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



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The paper contains descriptions of two new species, one each of *Chaetogramma* Doutt and *Lathromeromyia* Girault. These two genera are new to the Indian fauna. Also a new subgenus, *Chaetogrammina*, is proposed to accommodate the new species described here in *Chaetogramma*.

Genus *Chaetogramma* Doutt
Subgenus *Chaetogrammina* **nov.**

Type-species: *Chaetogramma* (*Chaetogrammina*) *maculata* n. sp.

The new species described here is placed in the genus *Chaetogramma* mainly because it resembles that genus in a majority of characters. The differences are, however, considered to be of sufficient merit to place the new species in a separate subgenus, *Chaetogrammina*, nov. The new subgenus differs from *Chaetogramma* s. str. in having two annelli and twosegmented funicle; broader forewings with the vein tracks discernible though obliterated distally where the disc is rather densely setose; and a well-developed costal cell. In general habitus and antennal components *Chaetogrammina* resembles *Xiphogramma* (see DOUTT, 1974; HAYAT, 1980), but the latter genus is distinct by the long, strongly developed ovipositor, sabre-shaped valvulae and longer wings. The male genitalia resembles to some extent those of *Brachygrammatella* (VIGGIANI, 1971: Fig. IV.2) except for the anteriorly narrowed phallobase; but otherwise *Brachygrammatella* has the marginal vein setose; short and robust pedicel; transverse, large funicle segments; and a shorter and basally broader club (see DOUTT & VIGGIANI, 1968; VIGGIANI & HAYAT, 1974).

Chaetogramma (Chaetogrammina) maculata n. sp.

Female. - Length, 0.76 mm. Body pale yellow to golden yellow; eyes and ocelli bright red; frontovertex golden yellow, face pallid; genae and facial margin pale brown; occiput from about level of foramen downwards brownish; thorax and gaster narrowly margined on sides with dark brown; propodeum with a small brown spot on each side mesad of spiracles; gaster with 6 transverse bands, bands 1-4 rather broadly interrupted in middle, the fifth band narrowly so, first two bands pale brown, third also pale brown but with a darker spot on each side, sixth band (on last tergum) brownish, and fifth band dark brown. Antennal scape with dorsal margin narrowly brownish, otherwise scape pale brown with apical fourth whitish; pedicel pale brownish yellow, ventrally yellow; funicle yellowish; club brownish yellow in basal two thirds, yellowish in apical third. Fore wings hyaline, slightly embrowned under marginal vein and with a distinct infuscated patch under stigmal extending to posterior margin of wing. Legs with tibiae except bases and apices and femora except apices, more or less dusky or with dusky suffusions; basal half of middle coxa and most of fore and hind coxae dusky; rest of legs pallid.

Head, in frontal aspect, about a fifth wider than high; genae slightly less than half of eye length; eyes with pale, short setae; antennal sockets with their upper margins above lower eye margins, separated from facial margin by a distance equal to distance between the two sockets; scrobes distinct, triangular, widely separated above. Maxillary and labial palpi unsegmented; maxillary palp about 2.5x as long as wide with the apical outer seta three times as long as the spur-like inner seta. Antennae as in figure I, 1A; there is some variation in the relative dimensions of the funicle segments (fig. I, 1B, C); club unsegmented, pointed at apex; setae in apical third colourless, other setae pale brown.

Thorax as wide as head; mesoscutum as long as wide, 1.5x as long as scutellum; mesopostphragma, as seen through the derm, extending to about middle of third segment of gaster; mesoscutum, each parapsis, each axilla and scutellum with 4, 1, 1, and 4 setae; anterior pair of scutellar setae about half the length of the posterior pair. Fore wings as shown in figure I, 2. Legs not specially modified; fore tibiae with three dents on outer margin (fig. I, 3).

Gaster slightly longer than head and thorax combined (10:9), distinctly narrowed at apex; ovipositor extending from about middle of second tergum and slightly exerted at apex, its total length a little less than twice of middle tibia (7:4).

Male. - Similar to female except for the antennae and genitalia. Antennae (Fig. I, 4) with the two ring segments distinct; F1 distinctly longer than wide and about twice the length of F2; club somewhat longer than pedicel, but

shorter than scape. Genitalia (fig. I, 5) with the phallobase spindle-shaped, narrowed anteriorly; parameres absent; aedeagus short; digiti flat, without denticles.

Holotype ♀, INDIA: Uttar Pradesh, Aligarh, January 1980, Coll. M. Hayat. *Paratypes*, 1 ♀, 1 ♂, same data as holotype, but collected December 1979. Types in Hayat coll.

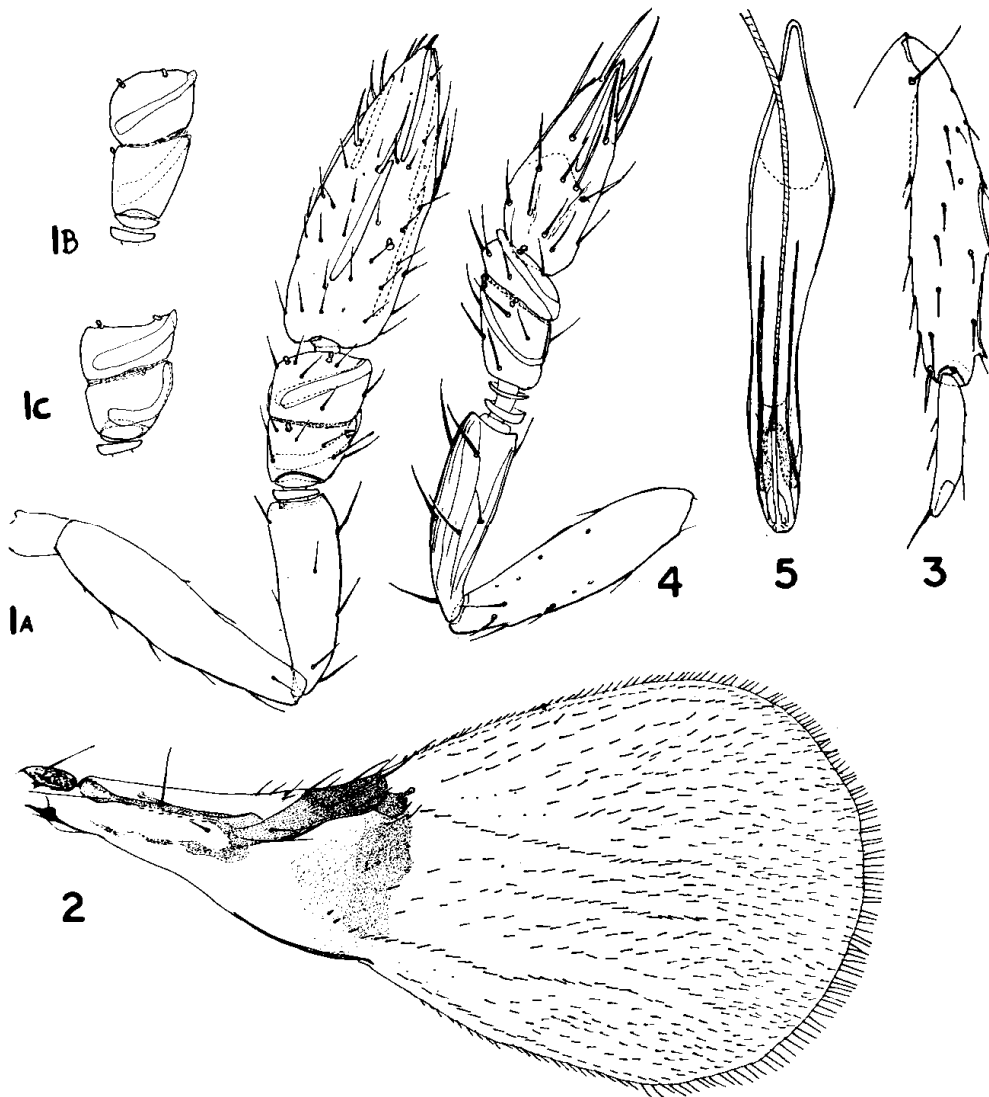


FIG. I. - *Chaetogramma* (*Chaetogrammina*) *maculata*, n. sp. - Female 1A. Antenna of right side, holotype. - 1B. Funicle of right side antenna, paratype. - 1C. Funicle of left side antenna, paratype. - 2. Fore wing. - 3. Fore tibia and basitarsus. Male. 4. Antenna. - 5. Genitalia.

Genus *Lathromeromyia* Girault

The genus is distinctive by its long setae on body, long (compared to size of body) wings and legs, and the antennal formula of 1, 1, 2 (ring

segments), (funicle absent), 4. One additional character noted in our specimens is the presence of a prominent hypopygium which extends nearly to the apex of the gaster (fig. II, 5).

The genus was so far known only in the female sex. I have collected two males by sweeping over mixed vegetation. These are brachypterous with

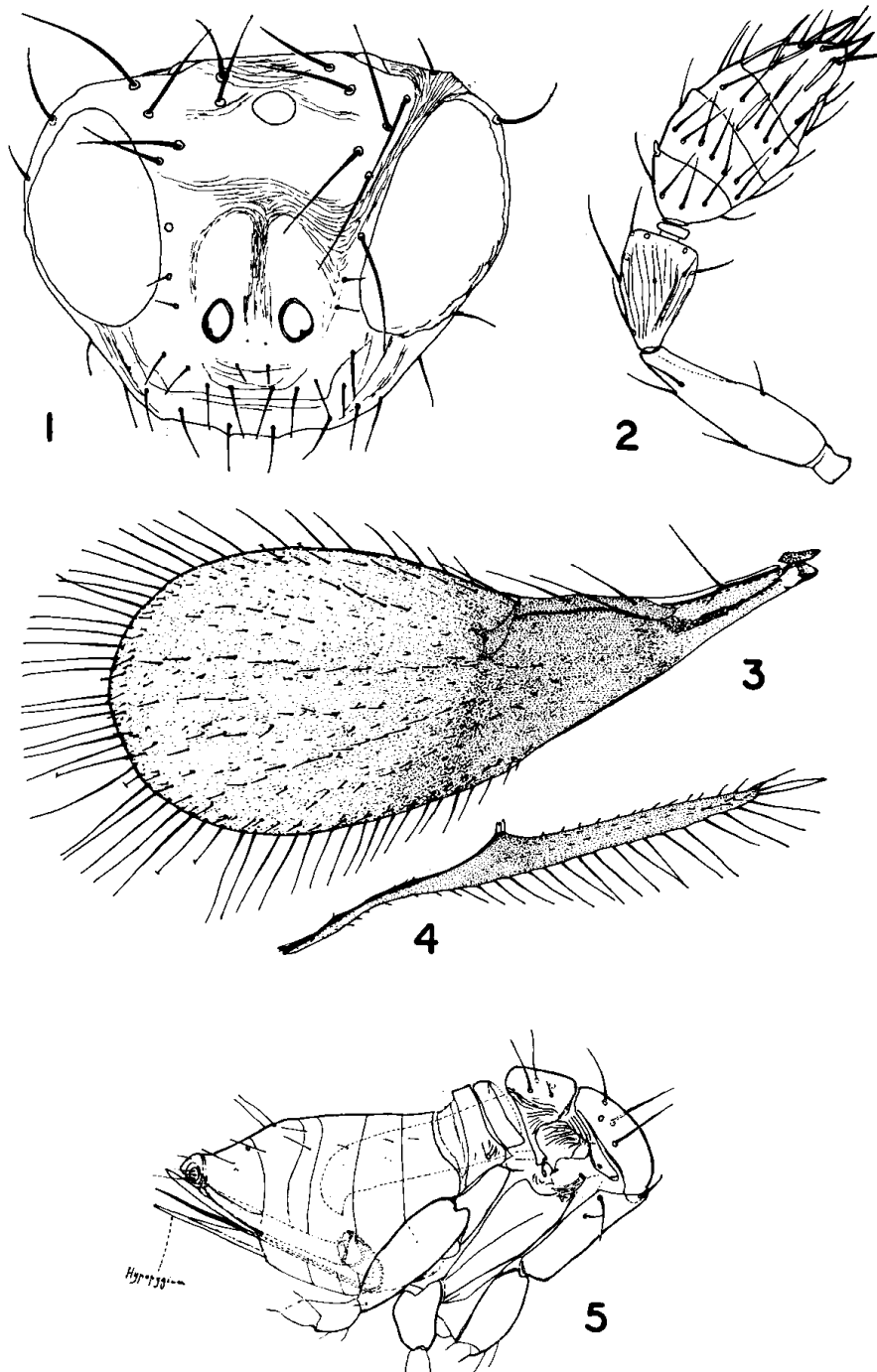


FIG. II. - *Lathromeromyia dimorpha*, n. sp. Female. 1. Head, frontal. - 2. Antenna. - 3. Fore wing. - 4. Hind wing. - 5. Thorax and gaster in side view. 3, 4 & 5 drawn on same scale.

the fore wing rudiments resembling large tegulae, of the same texture as other thoracic sclerites; whereas the hind wing rudiments are membranous. The following species is the third to be described in this genus. The other two are: *L. perminuta* Girault, the type species, from Java, and *L. cercopicida* (Risbec) from the Cameroons (see DOUTT & VIGGIANI, 1968 and VIGGIANI, 1969).

Lathromeromyia dimorpha n. sp.

Female. - Length, 0.4 mm. Body completely dark smoky brown. Fore wings lightly infuscate with a dark infuscation under marginal vein; hind wings lightly infuscate to subhyaline distad. Antennae pale brown. Legs pale dusky brown; hind coxae and femora dark brown; apices of middle and fore coxae and all trochanters colourless. Eyes and ocelli bright red. Body setae brownish except for a few colourless setae on last segment of club; eyes glabrous.

Structural details are adequately illustrated in figure II.

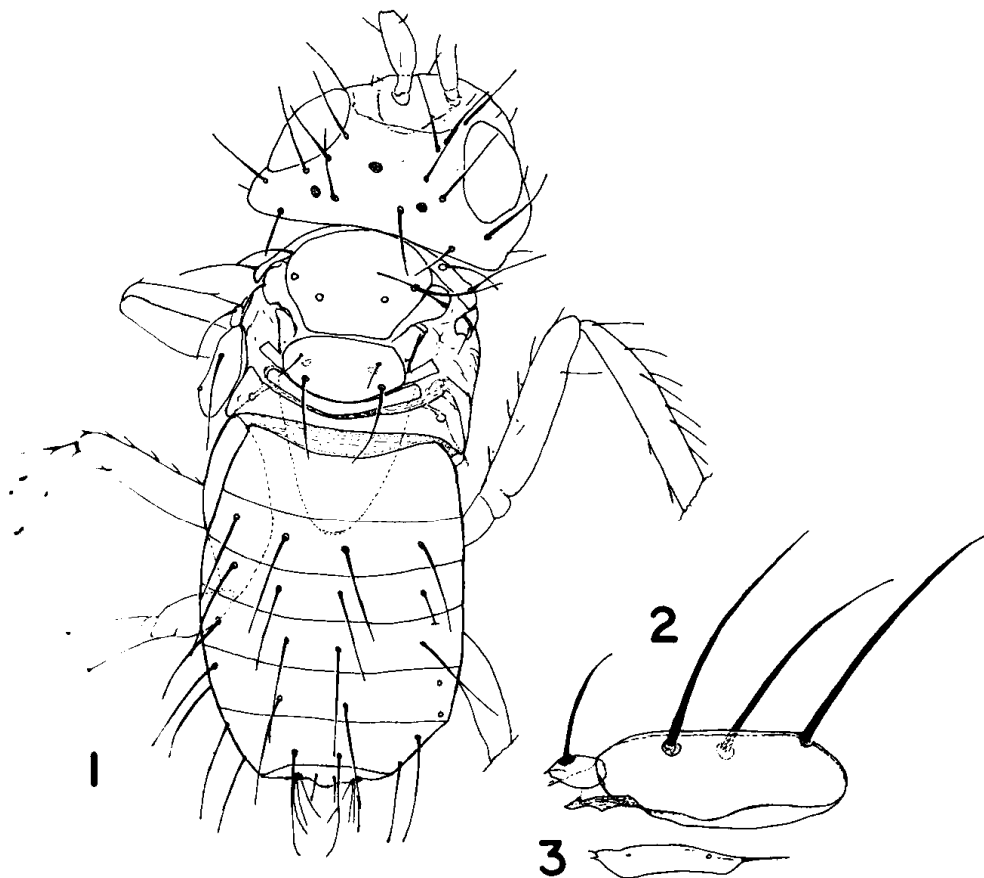


FIG. III - *Lathromeromyia dimorpha*, n. sp. Male. 1. Body, dorsal. - 2. Fore wing. 3. Hind wing. 2 & 3 drawn on same scale.

Male. - Length, 0.08 mm. Body dusky brown, paler than in female; legs pale yellow brown. Antennae as in female. Setae on body longer than in female; gaster with very long setae on segments 2-6; the anterior pair of scutellar setae and a pair of setae at apex of gaster short. Other details as in figure III.

Holotype ♀, INDIA: Uttar Pradesh, Aligarh, 19-X-1980, Coll. M. Hayat. *Paratypes*: 1 ♂, other data as for holotype; 2 ♀♀, data as for holotype, but collected October 1980; 1 ♀, 16-X-1978, Coll. M. Verma; 1 ♀, Bareilly, 7-X-1978, Coll. M. Verma. Types in Hayat coll. I have also collected one male (Aligarh, December 1979), but the specimen got damaged during mounting and only fragments and the head remain on a slide.

Comments: *L. dimorpha*, n. sp. differs from *L. perminuta* Grt. in having the stigmal vein longer, in the arrangement of the discal setae and infuscate wings. From *L. cercopicyda* (Risbec) the new species differs in wing infuscation, longer marginal fringe (fringe two-fifths the wing width in *dimorpha*), disc sparsely setose with the setae (on dorsal surface) arranged in more or less definite vein tracks; and different antennal dimensions. In *cercopicyda* the scape wide in basal half, 3x as long as wide; pedicel large, cup-shaped, two-thirds the length of scape; and club about one-third longer than scape.

SUMMARY

The author records the Trichogrammatid genera *Chaetogramma* Doutt and *Lathromeromyia* Girault from India and describes a new species in each: *C. maculata* and *L. dimorpha*. He further proposes a new subgenus, *Chaetogrammina*, in the genus *Chaetogramma*.

RIASSUNTO

L'autore segnala i generi di Tricogrammatidi *Chaetogramma* Doutt e *Lathromeromyia* Girault in India e descrive una nuova specie in ognuno di essi: *C. maculata* e *L. dimorpha*. Egli inoltre propone un nuovo sottogenere, *Chaetogrammina*, nel genere *Chaetogramma*.

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