## NEW OR LITTLE-KNOWN TIPULIDAE (DIPTERA). CII. ORIENTAL-AUSTRALASIAN SPECIES.

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THE species considered at this time are chiefly from India, with a few forms from Afghanistan, Pakistan and Thailand, and a single interesting species from Queensland. I am greatly indebted to my long-time friends and correspondents, Klapperich, Schmid, Sircar, Susai-Nathan, Thurman, and Wells, for this rich series of Tipulidae.

#### Ctenacroscelis molybros, sp. n.

General coloration of head and thorax dark plumbeous grey, præscutum with the stripes bordered by slightly darker brown; nasus long and slender; all coxæ clear orange yellow; femora yellow, tips broadly dark brown, tibiæ and tarsi brownish black; wings long and narrow, strongly tinged with brown; abdominal segments uniformly orange, sternites more yellowed.

Female.—Length about 24 mm.; wing 26 by 4.9 mm.

Frontal prolongation of the head above dark brownish grey, more brownish beneath; nasus long and slender; palpi black. Antennæ brownish black, scape and pedicel more fulvous at tips; proximal flagellar segments cylindrical to subcylindrical, the outer ones passing into long-oval; verticils very small. Vertex chiefly dark brown, sparsely pruinose; posterior orbits very narrowly light grey; vertical tubercle relatively conspicuous, delimited behind by a transverse impressed line.

Pronotum dark leaden brown. Mesonotum generally dark plumbeous, including the four præscutal stripes, these bordered by slightly darker brown; vestiture short, sparse and pale; posterior sclerites almost uniformly dark plumbeous; scutellum and mediotergite with indications of a capillary darker line. Pleura and pleurotergite almost uniformly plumbeous or dark grey, ventrally somewhat lighter grey; dorsopleural membrane darkened. Halteres brown, knob brownish black. Legs with all coxæ clear orange yellow, contrasting markedly with the dark pleura; trochanters yellow; femora yellow, the tips broadly dark brown; tibiæ and tarsi brownish black. Wings long and narrow, as shown by the measurements, strongly tinged with brown; prearcular and costal fields darker, stigma small, still darker brown; veins brown. Veins beyond cord glabrous or virtually so. Venation: Rs subequal to  $R_{2+3}$ ; petiole of cell  $M_1$  about one-half longer than m; m-cu just before midlength of  $M_{3+4}$ ; cell 2nd A relatively broad.

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Abdominal tergites almost uniformly orange, sternites more yellowed; genital shield blackened. Ovipositor with valves reddish horn colour; cerci long and slender.

Hab. South India (Madras).

Holotype, ♀, Cinchona, Anamalai Hills, altitude 3,500 feet, May 1956 (P. Susai Nathan).

The present fly is quite distinct from all other known members of the genus. It most resembles *Ctenacroscelis sordidithorax* Alexander, of Thailand, which belongs to a different group of the genus, with the nasus lacking.

#### Ctenacroscelis dorsopleuralis, sp. n.

Belongs to the brobdignagius group, allied to majesticus; mesonotum chiefly darkened, without brightening at the suture; a conspicuous dark brown dorsopleural stripe that attains the wing root; wings relatively narrow, the anterior third and apex weakly darkened; abdominal tergites brown, the mid-region of the basal segment very vaguely brightened; male hypopygium with the outer dististyle truncated at tip, inner style strongly constricted at near midlength; intermediate lobes of eighth sternite divergent, the median emargination very shallow.

 $\it Male.$ —Length about 28 mm.; wing 32·5 by 6·5 mm.; antenna about 4 mm.

Frontal prolongation of head yellowish brown above, including nasus, the sides dark brown; palpi black. Antennæ 12-segmented, brownish yellow; proximal three or four flagellar segments shorter than in *majesticus*; outer two segments more elongate, especially the last which is nearly as long as the penultimate and strongly narrowed at outer end. Head above light brown, the nearly entire vertical tubercle more yellowed; sides of vertex and genæ dark brown.

Pronotum yellow, variegated with dark brown on sides, the scutellum laterally less evidently so. Mesonotal præscutum with the disk chiefly occupied by four brownish grey stripes that are vaguely margined with darker brown, the interspaces darkened; lateral and cephalic margins broadly yellow; posterior sclerites of notum not brightened as in majesticus, dark brown, including the midregion of scutum and the scutellum, the latter paler behind; mediotergite brownish grey on disk and on sides, the two areas separated by more greyish colour. Pleura and pleurotergite light yellow, including the dorsopleural region; a narrow but conspicuous dark brown dorsopleural stripe extending from the cervical region across the dorsal sclerites to the wing root. Halteres with stem brown, narrowly fulvous basally, knob dark brown. Legs with all coxe and trochanters yellow; femora yellow, the tips narrowly black; tibiæ and tarsi brownish yellow, the extreme tips vaguely darkened; basal tooth of claw of male slender and acute. Wings a little narrower than in majesticus, as shown by the measurements, tinged with brown, especially at apex and on anterior third; prearcular and costal regions slightly darker; m-cu narrowly seamed with brown, widening behind; stigma pale; veins light brown. Venation:  $R_1$  some distance before fork of cell  $R_2$ , vein  $R_{1+2+3}$  about one-half the outer section of vein  $R_1$  alone; cell  $M_4$  at base slightly broader than in *majesticus*.

Abdominal tergites brown, the midregion of the basal segment very narrowly and vaguely brightened; lateral tergal borders and sternites yellow; in majesticus, the midregion of the basal tergite broadly pale. Male hypopygium with the tergal lobes and median notch shorter than in majesticus; vestiture of tergal lobes becoming weaker outwardly, not reaching apex of lobe. Outer dististyle truncated at tip; inner style strongly constricted at near midlength, the expanded outer part broader than the basal portion; outer vestiture very reduced. Eighth sternite with the intermediate lobes larger and more divergent, the median emargination very shallow.

Hab. Pakistan.

Holotype, 3, Balakot, altitude 3,225 feet, 23rd June, 1953 (F. Schmid). The present fly evidently is distinct from Ctenacroscelis majesticus (Brunetti), its nearest ally, differing in the points indicated throughout the description. I possess homotypes of C. majesticus and C. fulvolateralis (Brunetti), determined by Edwards in 1932. The latter species is readily told from the other two by the coloration and especially by the structure of the male hypopygium, notably the simple eighth sternite and the inner dististyle.

# Ctenacroscelis sufflavus, sp. n.

Belongs to the *monochrous* group, allied to *flavus*; mesonotal præscutum yellow with vaguely indicated more orange stripes; femora brownish yellow, unpatterned; wings brownish grey, stigma pale brown; male hypopygium with the tergal lobes short, truncated at tips; outer dististyle with blade relatively slender, at base produced into a second lobe that is densely clothed with short erect setæ; inner style obtuse at tip, with numerous stout spinoid setæ.

Male.—Length about 27-29 mm.; wing 24-25 mm.; antenna about 4 mm.

Female.—Length about 35-40 mm.; wing 27-30 mm.

Frontal prolongation of head yellow, nasus lacking; palpi yellowish brown, terminal segment darker. Antennæ with scape and pedicel yellow, succeeding segments darker, especially basally; first flagellar segment long-cylindrical, about one-fourth longer than the second; outer segments suboval, slightly produced beneath, verticils short; terminal segment long and slender, about one-third longer than the penultimate. Head light orange; vertical tubercle entire.

Pronotum brownish vellow. Mesonotal præscutum yellow with vaguely indicated more orange stripes, vestiture pale, long and conspicuous; posterior sclerites of notum obscure yellow. Pleura and pleurotergite uniformly yellow, the latter with long pale setæ. Halteres infuscated. Legs with all coxæ and trochanters yellow; remainder of

legs brownish yellow, the tarsi passing into black; no darkening at tips of femora other than the blackened comb; claws beyond the obtuse outer tooth long and slender. Wings brownish grey; stigma small, pale brown; veins brown. Venation: Cell 1st  $M_2$  relatively small; m-cu at near two-thirds  $M_{3+4}$ ; petiole of cell  $M_1$  shorter than m.

Abdominal tergites brownish orange, darker outwardly, outer segments fulvous; sternites clearer orange. Ovipositor with cerci long and slender, very slightly decurved outwardly, fringed beneath with long setæ. Male hypopygium with the tergite short, lobes broad, truncated at tips, median notch narrow; setæ on lobes almost to tips, especially on outer angles. Outer dististyle of peculiar form, the blade relatively slender, narrowed to the acute tip; posterior angle at base produced into a shorter lobe, its tip obtuse, densely clothed with short erect setæ. Inner dististyle with strong setæ on outer margin at base, slightly expanded and curved on outer third, tip obtuse, with numerous short spinoid setæ. Eighth sternite with posterior border gently rounded, without lobes.

Hab. South India (Madras).

Holotype, 3, Cinchona, Anamalai Hills, altitude 3,500 feet, May 1956 (P. Susai Nathan). Allotopotype,  $\mathfrak{P}$ , Paratopotypes,  $\mathfrak{I}$ ,  $\mathfrak{I}$ ,  $\mathfrak{P}$ .

It is evident that various species have been confused under Ctenacroscelis flavus (Brunetti), which seems to be restricted to the eastern Himalayas, Assam and northern Burma. The male hypopygium of the type of flavus, as briefly described by Brunetti, is distinct from that of the present fly.

# Ctenacroscelis flavus melanopus, subsp. n.

Characters generally as in typical flavus (Brunetti), differing evidently in the entirely black legs. It would seem that the discovery of the male sex will provide stronger characters for the separation of the fly from the typical form.

Hab. Assam (Khasi States).

 $Holotype, \, \mathcal{P}, \, \text{Cherrapunji}, \, \text{Khasi Hills, altitude 4,000 feet, 1935 } (S. \, Sircar).$ 

# Ctenacroscelis impictipleura, sp. n.

Belongs to the albovittatus group, allied to nudicaudatus; head and thoracic pleura orange, without brown pattern, the latter slightly suffused with fulvous on the dorsal anepisternum; femora brownish yellow, the tips broadly brownish black, tibiæ and tarsi brown; abdomen brownish fulvous, subterminal segments slightly darker; male hypopygium with the subtriangular lobes provided with dense microscopic setulæ that are longer near margins; inner dististyle with the dilated outer part produced on ventral margin, terminating in a decurved narrow blade.

Male.—Length about 25 mm.; wing 29 mm.

Frontal prolongation of head orange, including the elongate nasus; palpi dark brown, passing into black. Antennæ 12-segmented; basal

three segments yellow, succeeding ones dark brown; first flagellar segment cylindrical, succeeding ones decreasing in length and becoming more protuberant beneath; verticals short. Head orange, unpatterned; vertical tubercle indistinctly bilobed.

Pronotum orange above, vaguely patterned with darker. Mesonotal præscutum orange, with three narrow brownish grey stripes that are vaguely bordered by still darker brown, best defined at anterior ends of the intermediate stripes; scutum orange, the lobes with two contiguous slightly darker areas; posterior sclerites of notum obscure orange, unpatterned. Pleura obscure orange or fulvous, virtually unpatterned, there being a very slightly darker fulvous suffusion on the propleura and dorsal anepisternum. Halteres brown. Legs with all coxæ and trochanters orange yellow, the former with long erect setæ; femora brownish yellow, tips broadly brownish black; tibiæ and tarsi brown to dark brown. Wings strongly tinged with brown, particularly the prearcular and costal regions, unpatterned except for the small slightly darker stigma; obliterative areas at cord very restricted; veins brown. Venation: Petiole of cell  $M_1$  about one-third to one-half m; m-cu at or beyond midlength of  $M_{3+4}$ .

Abdominal tergites brownish fulvous, not or scarcely patterned; subterminal segments a little darker to form a subterminal ring; hypopygium obscure yellow. Male hypopygium with the tergal lobes relatively short, subtriangular, with very dense microscopic setulæ that become longer near the margins, with stronger black setæ more basally on tergite. Outer dististyle subtriangular, about one-half longer than the breadth across base. Inner dististyle generally as in albovittatus, differing in details, greatly constricted at near midlength, the outer part produced on ventral margin, the apex decurved into a narrow blade. Eighth sternite unarmed.

Hab. South India (Madras).

Holotype, 3, Cinchona, Ananamalai Hills, altitude 3,500 feet, May 1956 (P. Susai Nathan).

The most similar species is *Ctenacroscelis nudicaudatus* Edwards, from the Pulney Hills, South India, which differs in the smaller size and coloration, including the patterned head and thoracic pleura.

# Ctenacroscelis striaticeps, sp. n.

Belongs to the albovittatus group; head above buffy, with a narrow brown central stripe; darkened postantannal spots lacking or very reduced; wings brown, with extensive paler areas in certain cells; no marked arcular or prestigmal brightenings; abdominal tergites reddish brown, with indications of a more or less continuous darker central stripe, the subterminal segments uniformly blackened; male hypopygium with the median tergal groove not produced at its outer end; inner dististyle long and arcuated, the outer half dilated into two low blades on outer margin.

Male.—Length about 18–20 mm.; wing 21–24 mm.; antenna about  $2\cdot 8-3$  mm.

Female.—Length about 20 mm.; wing 23 mm.

Frontal prolongation of head brownish yellow above, darker on sides and beneath; nasus long and slender; palpi brownish black. Antennæ with scape and pedicel yellow, flagellum light brown, darker outwardly; outer segments slightly produced beneath; verticils short. Head above buffy to light grey, with a narrow brown central stripe, beginning on the entire vertical tubercle, narrowed to a point on the occiput; darkened spot on the external tambourine organ lacking or very reduced.

Pronotum vellow, brown medially. Mesonotal præscutum brownish yellow, with four brownish grey stripes that are narrowly bordered by brown, the intermediate pair confluent at suture; lateral præscutal border broadly infuscated; scutum buffy medially, each lobe with two confluent brownish grey areas, narrowly bordered anteriorly with brown; scutellum buffy, parascutella paler; postnotum whitened, with faint indications of a capillary darkened median line. Pleura buffy yellow, dorsopleural membrane clearer yellow, bordered beneath by a broad longitudinal brown stripe, beginning on sides of pronotum and cervical region, narrowed posteriorly, behind reaching the dorsal pteropleurite; ventral pleurites with faint indications of a darker pattern. Halteres infuscated. Legs with the fore coxe broadly darkened basally, remaining coxe with a pale brown cloud at near midlength; trochanters yellow; femora brownish yellow, tips broadly brownish black; tibiæ and tarsi brownish yellow, the latter passing into brownish black. Wings brown, the prearcular and costal regions more saturated; stigma brown; extensive paler areas in outer medial cells, outer half of cell M, and in cells Cu. 1st A and 2nd A; no marked brightenings at arculus or before and beyond the stigma, as in lineaticeps; a dusky seam along outer end of cell 1st  $M_2$  to the fork of  $M_{1+2}$ ; seam on m-cu very restricted except at posterior end; veins fulvous brown to brown. Venation: Vein R<sub>3</sub> sinuous at near midlength; vein  $R_2$  punctiform; petiole of cell  $M_1$  subequal to or shorter than m.

Abdominal tergites reddish brown, with indications of a more or less continuous darker brown central stripe; subterminal segments more uniformly blackened to form a ring that includes more than the basal half of the ninth tergite. Ovipositor with cerci long and slender, glabrous. Male hypopygium with the tergal lobes relatively long and broad, with an abundant silken pubescence; median groove not produced into an obtuse lobule at posterior end, as in *inclytus*. Outer dististyle narrowed outwardly; inner style long and arcuated, narrowest at near midlength, thence dilated into two low blades on outer border.

Hab. South India (Madras).

Holotype, 3, Cinchona, Anamalai Hills, altitude 3,500 feet, May 1956 (P. Susai Nathan). Allotopotype,  $\mathfrak P$ , April 1956. Paratopotypes, 3 33, April—May 1956.

The various species of Ctenacroscelis in South India that centre around C. albovittatus Macquart, include C. inclytus Alexander, C. lineaticeps

Edwards, and *C. nudicaudatus* Edwards, all closely interrelated and generally similar yet appearing to represent distinct species. In the head pattern, the present fly is closest to *lineaticeps* while it agrees more closely with *nudicaudatus* in the marked reduction of pale colour at arculus and before the stigma. Compared with *inclytus*, the vague brightened areas in the wing cells of the present fly are larger and have a different distribution.

#### Plusiomyia leucoplagia, sp. n.

Præscutum with four obscure yellow stripes that are conspicuously bordered by brown; femora yellow, the tips broadly dark brown; wings strongly infuscated, the stigma darker brown; a very conspicuous whitened obliterative area at cord; abdomen brownish yellow.

Female.—Length about 18-19 mm.; wing 14-14-5 mm.; antenna about 4 mm.

Frontal prolongation of head elongate. slightly exceeding the remainder of head, without nasus, light brown, more yellowed on sides; palpi brownish black. Antennæ with scape brownish yellow, pedicel clearer yellow, flagellum brown, the branches and outer segments black; scape very long, nearly equal to the proximal five flagellar segments combined; first flagellar segment with a simple outer tubercle; segments two to seven, inclusive, bipectinate, the longest branches (about flagellar segments four and five) about one-half longer than the segment; outer tubercle of segments very small and inconspicuous. Head grey.

Pronotum infuscated medially, obscure yellow on sides. Mesonotal præscutum broadly yellow laterally, the disk with four obscure yellow to yellowish brown stripes that are conspicuously bordered by brown, the median line of this same colour; centres of scutal lobes yellowish brown, the lateral parts more darkened; central region of scutum, with the scutellum and postnotum, clearer yellow, more or less light grey pruinose. Pleura grey, vaguely patterned with more yellowish areas; dorsopleural membrane buffy yellow. Halteres with stem and apex of knob obscure yellow, the base of the latter weakly infuscated. Legs with the coxæ and trochanters light grey; femora yellow, the tips broadly dark brown; tibiæ yellow, the tips less extensively darkened; tarsi black, the proximal end of basitarsus slightly paler. Wings strongly infuscated, stigma darker brown; obliterative area at cord whitened, very conspicuous, cell C more yellowed; veins brown, whitened in the obliterative mark. Venation: Cell  $M_1$  narrowly to more broadly sessile; cell 2nd A relatively narrow.

Abdomen brownish yellow, second tergite with basal ring more yellowed, darker laterally; sternites similar, the posterior borders narrowly pale; cerci long and slender, straight.

Hab. South Queensland (Macpherson Range).

Holotype,  $\bigcirc$ , Binna Burra Lodge, Lamington Plateau, altitude 2,590 feet, 24 December, 1953 (Reginald B. Wells). Paratopotype,  $\bigcirc$ .

The most similar species is *Plusiomyia inornata* Skuse, which is known to me only from the original description and from a photograph of the

wing of the type taken by Mr. John Shewan in 1921. This shows the wings to be unpatterned, without the conspicuous whitened discal area of the present fly.

### Tipula (Tipulodina) forficuloides, sp. n.

Size relatively small (wing,  $\mathcal{J}$ , 13 mm.); white bands on legs clear and distinct; costal field of wing blackened; male hypopygium with the outer arm of the inner dististyle produced into a very long spine, presenting a *Forficula*-like appearance to the hypopygium.

Male.—Length about 17 mm.; wing 13 mm.; antenna about 3.4 mm.;

total length of spine of dististyle 3 mm.

Frontal prolongation of head above, including the slender nasus, light yellow, dark brown on sides and beneath; palpi dark brown, the incisures paler. Antennæ of male relatively short; scape and pedicel obscure yellow, flagellum dark brown, the basal enlargements of the segments brownish black; segments exceeding the verticils. Head with the front and anterior vertex silvery white, including the antennal fossæ; posterior vertex dark brown, the genæ abruptly whitened.

Pronotum dark brown medially, whitened on sides, pretergites white. Mesonotal præscutum whitened, with four light brown stripes that are narrowly bordered by darker, including a broad conspicuous brownish black median vitta and pale lateral margins, on the outer stripes most evident on the inner borders; pseudosutural fovea comma-shaped, small, dark brown; scutal lobes dark brown, darkened laterally, pale medially; scutellum brown with a darker central vitta, parascutella dark; mediotergite grey on anterior two-thirds, the posterior third and a central area dark brown. Pleura and pleurotergite silvery white, dorsopleural region slightly more yellowed. Halteres with stem light brown, knob darker. Legs with the coxæ whitened, posterior pair greyish, the apex behind darkened; trochanters yellow, with a blackened spot; fore femora light brown, with a nearly terminal whitened ring; remaining femora obscure yellow, the tips blackened; tibiæ black, fore and middle pairs with a white ring placed about its own length before the tip; posterior tibiæ with two subequal white rings, one subbasal, the second far before tip; basitarsi black, tips broadly white, second and third segments white, outer two segments passing into dark brown; claws simple. Wings whitish hyaline, conspicuously patterned with dark brown, including cells C and Sc; stigma and broad seams over the anterior and posterior cords, narrowed or broken at M; wing tip in outer ends of cells  $R_2$  and  $R_3$ , and subapically in cell  $R_5$ ; narrow dark seams at outer end of cell 1st  $M_2$  and fork of  $M_{1+2}$ ; a weak dusky tinge in cell A and outer end of cell Cu; veins dark, especially in the clouded areas. Venation: Cell M<sub>1</sub> large, more than twice its petiole; m-cu shortly before end of  $M_{3+4}$ ; cell 2nd A very narrow, especially outwardly.

Abdomen with first tergite grey, patterned with brown; succeeding segments brownish black medially and at tips, more reddened on sides; hypopygium chiefly light brown, including the elongate forceps. Male

hypopygium with the tergal region small, its posterior border slightly produced into very low median and lateral lobes that are provided with strong erect black setæ. Outer dististyle small, suboval, gradually narrowed to the obtuse tip, the surface with long setæ. Inner dististyle very conspicuous, especially the long daggerlike outer arm which appears as a slender nearly straight spine, narrowed very gradually into an acute point, the tips slightly incurved, the two together suggesting the forceps of an earwig (Forficula), whence the specific name; body of style a compressed blade, the smaller outer basal lobe darkened, its tip obtuse.

Hab. South India (Madras).

Holotype, 3, Walayar Forest, South Malabar, altitude 1,000 feet, November 6, 1955 (P. Susai Nathan).

The only other known species of the subgenus having the costal field of the wing darkened are *Tipula* (*Tipulodina*) brunettiella Alexander, of Ceylon, and T. (T.) fumifinis Walker, of Amboina, both of which differ in all regards of coloration and in the structure of the male hypopygium.

#### Lechria argyrospila, sp. n.

Head grey; thorax almost uniformly polished black; femora brownish yellow, tips narrowly dark brown; wings hyaline, the prearcular and costal fields more yellowed, veins brownish black except in the brightened fields; cell 1st  $M_2$  long and narrow, m-cu approximately twice its length beyond the fork of M; abdomen brownish yellow, the two subterminal segments black; six basal sternites with a major silvery white area near each posterior lateral angle.

Female.—Length about 6.5 mm.; wing 7.5 mm.

Rostrum brownish yellow; palpi black. Antennæ with scape light yellow, remainder of organ black; first flagellar segment about equal in length to the succeeding two combined; remainder small, gradually decreasing in size outwardly. Anterior vertex grey, reduced to a narrow line, about equal in width to one and one-half rows of ommatidia; posterior vertex black, sparsely pruinose.

Pronotum black, very sparsely pruinose. Mesonotal præscutum and scutal lobes polished black, remainder of notum dark brown, sparsely pollinose. Pleura polished black, pteropleurite silvery pruinose. Halteres with stem yellow, knob broken. Legs with fore and middle coxæ and trochanters yellow, posterior coxæ and trochanters brownish black; femora brownish yellow, tips narrowly but conspicuously dark brown; tibiæ and tarsi brownish yellow, the latter more darkened at tips. Wings hyaline, the prearcular and costal fields more yellowed; stigma long and narrow, more infuscated; extreme margin and a seam along vein Cu weakly darkened, the latter more evident below the arculus; veins brownish black, light brown in the yellowed fields. Venation: r-m about one-half its length before fork of Rs; cell 1st  $M_2$  long and narrow, a little shorter than vein  $M_3$  beyond it; m-cu approximately twice its length beyond fork of M; cell 2nd A broad.

Abdominal tergites brownish yellow, clearer yellow at base, the seventh and eighth segments black; basal sternites conspicuously patterned, brownish yellow, the sides broadly black in front and behind, with a major nearly apical silvery white area on either side, six in number, very conspicuous. Genital shield and valves of ovipositor fulvous, bases of hypovalvae blackened.

Hab. South India (Madras).

Holotype,  $\bigcirc$ , Cinchona, Anamalai Hills, altitude, 3,500 feet, May 1956 (P. Susai Nathan).

Lechria argyrospila is very different from the other regional members of the genus. In its black colour it suggests the otherwise very different L. nehruana Alexander, of Assam; in its venation, it is closest to L. longicellula Alexander, of South India, which is entirely distinct in its coloration.

#### Paradelphomyia (Oxyrhiza) krisna, sp. n.

General coloration dark brown, the præscutum narrowly lined with black; antennæ 13-segmented, with ten segments beyond the large yellow fusion-segment; tibiæ with a narrow nearly basal white ring, tips dark brown; wings yellow, heavily patterned with brown, the costal areas larger and darker; veins  $R_2$  and  $R_{3+4}$  subequal, cell  $M_1$  subequal to its petiole, vein 2nd A strongly recurved to the margin; abdomen dark brown, sternites with posterior borders broadly silvery white.

Female.—Length about 6 mm.; wing 4.8 mm.

Rostrum and palpi brownish black. Antennæ apparently only 13-segmented, with ten segments beyond the enlarged basal fusion-segment which evidently involves four segments; scape brown, pedicel brownish black, fusion-segment pale yellow, succeeding ones brownish black; flagellar segments beyond the fusion short-oval, becoming more elongate outwardly, with very long verticils. Head dark brown, sparsely pruinose.

Pronotum brown. Mesonotal præscutum brown, very vaguely yellow pollinose, narrowly patterned with black, including capillary median and intermediate lines, with further areas on the humeral and lateral portions; posterior sclerites of notum brownish grey, the caudal border of scutellum slightly paler; mediotergite with a central brown line. Pleura and pleurotergite black, very narrowly and vaguely striped longitudinally with paler, most evident as a central stripe and across the bases of the coxæ. Halteres with stem yellow, vaguely darkened beyond base, knob dark brown. Legs with coxæ black, patterned as described above; trochanters brownish black; femora brownish yellow basally the tips blackened, broader on the slightly expanded fore femora; tibiæ light brown, just beyond the base narrowly whitened, followed by a darker brown suffusion, tip narrowly dark brown; tarsi brownish yellow, passing into dark brown. Wings with the ground colour yellow, the prearcular and costal fields more saturated; a heavy brown pattern, the costal markings larger and darker, placed beyond arculus, origin of Rs.

 $Sc_2$  and at stigma, the last large, interrupted by a yellow spot beyond  $R_2$ ; dark areas at tips of veins  $R_3$  and  $R_4$  interconnected; other smaller areas along cord, outer end of cell  $1st\ M_2$ , fork of  $M_{1+2}$ , and as a marginal series on all veins, including  $R_5$ , larger and darker on  $2nd\ A$ ; a weak dusky wash in cells M and Cu and less evidently in outer end of cell R and along vein  $R_5$ ; veins yellow in the ground, darker in the patterned areas. Macrotrichia of cells virtually lacking, with a very few in outer ends of cells  $R_4$  and  $R_5$ . Venation:  $R_2$  and  $R_{3+4}$  subequal; cell  $M_1$  subequal to its petiole; m-cu at near midlength of  $M_{3+4}$ ; vein  $2nd\ A$  strongly recurved to margin.

Abdominal tergites dark brown; sternites similar, the posterior borders, especially medially, conspicuously silvery white. Ovipositor with cerci elongate, pale horn-yellow.

Hab. South India (Madras).

Holotype,  $\mathfrak{P}$ , Cinchona, Anamalai Hills, altitude 3,500 feet October 1955 (*P. Susai Nathan*).

The most similar described species is Paradelphomyia (Oxyrhiza) manopi Alexander, of Thailand, which has the wing pattern of somewhat the same nature but much more restricted than in the present fly.

#### Hexatoma (Hexatoma) baluchistanica, sp. n.

Size relatively large (wing,  $\mathfrak P$ , 9 mm.); general coloration dark brown, præscutum with three darker brown stripes; antennæ of female 7-segmented; halteres dark brown; legs black; wings strongly suffuse, stigma lacking; veins beyond cord glabrous  $R_5$  with trichia; vein  $R_2$  far before the fork, m-cu at or close to fork of M.

Female.—Length about 9 mm.; wing 9 mm.; antenna about 2 mm.

Rostrum and palpi brownish black. Antennæ of female 7-segmented, brownish black throughout; first flagellar segment subequal in length to the succeeding two combined and stouter; setæ small and sparse. Head dark brown, anteriorly with a sparse bloom; anterior vertex broad, exceeding the exposed diameter of an eye; vertical tubercle conspicuous, more blackened.

Pronotum brownish black. Mesonotal præscutum brown, with three darker brown stripes, the median one with a capillary slightly darker central vitta; vestiture conspicuous, erect, black; posterior sclerites of notum and pleura brownish black. Halteres dark brown. Legs with the coxæ and trochanters brownish black; remainder of legs black. Wings with a strong darkened suffusion, Anal cells paler; no stigma darkenings; veins brown. Veins glabrous; distal section of  $R_5$  with trichia. Venation:  $R_2$  far before the fork,  $R_{3+4}$  variable in length, from equal to  $R_2$  to twice this length; m-cu at or close to fork of M.

Abdomen black; valves of ovipositor short and fleshy.

Hab. Baluchistan.

Holotype, Q, Urak, April 30, 1953 (F. Schmid). Paratype, Q, Ziarat, May 2-6, 1953 (F. Schmid).

The only regional species having the venation approximately as in the present fly are *Hexatoma* (*Hexatoma*) mediocornis Alexander and *H*. (*H*.) seticornis Alexander, of eastern and southeastern China, both differing in venation and details of coloration.

Hexatoma (Hexatoma) schmidiana, sp. n.

General coloration grey, the præscutum with four poorly defined brown stripes; antennæ of male about one-half longer than the wings; wings tinged with grey, stigma scarcely darker; veins glabrous; cell  $1st\ M_2$  preserved but outer medial veins tending to become evanescent.

Male.—Length about 6·5–7 mm.; wing 7–9 mm.; antenna about  $10-12\cdot5$  mm.

Female.—Length about 6.5 mm.; wing 7-7.5 mm.

Rostrum and palpi brownish grey. Antennæ of male very long, more than one-half longer than the body; scape brown, pedicel darker brown, flagellum black; flagellar segments very long-cylindrical, with an abundant short erect pubescence and scattered stronger setæ, the latter more elongate on the outer segments; antennæ of female short. Head brownish grey; vertical tubercle relatively large and rounded, entire.

Pronotum brown. Mesonotal præscutum grey with four poorly defined brown stripes that are more or less evidently bordered by darker brown; interspaces with short pale pubescence; scutum darker brown; scutellum dark basally, the apex grey; mediotergite grey, more or less darker medially. Pleura clearer grey; dorsopleural membrane dark. Halteres with stem obscure yellow, knob dark brown. Legs with the coxæ brownish grey; trochanters brownish yellow; remainder of legs brown, the tips of femora and tibiæ, with the outer tarsal segments, darker. Wings tinged with grey, stigma not or scarcely darker; veins brown. Veins beyond cord unusually glabrous, distal section of  $R_5$  with scattered trichia. Venation:  $Sc \log_5 Sc_1$  ending shortly beyond the fork of Rs,  $Sc_1$  relatively long;  $R_{1+2}$  and  $R_2$  subequal or the latter a little shorter;  $R_2$  at the fork or beyond; cell  $1st \ M_2$  preserved but the outer medial veins faint and tending to become evanescent; m-cu at or shortly beyond the fork of M.

Abdomen, including hypopygium, dark brown, more or less pruinose. Ovipositor with fleshy valves, as in the subgenus.

Hab. Kashmir, Pakistan.

Holotype, 3, Kalarian Baihk, Northwest Frontier Provinces, Pakistan, altitude 11,270 feet, 13 July, 1953 (F. Schmid). Allotopotype,  $\mathcal{P}$ , with the type. Paratopotypes, 7  $\mathcal{P}$ ; paratypes, 1  $\mathcal{P}$ , Lilam, Pakistan, altitude 9,000 feet, 23 August, 1953; 1  $\mathcal{P}$ , 1  $\mathcal{P}$ , Dalti, Kashmir, altitude 9,000 feet, 7 September, 1954 (F. Schmid).

I name this very interesting species for the collector, Dr. Fernand Schmid, of Lausanne, Switzerland, to whom I am indebted for an unusually large and valuable series of crane-flies from the western Himalayas. The fly is readily told from all other regional members of the subgenus by the presence of cell  $1st\ M_2$  of the wings. The paratype from Lilam

has the venational details slightly different, with Rs longer and  $R_2$  before the fork, yet seems to belong to this same species.

#### Hexatoma (Eriocera) fulvoapicalis, sp. n.

Belongs to the spinosa group; general coloration of thorax light grey, præscutum with four darker brownish grey stripes, postnotum obscure yellow, bordered posteriorly by brownish grey; femora brownish black, the bases and tips fulvous yellow; wings brownish yellow, the costal region clearer yellow; macrotrichia of veins very sparse; cell  $M_1$  present; abdominal tergites fulvous, with a longitudinal row of large brown areas that form a nearly continuous central stripe; genital shield orange; ovipositor with cerci very long and slender.

Female.—Length about 20 mm.; wing 17.5 mm.

Rostrum yellow; mouthparts and palpi black. Antennæ of female s-segmented; yellow, the outer four or five segments passing into pale brown; flagellar segments gradually decreasing in length outwardly, the first nearly one-half longer than the second. Front and anterior vertex orange yellow, the posterior vertex yellowish grey; vertical tubercle very low, weakly divided medially by a longitudinal impression.

Pronotum light brown, sparsely pruinose. Mesonotal præscutum light grey, with four darker brownish grey stripes, the median line narrowly darker brown; interspaces with very long erect pale setæ; scutum light grey, each lobe with two confluent brownish grey areas; scutellum brownish grey, the apex yellowed; postnotum obscure yellow, broadly brownish grey on posterior part. Pleura obscure yellow, with major darkened areas on posterior anepisternum, ventral sternopleurite and meron; dorsopleural membrane light brown. Halteres with stem yellow, knob large, dark brown. Legs with the coxae obscure yellow, the middle pair narrowly darkened adjoining the meron; trochanters yellow; femora brownish black, the bases and tips narrowly yellow or fulvous yellow, the amount subequal on all legs; tibiæ brown to darker brown, paler at tips; tarsi brownish yellow, the tips of the segments narrowly more infuscated. Wings brownish yellow, the prearcular and costal regions clearer yellow, especially cell Sc; stigma very small to scarcely evident, pale brown; vague brown clouds along vein Cu in cell M and in cell 2nd A; veins brown, yellowed in the brightened parts. Macrotrichia of veins very sparse, beyond cord on  $R_5$  and outer end of  $R_4$ . Venation: Rs in longitudinal alignment with  $R_5$ ; cell  $M_1$  variable in size, subequal to An adventitious cross vein in outer end of cell R, its petiole or shorter. on left wing of type only.

Abdominal tergites fulvous, with a longitudinal row of large brown areas that form an interrupted central stripe, more nearly continuous behind; sternites more uniformly fulvous, sparsely light grey pruinose; genital shield orange; ovipositor with cerci very long and slender, horn-yellow.

Hab. Pakistan (Northwest Frontier Provinces).

Holotype,  $\circ$ , Bourzil R.H., altitude 11,150 feet, 10 September, 1953 (F. Schmid).

Readily told from the other regional members of the *spinosa* group, including *Hexatoma* (*Eriocera*) *klapperichiana*, sp. n., by the distinctive pattern of the legs. Other such species have the femoral tips blackened, in cases very extensively so. The great majority of such species occur in Japan and western China.

### Hexatoma (Eriocera) klapperichiana, sp. n.

Belongs to the spinosa group; general coloration of thorax light grey; the præscutum with four narrow darker grey stripes; antennæ short; vestiture of mesonotum long and pale; legs black, only the extreme bases of the femora paler; wings tinged with brownish yellow, prearcular and costal fields clearer yellow; veins brown, unusually glabrous; cell  $M_1$  present, relatively deep; m-cu at near midlength of  $M_{3+4}$ .

*Male.*—Length about 12–13 mm.; wing 14–14·5 mm.; antenna about  $2\cdot8-2\cdot9$  mm.

Rostrum dark, grey pruinose; palpi black. Antennæ short, brownish black, scape and pedicel pruinose; only three flagellar segments remain, the first and third subequal, about twice the length of the second; all flagellar segments with abundant strong setæ, longer and more appressed on upper surface, erect on lower and lateral aspects. Head with front brownish yellow, vertex grey; vertical tubercle low; antennal fossæ conspicuous.

Pronotum grey, the sides of the scutellum more yellowed. Mesonotal præscutum light grey, with four narrow darker grey stripes, additional to a vague capillary median line; interspaces with long erect pale setæ; posterior sclerites of notum light grey pruinose, the scutal lobes a trifle more darkened. Pleura light grey; dorsopleural membrane conspicuously light buffy. Halteres with stem obscure yellow, clearer basally, knob dark brown. Legs with the coxæ grey pruinose, with long white setæ; remainder of legs black, the extreme femoral bases paler. Wings tinged with brownish yellow, prearcular region and cel Sc more yellowed, cell C more brownish yellow; stigma not or scarcely indicated; veins brown, more yellowed in the brightened fields. Veins beyond cord unusually glabrous, with a scattered series of sparse macrotrichia over the entire length of the distal section of  $R_5$ . Venation: Cell  $M_1$  relatively deep; inner end of cell 1st  $M_2$  arcuated; m-cu at near midlength of  $M_{3+4}$ .

Abdomen grey, the extreme posterior borders of the segments yellow, more extensive on sternites seven and eight; hypopygium dark brown.

Hab. Afghanistan (Badakschan).

Holotype, 3, Sarekanda Mountains, altitude 3,500 meters, 26 July, 1953 (J. Klapperich). Paratopotype, 3.

I am pleased to dedicate this fly to the collector, Mr. Johann Klapperich, of Bonn, Germany. The itinerary of Klapperich's expedition to Afghanistan has been given in a paper by him.\* The most similar regional species

<sup>\*</sup> Klapperich, J. Auf Forschungsreisen in Afghanistan. Entomologische Blätter, 50: 107-118, map; 1954.

is *Hexatoma* (*Eriocera*) fulvoapicalis, sp. n., which differs in coloration, especially of the legs and wings.

#### Hexatoma (Eriocera) nigroantica, sp. n.

Belongs to the *rubrescens* group, allied to *rufiventris*; mesonotal præscutum with three confluent plumbeous stripes, the lateral parts with a lunate velvety black area; mediotergite bicoloured; pleura grey pruinose, conspicuously variegated with black; antennal scape and pedicel black; fore coxæ black, remaining coxæ light yellow: remainder of legs brownish black, the femoral bases yellow; wings tinged with brown; veins beyond cord with numerous trichia; Rs long, subequal to distal section of  $R_5$ ; r-m at or shortly before fork of Rs; abdomen orange, basal tergite slightly blackened on sides.

Male.—Length about 11-14 mm.; wing 10-14 mm.

Female.—Length about 17-20 mm.; wing 13-15 mm.

Rostrum brown, palpi brownish black, remaining mouthparts obscure yellow. Antennæ of male 8-segmented, short; scape and pedicel black, flagellum dark brown; flagellar segments gradually decreasing in length outwardly, with very long delicate verticils. Head opaque black; no evident vertical tubercle.

Pronotum very light brown. Mesonotal præscutum with three confluent plumbeous stripes that form a solid shield, the anterior end of the lateral parts with a lunate velvety black area; humeral portion and a large lateral spot before suture yellow; posterior sclerites of notum plumbeous, the lateral part of each scutal lobe with a velvety black spot; mediotergite bicoloured, the anterior half or less brown or black, sending a central point backward to the posterior end of the sclerite, remainder of posterior half yellow: pleurotergite yellow on posterior half, black anteriorly. Pleura chiefly grey pruinose, conspicuously variegated with black on the anepisternum and ventral sternopleurite, the latter polished; metapleura and meron yellow, the former silvery pruinose; dorsopleural membrane light buffy. Halteres with stem obscure yellow, knob brownish black. Legs with the fore coxe polished black, remaining coxe and all trochanters light yellow; remainder of legs brownish black, the femoral bases yellow, somewhat more extensively so on the middle pair; no scales Wings tinged with brown, somewhat more heavily so in cell Sc and prearcular field, cell Sc clearer yellow: veins light brown. Numerous trichia on veins beyond cord. Venation: Rs long, subequal to distal section of  $R_5$ :  $R_2$  slightly oblique, subequal to  $R_{1+2}$ ; r-m at or shortly before fork of Rs; cell  $M_1$  lacking; cell 1st  $M_2$  shorter than vein  $M_3$  beyond it; m-cu beyond midlength of cell 1st  $M_2$ .

Abdomen orange, basal tergite more or less plumbeous, more blackened on sides. Ovipositor with cerci very long and slender, virtually straight. *Hab.* South India (Madras).

Holotype,  $\Im$ , Cinchona, Anamalai Hills, altitude 3,500 feet, May 1956 (P. Susai Nathan). Allotopotype,  $\Im$ , pinned with type. Paratopotypes. 1  $\Im$ , 1  $\Im$ , with the types.

This fly is quite distinct from all regional forms in the coloration of the thorax and antennæ. Hexatoma (Eriocera) rufiventris (Brunetti) has the fore and middle coxæ darkened, the posterior pair yellow; H. (E.) paenulatoides Alexander has the pleura and all coxæ yellow.

#### Hexatoma (Eriocera) nigrocoxata, sp. n.

Belongs to the *rubrescens* group, allied to *rufiventris*; disk of mesonotal præscutum almost covered by four opaque reddish brown stripes, the outer pair bordered externally by a large sinuous velvety black area; mediotergite with a pair of brownish black spots on posterior third; rostrum blackened; antennæ uniformly black; pleura almost uniformly dull grey; all coxæ black, remainder of legs dark brown, the femoral bases conspicuously light yellow; wings with a strong brownish tinge, with narrow but conspicuous brown seams at cord, outer end of cell 1st  $M_2$  and elsewhere; abdomen dull orange.

Male.—Length about 13-15 mm.; wing 12.5-14 mm. Female.—Length about 17-18 mm.; wing 13-14 mm.

Rostrum, palpi and mouthparts blackened. Antennæ of male 8-segmented, uniformly black; flagellar segments with very long delicate verticils. Head dark grey, somewhat darker on anterior vertex adjoining the eye.

Pronotum dark grey. Disk of mesonotal præscutum almost covered by four opaque reddish brown stripes that are narrowly separated by vaguely more pruinose lines, the intermediate pair by a capillary more shiny vitta; lateral stripe bordered externally by a large sinuous velvety black area; posterior sclerites of notum similarly reddish brown, the lateral ends of the scutal lobes with a small black spot; mediotergite with a pair of brownish black spots on posterior third or less. Pleura and pleurotergite almost uniformly dull grey, the posterior pleurotergite and ventral sternopleurite more blackened; dorsopleural membrane Halteres with stem light brown, knob brownish black. Legs with all coxæ black; trochanters yellow; remainder of legs dark brown to brownish black, the femoral bases conspicuously light yellow, subequal in amount on all legs. Wings with a strong brownish tinge, the prearcular and costal fields more saturated; narrow but conspicuous brown seams at origin of Rs,  $R_2$ , cord, outer end of cell 1st  $M_2$ , and fork of  $R_{2+3+4}$ ; stigma very small and narrow, darker brown: veins yellowish brown, darker in the patterned areas. Abundant macrotrichia on veins beyond cord. Venation: Rs shorter than distal section of  $R_5$ ; basal section of  $R_5$  short to very short; cell 1st  $M_2$  subequal in length to vein  $M_A$ ; m-cu at near three-fourths the length of cell 1st  $M_2$ .

Abdomen dull orange, the sides of the first tergite more darkened; basal sternites yellowed.

Hab. South India (Madras).

Holotype, 3, Cinchona, Anamalai Hills, altitude 3,500 feet, April 1956 (P. Susai Nathan). Allotopotype,  $\mathcal{P}$ , May 1956. Paratopotypes, 2 33, 1  $\mathcal{P}$ , April-May 1956.

Hexatoma (Eriocera) nigrocoxata, while superficially like some other regional species, including H. (E.) atroantica, sp. n., H. (E.) nigroantica, sp. n. and H. (E.) paenulatoides Alexander, is quite distinct in the diagnostic features listed above.

#### Hexatoma (Eriocera) thaiicola, sp. n.

Belongs to the rubrescens group, allied to rufiventris; mesonotal præscutum grey, with four more reddish brown stripes, laterally with two disconnected velvety black spots; pleura grey pruinose, the ventral anepisternum and ventral sternopleurite blackened; fore coxæ black, middle coxæ broadly blackened basally, remainder of legs obscure yellow; wings with a brownish tinge; r-m at or just before the fork of Rs, basal deflection of  $R_5$  lacking; m-cu at or very close to midlength of cell 1st  $M_2$ ; abdomen orange, first tergite broadly margined laterally with black.

Male.—Length about 14 mm.; wing 16 mm.

Rostrum brownish black; palpi black. Antennæ black, scape more pruinose; in male 8-segmented; outer flagellar segments with very long verticils. Head dark grey; no distinct vertical tubercle.

Pronotum light brown. Mesonotal præscutum grey, with four more reddish brown stripes, the intermediate pair divided by a capillary shiny vitta; two separate velvety black spots, one at cephalic end of interspace, the other opposite the lateral stripe, extending laterad to the pretergal strip; posterior sclerites of notum dark brown, more or less pruinose, especially behind; a smaller velvety black spot behind the suture on lateral part of scutal lobe; postnotum polished liver brown on anterior part, including the posterior pleurotergite, more pruinose behind. Pleura grey pruinose, conspicuously blackened on the ventral anepisternum and ventral sternopleurite; meron and metapleura grey. stem light brown, knob brownish black. Legs with the fore and middle coxe black, sparsely pruinose, the posterior half of the latter paling to yellow, posterior coxæ and all trochanters yellow; legs obscure yellow throughout. Wings with a brownish tinge, the long narrow stigma darker; veins brown. Abundant macrotrichia on veins beyond cord. Venation:  $R_{1+2}$  longer than  $R_2$ ; r-m at or just before the fork of Rs, the basal section of  $R_5$  thus lacking; m-cu at or very close to midlength of cell 1st  $M_2$ , the latter subequal in length to the distal section of vein  $M_3$ .

Abdomen orange, the first tergite broadly margined laterally with black; basal sternites clearer yellow.

Hab. North-west Thailand.

Holotype, 3, Miss Lemmon's Cabin, Doi Chom Cheng, altitude 3,000 feet, 4–12 May, 1952 (Deed C. Thurman, Jr.).

The closest relative of this fly appears to be *Hexatoma (Eriocera)* rufiventris (Brunetti), of south India, which differs in the black head and thorax, blackened legs, and in other characters.

Hexatoma (Eriocera) atroantica, sp. n.

Belongs to the *rubrescens* group, allied to *paenulata*; mesonotal præscutum with the disk covered by three confluent plumbeous stripes, the lateral part with a large velvety black area, postnotum entirely black; antennæ black, scape light yellow; fore coxæ black, remaining coxæ light yellow; wings with a brownish tinge, the tip and some of the veins narrowly seamed with darker; basal section of  $R_5$  preserved.

Male.—Length about 11-14 mm.; wing 10-13 mm.

Rostrum light brown; palpi dark brown; remainder of mouthparts yellow. Antennae of male short, 8-segmented; scape light yellow, pedicel black, flagellum brownish black; flagellar segments gradually decreasing in length outwardly, provided with very long verticils. Head dull black, without a developed vertical tubercle.

Pronotum brownish grey. Mesonotal præscutum with the disk covered by three confluent plumbeous stripes that form a shield, the lateral part bordered by a large curved velvety black area, restricting the vellow ground to markings at humeri and before suture; posterior sclerites of notum black, including the entire mediotergite; scutal lobes more plumbeous, with a lateral black spot; pleurotergite with posterior half black. anterior part silvery. Pleura silvery, with conspicuous black areas on ventral anepisternum and ventral sternopleurite; meron yellow, metapleura more silvery; dorsopleural region light brown. Halteres with stem light brown, the base narrowly yellow, knob black. Legs with the fore coxæ black, remaining coxæ and all trochanters light yellow; remainder of legs black, the femoral bases vellow, narrowest on fore legs, more extensive on the other pairs. Wings with a brownish tinge, the prearcular and costal fields slightly darker; arculus conspicuously whitened; wing tip, cord, vein  $R_5$  and a seam along vein Cu in cell Mnarrowly infuscated; stigma darker brown but exceedingly reduced; veins brown. Numerous macrotrichia on veins of outer half of wing. Venation: Rs a little shorter than the distal section of  $R_5$ , the basal section of the latter distinctly preserved, shorter than r-m; m-cu at near two-thirds the length of cell 1st  $M_{2}$ .

Abdominal tergites and hypopygium orange, the basal segment conspicuously brownish black to black except on the anterolateral part; a more or less distinct middorsal pale brown stripe that is broadly interrupted at the incisures; basal sternites clearer yellow.

Hab. South India (Madras).

Holotype, 3, Cinchona, Anamalai Hills, altitude 3,500 feet. May 1956 (P. Susai Nathan). Paratopotype, 3.

Although it is generally similar to *Hexatoma* (*Eriocera*) nigroantica, sp. n., the present fly obviously is distinct in the diagnostic features listed above.

Hexatoma (Eriocera) neopaenulata, nom. n.

New name for *Hexatoma* (*Eriocera*) subpaenulata Edwards, Spolia Zeylanica, 14: 123; 1927, nec *H.* (*E.*) subpaenulata Edwards, Sarawak Mus. Journ., 3: 270; 1926.

Inadvertently I had earlier (Rec. Indian Mus., 50:327; 1952) renamed this species H. (E.) paenulatoides but this name is a homonym of the earlier H. (E.) paenulatoides Alexander, Ann. Mag. Nat. Hist. (12) 1: 652; 1948.