DESCRIPTION OF A NEW SPECIES OF *CLATHA* CAMERON (HYMENOPTERA: ICHNEUMONIDAE) FROM KERALA, INDIA

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Abstract

A new species *Clatha anupama* sp. nov. is described from Kerala, India. This is a new record of the genus *Clatha* Cameron from India. The affinities of the new species with the only known species, *C. longipes* Cameron is also discussed.

Keywords

Clatha sp. nov., Hymenoptera, Ichneumonidae, India, Kerala, new record, new species.

Abbreviations

F - Female; FWL - Fore wing length; FWW - Fore wing width; HW - Head width; HL - Head length; HWL - Hind wing length; HWW - Hind wing width; ZSIK - Zoological Survey of India, Kozhikode.

Cameron (1905) erected the genus *Clatha* with *C. longipes* as its type species from Sri Lanka. The genus belongs to the subfamily Anomaloninae and closely resembles the Ethiopian genus *Bimentum* Townes, but differs in having the occipital carina joining the hypostomal carina before reaching the base of mandible and the venation of hind wing. The genus is known only by the type species from the world (Townes *et. al*., 1961; Gupta, 1987; Yu *et. al*., 2005). Townes (1971) reported one undescribed species each from Java and from the Philippines. In this paper, a new species of *Clatha* Cameron, namely, *Clatha anupama* sp. nov., is illustrated and described from Kerala. This is the first record of the genus from India. The new species differs from the only known species of the genus, *C. longipes* Cameron, in the sculpture of mesoscutum, the relative measurements of metasomal tergites, and the colour and measurements of the hind leg.

Materials and Methods

Terms used in the descriptions follow Wahl (1993). The specimens were collected using sweep net. Taxonomic studies were done using Leica MZ6 stereozoom (Switzerland), Wild M3Z stereozoom (Switzerland) and Olympus (Japan) microscopes. The figures were drawn using the drawing tube of Leica MZ6 and Wild M3Z stereozoom microscopes. The type specimens are deposited in the Prof. T.C. Narendran collections maintained in the Department of Zoology, University of Calicut for the time being and eventually will be transferred to the Western Ghats Regional Station of the Zoological Survey of India, Kozhikode (ZSIK).

Clatha anupama sp. nov.
(Figs. 1- 4)

Materials examined

Holotype: 1 female, 1.vii.2003, Kerala Agricultural University Campus (76°26'E-13°32'N), Vellanikara, Thrissur, Kerala, India, coll. P. Girish Kumar, (Reg. No. SK 258).

Paratypes: 1 female, 29.v.1995, Thiruvannur (75°47'E-11°16'N), Kozhikode, Kerala, India, coll. K. Rajmohana, (Reg. No. SK 259); 1 female, 3.v.1998, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. Swaran, (Reg. No. SK 260); 1 female, 25.iv.2001, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. K. Sudheer, (Reg. No. SK 261); 2 females, 27.iv.2001, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. P. Girish Kumar, (Reg. Nos. SK 262 & SK 263); 1 female, 9.v..2001, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. K. Sudheer, (Reg. No. SK 264); 1 female, 9.iv.2002, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. K. Sudheer, (Reg. No. SK 265); 1 female, 18.ix.2002, Calicut University Campus (75°51'E-11°7'N), Malappuram, Kerala, India, coll. Simi. C. Nair, (Reg. No. SK 266); 1 female, 2.vii.2003, Peechi forests (~76°34'E-10°53'N), Thrissur, Kerala, India, coll. P. Girish Kumar, (Reg. No. SK 267).

Etymology

The species epithet is from Sanskrit, which means unique, due to its unique features.

Holotype:

Female: Body slender, with length (excluding ovipositor) - 13.17mm; body covered with short, fine, silvery pubescence; hairs on wings light brown to brown.

Head: HW - 1.83mm and HL - 1.0mm in dorsal view (Fig. 3); HW - 1.83mm and HL - 1.35mm in front view (Fig. 2); face and clypeus with close, fine, evenly distributed punctures; upper part of face with an indistinct median longitudinal ridge in middle; malar space about 0.8x basal width of mandible; clypeus with a median tooth; mandibles with fine, close punctures, smooth at apex; upper tooth slightly longer than lower tooth; labial palp four segmented; maxillary palp five segmented; frons, vertex and gena with fine, close, evenly distributed punctures; interstices smooth, about 2x diameter of punctures; gena about 0.8x as broad as eyes in lateral view; interocellar distance 0.75x ocellocular distance, 1.8x distance between posterior ocellus and median ocellus; antennal scrobe shallow, smooth; antenna (Fig. 1) slender, very long; scape 1.7x as long as its maximum width, 2.14x as long as pedicel; pedicel 0.17x as long as first flagellar segment; first flagellar segment 8.2x as long as its width, 2.05x as long as second flagellar segment, 4.1x as long as last flagellar segment; second flagellar segment 1.43x as long as third flagellar segment, 0.5x as long as last flagellar segment.

Mesosoma: 3.22x as long as HL in dorsal view; pronotum with distinct striations, upper part with punctures; epomia long

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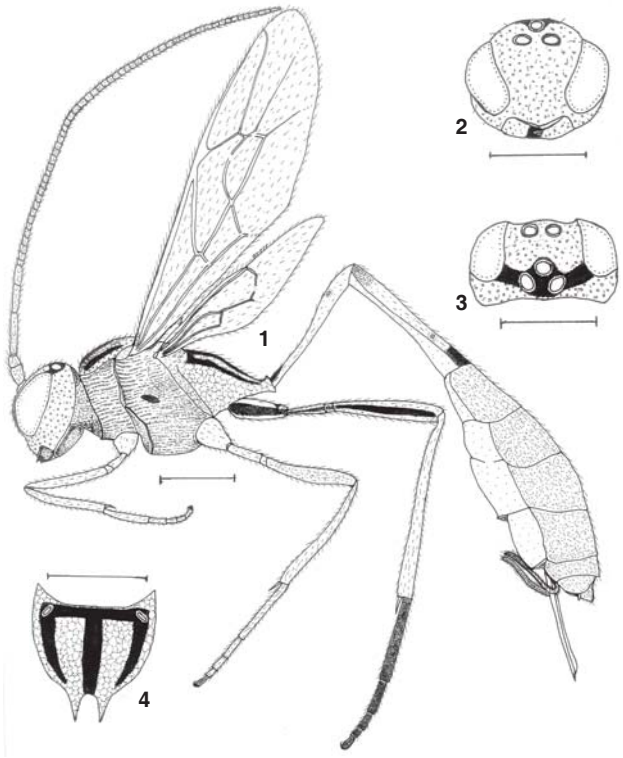

Figures 1-4.* Clatha anupama *sp. nov. female
1 - Body profile; 2 - Head - front view; 3 - Head - dorsal view; 4 - Propodeum. scale = 1mm

and strong, extending to upper part of pronotum and turning mesad; mesoscutum with fine, closely arranged, evenly distributed punctures, punctures running into striations in notaulus; notaulus distinct, extending beyond middle of mesoscutum; scutellum with evenly distributed punctures, lateral carina confined to its basal 0.55; mesopleuron longitudinally striate, striations irregular in lower part of mesopleuron, ventrally with distinct punctures; prepectus with fine punctures; sternaulus absent; epicnemial carina strong, extending up to 0.53x length of mesopleuron; propodeum and metapleuron reticulate; spiracle elongate; FWL - 6.13mm; FWW - 1.70mm; areolet (Fig. 1) absent; vein 1cu-a slightly basad of vein M; HWL - 3.17mm; HWW - 0.74mm; hind wing with one basal and six apical hamuli, with only two cells (Fig. 1); legs with fine, closely arranged punctures; hind femur 5.86x as long as broad; hind tibiae distinctly longer than (about 1.22x) combined length of trochanters and hind femur; first hind tarsal segment 2.67x length of second segment.

Metasoma: Tergite 1 largely smooth with fine, close, shallow, evenly distributed punctures visible only in high magnifications, without median dorsal, lateral and ventral carinae; spiracle of tergite 1 small and circular, near to apex; tergite 2 distinctly longer than (about 1.1x) tergite 1; ovipositor slightly compressed, straight, pointed at apex, without any dorsal apical notch, upper valve without ridges, tip of lower valve extending beyond tip of upper valve, 1.0 x as long as length of hind tibia.

Colour: Body largely yellow with the following markings: mandibular teeth, eyes, vertex transversely, ocelli, mesoscutum with median stripe extending beyond middle, stripes on lateral lobes shorter and broader, scutellar groove, median and lateral stripes on propodeum, a transverse stripe at base connecting longitudinal stripes of propodeum (Fig. 4), scutellum at base and apex, basal part of metascutellum, a small marking in centre of mesopleuron black; antenna yellowish-brown, darker towards apex. Metasoma (Fig. 1) reddish-brown except tergite 1 and 2 yellowish-brown, extreme base of tergite 1 and extreme apex of tergite 2 black, extreme base of tergite 2 brown, sternites yellowish brown to dark brown; fore and mid legs largely yellow, femur of mid leg with a brownish tinge, fifth tarsal segments brown, hind coxa yellow with a large black mark, trochanters, hind femur, and hind tibia yellowish-brown with a longitudinal dark brown line on trochanters and hind femur, tarsal segments brown darker towards apex, ovipositor yellowish-red, its sheath black.

Male: Unknown.

Host: Unknown.

Biology: Unknown.

Distribution: India (Kerala).

Discussion

This new species is similar to *C. longipes* Cameron in having black stripes on mesoscutum and propodeum, sculptures on propodeum and vertex transversely being black, but differs in the following characteristics: (1) Mesoscutum and scutellum with distinct punctures, striate in region of notaulus (Mesoscutum and scutellum rugosely punctate in *C. longipes*); (2) First hind tarsal segment more than twice (2.67x) length of second segment (First hind tarsal segment hardly longer than 2x length of second segment in *C. longipes*); (3) Hind tibiae distinctly longer than combined length of trochanters and hind femur (Hind tibiae as long as trochanters and femora united in *C. longipes*); (4) Propleuron without black lines (Propleuron with black lines in *C. longipes*) and (5) Combined length of metasomal segments 1 and 2 longer than mesosoma and tergite 2 distinctly longer than tergite 1 (Combined length of metasomal segments 1 and 2 as long as mesosoma and tergites 1 and 2 of equal length in *C. longipes*).

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