

Rec. zool. Surv. India : 107(Part-3) : 1-5, 2007

**FIRST RECORD OF *LYUBANA* BOUCEK FROM INDIAN
SUBCONTINENT WITH THE DESCRIPTION OF A NEW
SPECIES FROM SRI LANKA (HYMENOPTERA :
CHALCIDOIDEA : PTEROMLAIDAE)**

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INTRODUCTION

Lyubana was erected by Boucek in the subfamily Pteromalinae of Pteromalidae with type species *L. slavica* Boucek from Yugoslavia (Boucek & Rasplus, 1991). Later three species of *Lyubana* were described from Oriental China viz. *L. liaoi* Xiao and Huang, *L. longa* Xiao & Huang and *L. prolongata* Xiao & Huang (Xiao & Huang, 1997). Sureshan (2001) synonymised *Lyubana* under *Halticopterella* Girault & Dodd, but later invalidated his own synonymy thereby maintained the status of *Lyubana* valid (Status Rev.) (Sureshan, 2006). Currently *Lyubana* is known for four valid species from the world distributed in the Palearctic and Orietal regions. Here *Lyubana* is reported for the first time from the Indian subcontinent by describing a new species from the Central province of Sri Lanka. The occurrence of *Lyubana* in the extreme south is interesting, indicating the probable wider distribution of the genus in the Oriental region. A key to separate the species of *Lyubana* Boucek is also provided. The specimen belongs to the collections of Bohart Museum of Entomology, University of California which was kindly loaned by Dr. Steven L. Heydon for my study.

Following abbreviations are used in the text :

- | | |
|------------------------------------|----------------------------------|
| F1-F5 – Funicular segments 1 to 5, | OOL – Ocellocular distance; |
| POL – Postocellar distance; | SMV – Sub marginal vein; |
| MV – Marginal vein; | PMV – Post marginal vein; |
| STV – Stigmal vein; | T1-T2 – Gastral tergites 1 to 2. |

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Lyubana longigastra sp. nov.

(Figs. 1-3)

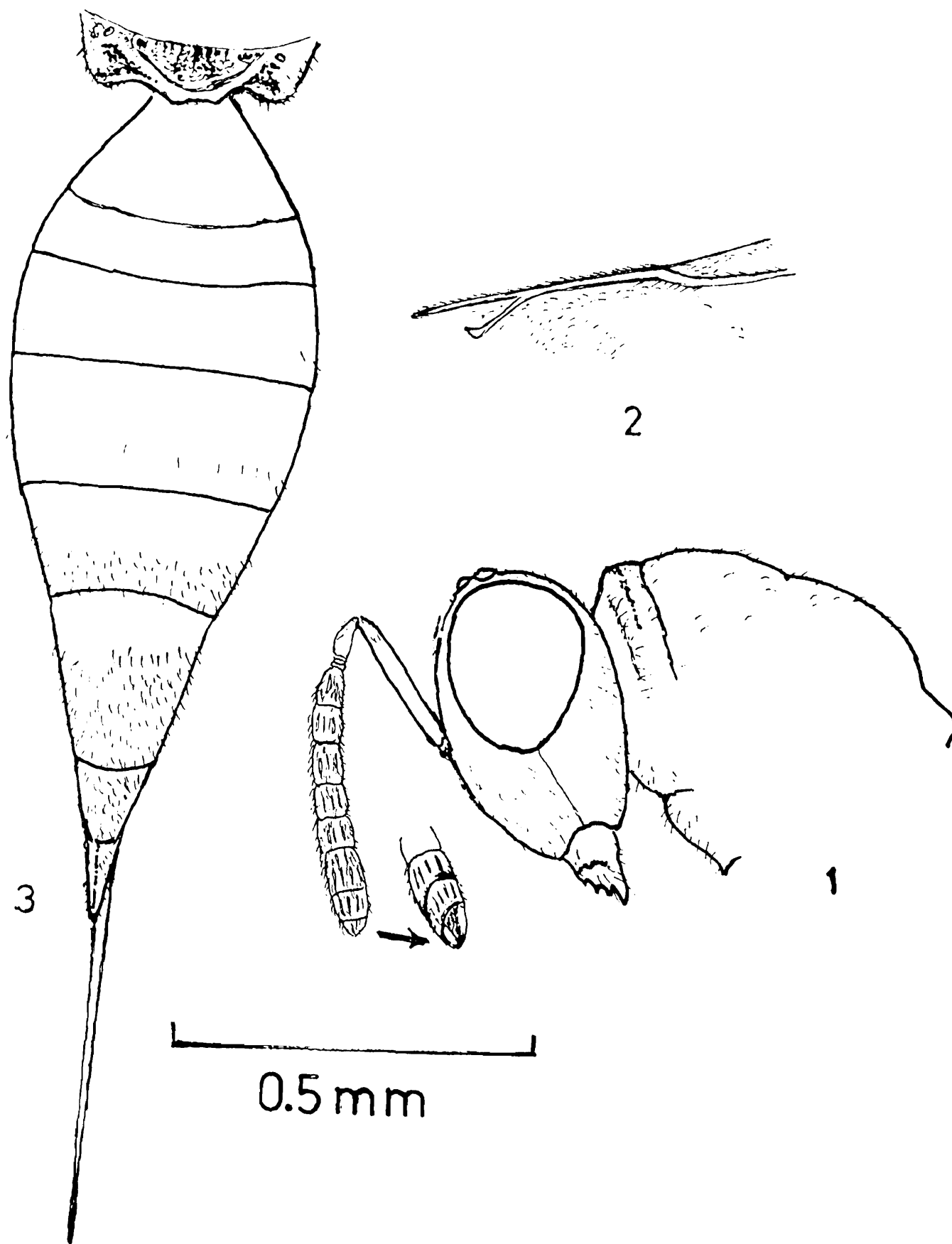
Holotype : Female : Length 2.4 mm. Head and thorax dark metallic blue; gaster blackish brown with metallic blue reflection on basal part, mainly on T1 dorsally; antennae yellowish brown, scape paler; eyes chocolate brown; mandibles brown; legs with coxae blackish brown, femora brown, tibiae and tarsi yellowish except on basal part infusate; tegulae brown; wings hyaline, veins brown; pubescence of body white.

Head : (Fig. 1) Head and thorax with extensive but short and subdecumbant pilosity, individual hairs curved, whitish. Head finely reticulate, in dorsal view width 2.1x length; POL : OOL 5.5 : 2.5; ocelli 2.5; temple length 0.23x eye length; eye length 1.22x width, length : width 14 : 11.5 (profile); malar space length 0.43x eye length. In front view head width 1.2x height; eyes separated 1.2x their height; clypeus anteriorly with two sharp teeth; both mandibles with 4 teeth. Antennae inserted below middle of face, almost level with lower margin of eyes, scape length 0.8x eye length, not reaching front ocellus, pedicel plus flagellum length 0.9x head width, pedicel little shorter than F1 (3 : 3.5), third anellus little wider, F1 slightly longer than F2 (3.5 : 3), F2-F4 equal, F5 little shorter, F1 with two rows of sensillae, club with sutures slightly oblique, little longer than two preceding segments combined (7 : 6), micropilosity strip down to base of third segment.

Thorax : Length 1.3x width, moderately reticulate punctuate; pronotum less wider than mesoscutum, moderately deep posteriorly, anteriorly with a very fine carina less distinct, hind margin with a broad smooth strip. Mesoscutum width 1.9x length, notauli incomplete. Scutellum medially slightly shorter than mesoscutum (11 : 12). Dorsellum narrow, almost fine. Propodeum medially almost half as long as scutellum, median carina slightly indicated in the anterior end which ends with some weak transversely striated reticulation in the nuchal area, few short rugae on either sides of median carina anteriorly; adpetiolar area less shiny; spiracles moderate, close to the metanotal border; callus with a convexity, covered with sparse white hairs. Mesopleuron reticulate; upper mesepimeron and sub alar area shiny. Prepectus finely reticulate except on margins, little shorter than tegula (3 : 4). Hind coxae bare dorsally, length 1.3x width, finely reticulate, ventrolaterally hairy; femora slender, length 4.1x width. Forewing (Fig.2) not densely pilose, length 2.2x width, speculum open below, basal hairline indicated, costal cell hairy towards tip, marginal fringe very small. Relative length : MV 11, PMV 8, STV 4

Gaster : (Fig. 3) in dorsal view length 2.7x width (excluding ovipositor), 1.42x as long as head plus thorax combined (in profile), hypopygium reaching little below middle of gaster (14/31), hind margin of T1 slightly and arcuately produced, T2 also slightly produced, epipygium medially 0.4x T6, ovipositor protruded out.

Holotype : Female : Sri Lanka : Central Province, Kandy dist., Vict. Randenigala. Rantembe Sanct. Mahawele R. N 07°12' E 080°57' 25–29.viii.1999. Malaise trap. M & J Wasbauer.(deposited in Bohart Museum of Entomology, University of California).



Figs. 1-3. : *Lyubana longigastra* sp. nov. (Female) : 1. Head and part of thorax in profile; 2. Forewing venation; 3. Gaster and propodeum in dorsal view.

Etymology : The species is named after its elongate gaster.

Remarks : This species differs from *L.slavica* Boucek and *L.prolongata* Xiao & Huang in having an elongated gaster which is distinctly longer than head plus thorax. (in *slavica* and *prolongata* the gaster is short only as long as head plus thorax combined). With *L.liaoi* Xiao & Huang and *L.longa* Xiao & Huang this species shares a long gaster, which is longer than head plus thorax, but it differs from *liaoi* in having propodeum with weaker reticulation in front of costula, basal cell of forewing not closed posteriorly and POL 2.2x OOL (in *liaoi* propodeum in front of costula with large punctures, POL slightly longer than OOL, basal cell of forewing closed posteriorly). It differs from *longa* in having antenna with F1 1.8x as long as broad with 2 rows of sensillae, basal cell of forewing not closed posteriorly and POL 2.2x OOL (in *longa* F1 2.6x as long as broad with 3 rows of sensillae, POL 1.3x OOL, and forewing with basal cell closed posteriorly).

Key to the species of *Lyubana* Boucek

1. Gaster distinctly longer than head plus thorax combined 2
 - Gaster as long as head plus thorax combined 4
2. Antennae with F1 1.7–1.8x as long as broad with two rows of sensillae. Length. 2.2–2.4 mm 3
 - Antennae with F1 2.6x as long as broad with three rows of sensillae. Length. 4 mm
..... *Lyubana longa* Xiao & Huai
3. POL 2.2x OOL; propodeum with only weaker reticulation in front of costula; basal cell of forewing not closed posteriorly. Length 2.4 mm. Sri Lanka *Lyubana longigastrea* sp. nov.
 - POL 1.1x OOL; propodeum with larger punctures in front of costula; basal cell of forewing closed posteriorly Length 2.2 mm. China. *Lyubana liaoi* Xiao & Huang
4. Antennae with F1 about 3x as long as broad with three rows of sensillae; POL 1.2x OOL; gaster about 3x as long as broad. Length 3.5–3.8 mm China
..... *Lyubana prolongata* Xiao & Huang
 - Antennae with F1 less than 3x as long as broad with two rows of sensillae; POL as long as OOL; gaster about 2.4 x as long as broad. Length 3.2 mm. Yugoslavia
..... *Lyubana slavica* Boucek

ACKNOWLEDGEMENTS

The author is grateful to the Director, Zoological Survey of India, Kolkatta and the Officer in charge, Zoological Survey of India, Estuarine Biological Station, Gopalpur-on-Sea, Orissa for providing facilities. He is also grateful to Dr. Steven L. Heydon, Bohart Museum, University of California, USA for kindly arranged the loan of the specimen.

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