

NEW DESCRIPTIONS

FIRST REPORT OF GENUS *HEMITAXONUS* ASHMEAD (HYMENOPTERA, SYMPHYTA, TENTHREDINIDAE: SELANDRIINAE) FROM INDIA WITH TWO NEW SPECIES¹

MALKIAT S. SAINI AND TAJINDER P. SAINI²

(With eight text-figures)

The sawfly genus *Hemitaxonus* Ashmead is recorded for the first time from India with the addition of two new species. Described as new species are *Hemitaxonus garhwalensis* from Mandal Uttar Pradesh and *Hemitaxonus kumaonensis* from Ramgarh, Uttar Pradesh. Each species is described and illustrated. A key is provided to distinguish all three Oriental species of the genus.

INTRODUCTION

Genus *Hemitaxonus* was erected by Ashmead (1898) taking *Taxonus dubitatus* Norton (by original designation) as its type species from North America. Takeuchi (1928) described a new species *Hemitaxonus formosanus* from Formosa. This was the first report of this genus from the Oriental region. In this paper, two new species are added to it from India, bringing the total number of species from the oriental region to three.

Genus *Hemitaxonus* Ashmead

Hemitaxonus Ashmead, 1898; Konow, 1905; Rohwer, 1911; Enslin, 1914; MacGillivray, 1916; Malaise, 1931; Malaise, 1933; Conde, 1934; Ross, 1937; Takeuchi, 1941; Ross, 1951; Smith, 1966.

Type: *Taxonus dubitatus* Norton. Original designation.

Epitaxonus MacGillivray, 1908; Rohwer, 1911 (= *Hemitaxonus* Ashmead); MacGillivray, 1916; Malaise, 1933.

Type: *Taxonus albidopictus* Norton. Original designation.

Sahlbergia Forsius, 1910; Enslin, 1914 (= *Hemitaxonus* Ashmead).

Type: *Sahlbergia struthiopteridis* Forsius. Monotypic.

DESCRIPTION

Based on Smith (1969); this genus is characterised by: Antenna long and slender; second segment globular, as long as wide; third segment subequal in length to fourth segment; sixth segment at least two times longer than wide. Frontal area distinct, enclosing the median ocellus. Post genal carina present. Clypeus slightly emarginate; malar space equal to or slightly wider than diameter of front ocellus. Epicnemium present as flat sclerite, separated from mesopleuron by suture, or present as raised shoulder, separated from mesopleuron by furrow. Forewing with an almost perpendicular anal crossvein; proximal anal cell twice length of distal anal cell; nervulus joins medius apically of middle of discoidal cell. Hindwing with two closed middle cells; anellian cell petiolate or sessile. Tarsal claw simple or with minute inner tooth.

In order to accommodate the new species, the following generic characters have been made slightly broad based: pedicel equal or shorter than its apical width and malar space may be less than diameter of median ocellus.

The terminology of Malaise (1945) and Ross (1937, 1945) has been followed. Holotypes will be deposited in the National Pusa Collections, IARI, New Delhi.

Abbreviations: AT=Apical tooth, CL=Clypeus, EL=Eye length, IATS=Inner apical tibial spur, ICD=Intercenchral distance, IDMO=Interocular distance at the level of median ocellus,

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²Department of Zoology, Punjabi University, Patiala-147 002, India.

ITD=Intertegular distance, LB=Labrum, LID=Lower interocular distance, MB=Metabasitarsus, OATS=Outer apical tibial spur, OCL=Ocello occipital line, OOL=Oculo-ocellar line, POL=Postocellar line, SAT=Sub-apical tooth.

KEY TO ORIENTAL SPECIES

1. Antennal segment 3 shorter than 4 in ratio 6:7; abdomen auratus; tarsal claw with a minute subapical tooth 2
- Antennal segment 3 & 4 equal; abdominal segments 3-6 reddish yellow; tarsal claw without subapical tooth. *Hemitaxonus formosanus* Takeuchi 1928.
2. Distal 1/3 metafemur yellow; malar space 0.4x diameter of median ocellus; inter & post ocellar furrows merely indicated. ITD:ICD :: 3.5:1.0 Female lancet, saw sheath & tarsal claw as in Figs. 7, 5, 3 *Hemitaxonus garhwalensis* sp. nov.
- Distal 2/3 metafemur yellow; malar space 0.6x diameter of median ocellus; inter and post ocellar furrows indistinct; ITD:ICD :: 3.0:1.0. Female lancet saw sheath and tarsal claw as in Figs. 8, 6, 4. *Hemitaxonus kumaonensis* sp. nov.

Hemitaxonus garhwalensis sp. nov.

(Figs. 1, 3, 5, 7)

Female: Average length 8 mm. Body black, with whitish yellow dorsolateral angles of pronotum, tegula, meso- and metacoxae except their extreme bases, all trochanters and the adjoining parts of all femora, apices of pro- and mesofemora, distal 1/3 of metafemur, anterior aspects of tibiae and tarsi of the 4 front legs; proximal 2/3 femur, tibia and tarsi of hind leg piceous. Abdomen auratus. Wings hyaline, stigma and venation dark brown to black.

Antenna slender, 2.8x head width, scape wider than long, longer than pedicel which is also apically much wider than its length, segment 3 shorter than 4 as 6:7. Anterior margin of clypeus roundly shallowly subemarginate (Fig. 1). Labrum broader than long as 3:1 with bluntly pointed anterior margin. Malar space 0.4x diameter of median ocellus. Supraclypeal area subtriangularly raised with blunt longi-

tudinal carina. LID:IDMO:EL :: 2.0:2.2:2.0; OOL:POL:OCL :: 1.0:1.0:0.8. Frontal area above the level of eyes, supraantennal tubercles insignificant and posteriorly connected with the blunt carina like well defined frontal ridges. Median fovea broad, distinct and divisible into two parts due to a transverse ridge of the elevation of frontal ridges. Upper part of median fovea is U-shaped and flat bottomed, whereas the lower part is open anteriorly and with a distinct pit in its posterior half. In middle frontal ridges laterally connected to inner margins of eyes through a transverse carina. Circum-ocellar furrow distinct, inter- and postocellar furrows merely indicated. Lateral furrows sunken, pit-like, abruptly ending only halfway to hypothetical posterior margin of head. Post ocellar area hump-like, strongly elevated in its anterior half and depressed in its posterior half, wider than long as 2:1. Inner margins of eyes subparallel. Head narrowing behind eyes. Hind orbits carinated only below. Mesoscutellum subconvex, appendage not carinate. ITD:ICD :: 3.5:1.0. Epicnemium subconvex, separated from mesopleuron by a fine furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth of tarsal claw (Fig. 3) much shorter than apical one. Metabasitarsus slightly shorter than all the following joints combined, as 6:7. Saw sheath tapering into a narrow pointed apex (Fig. 5).

Head and thorax smooth, shining, apunctate, except the posterior slope of mesoscutellum that bears isolated punctures arranged in a row. Abdomen subshining, apunctate. Body entirely without pubescence. Lancet with 7 serrulae (Fig. 7).

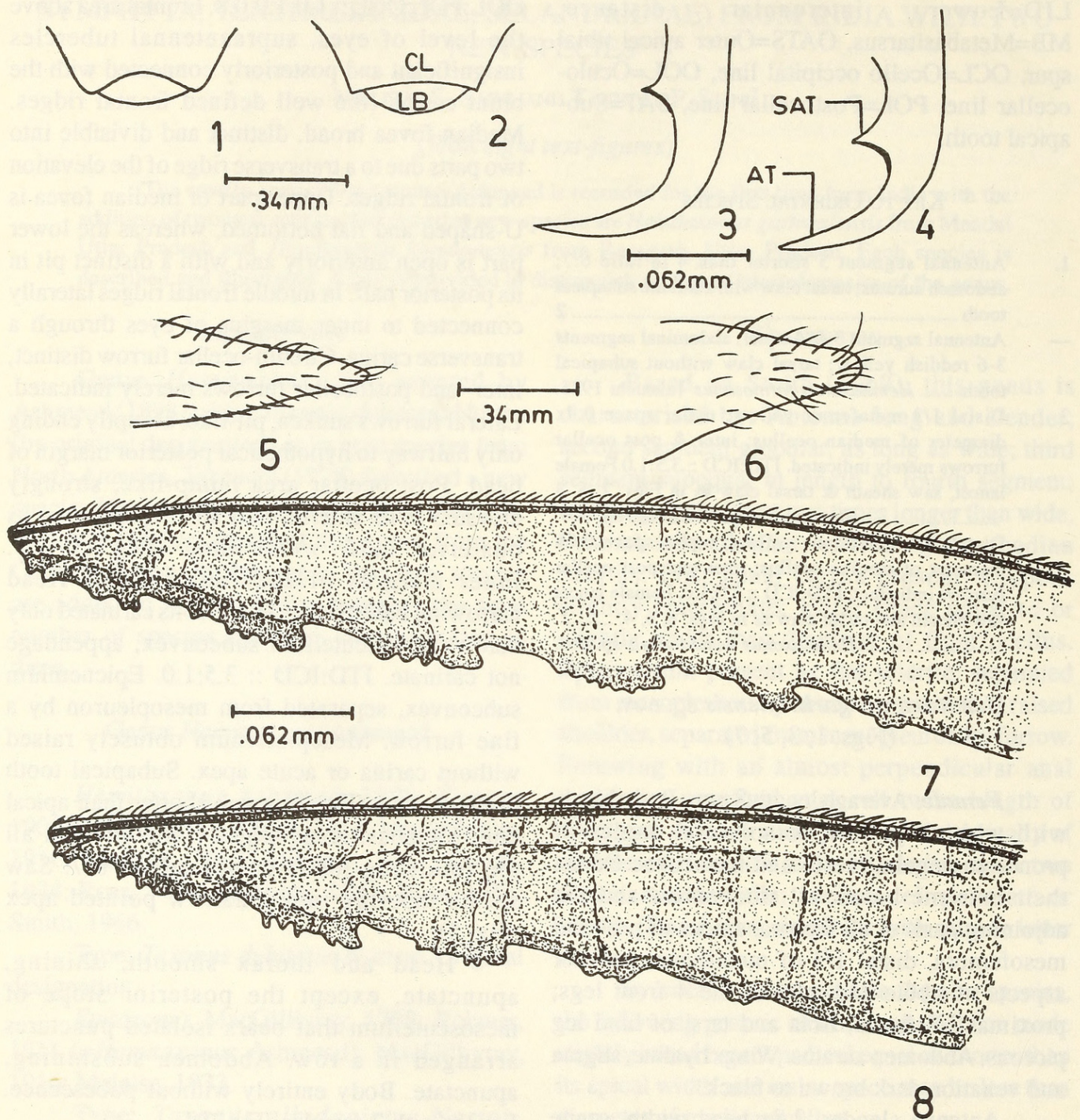
Male: Unknown.

Holotype: Female, Uttar Pradesh; Mandal, 2200 m, 12.vi.1985.

Paratype: 1 Female, same data as holotype.

Distribution: India; Uttar Pradesh.

Etymology: The species is named after the Garhwal hills in which its type locality is situated.



Figs 1-8. Clypeus: 1. *Hemitaxonus garhwalensis*; 2. *H. kumaonensis*.

Tarsal claw: 3. *H. garhwalensis*; 4. *H. kumaonensis*.

Saw sheath: 5. *H. garhwalensis*; 6. *H. kumaonensis* Lancet: 7. *H. garhwalensis*; 8. *H. kumaonensis*.

***Hemitaxonus kumaonensis* sp. nov.**

(Fig. 2, 4, 6, 8)

Female: Length 8 mm. Body black, with whitish yellow - dorsolateral angles of pronotum, tegula, meso- and metacoxae except their extreme bases, all trochanters and the adjoining parts of all femora, apices of pro- & mesofemora, distal 2/3 of metafemur, anterior aspects of tibiae and tarsi of 4 front legs; proximal 1/3 femur, tibia and tarsi of hind leg piceous. Abdomen auratus. Wings hyaline, stigma and venation dark brown to black.

Antenna slender, 2.9x headwidth, scape wider than long, longer than pedicel which is also apically much wider than its length, segment 3 shorter than 4 as 6:7. Anterior margin of clypeus roundly shallowly submarginate (Fig. 2). Labrum concealed beneath clypeus. Malar space 0.6 x diameter of median ocellus. Supraclypeal area subtriangularly raised with blunt longitudinal carina. LID:IDMO:EL::2.0:2.33:2.0, OOL:POL:OCL::1.0:1.0:0.9. Frontal area above the level of eyes, supra-antennal tubercles insignificant and posteriorly connected with the blunt carina like well defined frontal ridges. Median fovea broad, distinct and divisible into two parts due to a transverse ridge of the elevation of frontal ridges. Upper part of median fovea is U-shaped having flat bottom whereas lower one is open anteriorly and with a distinct pit in its posterior half. In middle frontal ridges laterally connected to inner margins of eyes through a transverse carina. Circumocellar furrow distinct, inter and post ocellar furrows indistinct. Lateral furrows sunken, pit-like, abruptly ending only halfway to hypothetical posterior margin of head. Postocellar

area hump-like, strongly roundly elevated in its anterior half and depressed in its posterior half, wider than long as 2:1. Inner margins of eyes subparallel. Head narrowing behind eyes. Hind orbits carinated only below. Mesoscutellum subconvex, appendage not cainate. ITD:ICD::3.0:1.0. Epicnemium subconvex, separated from mesopleuron by a fine furrow. Mesepisternum obtusely raised without carina or acute apex. Subapical tooth at the middle of tarsal claw (Fig. 4), much shorter than apical one. Metabasisarsus shorter than all following joints combined as 5:6. IATS:MB:OATS::2.0:7.0:1.8. Saw sheath broadened with blunt apex (Fig. 6).

Head and thorax smooth, shining and apunctate except the posterior slope of mesoscutellum that bears isolated punctures arranged in a row. Abdomen subshining, apunctate. Pubescence negligible. Lancet with 6 serrulae (Fig. 8).

Male: Unknown.

Holotype: Female, Uttar Pradesh; Ramgarh, 1800 m, 19.vi.1991.

Distribution: India; Uttar Pradesh.

Etymology: The species is named after the Kumaon hills among which its type locality is situated.

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