

NOTES ON GENUS *PROCONURA* DODD (HYMENOPTERA: CHALCIDIDAE) FROM CHINA WITH DESCRIPTION OF ONE NEW SPECIES AND ONE NEW RECORD SPECIES*

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Abstract This paper deals with the Chinese species of the genus *Proconura* Dodd. A new species *P. eurygena* Liu, sp. nov., a new record species *P. caryobori* (Hanna) and other two species *P. asiatica* Narendran and *P. ishüi* (Habu) are described. The holotype of *P. eurygena* is from Hainan Province. Its main features are: antennae and hind femora brown; vertex long; OOL to POL as 1:3; scapes reaching front ocellus, almost 3 times as long as pedicel; gaster with basal carinae short and distinctly converging backwards; first tergite of gaster smooth, without puncture. A key to known Chinese species of *Proconura* is given. Type specimen is deposited in Institute of Zoology, the Chinese Academy of Sciences.

Key words Hymenoptera, Chalcididae, *Proconura*, new species, new record

The genus *Proconura* Dodd 1915 belongs to the tribe Hybothoracini in the subfamily Haltichellinae. It can be easily distinguished from other genus of Hybothoracini on the basis of the presence of two carinae on either side of basal fovea on the first gasteral tergite. Two carinae can be relatively short or exceeding the fovea, and they can be parallel to strongly convergent (Boucek 1988). The most known hosts are lepidopterous pupae in Pyralidae, Gelechiidae, Yponomeutidae and Plutellidae, only one belongs to Coleoptera (Bruchidae) (Boucek 1988, Narendran 1989, Kfir 1997). The genus is distributed in Asia (23 spp.), Africa (12 spp.), Australia (7 spp.), Europe (2 spp.). (Boucek 1988, Narendran 1989, Pujade-Villar *et al.* 1998).

Four species are recorded in this paper, including one new species, one new record to China. Type specimen is deposited in Institute of Zoology, the Chinese Academy of Sciences.

Key to Chinese species of *Proconura* Dodd

- 1. First tergite of gaster with two basal carinae converging backwards 2
- First tergite of gaster with two parallel basal carinae 3
- 2. Antennae and hind femora brown; vertex long; gaster with basal carinae short and distinctly converging; first tergite of gaster smooth, without puncture; gaster longer than thorax *P. eurygena* Liu, sp. nov. ♀
- Antennae and hind femora partly black; vertex short; gaster with basal carinae slightly converging; first tergite with punctures, gaster shorter than thorax *P. asiatica* Narendran ♀
- 3. Antennae with slender scapes reaching front ocellus *P. caryobori* (Hanna) ♀
- Antennae with scapes shorter, not reaching front ocellus 4

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4. Preorbital carinae and postorbital carinae indistinct; propodeum without distinct median carina and accessorial carinae *P. caryobori* (Hanna) ♂
 - Preorbital carinae and postorbital carinae present; propodeum with weak median carina and accessorial carinae *P. ishii* (Habu) ♂

***Proconura eurygena* Liu, sp. nov.** (Fig. 1)

Female: Length 2.3 mm. Black; antennae, tegulae and legs brown, but apex of femora, apical half of tibiae and tarsi brownish yellow; base and ventral margin of hind tibiae dark brown; wings hyaline; ventral side of gaster and epipygium a trifle reddish brown.

Head wider than thorax; pits close and shallow, interstices rugulose; pits on genae stronger than on vertex and frons; eyes with sparse and short pubescence; scrobe weakly concave, far away from front ocellus; scapes reaching front ocellum; frons without pre- and postorbital carinae. Temples longer than a half of eyes in dorsal view; genae below level of ventral margin of eyes rather broad, slight convex on malar sulcus in lateral view; genotemporal regions weakly grooved along posterior margin; relative measurements: head width 23, head height (labrum excluded) 20, eye length 10, eye width 8, malar space 9, OOL to POL as 1:3.

Antennae with slender scapes which a little longer than funicle I - V together; pedicel 2.4 times as long as ring segment; relative measurements of length: scape 68, flagellum 112, pedicel 22, ring segment 9, funicle I 11, funicle II 13, funicle III 12, funicle IV 12, funicle V 12, funicle VI 12, funicle VII 12, club 21.

Thorax 1.6 times as long as wide, with shallow, sparse and small pits on dorsal side, interstices wider than the diameter of the pits, pubescence sparse; pits on pronotum and the anterior half of mesoscutum relative closer and smaller, interstices rugulose; pits on scutellum very sparse, interstices wide, almost smooth and shiny, without pits on median part; scutellum 0.8 times as long as broad, posterior half regularly semicircular; propodeum with almost flat median areola, but abruptly declined near posterior part, submedian and sublateral carinae distinct, median carina absent, accessorial carinae indistinct, with coarse, irregular and transverse wrinkles between submedian carina and sublateral carina; lateral teeth distinct.

Forewings with submarginal vein 4.1 times as long as marginal vein; marginal vein slightly remote from anterior margin.

Hind coxae three-fifths as long as hind femora, base of outer dorsal side smooth; hind femur twice as long as wide, outer side somewhat smooth, with sparse, rather long pubescence, outer ventral margin with one triangular projection near base and one rounded lobe near apex, one dull, rounded lobe at middle, with a row of densely small teeth from base projection to apex.

Gaster longer than thorax, about twice its width; length of first tergite occupying base three-tenths of gaster at dorsal middle; first tergite smooth, without pit on median part, base fovea rather small, with two short base carinae converging backwards, posterior margin convex; second to fifth tergite smooth on median part, posterior margin dis-

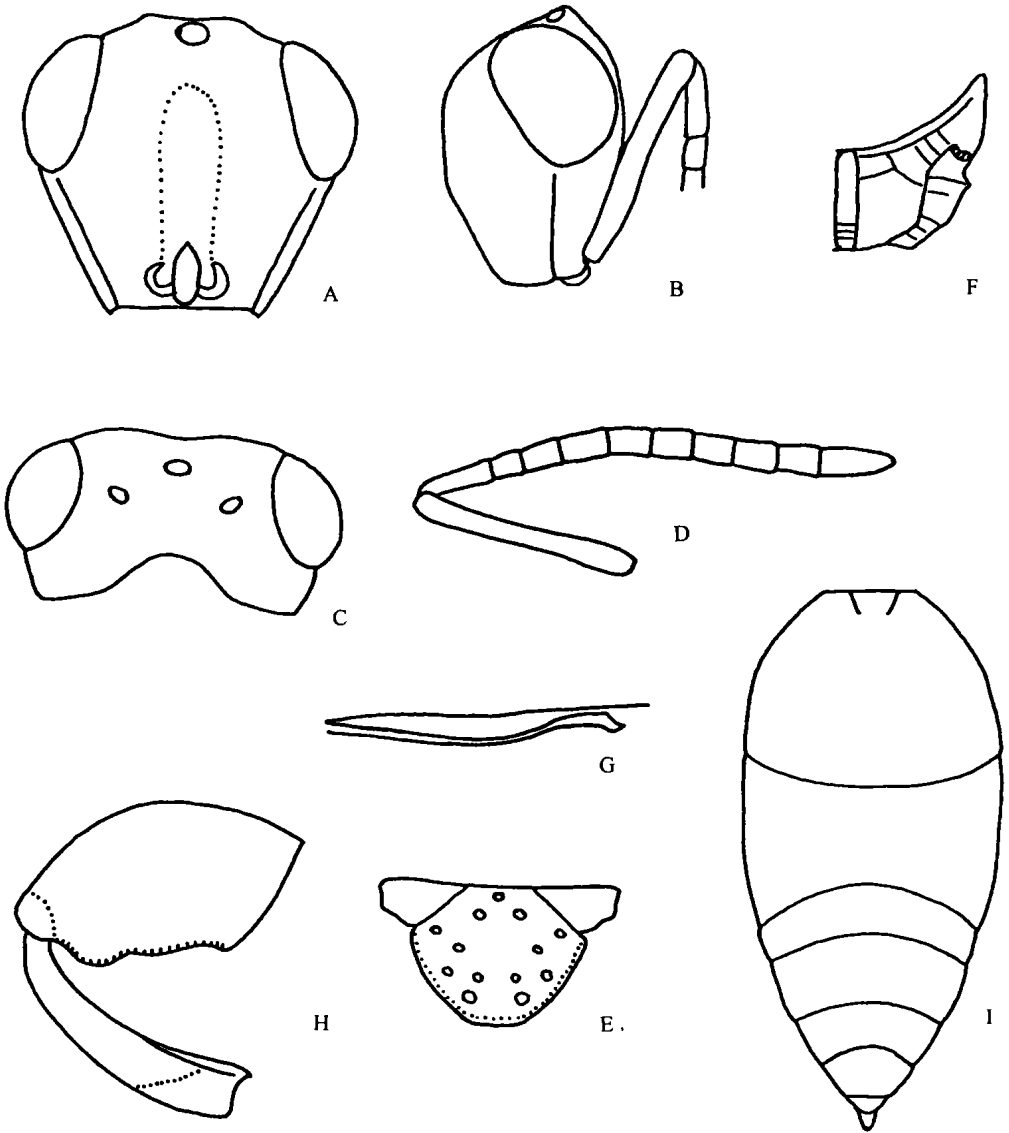


Fig. 1 *Proconura eurygena* Liu, sp. nov.

A. head in front view; **B.** head in lateral view; **C.** head in dorsal view; **D.** antenna (♀); **E.** scutellum; **F.** propodeum; **G.** forewing venation; **H.** hind femur and tibia; **I.** gaster in dorsal view (♀).

tinctly emarginate; sixth tergite rugose; epigygium and ovipositor sheath short in dorsal view.

Male: Unknown.

Host: Unknown.

Holotype: ♀, Tongshi, Hainan Province, China, Apr. 25, 1960, LI Chang-qing.

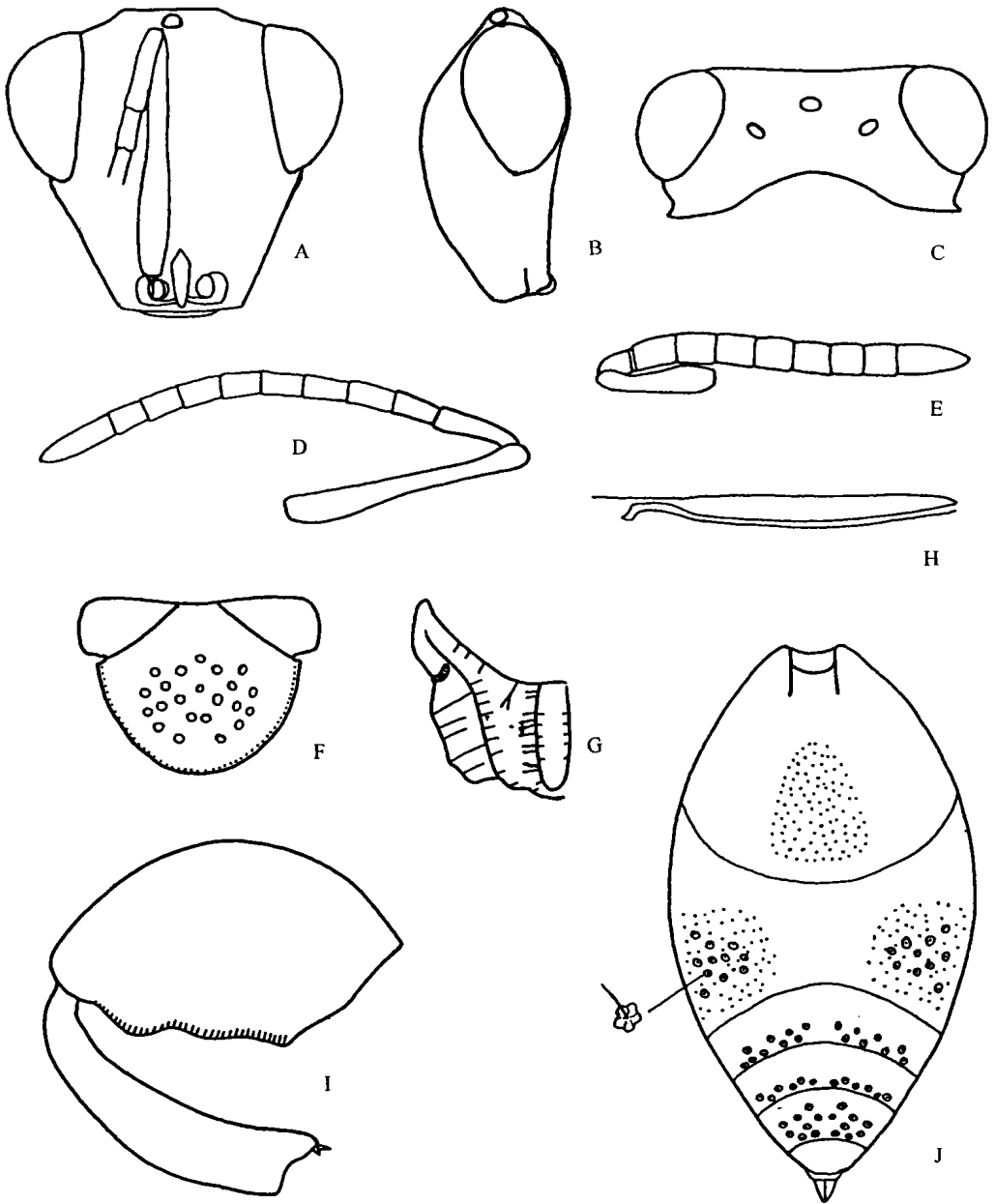


Fig. 2 *Proconura caryobori*(Hanna).

A. head in front view; B. head in lateral view; C. head in dorsal view; D. antenna(♀); E. antenna (♂); F. scutellum; G. propodeum; H. forewing venation; I. hind femur and tibia; J. gaster in dorsal view(♀).

Remarks: This new species fairly resembles *P. minuse* Narendran, 1989 from India, but it can be distinguished from the latter with the following features: antennae and

hind femora brown; OOL to POL as 1: 3; scape reaching front ocellus, almost 3 times as long as pedicels; propodeum without distinct median carina and accessorial carinae; hind femora twice as long as wide; gaster longer than thorax.

***Proconura caryobori* (Hanna) (Fig. 2) [New Record in China]**

Euchalcidia caryobori Hanna. 1934. *Ann. Mag. Natn. Hist.* **13**: 475-479.

Lasiochalcidia trisulia Mani & Dubey. 1974. *Mem. Sch. Ent. St. John's Coll.* **3**: 17.

Peltochalcidia indica Mani & Dubey. 1974. *Mem. Sch. Ent. St. John's Coll.* **3**: 17.

Euchalcidia ricini Roy & Farooqi. 1984. *Mem. Ent. Soc. India* **10**: 44.

Proconura caryobori (Hanna). 1989. T. C. Narendran. *Oriental Chalcididae*, 190.

Host: *Caryoborus pallidus* Olivier.

Distribution: China (Hunan, Fujian, Guanxi); India, England and Sudan. Type specimen is from Sudan.

Materials examined: 1 ♀, Fuzhou, Fujian Province, China, Sep. 1991, LIN Naiquan; 1 ♂, Shanghang, Fujian Province, China, Jul. 22–24, 1988, MA Yun; 1 ♂, Nanyue, Hunan Province, China, Aug. 20, 1980, TONG Xin-wang; 1 ♀, Beihai, Guangxi Province, China, May 29, 1980.

***Proconura asiatica* Narendran**

Proconura asiatica Narendran. 1989. *Oriental Chalcididae*, 187–188.

So far, the known data for this species only come from the original description based on the holotype (female) from Taiwan.

Male: unknown.

Host: unknown.

Distribution: China (Taiwan).

***Proconura ishii* (Habu)**

Euchalcidia ishii Habu. 1961. *Kontyu* **29**: 169-171.

Proconura ishii was named by Habu in 1961 according to 19 male type specimens collected in northeastern China in 1941. Since then, no new record is reported.

Female: unknown.

Host: unknown.

Distribution: Northeastern China.

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中国泊卡小蜂属(膜翅目:小蜂科)及一新种和一新记录种记述

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本文记述了中国泊卡小蜂属 *Proconura* Dodd 共 4 种,包括新种阔颊泊卡小蜂 *Proconura eurygena* Liu, sp. nov., 新记录种豆象泊卡小蜂 *P. caryobori* (Hanna), 其余两种为亚洲泊卡小蜂 *P. asiatica* Narendran 和石井泊卡小蜂 *P. ishii* (Habu)。新种阔颊泊卡小蜂采自海南,其主要特征为:触角和后足腿节褐色;头顶较长;OOL:POL 为 1:3;触角柄节达中单眼,约为梗节长的 3 倍;柄后腹基部具向后会聚的一对短脊;第 1 腹节背板光滑,无刻点。模式标本保存于中国科学院动物研究所标本馆。

关键词 膜翅目 小蜂科 泊卡小蜂 新种 新记录