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The genera *Neocentrobiella* and *Xiphogramma* from India,
with descriptions of two new species
(Hymenoptera: Trichogrammatidae)



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The paper contains descriptions of two new species of trichogrammatids, one each of *Neocentrobiella* Girault and *Xiphogramma* Nowicki. Both the genera are new to the Indian fauna.

Neocentrobiella viggianii, n. sp.

Female. — Length (excluding exerted part of ovipositor), 0.51 mm (0.175 mm). Body wholly dark brown with the frontovertex specially on sides of lateral ocelli, brown yellow. Antennae dark brown, the scape dusky brown. Fore wings slightly infumate from about junction of submarginal and marginal veins proximad, otherwise hyaline with brown venation. Legs pallid except as follows: fore coxae and both margins of fore femora pale brown; middle coxae and femora brown; hind coxae and femora dark brown.

Head, in profile, with the genae about one-third of eye length; eyes glabrous; antennal sockets placed far above facial margin, distinctly above lower level of eyes; maxillary palpi 2-segmented, labial unsegmented. Antennal scape short, three times as long as wide; pedicel longer than both funicle segments combined; funicle segments each somewhat longer than wide; first segment of club about half the length of second segment, and both provided with very long cilia; first segment with a single whorl, second segment with two whorls; third segment with long tyloidea and with only short cilia. Mesoscutum and scutellum with distinct, large, hexagonal cells, those on middle of scutellum somewhat longitudinally drawn; mesopleura appears undivided. Gaster as long as head and thorax combined; ovipositor extending from between bases of hind coxae, and strongly exerted at apex; inner plates enormously enlarged within gaster, but third valvulae (styli) very short, hardly extending to apex of gaster; inner plate and third valvula combined about one and two-thirds times as long as middle tibia hypopygium extending to apex of gaster.

Male. — Similar to female in colour and other details except for the antennae and genitalia. Antennal scape about twice the length of pedicel; flagellar

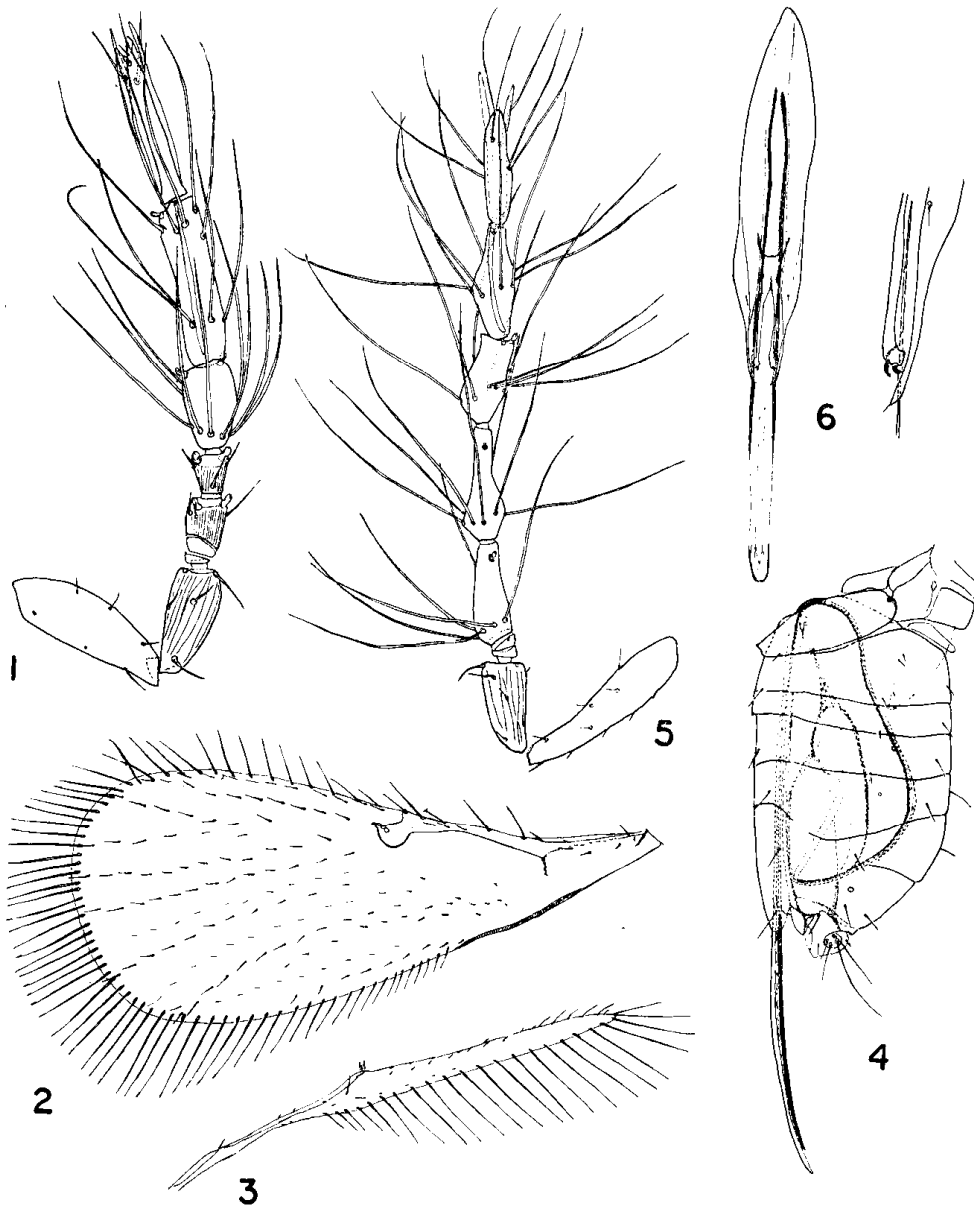


FIG. I. - *Neocentrobiella viggianii*, n. sp. Female. 1. Antenna; 2. Fore wing; 3. Hind wing; 4. Gaster, side view; Male. 5. Antenna; 6. Genitalia, enlarged paramere and digitus shown separately

segments (5) all longer and each with a whorl of very long cilia. Genitalia with the phallobase long, tubular, narrowed at apex, and with very long and narrow parameres that extend beyond the apices of the digiti; each digitus with two short denticles; aedeagus extraordinarily long, its total length much more than the length of phallobase.

Other details as in figure I. 1-6.

Holotype ♀, India: Uttar Pradesh, Aligarh, Sept. 1980, coll. Hayat; *Paratypes*, 1 ♀, 1 ♂, Dec. 1979, rest of data as for holotype. Types in Hayat coll.

Comments: The new species is referred to *Neocentrobiella* mainly because of the similarly shaped antennae and long and strongly exerted ovipositor (but not valvulae). The fore wings are slightly different from those of the type species, *N. rara* Grt., and are suggestive of the wings of *Ittys* (as a subgenus of *Paracentrobia* in DOUTT & VIGGIANI, 1968; but a distinct genus in VIGGIANI, 1971). However, in the new species, as in *N. rara*, the marginal cilia distad of venation are distantly placed and only slightly shorter than those on the marginal vein. In *Ittys* the marginal cilia are short, closely placed, and much shorter than those on the marginal vein. The male (new record) is also quite distinct from the known males of other trichogrammatids in the long flagellar segments with very long cilia arranged in whorls, and in the long and narrow genitalia with elongate parameres and digiti. In this structure *N. viggianii*, n. sp. approaches *Ophioneurus* (*O. signatus* Ratz., see VIGGIANI, 1971: Fig. I. 6, 6.), but that genus is, otherwise, quite different.

The new species is named for Prof. Gennaro Viggiani in recognition of his contributions to the Trichogrammatidae.

Xiphogramma indicum, n. sp.

Female. — Length (excluding exerted part of ovipositor sheaths), 0.75 mm (0.225 mm). Frontoververtex mostly brownish, genae dusky brown, face below sockets pallid; occiput from about upper level of foramen downwards, brownish; eyes and ocelli carmine; pronotum dark brown; mesoscutum brownish with sides and apical third yellow; axillae in anterior half washed with brown, rest yellow; metanotum and propodeum yellow in middle, dark brown on sides; pleura mostly brownish; gaster and valvulae blackish brown. Antennal scape pale with brownish dorsal margin; pedicel brown; funicle and club dark brown. Wings hyaline; fore wings with the marginal vein in distal two-thirds, stigmal and basal half or so of submarginal vein brown. Fore leg: coxa dark brown with pale apex; femur brown with distal third pale; last tarsal segment brown; rest of leg pale yellow to nearly white. Middle leg: base of coxa and femur in middle indistinctly pale brown; last tarsal segment brown; rest of leg whitish. Hind leg: Coxa except apex dark brown; femur except apical third brownish; last tarsal segment brownish; rest of leg whitish.

Head, in frontal aspect, slightly wider than high; genae slightly less than half eye length; antennal sockets placed slightly above lower eye margins, as distant from each other as each socket is from eye margin; scrobes distinct, but not meeting above; eyes distinctly hairy; mandibles three-dentate; maxillary and labial palpi each unsegmented. Antennal scape wider at base, about

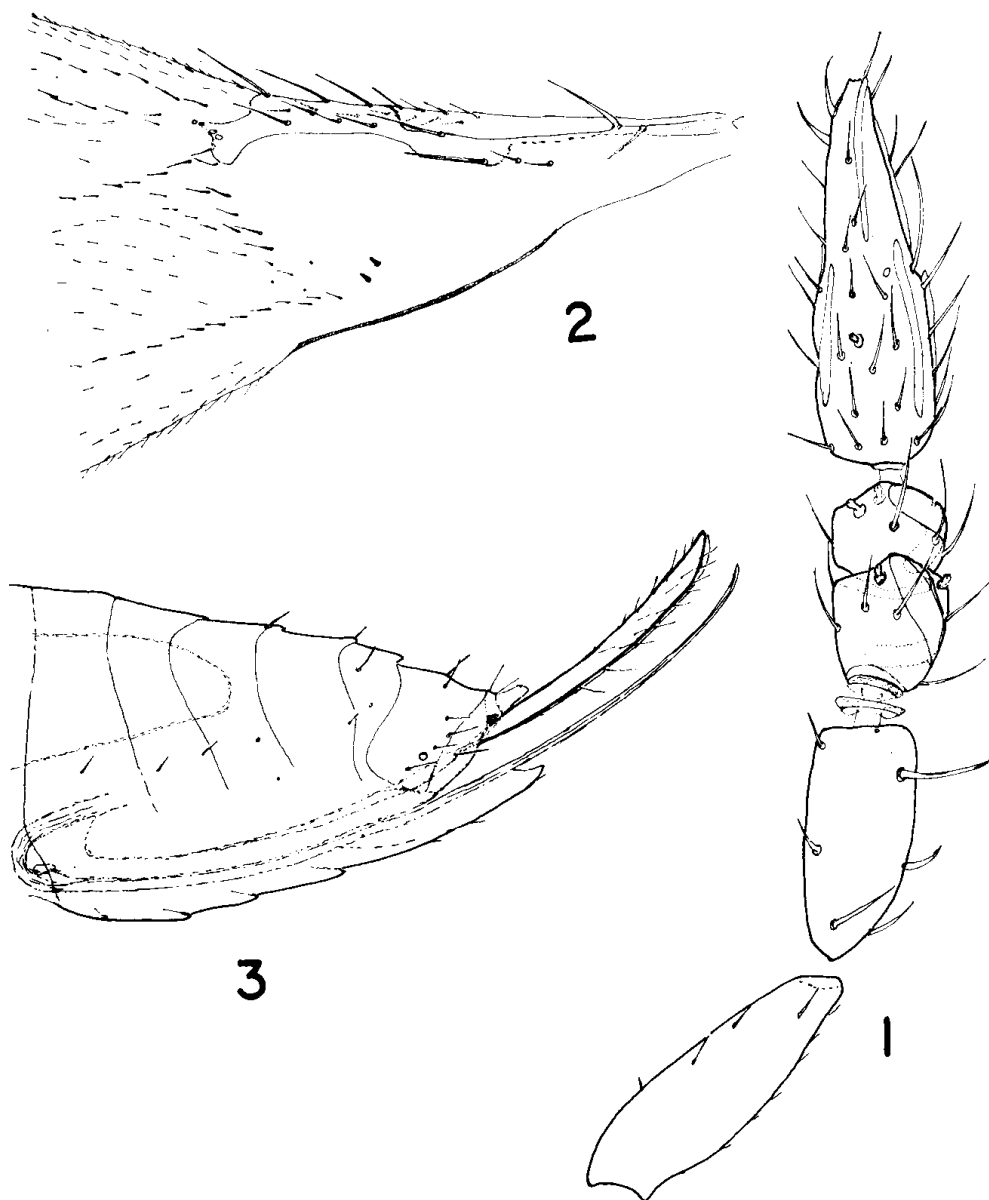


FIG. II. - *Xiphogramma indicum*, n. sp. Female. 1. Antenna; 2. Fore wing, basal half; 3. Gaster, side view.

three and half times as long as wide; pedicel slightly longer than funicle; F1 about as long as wide or slightly longer than wide; F2 distinctly wider than long. Thorax as in *X. holorhoptra* Nowicki; mesoscutum, each parapsis, each axilla, and scutellum with 4, 1, 1, and 4 setae respectively; propodeum with a distinct triangular extension in middle. Gaster as long as head and thorax combined; hypopygium extending to apex of gaster; ovipositor and valvulae long, extending from base of gaster and strongly exerted at apex; total length of inner plate and valvula about four times of the length of middle tibia. Other details as in figure II.

Male. — Not known.

Holotype ♀, India: Uttar Pradesh, Aligarh, 14-IX-1978, coll. Hayat & Verma; **Paratype**: 1 ♀, Bareilly, 7-X-1978, coll. Verma. Also 1 ♀ (not designated as type) collected in Aligarh in October 1980 by Hayat. Types in Hayat coll.

Comments: *Xiphogramma indicum*, n. sp. resembles *X. aneckei* DOUTT (1974) only in the shape of head and hyaline wings. It differs from *anneckei* in the completely dark brown gaster, presence of vein track RS_1 in the fore wing, funicle segments not distinctly separated and both combined shorter than pedicel. The new species is rather closely related to the type species, *X. holorhoptra* Nowicki, but differs in having the head somewhat wider than high (in facial view), antennal sockets placed slightly above lower eye margins, and hyaline wings.

SUMMARY

The author records the trichogrammatid genera *Neocentrobiella* Girault and *Xiphogramma* Nowicki from India, and describes a new species in each: *N. viggianii*, n. sp. (♀ and ♂) and *X. indicum*, n. sp. (♀).

RIASSUNTO

L'autore segnala i generi di Tricogrammatidi *Neocentrobiella* Girault e *Xiphogramma* Nowicki in India e descrive una nuova specie in ognuno di essi: *N. viggianii*, n. sp. (♀ e ♂) e *X. indicum*, n. sp. (♀).

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