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DESCRIPTION OF A NEW SPECIES OF *OLIGOSITA* HALIDAY (HYMENOPTERA: CHALCIDOIDEA: TRICHOGRAMMATIDAE) FROM INDIA

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Abstract: A new species of the trichogrammatid genus, *Oligosita* Haliday, *Oligosita doonensis* sp. nov. is described based on specimens collected from Uttarakhand and Uttar Pradesh, India.

Keywords: India, new species, *Oligosita*, Trichogrammatidae.

Oligosita doonensis sp. nov. (Figures 1–9)

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Material examined

Holotype: ZDAMU HYM.CH.696, female (on slide), 3.xi.2009, (30.46°N & 77.77°E; 448.18m), Udaibagh, Dehradun, Uttarakhand, India; coll. F.R. Khan, Department of Zoology, Aligarh Muslim University.

Paratype: ZDAMU HYM.CH.696, 1 female (on slide), same data as holotype; 7.iii.2009, (28.03°N & 80.7°E; 448.18m), Dhorau, Aligarh, Uttar Pradesh, India; coll. F.R. Khan.

Etymology

The specific name is derived from the collection locality - Doon Valley (Dehradun).

The trichogrammatid fauna is represented by 89 genera and more than 800 species across the world (Ranyse et al. 2010). The genus *Oligosita* Haliday in Walker (1981) contains more than 120 species world wide and 14 species from India. Hayat (2008) provided notes on the 17 valid species of the genus *Oligosita* from India and gave a key to these species. Pinto & Viggiani (2004) and Begum & Anis (2013) transferred some species of *Oligosita* to *Pseudoligosita*. In this paper, a new species of the genus *Oligosita* is described from specimens collected from Uttarakhand and Uttar Pradesh, India. The genus now contains 15 species from India, including the new species described in this paper.



DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
DD	LC	NT	VU	EN	CR	EW	EX

Oligosita doonensis sp. nov.



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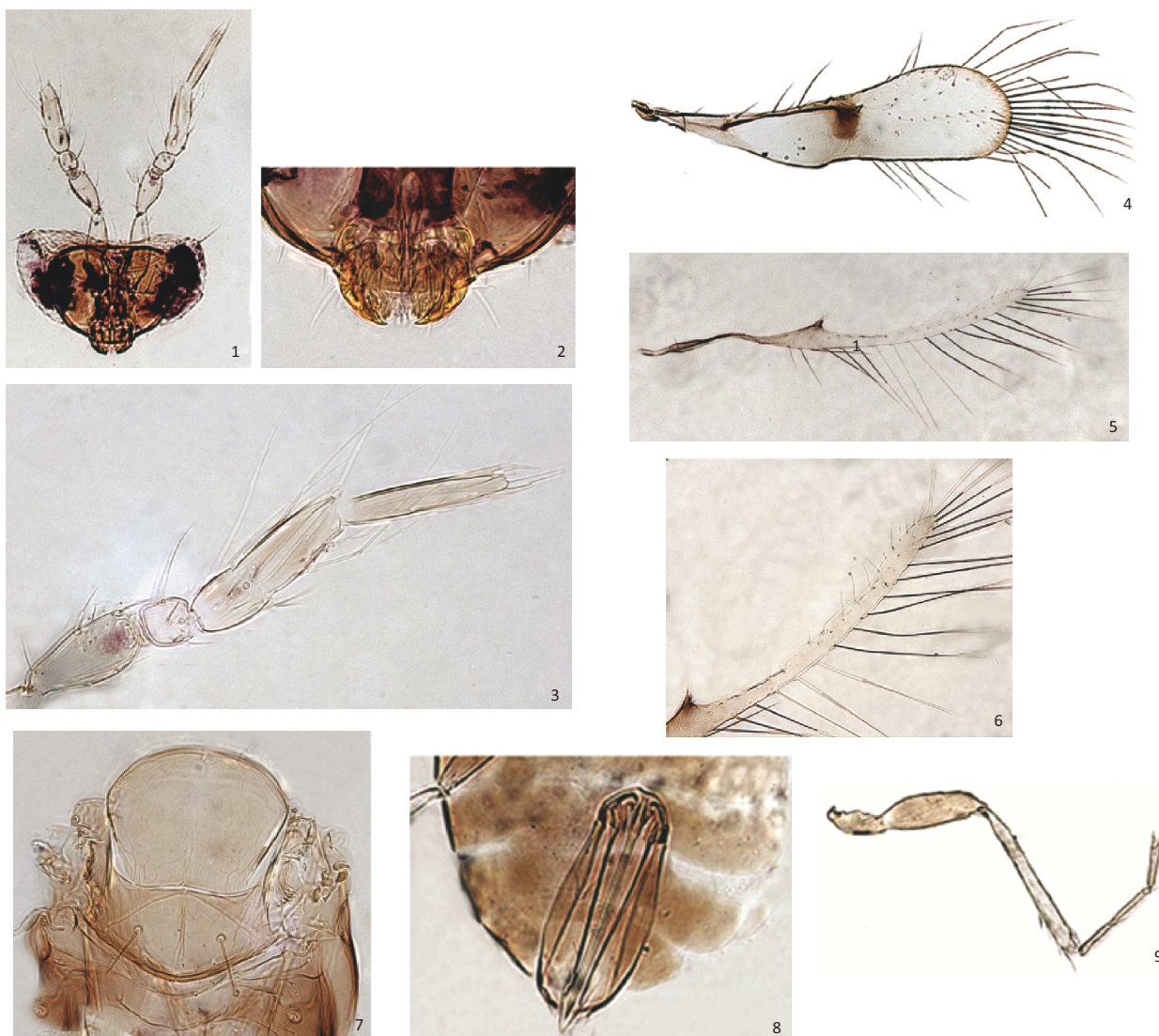
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Figures 1–9. *Oligosita doonensis* sp. nov. (Female) (ZDAMU HYM.CH.696)

1 - Head with antenna; 2 - mandibles; 3 - flagellum; 4 - fore wing; 5–6 - hind wing; 7 - thorax; 8 - gaster showing ovipositor; 9 - hind leg.

Description

Female: Length, mesosoma + metasoma, 0.55mm. Body brown; eyes dark; antenna pale yellow except clava pale brown; tips of mandible honey brown; mid lobe of mesoscutum pale brown; scutellum medially pale yellow, side lobes pale brown; metanotum pale yellow; propodeum medially pale brown, side lobes brown; fore wing hyaline, with infuscation beneath stigmal vein and slight infuscation at basal part of fore wing; hind wing hyaline. Legs with coxae dark brown, femur pale brown, tibia and tarsal segment of all legs pale yellow. Gaster with dark brown cross bands.

Head: Mandibles tri-dentate (Fig. 2); malar sulcus present; malar space about 0.29x eye length; maxillary palp well developed; antenna (Fig. 1) thin and long with

scape 3.1x as long as broad (28:9); funicle 1.12x as long as broad and slightly shorter than first segment of clava (9:10); clava (Fig.3) 3 segmented about 6.11x as long as broad (55:9); first segment of clava shortest, length, 10; second segment is longer than the first, length, 18 and third segment, the slender and longest and apical segment with long hook like bristle (Fig. 3).

Mesosoma: Mesoscutum and scutellum with cellular sculpture (Fig.7); 1+1 setae on scutellum (Fig. 7) but absent in mesoscutum; mesopleuron divided in suture; mesophragma notched and extending upto TII of gastral tergite; metanotum 0.57x as long as propodeum (4:7); mesoscutum 0.8x as long as broad (33:41); scutellum 0.57x as long as broad (20:35); fore wing (Fig. 4) incised at apex of retinaculum, 3.9x as long as broad (176:45),

longest marginal fringe 1.4x wing width (65:45); hind wing (Fig. 5) 25.3x as long as broad, marginal fringe 7.8x wing width. Legs (Fig. 9) normal, individual segment with fine hairs.

Metasoma: Ovipositor originates from TIII of gastral tergites and is slightly exerted at apex (Fig. 8), ovipositor about 1.23x as long as hind tibia (80:65) and 1.25x as long as mid tibia (80:64). Setae on tergite (TI–TVII) as follows: TI, 1+1; TII, 1+1; TIII, 1+1; TIV, 1+1; TV, 1+1; TVI, 1+2+1; TVII, 4.

Male: Unknown.

Hosts: Unknown.

Relative measurements (taken from the divisions of a linear scale of a micrometer, at 400x magnification): Female. Eye length 41; eye width 15; malar space 12; scape length 28; scape width 9; pedicel length 18; pedicel width 9; funicle length 9; funicle width 8; clava length, 55; clava width 9; thorax length 64; thorax width 75; mesoscutum length 33; mesoscutum width 41; scutellum length 20; scutellum width 35; propodeum length 7; metanotum length 4; fore wing length 176; fore wing width 45; marginal fringe 65; hind wing length 152; hind wing width 6; marginal fringe 47; mid leg femur 51; mid leg tibia 64; mid leg tarsi 54; mid leg basitarsus 15; hind leg femur 43; hind leg tibia 65; hind leg tarsi 56; hind leg basitarsus 14; gaster length 140; gaster width 64; ovipositor length 80; exerted ovipositor length 12.

Distribution

India: Uttarakhand and Uttar Pradesh.

Comments

This new species appears to be very similar to *Oligosita curvialata* Lin (1994) in having fore wing incised at apex of retinaculum, but differ from the latter in fore wing discal setation; antennal funicle rounded, about 1.12x as long as broad; second claval segment longer than first (Fig. 3), and ovipositor 1.23x as long as hind tibia. (In *O. curvialata*, antennal funicle, long and cylindrical, about 2.2x as long as broad; first segment of clava longer than the second; second segment of clava shortest in length and ovipositor 2.67x as long as hind tibia).

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