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SHORT COMMUNICATION

A NEW SPECIES OF BRACONID WASP *METEORUS* HALIDAY (HYMENOPTERA: BRACONIDAE: METEORINAE) FROM INDIA

Zaheer Ahmed, Altaf Hussain Mir & Mohammad Shamim

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A new species of braconid wasp *Meteorus* Haliday (Hymenoptera: Braconidae: Meteorinae) from India

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Abstract: A new species of braconid wasp, Meteorus rubrum Ahmed & Shamim sp. nov. (Hymenoptera: Braconidae: Meteorinae), is described from India. The new species is closely related with M. dichomeridis (Wilkinson, 1930) and M. kotanni (Maeto, 1986).

Keywords: Meteorus dichomeridis, M. kotanni, Rajouri, wasp.

Haliday (1835) erected the genus Meteorus with its type species Ichneumon pandulator Latreille. The genus is distinguished by maxillary palp six segmented, forewing vein SR1 usually long and straight, first metasomal tergite slender and long. This genus is studied well by Muesebeck (1936), Nixon (1943), Huddleston (1980, 1983, 1986), and Maeto (1986, 1988a,b, 1989a,b, 1990). It includes 412 species from all over the world (Yu 2020), out of which 11 species have been described and reported from India so far, viz.: Meteorus arcticida (Viereck, 1912), M. dichomeridis (Wilkinson, 1930), M. spilosomae (Narendran & Rema, 1996), M. etawahiana (Shamim & Ahmad, 2008), M. poonchiensis (Shamim & Ahmad, 2008), M. aurayyus (Shamim, 2011), M. hayati (Shamim, 2011), M. indicus (Shamim, 2011), M. narendrani (Shamim, 2011), M. sharifi (Shamim, 2011), and M. aligarhensis (Shamim

& Usmani, 2012). All of these species are koinobiont endoparasitoids, usually attack young exposed-feeding caterpillars, but some of the species parasitize grubs (Shaw & Huddleston 1991; Shaw 1997). Meteorus species are famous for their diverse silk-spinning, and cocoonforming behaviours (Zitani et al. 1997). In this paper a new species Meteorus rubrum is illustrated and described from India.

PLATINUM

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MATERIAL AND METHODS

The specimens were collected by using sweep net. The slides and card mounts of specimens were examined through stereo zoom binocular microscopes (Nikon SMZ1500 and Nikon SMZ 25). The ocular micrometer was used for the measurement (linear side of 100 divisions) of body parts. The ocular micrometer was calibrated with the help of stage micrometer under 8x10x magnification. Photographs were taken at different magnifications (4-16x) by the camera attached to Stereozoom binocular microscope. The general terminologies and venation terminologies followed given by Achterberg (1993) and for the surface sculpture followed Eady (1968). The following acronyms are used to denote the various body

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parts: AOL= Anterior ocellar line; POL= posterior ocellar line; OOL= ocello ocular line; OOD= ocellus diameter; F: flagellomere; T= thoracic terga; 1-CU1= first cubitus, 2-CU1= second cubitus, 3-CU1= third cubitus. Acronym for type depository MDZUK= Museum Department of Zoology, University of Kashmir

RESULTS AND DISCUSSION

Meteorus rubrum Ahmed & Shamim, sp. nov. (Image 1 A–K)

urn:lsid:zoobank.org:act:7A0A16B7-C7BF-4D1C-9620-6E248392F9E3

Material examined

Holotype: ZoKU Art/06179, 25.vi.2019, Female, Palma, Rajouri, Jammu & Kashmir (UT), India, coll. Zaheer Ahmed, deposited in MDZUK.

Paratype: ZoKU Art/06179a, 1 Female, data same as holotype.

Female: Body length: 8.87mm; Forewing: 8.45mm.

Head: The width of head in dorsal view 1.6x of its length and 1.4x of height; occipital carina complete; length of eye in lateral view 1.4x of its width and 1.8x of temple; temple setose, OOL:POL:AOL:OOD= 7:10:5:9; vertex smooth and densly setose, width of vertex 2.5x of its length; frons smooth and shiny with median longitudional carina, width of frons 3.5x of its length; face rugose and densely setose; width of face 1.8x of its length; tentorial pits deep and broad; intertentorial line 4.3x of tentorioocular line; length of malar space 3.3x of basal width of mandible; clypeus convex and sparsely setose, length of clypeus 2.7x of its width; antennal segments 38; length of scape 1.2x of its width, pedicel as long as wide, length of F1- F4 :3.4x: F5-F9 3x: F5-F9 2.8x: F10 -F13 2.2x: F14 -F26 2x: F27- F28: 2.6x: F29: 2.3x: F30 -F34 :2x: F35: 1.6x: F36 3.5x of their widths respectively.

Mesosoma: Length of mesosoma 2.6x of its width and 2.8x of its height; dorsal surface of pronotum smooth, laterally rugulose punctate; notauli deep, anteriorly crenulate, posteriorly rugose; mesopleuron anteriorly rugose, medially with some crenulation and posteriorly longitudinally striate, metapleuron reticulate and sparsely setose; scutellar sulcus shallow without any carina; scutellum smooth, sides of scutellum rugose; metanotum anteriorly smooth, laterally crenulate; sternulus smooth and shallow; propodeum entirely reticulate rugose.

Legs: Hind coxa 1.4x as long as wide; length of hind femur, tibia, and basitarsus 5.7x, 12x, and 1.8x their widths respectively; length of hind tibial spurs 0.28x–0.35x of hind basitarsus.

Wings: Length of forewing 2.9x of its width, length of pterostigma 3.3x of its width, length of vein 1-R11.4x

length of pterostigma; vein 3-SR of forewing 1.8x length of r; vein SR1+3-SR curved; r arising 1/3rd of the pterostigma; r: 2-SR:S-R1+3-SR= 10:20:112; 1-CU1: 2-CU1: 3-CU1 = 1:42:15; m-cu and cu-a post furcal; length of hind wing 3.5x of its width; 1-M: 1-r-m: 2-SC+R= 12:28:7.

Metasoma: Length of metasoma 3.1x of its width and 2.8x of its height; length of first metasomal tergite 4.3x of its apical width; apical width 2x its basal width; first metasomal tergite smooth apically, medially some striae; dorsope present; spiracles present just middle of first metasomal tergite; second metasomal tergite smooth, long; rest of tergite smooth and sparsely setose; ovipositor very long and pointed, length of ovipositor sheath 0.36x forewing.

Colour: Head reddish-brown, eyes greyish, ocelli yellowish, ocellar area reddish, wings hyaline with brown venation, scape, pedicel, F1–F17 segments reddish-yellow, remaining antennal segments dark brown, legs reddish-yellow except tarsus pale yellow and claw dark brown femur, mandibles yellow with black dentation, maxillary and labial palpi yellowish, pronotum, scutellum, propodeum, first metasomal tergite and remaining terga reddish-yellow, ovipositor yellow and ovipositor sheaths dark brown.

Etymology: The new species is named after the red colour of the body of the type specimen.

Male: Unknown

Host: Unknown

Diagnosis: The new species *Meteorus rubrum* Ahmed & Shamim, sp. nov. closely resembles with *Meteorus dichomeridis* (Wilkinson, 1930). It, however, differs from this species in certain peculiar characters which are as follows:

Meteorus dichomeridis Wilkinson, 1930	Meteorus rubrum Ahmed & Shamim, sp. nov.
Antennal segments 26–28	Antennal segments 38
Vein 3-SR of forewing equal to r	Vein 3-SR of forewing 1.8x length of r
First metasomal tergite 2x its apical width	First metasomal tergite 4.3x its apical width
Face minutely punctate and aciculate	Face rugose and densely setose

Meteorus rubrum Ahmed & Shamim, sp. nov. also closely resembles *Meteorus kotanni* (Maeto, 1986); however, it differs as follows:

Meteorus kotanni Maeto, 1986	<i>Meteorus rubrum</i> Ahmed & Shamim, sp. nov.
Antennal segments 41	Antennal segments 38
Vertex punctate	Vertex smooth and densely setose
Propodeum with median longitudinal carina anteriorly and transverse carina posteriorly	Propodeum entirely reticulate rugose
First metasomal tergite apically reticulate rugose, medially longitudinally striate rugose	First metasomal tergite apically smooth, medially some striae

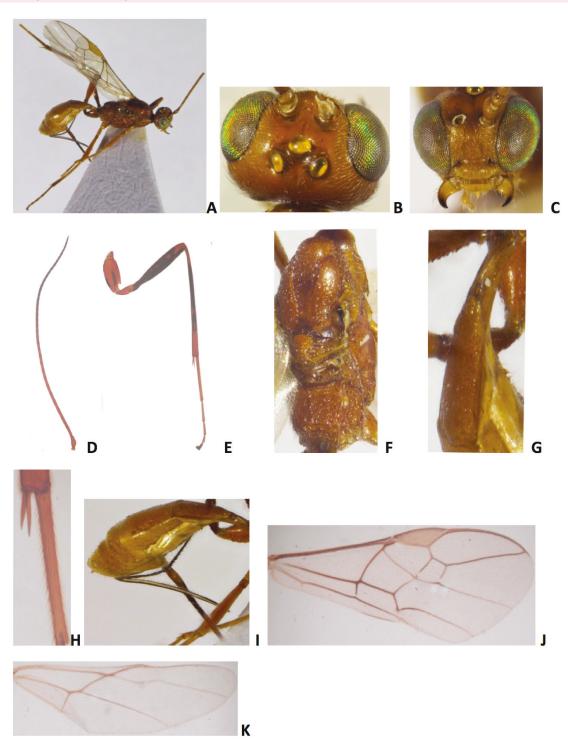


Image 1 A–K. Female *Meteorus rubrum* Ahmed & Shamim, sp. nov.: A–Habitus | B–Dorsal head | C–Frontal head | D–Antenna | E–Hind leg | F–Mesosoma dorso-lateral | G–First metasomal tergite | H–Tibial spurs | I–Metasoma lateral | J–Forewing | K–Hindwing. © Zaheer Ahmed.

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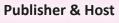
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