov, 1940)
 Distribution: Guangxi.
- 9. Homolobus (Oulophus) bohemani (Bengtsson, 1928) Distribution: Jinlin.
- Homolobus (Oulophus) nepalensis Achterberg, 1979
 Distribution: Zhejiang.
- Homolobus (Oulophus) crenulatus Achterberg, 1979
 Distribution: Fujian.
- Homolobus (Oulophus) flagitator (Curtis, 1837)
 Distribution: Inner Mongolia, Hebei.

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References

- ACHTERBERG, C. VAN, 1979. A revision of the subfamily Zelinae auct. (Hymenoptera: Braconidae). *Tijdschr. Ent.* 122: 241-479.
- CHEN, XUEXIN, JUNHUA HE& YUN MA, in press. The genus Homolobus Foerster of China (Hymenoptera: Braconidae). – Acta Agriculturae Universitatis Zhejiangensis.
- MAETÔ, K., 1982. The genus *Homolobus* Foerster of Japan (Hymenoptera: Braconidae). I. subgenus *Homolobus*. *Kontyu* 50 (2): 314-323.
- MAETÔ, K., 1982. The genus Homolobus Foerster of Japan (Hymenoptera: Braconidae). II. subgenus Apatia, Chartolobus, Phylacter, Oulophus. Kontyu 50 (3): 425-433.
- RICHARDS, O. W., 1977. Hymenoptera. Introduction and key to families. – Handb. Ident. Brit. Insects 6(1), 2nd ed.: 1-100.

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