- (15) KAUFMANN, R. 1943. "Aquatic Coleoptera of North and South Devon." E. M. M. lxxix. pp. 185-198; 228-230.
- (16) LINNELL, J. 1867. "Nat. Hist. of Reigate and its Vicinity.—
   Coleoptera." Holmesdale Nat. Hist. Club, Reigate.
   (17) M'LEOD, W. J. 1912. "Further Notes on the Aquatic Coleoptera
- of Monklands (Lanarkshire)." Glasgow Naturalist, iv. p. 117.
  (18) Moncreaff. 1840–1880. 'A Catalogue of the Coleoptera of the
- Island of Portsea and District,' MS. list.
- (19) NEWBERY, E. A. 1907. "Hydræna tongior Rey and Ochthebius viridis Peyron, additions to the British List of Coleoptera." E. M. M. xliii. pp. 172, 173.
- (20) Pearce, E. J. 1926-1929. "Coleoptera of Dorset and Supplements." Dorset Nat. Hist. and Antiquarian Field Club &c.
- (21) SCHAUM, H. 1947. "Revision of British Hydrocantharide." Zoologist, vi. pp. 1887-1897.
- (22) Sharp, D. 1914. "The British Species of Gyrinus." E. M. M. l. pp. 128-138.
- (23) STEPHENS, J. F. 1828. 'Illustrations of British Entomology.— Mandibulata," ii.
- (25) Stott, C. E. 1927. "A Supplementary Note on the List of the Coleoptera of Dorset." E. M. M. lxiii. pp. 91, 92.
  (26) TOMLIN, J. R. 1907. "Calambus 9-lineatus Steph. in Berkshire."
- E. M. M. xlv. p.15
- (27) ——. 1913. 'The Coleoptera of Glamorgan." Trans. Cardiff
- Nat. Soc. vl. (28) —. 1919. "New localities for Hydrovatus clypealis Sharp." E. M. M. Iv. p. 159.

XLV.—New or little-known Tipulidæ (Diptera).—LXXXII. Species.Oriental-Australasian By Charles ALEXANDER, Ph.D., F.R.E.S., University of Massachusetts, Amherst, Massachusetts, U.S.A.

The Tipulidæ discussed herewith were taken by Mr. P. Susai Nathan, chiefly at Cinchona, in the Anamalai Hills, in South India. I am greatly indebted to Mr. Susai Nathan for the privilege of retaining the types of the novelties in my extensive personal collection of these flies.

# Ctenacroscelis inclytus, sp. n.

Belongs to the *umbrinus* group; femoral tips broadly black, preceded by a clearer yellow ring; wings strongly infuscated, patterned with more yellowed areas, including large ones in outer end of cell M and near outer end of cell 1st A; abdomen dark reddish brown, the tergites more blackened on sides.

Female.—Length about 26 mm.; wing 26 mm.; antenna about 3 mm.

Frontal prolongation of head dark brown; nasus elongate; palpi black, relatively short. Antennæ with scape infuscated, corrugated; pedicel and first flagellar segment brownish yellow, the succeeding segments passing into cinnamon brown; flagellar segments with ventral face only moderately produced, each segment with about two short black verticils on this face. Head above brown, broadly light grey pruinose on front and vertex.

Pronotum brown. Mesonotal præscutum with four brownish grev stripes that are conspicuously bordered by dark brown, including the posterior interspaces: lateral and humeral borders of præscutum dark brown, restricting the buffy yellow ground to delicate lines on the outer and anterior edges of the lateral stripes and as a capillary median vitta; posterior sclerites of notum chiefly dark grey, the scutal areas more or less distinctly bordered by brown: scutellum with indications of a pale central vitta, the mediotergite with a corresponding black line; posterior border of mediotergite and much of the katapleurotergite brownish black. Pleura with a very broad and conspicuous dark brown longitudinal stripe extending from the ventral cervical region across the dorsal selerites to the postnotum; dorsopleural region broadly pale yellow; ventral pleurites more grevish vellow, more or less patterned with brown, most distinct on the ventral sternopleurite. Halteres infuscated, the stem somewhat paler. Legs with the coxæ light grey, the fore and hind pairs patterned with brown; trochanters reddish yellow; femora obscure brownish yellow, the tips very broadly and conspicuously blackened, preceded by a slightly clearer yellow ring; tibiæ and tarsi brownish yellow, the tips of the former narrowly darkened. Wings with a strong brownish suffusion, somewhat darker in the costal area and only slightly less so in cells R and M: prearcular, apical and anal fields a little less darkened: conspicuous yellowed areas at and above arculus: before stigma, continued caudad as a narrow line along the cord through cell 1st  $M_2$ ; paler, more diffuse yellow areas in outer end of cell M and as marginal markings in cell 1st A; small brown seams at posterior end of m-cu. outer end of cell 1st  $M_2$  and fork of  $M_{1+2}$ , and as smaller

marginal spots at ends of the veins; veins light brown, darker in the patterned portions, pale yellow in the obliterated areas. Veins beyond cord glabrous, including  $R_{4+5}$ . Venation:  $m{-}cu$  at midlength of  $M_{3+4}$ ; petiole of cell  $M_1$  about two-thirds m.

Abdominal tergites dark reddish brown, more brownish black on sides, with fainter indications of a median darkening; sternites paler reddish brown.

Hab. South India.

Holotype, ♀, Cinchona, Anamalai Hills, altitude 4000–5000 feet, August 30, 1946 (P. Susai Nathan).

The present fly is readily told from the other members of the group, including *Ctenacroscelis ochripes* (Brunetti) and *C. infindens* (Walker), by the pattern of the body, legs and wings. In the unusually short antennal verticils the species agrees with the members of the *albovittatus* group, but the position in the *umbrinus* group seems correct.

# Tipula (Indotipula) brachycantha, sp. n.

Thorax uniformly orange yellow; antennæ (male) relatively long, scape and pedicel yellow, flagellum black; abdomen reddish brown with a broad black subterminal ring; male hypopygium with the tergite terminating in two rounded spiculose lobes; outer dististyle widest at near midlength; outer basal lobe of inner dististyle a slender curved spine; gonapophyses terminating in flattened blades.

Male.—Length about 12–13 mm.; wing 13·5–14 mm.; antenna about 4·5 mm.

Frontal prolongation of head yellow, relatively short; nasus elongate; palpi brown, with paler incisures. Antennæ (male) relatively long, as shown by the measurements; scape and pedicel yellow, flagellum black; flagellar segments very gently incised, subequal to or longer than the verticils. Head with front yellow; posterior portion greyish brown, with a capillary black median vitta.

Thorax uniformly orange yellow, only the pleura a trifle paler. Halteres brown, the base of stem yellow. Legs with all coxæ and trochanters yellow; remainder of legs brown, femoral bases restrictedly brightened; claws (male) with a large tooth at near midlength and with a small basal spur. Wings subhyaline, the prearcular and

costal fields more yellowed; stigma oval, brown; veins dark brown. Macrotrichia on most of distal section of  $R_{4+5}$  and on vein  $M_1$ . Venation: Rs short, subequal to or shorter than m-cu; m subequal to petiole of cell  $M_1$ ; cell 2nd A narrow.

Abdominal tergites reddish brown, darker laterally; tergites six to eight, inclusive, black, the lateral borders broadly pale; eighth sternite similarly blackened, remainder of hypopygium brownish yellow. Male hypopygium with the tergite terminating in two rounded lobes that are provided with numerous blackened spicules but without accessory lobes. Outer dististyle widest at near midlength, on lower margin dilated and with a grouping of black setæ. Inner dististyle with the outer basal lobe a small slender curved spine; beak blackened, simple, completely cut off from the dorsal crest by a membranous incision, the dorsal row of setæ continuous across the break; lower beak lying far basad, appearing as a small blackened knob. Gonapophysis appearing as an expanded pale blade, the tip obtusely rounded.

Hab. South India.

Holotype, 3, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 2, 1946 (P. Susai Nathan). Paratopotypes, 4 33, September 2-October 5, 1946 (P. Susai Nathan).

Among the numerous regional species, the present fly is closest to forms such as *Tipula* (*Indotipula*) *elegantula* Brunetti, differing in the details of coloration and in the structure of the male hypopygium, especially the outer and inner dististyles.

# Tipula (Indotipula) dilatistyla, sp. n.

Belongs to the *leucopyga* (sulaica) group; general coloration yellow, the præscutum with four nearly confluent reddish brown stripes; femora obscure yellow, the tips darker; wings brownish yellow, the prearcular and costal fields more saturated; male hypopygium with outer angle of tergal plate produced into a strong incurved black spine, with a more ventral inner lobe; outer dististyle strongly dilated outwardly, weakly bilobed at apex, the lower lobule with a concentration of strong black setæ.

Male.—Length about 15 mm.; wing 16.2 mm.; antenna about 3 mm.

Frontal prolongation of head obscure vellow, relatively short, only about one-half as long as remainder of head: nasus long and slender, nearly one-half the prolongation; palpi with basal two segments obscure yellow, the outer ones brownish black. Antennæ small: basal three segments obscure yellow, the remaining segments uniformly black; flagellar segments strongly binodose, as in the group, the outer node larger and more triangularly produced than the basal swelling; verticils very long. Head brownish grey, with a capillary brown median line; a small dark spot on either side of the anterior vertex opposite the narrowest point.

Červical region dark brown. Pronotum brownish grey, paling to vellow on sides. Mesonotum chiefly vellow, the præscutum with four reddish brown stripes that are relatively conspicuous, the various stripes almost confluent; scutal lobes with reddish brown areas; posterior sclerites of notum and the pleura more whitened; very small and vague darkenings on the cephalic portion of the anepisternum and sternopleurite. Halteres dark brown, the base of stem restrictedly brightened. Legs with the coxæ and trochanters yellow; femora obscure yellow, the tips darker brown; tibiæ brown, the tarsi passing into black; claws (male) with a basal and a medial tooth. Wings with a brownish vellow tinge, the prearcular and costal fields more saturated yellow; stigma medium brown; veins brown, more brownish yellow in the flavous fields. Venation: Rs and m-cu subequal in length;  $R_{1+2}$  preserved, relatively short, about one-half longer than vein  $R_1$ ; m and petiole of cell  $M_1$  subequal; m-cu at fork of M; cell 2nd A relatively narrow.

Abdominal tergites chestnut brown, the outer segments more darkened to form a ring; pleural membrane infuscated; basal sternites yellow; male hypopygium yellow. Male hypopygium with the outer angles of the tergal plate produced into a strongly incurved black spine; median region of tergite slightly produced, the margin narrowly blackened: beneath this rim on either side with a stout lobe that terminates in two or three strong blackened spines. Outer dististyle strongly dilated outwardly, weakly bilobed at apex, the upper lobe with delicate setæ, the lower one with a concentration of strong black setæ. Inner dististyle with the beak slender, lower beak reduced; outer basal lobe simple, obtuse, with relatively sparse setæ; on its face with a small finger-like lobule that is provided with scattered bristles.

Hab. South India.

Holotype, 3, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946 (P. Susai Nathan).

This fly is most similar to *Tipula* (*Indotipula*) palnica Edwards, having the tergite of the male hypopygium somewhat similar but with the outer dististyle quite different.

# Tipula (Indotipula) oreoctistes, sp. n.

Allied to flavithorax; thorax chiefly reddish yellow, unpatterned; wings with a weak brownish tinge, the costal border and stigma more brownish yellow; veins beyond cord vaguely more seamed with brown; vein  $R_{1+2}$  glabrous, usually entire, its tip not bent strongly cephalad; abdomen reddish yellow, with a brownish black subterminal ring; male hypopygium with the outer basal lobe of the inner dististyle produced into a long sinuous spine, the remainder unusually glabrous; eighth sternite bearing a median depressed lobe.

Male.—Length about 13-14 mm.; wing 17-18 mm.; antenna about  $5\cdot1-5\cdot2$  mm.

Female.—Length about 19–20 mm.; wing 17–18 mm. Frontal prolongation of head yellow, relatively short, nasus elongate; palpi brown, the incisures restrictedly pale. Antennæ with basal three segments yellow, the succeeding ones bicolorred, black, their apices narrowly yellow, the amount of pale colour decreasing on the outer segments, becoming obsolete beyond midlength of organ; flagellar segments weakly incised, longer than the verticils. Front and anterior vertex yellow, the posterior vertex grey; vertical tubercle very low, entire.

Pronotum light brown, paler on sides. Mesonotum chiefly reddish yellow, the præscutal stripes not or scarcely indicated; præscutum with vestiture exceedingly sparse and small to virtually lacking. Pleura and pleurotergite more yellowed. Halteres with stem brownish yellow, the knob darker. Legs with coxæ and

trochanters yellow; femora and tibiæ brownish yellow, the tips rather narrowly blackened, those of the midtibiæ even more restricted; tarsi brown; claws (male) slender, toothed. Wings with a weak brownish tinge, the prearcular and costal fields, with the stigma, more brownish yellow to light brown; veins brownish black, those beyond cord vaguely more seamed with brown; veins basad of cord, especially in the brightened fields, much paler. Veins beyond cord with abundant trichia;  $R_{1+2}$  glabrous and pale, in cases with the tip atrophied. Venation: Rs longer than  $R_{2+3}$ ; cell  $M_1$  about twice its petiole; cell 1st  $M_2$  small, pentagonal, with m-cu at or beyond the fork of  $M_{3+4}$ .

Abdomen reddish yellow, the tergites more or less darkened; segments seven and eight brownish black to form a subterminal ring; hypopygium fulvous. In the female, abdomen almost uniformly darkened but this seems due, in part at least, to internal discoloration. Male hypopygium with the caudal border of tergite with a deep U-shaped notch, the lateral lobes appearing as slender glabrous horns; at base of notch with a low obtuse lobe. Dististyle parallel, on lower face with a small setiferous lobule that represents the usual outer dististyle; outer basal lobe a long slender sinuous spine, approximately two-thirds as long as the entire style. Eighth sternite bearing a profoundly divided depressed lobe, either half relatively narrow, the outer margin with relatively few long setæ.

Hab. South India.

Holotype,  $\Im$ , Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 16, 1946 (P. Susai Nathan). Allotopotype,  $\Im$ , September 21, 1946. Paratopotypes,  $\Im \Im$ .

The only close relative appears to be *Tipula* (*Indotipula*) flavithorax Brunetti, of which I possess a homotype female that had been compared with the type by Edwards and which certainly appears to be distinct. Edwards (Rec. Indian Mus., 26: 306; 1924) has provided additional notes on the type male of flavithorax, further indicating a different species.

Trichoneura (Xipholimnobia) umbripennis, sp. n.

General coloration of body dark brown, the dorsopleural region of pleura and a more ventral pleural stripe narrowly whitened; legs brown; wings with a strong blackish tinge, cell C light yellow; male hypopygium with the apex of the arm of the outer dististyle terminating in a strong gently curved spine.

Male.—Length about 2.5 mm.; wing 2.9-3.2 mm.

Female.—Length about 3 mm.; wing 3 mm.

Rostrum and palpi black. Antennæ short; scape black, pedicel brown; flagellum medium to pale brown. Head grey.

Pronotum brown, the lateral portions, pretergites and lateral præscutal border whitened, the colour reaching the wing root: remainder of mesonotum dark brown. brownish black with a very narrow but conspicuous pale longitudinal stripe extending from behind the fore coxe. passing above the bases of the other coxæ, to the abdomen. Halteres with stem obscure whitish, knob blackened. Legs with the coxe and trochanters yellow, the fore pair somewhat darker; remainder of legs dark brown. Wings with a strong blackish tinge, cell C to or beyond the level of origin of Rs light yellow; veins brown. Venation:  $Sc_1$  ending about opposite four-fifths the length of Rs,  $Sc_2$  a short distance from its tip; m-cu approximately its own length or less before the fork of  $M_{3+4}$ . In a paratype, vein  $R_1$ , apposite the atrophy of the free tip of  $Sc_2$ , bends sharply down to  $R_{2+3}$  to produce a short fusion of  $R_{1+2+3}$ .

Abdomen, including the hypopygium, brownish black. Male hypopygium having the tergal region with a very deep and narrow median split, the adjoining lobes broad, truncated at tips. Outer dististyle complex, as in the group, the apex of the non-spiculose arm terminating in a strong, gently curved spine that is not fasciculate.

Hab. South India.

Holotype,  $\circlearrowleft$ , Coimbatore, September 21, 1939 (P. Susai Nathan). Allotopotype,  $\circlearrowleft$ , September 8, 1939. Paratopotypes, 10  $\circlearrowleft$ , August 16-September 29, 1939 (P. Susai Nathan).

The present fly differs most evidently from *Trichoneura* (Xipholimnobia) nepalensis (Brunetti), of Nepal, in the darkened legs, unusually darkened wings, and in other details of coloration. Unfortunately the latter species is still known only from the unique type female. By a key to the Asiatic species of *Trichoneura* (Xipholimnobia)

by the writer (Philippine Journ. Sci., 53: 440; 1934), the present fly runs to T. (X.) bontocensis Alexander of northern Luzon, a distinct species.

# Limonia (Geranomyia) fimbriarum, sp. n.

General coloration of mesonotum plumbeous, pleura and pleurotergite yellow; femora brown, the bases restrictedly yellow; wings subhyaline, very restrictedly patterned with dark brown, most evident as the stigma; costal fringe (male) very long and conspicuous; Sc relatively long,  $Sc_1$  ending just beyond midlength of Rs; male hypopygium with the rostral prolongation of the ventral dististyle large and complex, bearing two very unequal, widely separated spines from elongate tubercles, the outer spine from a tubercle that is approximately three times its own length.

Male.—Length, excluding rostrum, about 6 mm.; wing 6.7 mm.; rostrum about 2.25 mm.

Rostrum relatively short, less than one-half the length of wing, black throughout. Antennæ black throughout; flagellar segments subcylindrical or truncate-oval; verticils relatively inconspicuous. Head with a narrow silvery median stripe, the sides of the posterior vertex infuscated; anterior vertex very narrow, less than the diameter of two rows of ommatidia.

Pronotum infuscated above, paling to yellow on the Mesonotal præscutum with the dorsum chiefly brown, sparsely pruinose to present a plumbeous appearance, the broad central stripe somewhat darker; humeral and lateral portions more testaceous yellow; posterior sclerites of notum yellow, the scutal lobes and posterior half of mediotergite dark brown. Pleura and pleurotergite vellow. Halteres brownish black, relatively short, the outer part of stem with conspicuous setæ. Legs with all coxæ yellow; trochanters more greenish; femora brown, the bases restictedly yellow; tibiæ and tarsi greenish brown, the outer tarsal segments darker. Wings subhyaline, very restrictedly patterned with dark brown, most evident as the oval stigma; scarcely evident darkenings at the supernumerary cross-vein in cell Sc.  $Sc_2$ , and the tips of veins  $R_3$  and  $R_{4+5}$ ; veins brown. Costal fringe (male) very long and conspicuous, the longest setæ fully equal to the combined width of cells C and Sc. Venation: Sc relatively long,  $Sc_1$  ending just beyond midlength of Rs,  $Sc_2$  a short distance from its tip; Rs long, about three times the basal section of  $R_{4+5}$ ; cell 1st  $M_2$  long-rectangular, only a little shorter than the distal section of vein  $M_{1+2}$ ; m-cu at or very close to the fork of M.

Abdominal tergites dark brown, sternites more yellowed. Male hypopygium with the tergite very shallowly emarginate, the sides nearly parallel. Basistyle small, the ventro-mesal lobe very reduced. Dorsal dististyle a curved hook, its tip acute. Ventral dististyle relatively small, exceeding the basistyle in area; rostral prolongation very large and conspicuous, sclerotized, with two widely separated spines of unequal size; outer spine from an even longer basal tubercle, the spine exceeding in length the rostral prolongation; basal spine about three times as long as its tubercle. Gonapophysis with the mesal-apical lobe a slender darkened rod, its tip acute, strongly curved.

Hab. South India.

Holotype, 3, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 16, 1946 (P. Susai Nathan).

The most similar species is Limonia (Geranomyia) longifimbriata Alexander, which is readily distinguished by the open cell  $M_2$  of the wings and especially by the details of structure of the male hypopygium, particularly the rostral prolongation and the gonapophyses.

# Eupilaria guttulifera, sp. n.

Mesonotum chiefly light brown, the præscutum vaguely patterned with darker; humeral and lateral portions of præscutum more darkened; a large black spot on side of each scutal lobe behind suture; pleura yellow, with two narrow longitudinal black stripes; femora yellow, the tip and a subterminal ring darkened, enclosing a broad yellow annulus; wings brownish fulvous, conspicuously patterned with darker brown; abdomen chiefly yellow, the outer segments vaguely bicoloured.

*Male*.—Length about 8-9 mm.; wing 7.5-8.5 mm.; antenna about 1-1.2 mm.

Female.—Length about 10 mm.; wing 9 mm.

Rostrum very short, brown, palpi black. Antennæ with scape, pedicel and first segment of flagellum yellow,

the remaining flagellar segments passing into brownish black; basal flagellar segments transverse subglobular, crowded, the outer ones passing into elongate; outer segments with very long conspicuous verticils. Head above dark brownish grey, the front, posterior portion of vetex and lower surface obscure yellow; anterior vertex broad, approximately four times the diameter of scape.

Pronotum weakly infuscated medially above, more vellowed on sides. Mesonotum chiefly almost uniformly light brown or brownish vellow, in cases more pruinose, the præscutum vaguely patterned with darker; humeral and lateral portions of præscutum weakly infuscated; a conspicuous black spot on side of scutal lobe, just inside the wing root and behind the transverse suture. Pleura vellow, with two longitudinal black stripes, the more dorsal one extending from the cervical region across the propleura, ventral anepisternum and pteropleurite, not reaching the pleurotergite; ventral stripe extending from the fore coxe, crossing the middle of the sternopleurite. more intense over the meron and metapleura, thence merging with the lateral abdominal stripe: remainder of pleura and sternum light vellow. Halteres with the stem pale, knob weakly darkened. Legs with the fore coxe darkened, as described, the other coxe clear light vellow: trochanters vellow; femora obscure vellow, the narrow tip and a somewhat more extensive but paler subterminal ring brownish black, enclosing a much broader vellow annulus; tibiæ obscure yellow, the tips blackened; tarsi black, the proximal portion of basitarsi paler. Wings with a strong brownish fulvous tinge, conspicuously patterned with darker brown, the small oval stigma darker brown; paler clouds at origin of Rs, over the cord and outer end of cell 1st  $M_2$ , and as marginal clouds over the ends of the longitudinal veins with the exception of  $R_3$ ; veins yellowish brown, darker in the patterned areas. Venation:  $R_2$  shorter than  $R_{2+3}$ ; cell 1st  $M_2$  longer than  $M_{\star}$ : m-cu nearly its own length beyond the fork of M.

Basal abdominal tergites obscure yellow, the outer ones weakly bicoloured, brown, with the incisures somewhat paler; lateral borders brownish black, being a continuation of the ventral thoracic pleural stripe; sternites yellow, hypopygium brownish yellow.

Hab. South India.

Holotype, ♂, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946, (P. Susui Nathan). Allotopotype, ♀, July 16, 1946. Paratopotypes, ७००, August 29–September 24, 1946, (P. Susui Nathan).

The genus *Eupilaria* Alexander was originally proposed as a subgenus of Pilaria Sintenis (Philippine Journ. Sci., 48: 39: 1932), chiefly because of the conspicuously verticillate antennæ. I now regard it as representing an entirely distinct genus. The earliest described species was Eupilaria opaca (de Meijere), of Java. Three further forms, E. auranticolor (Alexander), E. leucopoda (Alexander), and E. phoenosoma (Alexander), are known from the Philippines, and E. albicans (Edwards), from northern Borneo. Five further species are now known from southern India, three being described at this time. present fly is close to E. annulipes (Brunetti), of southwest India, having the leg pattern approximately the same, but differing in the conspicuously patterned wings. The Indian species may be separated by the following kev:--

1. Thoracic pleura uniformly yellow Thoracic pleura striped longitudinally with	2.
brownish black	3.
2. Legs brownish yellow	inconsequens(Brunetti).
Legs black	sauvis, sp. n.
3. Wings unpatterned except for the stigma	annulipes (Brunetti).
Wings with a conspicuous dark pattern	
additional to the stigma	<b>4.</b>
4. Femora with two brown rings that enclose	
a broader yellow one; ground colour of	
thoracic pleura yellow; posterior portion	
of vertex pale	guttulifera, sp. n.
Femora yellow, the tips narrowly black-	
ened, subterminal dark ring lacking;	
thoracic pleura and vertex uniformly	
grey ,	incana, sp. n.
$rac{1}{r}$	* *

# Eupilaria incana, sp. n.

 $\it Male. — Length about 6.5-7 mm.; wing 7.2-8 mm.;$  antenna about 1-1.1 mm.

Female.—Length about 10 mm.; wing 9 mm.

Characters as in *guttulifera*, sp. n., differing as follows:—Head above uniformly dark grey; rostrum brown. Antennal flagellum black. Præscutal disk with four distinct brown stripes; postnotum and pleura distinctly pruinose, in cases heavily so, completely obscuring the

yellow. Legs with the femora yellow, the tips conspicuously blackened, but with no dark subterminal ring. Wings with cell 1st  $M_2$  relatively small, with m-cu slightly nearer the base.

The grey coloration and the pattern of the femora should readily separate this fly from *guttulifera*.

Hab. South India.

Holotype, ♂, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 16, 1946 (P. Susai Nathan). Allotoptype, ♀, August 27, 1946. Paratopotype, 1 ♂, August 29, 1946.

# Eupilaria sauvis, sp. n.

Allied to *inconsequens*; mesonotum almost uniformly castaneous, the pleura and pelurotergite uniformly yellow; legs black; wings fulvous brown, the stigma darker brown;  $Sc_1$  ends only a short distance beyond the fork of Rs.

Male.—Length about 7–9 mm.; wing 7·5–9 mm.

Female.—Length about 7 mm.; wing 7 mm.

Rostrum yellow; palpi black. Antennæ brownish black throughout. Head pale grey, the centre of vertex extensively infuscated.

Pronotum brownish yellow. Mesonotum almost uniformly light brown or castaneous, unpatterned, the pleura and pleurotergite uniformly yellow. Halteres infuscated, the base of stem narrowly yellow. Legs with all coxæ and trochanters yellow; remainder of legs black, the femoral bases restrictedly brightened. Wings light brown to fulvous brown, the prearcular and costal fields more yellowed; no pattern except the oval brown stigma; veins brown, somewhat lighter in the yellowed areas. Venation: Sc relatively short,  $Sc_1$  ending a short distance beyond the fork of Rs and distinctly before the fork of  $R_{2+3+4}$ , the latter subequal to or shorter than the basal section of  $R_5$ ; m-cu about two-thirds to three-fourths its length beyond the fork of M.

Abdominal tergites brown to dark brown, darkest on the subterminal segments, in cases weakly bicoloured; sternites yellow; hypopygium brownish yellow.

Hab. South India.

Holotype, o, Cinchona, Anamalai Hills, altitude 4000-5000 feet, August 29, 1946 (P. Susai Nathan).

Allotopotype,  $\$ , September 24, 1946. Paratopotypes, several  $\$  $\$ , August 29-September 24, 1946.

Although close to *Eupilaria inconsequens* (Brunetti), I must regard the present fly as being distinct. The smallest measurements given above are those of three specimens that differ markedly from the larger type and various paratypes in this regard.

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

Allied to pænulata; size relatively small (wing, male, 11 mm.); antennæ (male) 8-segmented; mesonotum plumbeous grey, the humeral region of præscutum obscure yellow with a velvety black spot at the cephalic portion of the interspace and a much larger more lateral one of the same colour; antennæ black, the scape yellow; pleura and pleurotergite yellow; legs black, the femoral bases and all coxæ yellow; wings with a strong brownish tinge, the prearcular and costal borders more brownish yellow; Sc very long,  $Sc_1$  ending shortly beyond the fork of  $R_{2+3+4}$ , the latter about three times the basal section of  $R_5$ ; m-cu at near two-thirds the length of cell  $Ist M_2$ ; abdomen opaque orange, the basal tergite darkened medially above.

Male.—Length about 11 mm.; wing 11 mm.; antenna about 2.2 mm.

Rostrum yellow; palpi black. Antennæ (male) 8-segmented, short, as shown by the measurements; scape light yellow, pedicel and flagellum brownish black; flagellar segments gradually decreasing in length outwardly, provided with long setæ, the longest on flagellar segment three a little shorter than the segment. Head black.

Mesonotum chiefly brownish grey or plumbeous, the humeral region obscure yellow, with a velvety black spot at cephalic portion of the interspace, with a second much larger circular black marginal spot opposite the lateral stripes; lateral borders of mediotergite and all of pleurotergite yellow. Pleura similarly yellow, with small inconspicuous darkenings below and in front of wing root. Halteres brownish black, the base of stem narrowly yellow. Legs with coxæ and trochanters yellow; femora black, the bases yellow, somewhat more conspicuous on the fore pair; tibiæ and tarsi black. Wings with a strong brownish

tinge, the prearcular and costal fields more brownish yellow: stigma exceedingly narrow to scarcely indicated; vague to scarcely evident darkenings over the cord and outer ends of cell  $1st\ M_2$ ; veins brown, more yellowed in the brightened portions. Abundant macrotrichia on veins beyond cord, much more sparse basad of this point. Venation: Sc very long, ending shortly beyond the fork of  $R_{2+3+4}$ , vein  $R_2$  oblique, its origin lying slightly more distad than its cephalic portion, the vein subequal to vein  $R_{1+2}$ ;  $R_{2+3+4}$  about three times the basal section of  $R_5$ ; cell  $1st\ M_2$  rectangular, with m-cu at about two-thirds the length, the cell subequal in length to vein  $M_4$ .

Abdomen almost uniformly opaque orange, the first tergite infuscated medially above; on the individual tergites the posterior third of the segments somewhat more intensely fulvous orange or brownish orange.

Hab. South India.

Holotype, 3, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946 (P. Susai Nathan).

The most similar described species include *Hexatoma* (*Eriocera*) pænulata (Enderlein), *H*. (*E*.) subpænulata (Edwards) and *H*. (*E*.) rufiventris (Brunetti), all of which are represented in my collection. All differ in the larger size and in distinct details of coloration and venation.

# Hexatoma (Eriocera) anamaliana, sp. n.

Size relatively small (wing, female, 10 mm.); mesonotal præscutum with three polished dark stripes, the interspaces concolorous, opaque; antennæ (female) 7-segmented; head brownish black, more pruinose on front, anterior vertex with a pair of small conical tubercles; legs black; wings with a strong brownish suffusion, the base vaguely more yellowed;  $R_{2+3+4}$  about one-half longer than the basal section of  $R_5$ ; cell  $M_1$  lacking; abdomen with basal two segments obscure brownish yellow, the succeeding ones dark brown, subnitidous, the extreme posterior borders of the segments obscure yellow; genital shield (female) obscure orange.

Female.—Length about 11 mm.; wing 10 mm.; antenna about 1.6 mm.

Rostrum light brown; palpi dark brown. Antennæ (female) short, 7-segmented; scape and pedicel dark

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brown, flagellum brownish black; first flagellar segment subequal to the combined segments two and three, stouter; flagellar segment four a little longer than segment three and nearly twice as long as five. Front pale brown, prey pruinose; head above brownish black; anterior vertex with a small but conspicuous tubercle on either side, immediately behind the pruinose field.

Pronotum opaque dark brown. Mesonotal præscutum with three polished dark brown stripes, the interspaces restrictedly opaque brown of the same colour; scutal lobes similarly polished brown; scutellum brownish yellow, postnotum uniformly yellow; vestiture of mesonotum very sparse, of moderate length only. Pleura light brown, the dorsopleural region more brownish black. Halteres brown, the knobs darker brown. Legs with the coxæ light brown; trochanters yellow; remainder of legs black, the femoral bases obscure vellow. Wings with a strong and almost uniform brown suffusion, the prearcular field and cell Sc more yellowed; no stigma; veins brown, paler in the brightened fields. Macrotrichia on veins beyond cord, with a few others basad of this point. Venation:  $Sc_1$  ending about opposite the fork of Rs; R<sub>2+3+4</sub> about one-half longer than the basal section of  $R_5$ ;  $R_{2+3}$  and  $R_{1+2}$  subequal or the former slightly longer, either one a trifle less than twice as long as vein R<sub>o</sub>: cell  $M_1$  lacking; m-cu about opposite midlength to cell

Abdemen with the basal two segments obscure brownish yellow, the succeeding segments dark brown with the extreme caudal borders obscure yellow; entire surface subnitidous; genital shield obscure orange; valves of ovispositor elongate, cerci gently upcurved.

Hab. South India.

Holotype, ♀, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946 (P. Susai Nathan).

By Edwards' key (1921) to the Old World species of the subgenus, the present fly runs without serious complications to *Hexatoma* (*Eriocera*) caliginosa (Brunetti), with which it disagrees in many details of coloration, especially of the thorax and abdomen. The latter fly has the thorax wholly black, the abdomen black, patterned with yellow on the third and fourth segments.

# Hexatoma (Eriocera) purpurata, sp. n.

General coloration of thoracic dorsum and abdomen purplish black; head dull black; antennæ very short in both sexes; halteres and legs black; wings with a strong blackish suffusion, slightly paler on basal half: Sc short, Sc, ending some distance before the fork of Rs: vein 2nd A slightly concave.

Male.—Length about 9.5-11 mm.; wing 8-9 mm.; antenna about 1·1-1·2 mm.

Female.—Length about 11 mm.; wing 10 mm.

Rostrum and palpi black. Antennæ verv short in both sexes, black throughout; in male, 7-segmented, the first flagellar segment stout, about as long as the second and third taken together; flagellar segments two to five gradually decreasing in length and diameter, all provided with conspicuous verticils; in female, antennæ 8-secmented, the terminal one small. Head dull black, with abundant long black setæ.

Thoracic dorsum purplish black, very sparsely pollinose, the vestiture long and black. Pleura black. pruinose, heavily so on the metapleura and pleurotergite. Halteres short, black. Legs with the coxæ black, pruinose: remainder of legs uniformly black. Wings with a strong blackish suffusion, on basal half somewhat more vellowed, this especially evident in the female, including the prearcular field and slightly beyond, as well as cell  $Cu_1$ ; veins brownish black, paler on proximal half of wing. Veins beyond cord with abundant trichia, basad of cord these becoming more sparse and finally lacking. Venation: Sc unusually short, Sc, ending some distance before fork of Rs, Sc<sub>2</sub> near its tip;  $R_{2+3+4}$  nearly twice  $R_{2+3}$ and in direct alignment with it;  $R_{1+2}$  about one-half longer than  $R_{2+3}$ ; cell  $M_1$  lacking, m short; m-cu at near one-third to one-half the length of cell 1st  $M_2$ . In a single paratype, vein  $R_2$  lies just before the fork of  $R_{3+4}$ .

Abdomen uniformly black, the segments more or less shiny and with strong purplish reflexions that are scarcely obscured by a sparse pollen. In cases, abdominal segments five to seven inclusive, in the male, expanded into a spatula, this not apparent in other individuals that seem evidently to be conspecific. In female, genital shield black, the long straight valves of the ovipositor orange.

Hab. South India,

Holotype,  $\Im$ , Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 20, 1946 (P. Susai Nathan). Allotopotype,  $\Im$ , September 17, 1946. Paratopotypes, 4  $\Im\Im$ , September 16–20, 1946.

In the short vein Sc, the present insect agrees with a group of about ten species of the subgenus known from Ceylon, all of which are otherwise quite distinct flies. However, in other venational characters it disagrees with these flies and by Edwards' key (1921) to the Old World species of *Eriocera* it runs to couplet 35 where it cannot be traced beyond this point. Evidently the characters of a spatulate abdomen, found in the males of a few regional species, is not as constant a character as had formerly been believed.

# Hexatoma (Eriocera) susai-nathani, sp. n.

General coloration of thorax black, the præscutum with three polished stripes; antennæ (male) elongate, approximately as long as body, basal three segments of flagellum light yellow, the outer ones black; in female, antennæ uniformly blackend; halteres and legs black, the femoral bases obscure yellow; wings brownish black, handsomely variegated with pale yellow and white, the former including the broad wing base, the latter a wide band before cord and a subterminal row of spots, as well as a small area at origin of Rs; abdomen with segments one and six to eight black, two to five orange, male hypopygium yellow.

Male.—Length about 8-9 mm.; wing 9-9.5 mm.; antenna about 8.5-9 mm.

Female.—Length about 14–15 mm.; wing 12–13 mm.; antenna about  $2\cdot 8-$  3 mm.

Rostrum brownish black; palpi dark brown. Antennæ (male) elongate, nearly equal in length to the wing, much shorter in the female, as shown by the measurements; in male, scape and pedicel light chestnut, basal three segments of flagellum light yellow, the remainder abruptly brownish black; 7-segmented, the last flagellar segment very small; flagellar segments long-cylindrical, the first and fourth longest, second and third slightly shorter and subequal to one another; flagellar segments with a dense erect white pubescence that is nearly as long as the diameter of the segment; basal flagellar segments with

relatively few short verticils, on the fourth segment becoming much more numerous; in female, antennæ 9-segmented, dark throughout. Head dull black.

Pronotum black, more pruinose on sides. Mesonotum with the ground colour velvety black, the præscutum with three polished black or plumbeous black stripes; scutal lobes similarly polished. Pleura and pleurotergite black, more pruinose on the propleura and much of the mesopleura, the anterior border blackened to form a transverse darkening: meron blackened. Halteres black. Legs with the coxe grey pruinose; trochanters brown; remainder of legs black, the femoral bases obscure vellow. somewhat less extensively so on the fore legs. Wings brownish black, variegated with pale yellow and white or vellowish white; prearcular field and cells C to M immediately beyond vellow; the white areas include a broad band before cord, extending from R to the posterior margin; wing tip slightly paler than the remainder of ground, its inner portion with a broken band or series of white spots in cells  $R_3$  to  $M_3$  inclusive, more obscured behind and the posterior one often lacking: a small white spot at origin of Rs; axilla whitened; veins brown. more yellowed in the pale fields. Macrotrichia on veins beyond cord. Venation:  $R_{2+3+4}$  and  $R_{2+3}$  subequal;  $R_{2}$ shorter than  $R_{1+2}$ ; cell  $M_1$  lacking; m-cu at near midlength of cell 1st  $M_2$ .

Abdomen with the first segment velvety black; segments two to five, inclusive, orange; segments six to eight black; hypopygium yellow; none of the segments with polished rings; in female, genital shield orange.

Hab. South India.

Holotype,  $\Im$ , Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946 (*P. Susai Nathan*). Allotopotype,  $\Im$ , September 18, 1946. Paratopotypes, several  $\Im$ , August 27–October 2, 1946; taken on plants near mountain torrent.

I take great pleasure in naming this very distinct fly for Mr. P. Susai Nathan, to whom I am indebted for numerous Tipulidæ from South India. By Edwards' key (1921) to the Old World species of the subgenus the species runs to Hexatoma (Eriocera) basilaris (Wiedemann), of Java, which has approximately the same wing pattern but differs in the short antennæ of both sexes and in details of coloration.

All other generally similar East Indian species likewise differ in the short antennæ.

Elephantomyia (Elephantomyodes) affluens, sp. n.

General coloration of thorax dark grey, the præscutum with four dark brown stripes; head dark grey; rostrum elongate, being approximately two-thirds the wing; legs black, the tarsi whitened before the tips; wings with a weak brownish tinge, the costal border narrowly and conspicuously dark brown; narrow brown seams over cord and the outer end of cells  $1st\ M_2$ .

Male.—Length, excluding rostrum, about 6·5-10 mm.; wing 7-10 mm.; rostrum about 4-6 mm.

Rostrum black, elongate, approximately two-thirds as long as the wing. Antennæ black throughout; flagellar segments elongate-oval, with very elongate verticils. Head dark grey, clearer grey on front; anterior vertex moderately wide, a little exceeding the diameter of the scape.

Pronotum dark brown, sparsely pruinose. Mesonotum dark grey, the præscutum with four dark brown stripes. the intermediate pair narrowly confluent in front, very narrowly separated behind: scutellum obscure brownish vellow to dark brown, bordered by pale; mediotergite Pleura and pleurotergite dark plumbeous dark brown. grey, restrictedly patterned with yellow, including the dorsal pleurotergite and the entire region of the metapleura. Halteres dark brown, the base of the stem restrictedly yellow. Legs with the coxæ brown: trochanters brownish yellow; femora, tibiæ and basitarsi black, the tips of the latter narrowly snowy white; segments two and three white, four and five black. Wings with a weak brownish tinge, the costal border narrowly and conspicuously dark brown, occupying cells C and Scand continued outwardly about to the wing tip, involving the outer half of cell  $R_1$ ; narrow brown seams over origin of Rs and cord, more narrowly so at outer end of cell 1st  $M_2$ ; veins brown. Venation: Rs relatively long, fully one-half longer than cell 1st  $M_2$ , square at origin; cell 1st  $M_2$  about equal in length to vein  $M_4$ ; m-cu at near one-third the length of cell 1st  $M_2$ ; cell 2nd A narrow.

Abdomen relatively long, basal segments weakly bicoloured, chiefly brownish black, the bases of each

segment very restrictedly pale; outer segments more uniformly blackened.

Hab. South India.

Holotype, 3, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 30, 1946 (P. Susai Nathan). Paratopotypes, several 33. September 16-October 4, 1946.

Elephantomyia (Elephantomyodes) affluens is very different in all regards from the only other regional member of the subgenus so far made known, E. (E.) aurantia (Brunetti), of Assam.

# Riedelomyia chionopus, sp. n.

Mesonotum chiefly reddish brown, the præscutum narrowly margined with brownish black; antennæ black, the four-parted fusion segment yellow; legs dark brown, the outer tarsal segments snowy white; wings brownish yellow, with a heavy brown spotted pattern.

Female.—Length about 5.5 mm.; wing 6 mm.

Rostrum black, sparsely pruinose; palpi black. Antennæ with the scape black, grey pruinose; pedicel brownish black; fusion segment of flagellum yellow, the remainder of organ brownish black, the segments with long verticils; fusion segments apparently involving four segments, but with all sutures incomplete; terminal flagellar segments broken. Head brownish grey; anterior vertex broad.

Pronotum buffy above. Mesonotum chiefly reddish brown, the præscutum narrowly margined with brownish black and with faint indications of two paler brown intermediate stripes; pseudosutural foveæ large, pale; tuberculate pits not evident; posterior sclerites of notum brown, more or less yellow pollinose, the scutellum darkest. Pleura brownish vellow, conspicuously striped longitudinally with brownish black, the dorsal stripe broader, extending from the cervical region across the dorsal pleurites to the anterolateral portions of the mediotergite: ventral stripe narrower, beginning more faintly on the fore coxe, becoming darker behind, crossing the central portion of the sternopleurite, passing beneath the halteres to the abdomen; dorsopleural membrane buffy vellow. Halteres infuscated, the base of stem narrowly Legs with the fore coxe yellow basally, brown beyond, as described; remaining coxe and all trochanters

pale vellow; remainder of legs dark brown, the distal fifth of basitarsi and remainder of tarsi white (terminal two segments broken). Wings with the ground brownish vellow, the costal border narrowly clearer vellow; a relatively heavy brown spotted pattern, as follows: At and beyond arculus in bases of cells R and M; origin of Rs. extending from vein R backward, not reaching vein M: a comparable large spot at fork of Rs, not or scarcely connected with the seam along cord; outer end of cell 1st M2; stigma darker brown, relatively small; veins beyond cord, especially near wing tip, narrowly seamed with brown; a somewhat larger area at end of vein 2nd A. with a further infuscation in the wing axilla; veins brownish vellow, clearer in the brightened portions, darker in the clouded area. Venation:  $Sc_1$  ending opposite fork of Rs, Sc, far from its tip; veins  $R_4$  and  $R_5$  slightly approximated at outer ends so cell  $R_1$  is somewhat wider at its base; cell 1st M, about as long as distal section of vein  $M_3$ ; m-cu from one-fourth to one-third its length beyond the fork of M.

Abdominal tergites uniformly dark brown or brownish black; sternites, especially the outer ones, somewhat paler with darkened posterior borders; cerci only gently curved, obscure yellow, darker basally; hypovalvæ very slender, darkened.

Hab. South India.

Holotype, ♀, Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 21, 1946 (P. Susai Nathan). Paratopotype, ♀, September 2, 1946.

The present fly is quite different from the two previously described regional species, both of which have the tips of the femora narrowly snowy white. The genus still is very insufficiently known. To the recorded generic characters may be added: Legs with long simple setæ only, no scales. Meral region greatly reduced, the middle and hind coxæ nearly contiguous.

# Rhabdomastix (Rhabdomastix) nilgirica, sp. n.

General coloration of thorax medium brown, sparsely pruinose, the more ventral thoracic pleurites reddish brown; antennæ (male) greatly lengthened, exceeding three times the length of the wing; wings brownish grey,

the stigma and outer radial cells more darkened; veins  $R_3$  erect to virtually perpendicular; abdomen bicoloured, the segments obscure yellow with the caudal margins broadly infuscated; hypopygium brownish black.

Male.—Length about 6 mm.; wing 6.8 mm.; antenna about 25 mm.

Rostrum brown; palpi reduced, black. Antennæ (male) greatly lengthened, as shown by the measurements, exceeding three times the length of the wing; scape enlarged, chestnut brown; pedicel very small, testaceous; flagellar segments yellow, the incisures narrowly infuscated; outer segments more uniformly darkened; flagellar segments elongate-cylindrical, with a short dense pubescence on the outer face, this longer than the very sparse darkened verticils. Head dark brown, grey pruinose; anterior vertex broad.

Pronotum brownish grey. Mesonotum almost uniformly medium brown, sparsely grey pruinose, the humeral region of præscutum yellow; pseudosutural foveæ and tuberculate pits black, conspicuous. Pleura chiefly reddish brown, the dorsal pleurites and dorsopleural membrane darker brown. Halteres infuscated. the base of stem restrictedly vellow. Legs with the coxæ yellowish testaceous; remainder of legs obscure yellow or brownish vellow; fore and middle trochanters elongate, exceeding the coxe in length, posterior trochanters normal. Wings brownish grey, cells C and Sc more infuscated; outer radial cells conspicuously darkened, involving all of cell  $R_3$  and the outer half of  $R_4$ ; stigma oval, dark brown, separated from the outer radial darkening by a pale spot before vein  $R_3$ ; cord and outer end of cell 1st  $M_2$  very narrowly seamed with dark brown; veins brown, the Anal veins paler. Wings broad, anal angle conspicuous. Venation:  $Sc_1$  ending nearly opposite five-sixths the length of Rs; vein  $R_3$  erect to virtually perpendicular, subuequal in length to the space on costa between veins  $R_{1+2}$  and  $R_3$ ; vein  $R_4$  only slightly arcuated, subequal to  $R_{2+3+4}$ ; m much longer than the basal section of  $M_3$ ; vein 2nd A sinuous.

Abdomen bicoloured, basal tergite brown; remaining segments obscure yellow with their caudal margins broadly infuscated; hypopygium brownish black.

Hab. South India.

Holotype, 3, Singara, Nilgiri Hills, altitude 3400 feet, May 21, 1948 (P. Susai Nathan).

This is the first record of occurrence of the genus from India. From the other Oriental species having cell 1st  $M_2$  closed, including Rhabdomastix flavidula Edwards, of Borneo, and R. trochanterata Edwards, of Pahang, Federated Malay States, the present fly is readily told by the coloration of the body and wings. The closest ally and the only one of the two species above listed, that is certainly a member of the typical subgenus, is trochanterata.

# Styringomyia thetis, sp. n.

General coloration yellow, the pronotum and lateral borders of præscutum broadly bordered by black; pleura and pleurotergite yellow; fore and middle femora yellow, each with two brown rings, posterior femora yellow with a narrow incomplete subterminal brown annulus; wings yellow, unpatterned; vein  $2nd\ A$  simple; male hypopygium with two unequal spines on basistyle; dististyles complex, the intermediate and inner styles or arms with long black setæ.

Male.—Length about 7.5 mm.; wing 4.8 mm. Female.—Length about 6 mm.; wing 5 mm.

Rostrum and palpi black. Antennæ with scape and pedicel black; flagellum yellow, the outer segments darker; in female the bases of the segments narrowly clearer yellow to produce a weak bicoloured appearance. Head testaceous brown above, darker brown on sides.

Pronotum and mesonotum obscure yellow dorsally, the lateral border continuously and conspicuously black, the pattern more expanded over the humeral region; disk of præscutum with two narrow blackish lines before suture, narrowed in front; posterior sclerites of notum somewhat more pruinose and less evidently patterned with brown, more distinctly so on the lateral borders of the scutellum and mediotergite; setæ of mesonotum unmodified. Pleura and pleurotergite yellow. Halteres with stem pale, knob weakly darkened. Legs with all coxæ and trochanters yellow; femora yellow, the fore and middle pairs with two dark rings, the outer one darker, about one-half its own length from the tip, narrower than the

yellow subterminal annulus; tibiæ yellow, with two alternate black rings, the tip black, the dark and light rings subequal in extent, only the basal yellow one narrower; basitarsi yellow, the tips blackened, more broadly so on the fore legs, remainder of tarsi black; posterior femora yellow with a single narrow and incomplete dark subterminal spot; tibiæ yellow, the tip narrowly darkened; basal three tarsal segments yellow, their tips narrowly infuscated, the terminal segments darkened. Wings yellow, unpatterned; veins brownish yellow; costal fringe relatively long. Venation: Cell 2nd  $M_2$  narrowly sessile; m-cu at near one-third the length of cell 1st  $M_2$ ; vein 2nd A simple.

Abdominal tergites with central portion almost uniformly pale to medium brown, more vellowed laterally; sternites and hypopygium vellow. Male hypopygium with the apical lobe of the ninth tergite hemispherical, transverse, the margin fringed with abundant yellow setæ; ninth sternite narrowed to the truncated tip which bears two elongate unmodified setæ. Basistyle with the outer lobe bispinous, the spines unequal, the longest at apex of a tubercle, the second about one-half as long, subapical. Outer dististyle or arm long and pale, with two apical setæ, one very long; intermediate style a narrow flattened blade that is densely covered with long black setæ; inner style or branch triangular in outline, narrowed outwardly, at tip with a strong blackened spine, the surface with abundant black setæ, much as in the case of the intermediate style: at extreme base of style, on mesal face, with a slender curved arm that terminates in a long black spine of nearly equal length; at base of this arm with a comb of long black spines. Phallosome with very sparse darkened areas or points.

Hab. South India.

Holotype,  $\Im$ , Cinchona, Anamalai Hills, altitude 4000–5000 feet, September 17, 1946 (P. Susai Nathan). Allot potype,  $\Im$ , in copula with the type.

The most similar regional species is Styringomyia kempiana Alexander, which differs in the coloration of the body and legs and in the details of structure of the male hypopygium, particularly the basistyle and in all details of structure of the dististyles.