

THE SAWFLY GENUS *ALLANTIDEA* ROHWER (HYMENOPTERA: ALLANTINAE) IN INDIA

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ABSTRACT

The genus *Allantidea* Rohwer is represented by one species viz. *A. bengalensis* (Cameron) in the Indian subcontinent. The taxonomic validity of this species has been supported by taxonomic redescription, illustrations, detailed discussion and review.

KEYWORDS

Allantidea bengalensis, *Allantinae*, *Hymenoptera*, review

ABBREVIATIONS

EL - eye length ; IATS - inner apical tibial spur; ICD - inter cenchri distance; IDMO - interocular distance at level of median ocellus; ITD - inter tegular distance; LID - lower interocular distance; MB - metabasitarsus; NHM - National History Museum; NR - OATS - Outer apical tibial spur; OCL - oculoocipital line; OOL - oculoocellar line; POL - postocellar line

Taxonomic studies on the sawfly genus *Allantidea* erected by Rohwer (1912) taking *Monophadnus bengalensis* Cameron as its type species were carried out from the Indian subcontinent. This genus restricted to the oriental region is represented only by its type species so far. The hosts plants of this species remain unknown. The species is redescribed following a standardized uniform pattern defined for the Allantine sawflies. This would help accommodating the new arrivals at ease if described under this genus in future. Illustrations pertaining to genitalia and other morphological characters of taxonomic importance are provided, however, the male genitalia has not been dissected out keeping in view the importance of the determined-material.

The species, *Allantidea bengalensis*, was first described by Cameron (1876) under the genus *Monophadnus* Hartig. It was later on shifted to the genus *Eriocampa* Hartig by Kirby (1882), but Konow (1905) transferred this species to the genus *Taxonus* Hartig while cataloguing the global Sawfly fauna. Later on Rohwer (1912) erected a new genus *Allantidea* taking *Monophadnus bengalensis* Cameron as its type, which ended the controversial status of the species. This status was accepted and retained by Malaise (1957), Abe and Smith (1991), and Koch (1996). Malaise (1957) also added a new species *fumipennis* to this genus from Myanmar, but Koch (1996) synonymized it with *bengalensis* Cameron.

Genus *Allantidea* Rohwer

Allantidea Rohwer, 1912: 208-209; Malaise, 1957: 14, 15; Abe & Smith, 1991: 5, 102; Koch, 1996: 236.

Type species

Monophadnus bengalensis Cameron (original designation).

Distribution

Oriental region.

Diagnosis

Adult: Clypeus broad, short, arcuately incised; eyes converging; malar space indistinct; posterior orbits broad; antennae stout, nine segment, incrassated in middle, pedicel hardly longer than its apical width, segment three much longer than four; mandible with two prominent subapical teeth; propodeum divided along middle by long and narrow seam; scutellum not acute; tarsal claw with a large apical and shorter subapical teeth, basal lobe broad and triangular. Forewing without any appendiculate cell and hindwing with a rather large such cell; anal cell of forewing without any trace of contraction before base and its long cross-vein strongly oblique.

Allantidea bengalensis (Cameron)

Monophadnus bengalensis Cameron, 1876: 461; Abe & Smith, 1991: 5.

Eriocampa bengalensis: Kirby, 1882: 185.

Taxonus bengalensis: Konow, 1905: 109.

Allantidea bengalensis: Rohwer, 1912: 209; Malaise, 1957: 14, 15, 16; Koch, 1996: 236-238.

Allantidea fumipennis Malaise, 1957: 14, 15; ~Koch, 1996: 236-238.

Material depository

Holotype: Female (*Monophadnus bengalensis* Cameron), NHM, London; female (*Allantidea fumipennis* Malaise), NR, Stockholm.

Paratype: One male (*Allantidea fumipennis* Malaise), NR, Stockholm.

Determined specimens: One female, one male (*Monophadnus bengalensis* Cameron), det Malaise, NR, Stockholm.

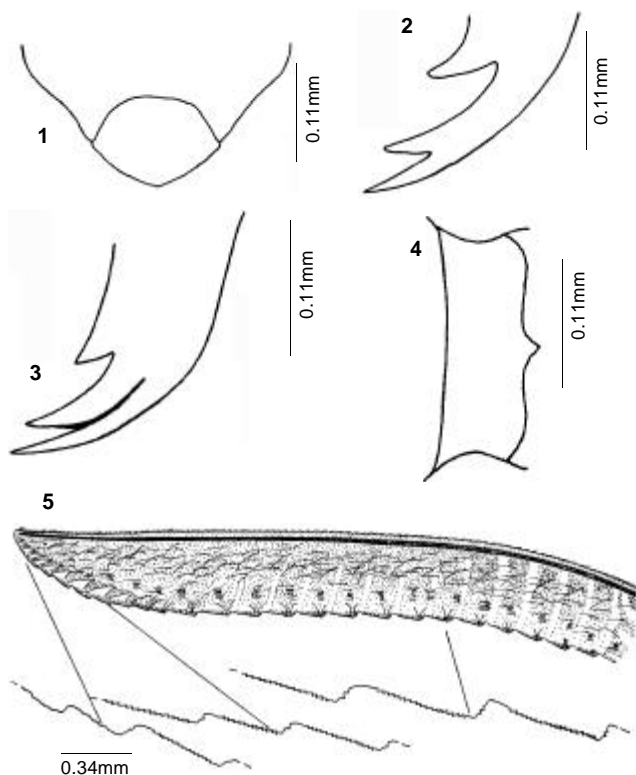
Material examined

Holotype: (borrowed from NHM, London) appended with labels as: female, *Monophadnus bengalensis* Cameron, 1876, B.M. Type, HYM, 1.327, *Allantidea bengalensis* (Cameron), det. F. Koach, 195.

Determined specimens: (borrowed from NR, Stockholm) appended with labels as: Male *Allantidea bengalensis* (Cameron) det. Malaise, 1938, 28.ii.1934, 12/90, NR, Stockholm, N. Shan States, Maymyo, 1500m, coll. Malaise.

Individual variation

Both specimens alike



Figures 1-5. *Allantidea bengalensis* (Cameron)
1 - Clypeus and labrum; 2 - Mandible; 3 - Tarsal claw;
4 - Hypopygium; 5 - Lancet

Distribution

Myanmar, Bangladesh, India: West Bengal.

Diagnostic features

Based upon the following combination of characters such as: black colour with oily bluish reflection of the body; general pattern of distribution of punctures on various parts of body; distinctly marked furrows on head, longer than wide postocellar area, insignificant malar space; tarsal claw with laterally placed shorter subapical tooth and broadly triangular basal lobe; flat top of mesoscutellum with ecarinate appendage; antenna short, segment three longer than four; and infuscated apical half of forewing, the species dealt herein, viz., *A. bengalensis* (Cameron) makes up its real entity.

Female:

Colour: Body black with distinct oily bluish tinge, yellowish are: apical $\frac{1}{2}$ of coxae, entire trochanters, front four femora except posterior stripe along apical $\frac{1}{3}$, basal $\frac{2}{3}$ of metafemur, front four tibiae except posterior stripe on apical $\frac{2}{3}$, basal $\frac{1}{4}$ of metatibia. Forewing with infuscated apical half, hindwing clear, venation including costa, subcosta and stigma fuscous.

Structure: Length 9.0mm. Antenna 1.6x head width, scape longer than wide, pedicel as long as wide, segments three and four as 5:3; clypeus (Fig. 1) with pointed lateral teeth and roundly incised up to $\frac{3}{5}$ of its length, labrum (Fig. 1) broader than long

as 5:3 with roundly pointed anterior margin; mandible three-toothed (Fig. 2); postgenal carina absent, hind orbits ecarinate; LID:IDMO:EL = 1.0:1.3:1.2, POL:OCL:OOL = 1.0:2.0:1.8; supra-clypeal and supra-antennal pits well marked; frontal area below level of eyes, supra-antennal tubercles confluent with similar low lying frontal ridges; median fovea in form of broad, deep triangular depression; post-, inter- and circum-ocellar furrows distinct; lateral furrows shallow, bulging medially and ending abruptly just before hypothetical hind margin of head; postocellar area subconvex, longer than wide as 4:3; head narrowing behind eyes; mesoscutellum flat, appendage ecarinate; ICD:ITD = 1.0:4.0; tarsal claw (Fig. 3) with laterally placed subapical tooth stronger but shorter than apical one and distance between two tips distinctly shorter than length of subapical one, basal lobe distinct, triangularly tooth like; metabasitarsus distinctly shorter than following three joints combined as 3:4, IATS:MB:OATS = 1.0:4.5:0.9. Hypopygium as in Fig. 4. Lancet (Fig. 5) having 24 serrulae.

Sculpture: Head impunctate, shining; rest of body subshining with minute and sparsely distributed punctures.

Pubescence: Silvery, 0.3x scape length.

Male: Length 8.5mm. Similar to female excepting entirely yellowish mesotibiae. Genitalia not dissected out.

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