



Description of a new species of *Oligosita* Haliday (Hymenoptera: Chalcidoidea: Trichogrammatidae) from India

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Author contributions: M. HAYAT did the main work on identifications and description of the species. F.R. KHAN collected the specimens, provided help in identification, and prepared the final manuscript on the computer.

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Abstract: A new species of the trichogrammatid genus *Oligosita* Haliday, *O. sakara*, sp. nov., is described based on specimens collected in Uttar Pradesh and Orissa, India.

Keywords: Indian Trichogrammatidae, *Oligosita* new species.

The trichogrammatid genus *Oligosita* Haliday in Walker (1851) contains more than 120 species worldwide. Recently, Hayat (2008 a, b) studied the types of all but one species of *Oligosita* described by Mani (1939) and Yousuf & Shafee (1984, 1988, 1992), and recorded material pertaining to six species. In all, Hayat (2008b) recognized 17 valid species from India and gave a key to these species. In this paper, a new species of the genus is described from specimens collected from Uttar Pradesh and Orissa.

Oligosita sakara sp. nov.

(Figs. 1-7)

Material examined

Holotype: Female (on slide), 1.x.2006, Tikona Mod, Bahraich, Uttar Pradesh, India, coll. F.R. Khan. Deposited in National Pusa Collection, Division of Entomology, Indian Agricultural Research Institute, New Delhi (NPCI), Registration no. 13/6/59/1.

Paratypes: 4 Females (on slides), same data as per holotype; 1 Female (on slide), 26.ix.2006, Lakhkhi Purwa, Lakhimpur, Uttar Pradesh, coll. S.M.A. Badruddin & F.R. Khan; 2 Females (on one slide), 27.ix.2006, Imami Purwa, Lakhimpur, Uttar Pradesh, coll. S.M.A. Badruddin & F.R. Khan. Two paratypes from Imami Purwa, deposited in NPCI, No. 13/6/59/2; rest of the paratypes in Insect Collection, Department of Zoology, Aligarh Muslim University, Aligarh

Additional specimens examined, but not designated as types: (All specimens are on cards): 2 Females, 26.xi.2007, Benipur, Bhubaneswar, Orissa; 1 Female, 29.xi.2007, Chandpur, Puri, Orissa; 4 Females, 1.xii.2007, Matiapada, Puri, Orissa; 1 Female, 4.xii.2007, Harrajpur, Khorda, Orissa; 1 Female, 11.xii.2007, Budharaja, Sambalpur, Orissa; 2 Females, 15.xii.2007, Sarbahai, Jharsuguda, Orissa (All coll. F.R. Khan).

Etymology

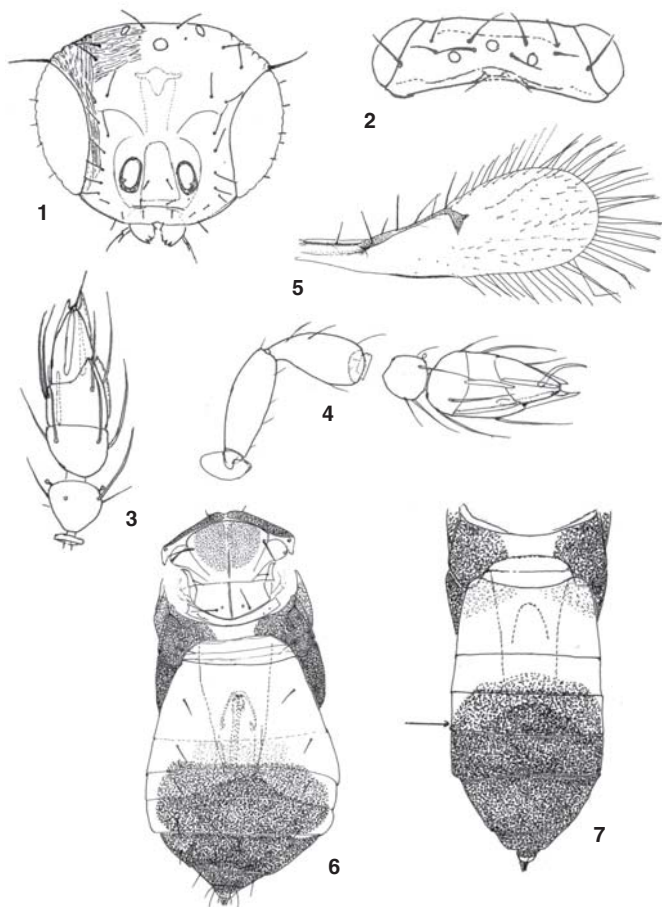
The specific name is an arbitrary combination of letters.

Description

Female: Length, 0.51-0.60 mm; Head, pronotum, mesopleuron, metapleuron, gastral terga beginning posterior half of third tergite (T III) to T VII, except white apex of T VII, dark brown; two patches in about anterior two-thirds of mid lobe of mesoscutum, sides of propodeum, posterior half of T II and anterior half of T III, brown; ovipositor sheaths dark brown; rest of body pale yellow (Figs. 6, 7); antenna pale infuscate brown yellow; wings hyaline with a faint yellow tinge, with slight infuscated spots at base of parastigma and at apex of stigmal vein; veins yellow-brown; last tarsal segment of all legs brown.

Head: compared to other Indian species, flattened; dorsum about 5x as broad as long, with vertex at level of posterior ocelli, about 4x as broad as long (Fig. 2) [These dimension vary in specimens treated with KOH and mounted in balsam. See Fig. 1]; malar sulcus present; malar space two-fifths of eye length; head, in front view, 1.3x as broad as high in a normally preserved specimen; vertex with transversely elongate reticulations, but from sides of eyes down to near the lower margins of eyes with longitudinally elongate ridge-like reticulations (Fig. 1); ocellar triangle with apical angle strongly obtuse; setae as in Figs 1 & 2. Mandibles with two teeth and a truncation. Maxillary palp unsegmented.

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Figures 1-7. *Oligosita sakara* sp. nov. (Female)

1 - Head frontal view; 2 - head dorsum; 3 - flagellum; 4 - antenna, scape and pedicel from left antenna, flagellum from right antenna; 5 - fore wing; 6 - thorax and gaster, gaster distended; 7 - propodeum and gaster showing colour, normal. Figures 1, 3, 5 and 6 from holotype; 2, 4 and 7 from paratypes.

Antenna (Figs. 3, 4) with scape slightly longer than pedicel (5:4.5) and shorter than clava (5:6.5); funicle segment as long as broad and as long as first segment of clava; clava 2.25 to 2.75x as long as broad, apical segment with a hook-like bristle (Fig. 4).

Thorax: somewhat flattened; setation and dimensions as in Fig. 6. Fore wing (Fig. 5) about 3x as long as broad; marginal fringe 0.65x-0.70x of wing width. Hind wing 16.4x as long as broad; marginal fringe 2.8x as long as wing width.

Gaster: depending upon the state of preservation and if not stretched as in Fig. 6, 1.76x to 1.90x as long as thorax; gastral tergites 1 and 5 (T I, T V) long; setae on tergite as follows; T I, 1+1; T II, 1+1; T III, 1+1; T IV, 1+2+1; T V, 1+2+1; TVI 1+2+1; T VII, 4; ovipositor as seen through the derm, appears to originate from about basal third to half of T I, and very slightly exerted at apex; ovipositor varies from 1.57x to 1.87x as long as hind tibia; in holotype, 1.87x as long as hind tibia.

Male: Unknown.

Host: Unknown.

Comments: This new species does not agree with any of the available descriptions of the species (Nowicki 1935, 1936; Viggiani 1976, 1981; Yousuf & Shafee 1984, 1988, 1992; Lin 1994; Hayat 2008b) of *Oligosita*. However, it appears related to *O. aesopi* Girault (1929) as it runs near that species in the key to the Australian species given by Viggiani (1976), but *O. aesopi* has an obscure yellow body, scape about 2x as long as pedicel and fore wing marginal fringe a little shorter than width of wing. This species was mentioned as '*Oligosita* sp. indet. D' in the key to the Indian species of *Oligosita* given by Hayat (2008b).

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