

A NEW GENUS OF ALLANTINAE FROM INDIA (HYMENOPTERA: SYMPHYTA: TENTHREDINIDAE)

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Abstract

A new genus, *Isotaxonus*, belonging to subfamily Allantinae from India is described with *Isotaxonus maculatus* sp. nov., the type species.

Keywords

Hymenoptera, *Isotaxonus* gen. nov., *Isotaxonus maculatus* sp. nov., *Taxonus*

Abbreviations

IATS - Inner apical tibial sput
IDMO - Interocular distance at level of median ocellus
LID - Lower interocular distance
OAT - Outer apical tibial spur
OOL - Oculoocellar line

ICD - Intercenchi distance
ITD - Intertegular distance
MB - Metabasisarsus
OCL - Ocellooccipital line
POL - Postocellar line

Introduction

A new species described under a new genus, runs smoothly in Malaise's (1963) key upto couplets 92 and 132 where these can be wrongly associated with genus *Taxonus* Hartig or *Parasiobla* Ashmead. If not studied in detail, this new species representing a new genus is likely to be mistakenly placed under *Parasiobla*, a genus that was erected by Ashmead (1898) with *Taxonus rufocinctus* Norton, its type species. Although Konow (1905) considered *Parasiobla* a synonym of *Taxonus*, Malaise (1963) on the basis of the absence of closed middle cells in the hindwing, a character which is especially variable in *rufocinctus*, considered it a distinct genus. We agree with Smith's (1979) arguments that the criterion used by Malaise (1963) to split *Taxonus* Hartig into four genera: *Taxonus*, *Strongylogastroidea*, *Hypotaxonus*, and *Parasiobla* (= *Polytaxonus*) on the basis of variable, unstable and very weak characters such as the comparative length of hind basitarsus and presence or absence of closed middle cell in the hind wing are completely unreliable and thus unacceptable. Thus, we also consider all of them the synonyms of *Taxonus* Hartig. On the basis of some stable and reliable characters such as: extent and shape of clypeal incision; ratio of antennal segments 3 and 4; overall shape of antenna; presence or absence

of postgenal as well as postorbital carinae; presence or absence of punctures on mesopleura; presence or absence of closed middle cell in hind wing; general direction and angle of cross vein, a new generic name *Isotaxonus* is proposed to treat the new species.

Type material will be housed at Pusa National Collection, Division of Entomology, Indian Agricultural Research Institute, New Delhi, India, after this work is published.

***Isotaxonus* gen. nov.**
(Figs. 1, 2, 4)

Type species

Isotaxonus maculatus sp. nov.

Distribution

India: Ukhrul in Manipur; Pfutsero in Nagaland.

Etymology

The generic name is based on its close resemblance to the genus

Taxonus Hartig (Iso = similar), and the feminine form is used.

Diagnostic features

Adult: Antenna (Fig. 4) nine segmented; scape longer than pedicel; segment 3 shorter than 4, some apical segments compressed; clypeus shallowly circularly emarginate; labrum broader than long, with rounded anterior margin. Postgenal carina present. Hind orbits carinated. Mesopleuron smooth, shining and impunctate. Metabasitarsus equal to or somewhat longer than the following joints combined. Claw with a subapical tooth and without basal lobe. Forewing (Fig. 1) with veins M and Rs+M meeting Sc+R near same point, but the distance is less than the length of first cubital cross vein; anal cross vein oblique. Hindwing (Fig. 2) without closed middle cell; anellan cell sessile.

Discussion

Isotaxonus gen. nov. is closely allied to *Taxonus* Hartig as in: scape is longer than pedicel; postgenal carina present; hind orbits carinated; mesopleuron smooth, shining and impunctate; anal cross vein oblique and anellan cell sessile. However, owing to antennal segment 3 shorter than 4 (segment 3 longer than 4 in *Taxonus*); clypeus shallowly broadly emarginate (clypeus deeply incised up to 1.12 or more of its medial length in *Taxonus*); claw without basal lobe (basal lobe present in *Taxonus*) and hindwing without closed middle cell (hindwing with closed middle cell in *Taxonus* but character variable in *Taxonus rufocinctus*), this genus is considered distinct from *Taxonus* and other related genera.

Isotaxonus maculatus sp. nov.

(Figs. 1-9)

Material examined

Holotype: Female, 23.ix.1992, Ukhrul, Manipur, 1800m, Coll. M.S. Saini. Paratype: Male, 19.v.1994, Pfutsero, Nagaland, 2100m, Coll. V. Vasu.

Distribution

India: Ukhrul in Manipur; Pfutsero in Nagaland.

Diagnostic features

Female: Colour: Body black, whitish-yellow are: clypeus, labrum, mandible base; posterodorsal margin of pronotum, top of mesoscutellum, spot on metascutellum; tergite second except a broad medial black spot, deflexed anterolateral angles of tergites 3-5, broad posterior margins of tergites 8-9, sternites 2-5 more or less; all trochanters and adjoining parts of all femora. Pale to brownish-golden are: mandible tip, scape, pedicel, segment 3 more or less; tegula; femur, tibia and tarsi of proleg; apical 3/4 of femur, entire tibia and all tarsi more or less of mesoleg; metatibia except apical 2/7. Wings hyaline; costa fulvous, rest of venation

including stigma piceous.

Structure: Length 8.5 mm. Antenna long, 3.lx head width; scape 1.5x its apical width, pedicel as long as wide at apex, segment 3 shorter than 4 as 5:6; clypeus (Fig. 5) shallowly circularly emarginate, labrum (Fig. 5) broader than long as 3:2, with slightly deflexed rounded anterior margin, malar space 0.75x diameter of median ocellus; lower margin of eye below level of antennal socket; LID:IDMO:EL = 6:7:6, POL:OCL:OOL = 1:1.8:1.6; supraclypeal and supraantennal pits well marked; frontal area below level of eyes, supraantennal tubercles and frontal ridges insignificant, median fovea with a ditch in its anterior half and posteriorly only shallowly and broadly reaching median ocellus; post-, inter- and circum-ocellar furrows distinct; lateral furrows sunken, excurved (bulging) and ending abruptly well before hypothetical hind margin of head; post-ocellar area sub convex, broader than long as 5:4, head narrowing behind eyes; mesoscutellum almost flat, its appendage not carinate; ICD:ITD = 1:4; tarsal claw (Fig. 9) with a subapical tooth shorter than apical one and without basal lobe; metabasitarsus 1.25x as long as following joints combined; IATS:MB:OATS = 1:4:0.8. Lancet (Fig. 3) having 24 serrulae, hypopygium as in Fig. 8.

Sculpture: Head, thorax and abdomen punctate, smooth and shining with general oily lustre.

Pubescence: Black surface of body covered with silvery pubescence, rest of the areas covered with golden pubescence.

Male: Length 7 mm. Similar to female except: metafemur brownish golden; tergites 2-3 except broad medial black spots and 4-5 entirely pale golden; basal 3 antennal segments fuscous to black.

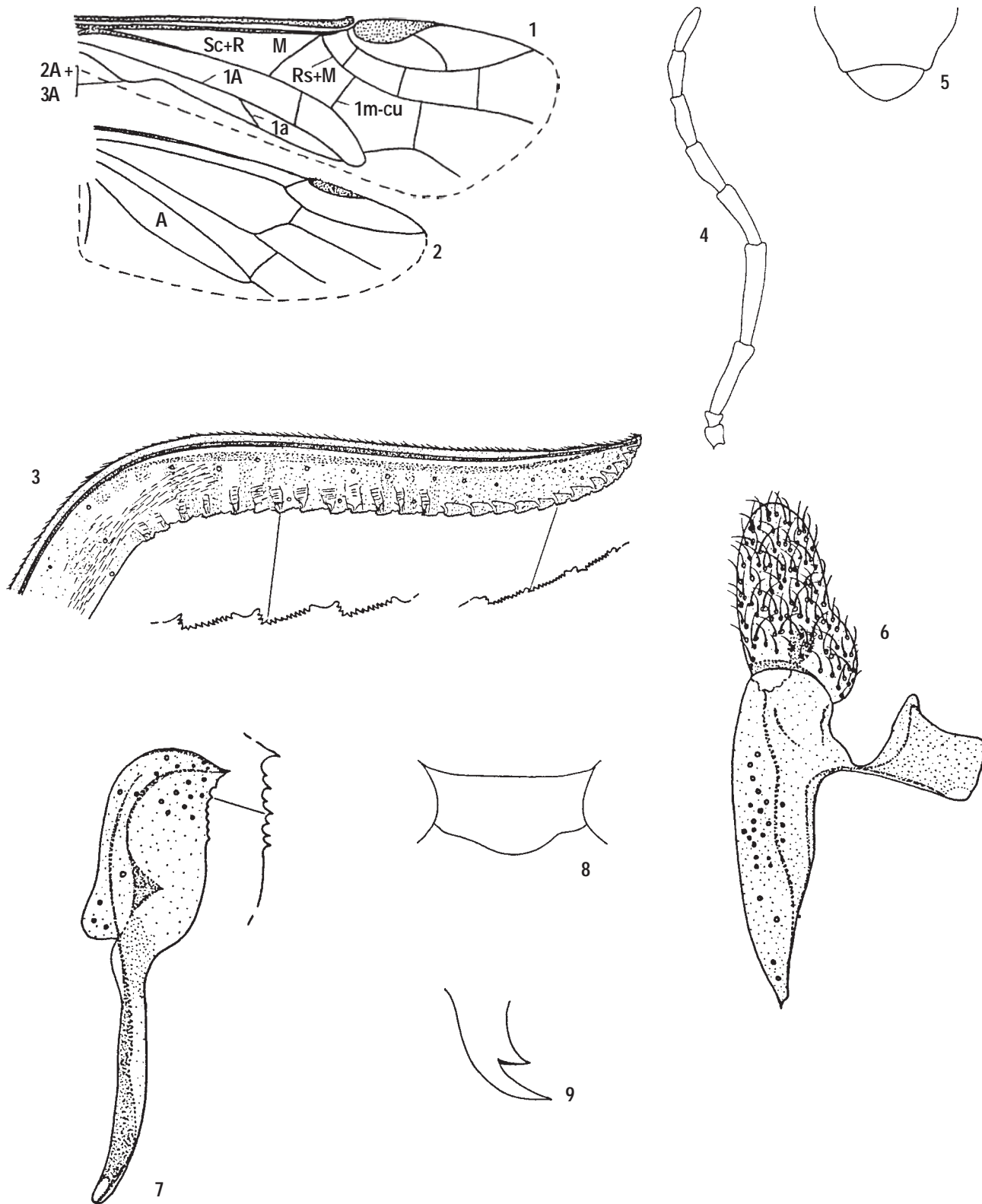
Genitalia: Penis valve (Fig. 7), gonoforceps (Fig. 6).

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Figs. 1-9. *Isotaxonus maculatus* sp. nov.
 1 - Forewing; 2 - Hindwing 3 - Lanceet; 4 - Antenna; 5 - Clypeus and Labrum; 6 - Gonoforceps; 7 - Penis valve;
 8 - Hypopygium; 9 - Tarsal claw.