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NEW OR LITTLE-KNOWN TIPULIDAE (DIPTERA).—  
XCIV. ORIENTAL-AUSTRALASIAN SPECIES.

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THE majority of the species discussed herewith are preserved in the British Museum (Natural History), being based on extensive collections made in north-east Burma and in Tibet by F. Kingdon Ward and Lord Cranbrook, R. J. H. Kaulback and Lt.-Colonel F. M. Bailey. Other materials taken in the Nilgiri Hills, South India, by Mr. P. Susai Nathan, are in my own collection of these flies. The first reference in this series of reports to the Kingdon Ward and Lord Cranbrook collections is to be found in Part XCI\* under this title.

*Tipula (Oreomyza) kaulbackiana*, sp. n.

General coloration grey, the præscutum with three dark brown stripes, the median one vaguely paler on central portion but not divided; antennæ black throughout, the segments moderately incised; head and scape with unusually long black setæ; fore femora dark brown, brighter basally, remaining femora brown, the tips more narrowly blackened; claws (male) toothed; wings brown, variegated by darker brown and whitish subhyaline areas, the white band beyond cord extending only into cell  $R_5$ ;  $R_{1+2}$  relatively short, strongly upturned; abdomen brownish yellow, the basal rings of the individual segments darker to produce a bicoloured appearance; outer dististyle relatively narrow, the apex obtusely rounded.

*Male*.—Length about 15 mm.; wing 16 mm.; antenna about 5 mm.

Frontal prolongation of head dark brown, including the long nasus; palpi brownish black. Antennæ black throughout; flagellar segments moderately incised; verticils of lower face short, of upper surface much shorter than the segments, unilaterally distributed; scape with numerous long coarse setæ. Head dark grey; vertical tubercle high, strongly carinate medially; head with unusually long black setæ, including the prolongation, sides of front and posterior vertex.

Pronotum grey, infuscated medially; setæ long but delicate, yellow. Mesonotal præscutum light grey, the surface chiefly covered by three dark brown stripes, the median one vaguely paler in central portion; posterior interspaces strongly infuscated; scutum grey, the lobes patterned with brown; posterior sclerites of notum grey; pleurotergite brightened on posterior end, the cephalic part grey. Pleura light grey, the anepisternum darker brownish grey except on upper end; dorso-

pleural membrane infuscated. Halteres with stem yellow, knob dark brown. Legs with the coxæ grey, with long yellow setæ; trochanters dark brown; fore femora dark brown, brighter basally, with about the distal half passing into black; tibiae and tarsi dark brown; remaining femora brown, the tips more narrowly blackened; claws (male) with a short subbasal tooth. Wings with a brown ground, variegated by darker brown and whitish subhyaline areas, the darkest of the latter including the stigma and a confluent mark over the anterior cord; the chief pale areas include the prearcular field; a zigzag band beyond the arculus, extending from cell  $C$  to vein  $2nd\ A$ , not involving the latter cell; a transverse series of three spots before level of origin of  $Rs$ , in cells  $R$ ,  $M$  and  $1st\ A$  respectively; extensive prestigmal and poststigmal whitenings, the last barely entering cell  $R_5$  and being completely interrupted by a major darkening across the outer end of cell  $1st\ M_2$ ; oblitative area across cell  $1st\ M_2$ , slightly invading cells  $R$  and  $M_3$ ; a small whitened mark in cell  $1st\ A$  at end of this vein; a scarcely evident brightening in outer end of cell  $R_5$ ; veins brown. No squamal trichia; outer medial veins, with the exception of  $M_1$  and  $M_2$ , glabrous. Venation:  $Rs$  long, exceeding twice  $m-cu$ ;  $R_{1+2}$  relatively short and strongly upturned, widening cell  $R_2$  at margin; petiole of cell  $M_1$  about one-half longer than  $m$ ;  $m-cu$  just before fork of  $M_{3+4}$ .

Abdomen brownish yellow, the basal rings of the individual segments darker to produce a bicoloured appearance; hypopygium chiefly infuscated. Male hypopygium with the lobes of the ninth tergite relatively long, their tips obtuse, the notch narrower than in *sharva*. Basistyle with the lower outer part slightly protuberant, densely provided with erect yellow setæ. Outer dististyle relatively narrow, especially at the obtusely rounded apex. Inner dististyle with the beak stout; posterior part of crest protuberant but not blackened or produced into a flange.

*Hab.* East Tibet.

*Holotype*, ♂, Poshö, Kyari Dzong, altitude 15,000 feet, July 19, 1936 (R. J. H. Kaulback).

This crane-fly is named for the collector, Mr. R. J. H. Kaulback, who has added materially to our knowledge of the Tipulidae of Tibet. The nearest relative is *Tipula (Oreomyza) sharva*, sp. n., as compared under the description of that species.

*Tipula (Oreomyza) sharva*, sp. n.

Males fully winged, females with wings greatly reduced, only a little longer than the halteres; mesonotal præscutum grey, with four entire dark brown stripes; antennæ black, pedicel light yellow; knobs of halteres dark brown; femora yellow, the tips conspicuously blackened, claws (male) simple; wings medium brown, variegated with large whitish areas, including a complete cross-band beyond cord;  $R_{1+2}$  entire, long and straight; abdomen reddish brown, the outer segments darker, the tergal borders grey; male hypopygium with the outer dististyle truncated at apex.

\* Ann. & Mag. Nat. Hist. (12) iv, 1072-1074, 1951.



*Male*.—Length about 13 mm. ; wing 17 mm. ; antenna about 5 mm.

*Female*.—Length about 16 mm. ; wing about 2.5 mm. ; antenna about 2.2 mm.

*Male*.—Frontal prolongation of head brown, sparsely pruinose ; nasus distinct ; palpi brownish black. Antennæ with scape brownish yellow to brown, pedicel light yellow, flagellum black ; flagellar segments rather strongly incised, more than twice the length of the short verticils. Head grey, more darkened behind ; vertical tubercle high and simple, with a capillary black line extending backward to the occiput ; head and antennal scape with normally developed vestiture.

Pronotum obscure yellow, narrowly patterned with brown medially and with grey and brown on the sides. Mesonotal præscutum grey, with four entire dark brown stripes ; posterior sclerites of notum grey, each scutal lobe with two confluent dark brown spots. Pleura light grey, vaguely patterned with darker grey on the ventral anepisternum and ventral sternopleurite ; dorsopleural membrane dull buffy. Halteres with stem light yellow, knob dark brown. Legs with the coxæ light grey ; trochanters yellow ; femora yellow, the tips rather narrowly but conspicuously blackened, the amount subequal on all legs ; tibiæ and basitarsi yellow, the tips narrowly infuscated, outer tarsal segments passing into black ; claws small, simple. Wings medium brown, variegated with large whitish areas ; prearcular and costal fields more yellowed, especially cell *Sc* ; slightly darker brown areas at origin of *Rs*, stigma and over anterior cord, the two last confluent ; white areas well-distributed over the disk, including a complete cross-band beyond cord, extending from the poststigmatal region to the posterior margin in cells  $M_3$  and  $M_4$ , cell 1st  $M_2$  with much of the centre whitened ; veins brown, *Sc* more yellowed. Venation : *Rs* long, about twice *m-cu* ;  $R_{1+2}$  entire, long and straight ; petiole of cell  $M_1$  a trifle longer than *m* ; *m-cu* on  $M_4$  shortly beyond the base, the first section perpendicular.

Abdomen with basal segments reddish brown, the subterminal ones darker brown ; dorsum of first tergite and sublateral portions of succeeding segments infuscated, the tergal borders light grey ; hypopygium reddened. Male hypopygium with the sutures separating the tergite, sternite and basistyle complete. Ninth tergite large, the caudal border terminating in two broad thin obtuse lobes that are separated by a U-shaped notch. Outer dististyle narrowed at base, the apex truncate. Inner dististyle with both the beak and lower beak obtuse, blackened ; region of the posterior crest behind darkened and elevated into a blackened ridge. Gonapophysis long and slender, acicular. Eighth sternite unarmed.

*Female*.—Differs from the male in the dimorphic characters of short antennæ, stout legs and very abbreviated wings.

Antennæ with scape darker, pedicel pale yellow, flagellum black ; flagellar segments simple. Wings very reduced, a trifle longer than the halteres ; veins stout and distorted but clearly showing the venation of the genus. Abdomen almost uniform dark liver-brown. Ovipositor

with the cerci long and slender, straight, the margins smooth ; hypovalvæ long.

*Hab.* North-east Burma.

*Holotype*, ♂, Lung Sa, Adung Valley, altitude 12,000 feet, July 18, 1931 (*Kingdon Ward and Lord Cranbrook*). *Allotopotype*, ♀, altitude 14,000 feet, July 12, 1931. *Paratopotype*, ♂, with the type, June 22, 1931.

This fly and *Tipula (Oreomyza) kaulbackiana*, sp. n., are evidently closely allied despite the difference in toothing of the claws, and other conspicuous differences in coloration and in the structure of the male hypopygium.

*Tipula (Oreomyza) garuda*, sp. n.

General coloration of mesonotum grey, the præscutum with four entire brown stripes ; nasus greatly reduced ; basal segments of antennæ yellow, the flagellum black ; femora brownish black with a broad yellow subterminal ring ; claws (male) toothed ; wings with a marbled pattern of cream-yellow and medium brown ; vein  $R_{1+2}$  entire ; basal segments of abdomen yellow, the outer ones blackened ; male hypopygium with the tergite terminating in two obliquely truncated lobes that are separated by a U-shaped notch ; inner dististyle compressed, the outer margin with an acute blackened point.

*Male*.—Length about 14 mm. ; wing 15 mm. ; antenna about 5 mm.

*Female*.—Wing 18.5 mm. ; antenna about 3 mm.

Frontal prolongation of head relatively long, infuscated except at base above ; nasus reduced to a tiny tubercle ; palpi brownish black. Antennæ (male) moderately long, if bent backward extending virtually to the base of abdomen ; scape, pedicel and proximal half of first flagellar segment yellow, the remainder black ; flagellar segments moderately incised, longer than the verticils. Head brownish grey ; vertical tubercle relatively low, simple ; vestiture of head relatively short, except on genæ.

Pronotum grey, infuscated medially. Mesonotal præscutum grey, with four brown stripes, the intermediate pair confluent and more suffused in front, narrowed and clear-cut behind ; lateral stripes faint ; posterior sclerites of notum brownish grey, the scutal lobes vaguely patterned with darker ; mediotergite with indications of a darker central line. Pleura and pleurotergite grey ; dorsopleural membrane buffy brown. Halteres with stem pale yellow, knob rather weakly infuscated. Legs with the coxæ yellow, grey pruinose, especially the fore pair, provided with long white setæ ; trochanters yellow ; femora brownish black, narrowly yellow basally and with a broad conspicuous subterminal yellow ring ; tibiæ brown, darkened at tips ; tarsi passing into black ; claws (male) with a strong tooth at near mid-length. Wings with a marbled pattern of cream-yellow and medium brown ; cell *C* pale brown, *Sc* clear light yellow, stigma somewhat darker brown ; the light and dark colour before the cord subequal in area and forming a checkered pattern ; beyond the cord with a nearly unbroken pale band from beyond the stigma, through cell 1st  $M_2$ , almost to the posterior border in cell  $M_3$  ; cells  $R_5$  and 2nd  $M_2$  darkened, with paler central areas, more

conspicuous in female; veins brown, paler in the brightened parts. Venation:  $R_{1+2}$  entire;  $Rs$  about two and one-half times  $m-cu$ ; petiole of cell  $M_1$  shorter than  $m$ .

Abdomen with basal four segments yellow, restrictedly patterned sublaterally with brown, the lateral borders beyond the basal rings pale; outer segments blackened. Male hypopygium with the ninth tergite entirely separated from the sternite. Ninth tergite transverse, broadest across basal half, the apex produced into two conspicuous lobes, their apices obliquely truncated, separated by a U-shaped notch. Ninth sternite divided medially by pale membrane to its very base, the outer end of the notch widened, on either side with a small complete accessory sclerite. Basistyle simple, not produced in any manner. Outer dististyle relatively long and narrow, the obtuse tip with conspicuous setae that are longer than elsewhere on the style. Inner dististyle compressed, the beak stout, blackened; lower beak long and narrow, subcylindrical, the tip obtuse; posterior border of style with an acute black spine that is directed outwardly. Gonapophysis appearing as a small weak blade, the tip notched to form two unequal lobes, one of which is acute. Eighth sternite transverse, its posterior border truncate to scarcely emarginate, unarmed.

*Hab.* North-east Burma.

*Holotype*, ♂, Adung Valley, altitude 10,000 feet, June 6, 1931 (*Kingdon Ward and Lord Cranbrook*). *Allotopotype*, ♀, without abdomen, June, 7, 1931.

Generally similar to species such as *Tipula (Oreomyza) kaulbackiana*, sp. n., differing in all details of coloration and, especially, the structure of the male hypopygium, particularly the dististyles.

*Tipula (Oreomyza) leucosticta*, sp. n.

General coloration of thorax light grey, the præscutum with four dark brown stripes; antennae black, the scape weakly infuscated, pedicel light yellow; knob of halteres black; femora brown, the tips broadly darker brown, preceded by a vague yellow subterminal ring; wings whitish, conspicuously patterned with brown; outer half of vein  $R_{1+2}$  atrophied; abdomen dark brown, the lateral tergal borders with a broad silvery grey area.

*Female*.—Length about 17–19 mm.; wing 17–19 mm.; antenna about 2.7–3 mm.

Frontal prolongation of head brownish grey; nasus elongate; palpi black. Antennae with scape weakly infuscated, pedicel light yellow, flagellum black; first flagellar segment long, nearly equal to the succeeding two taken together; intermediate segments subequal to their verticils. Head grey, the vertex with a conspicuous brown central area, extending from the low entire vertical tubercle backward, pointed behind.

Pronotum grey, with a small brown central spot. Mesonotal præscutum with the ground light grey, with four dark brown stripes, the intermediate pair separated by a capillary line of the ground; interspaces and sub-

lateral parts freckled and washed with brown; posterior sclerites of notum clear light grey, each scutal lobe with two dark brown areas, the more posterior one larger; a capillary to scarcely evident brown central vitta on the scutellum and mediotergite. Pleura and pleurotergite clear light grey, the lower face of the katapleural tubercle more darkened. Halteres with stem yellow, knob black. Legs with the coxæ light grey pruinose; trochanters obscure brownish yellow; femora brown, the tips broadly darker brown, preceded by a vague obscure yellow subterminal ring of nearly equal width; tibiae and tarsi dark brown. Wings with the ground-colour whitish, conspicuously patterned with brown, the areas at arculus, origin of  $Rs$ , stigma and wing-tip somewhat darker brown; elsewhere on disk the dark markings completely cross the wing in the cells before cord, being more extensive than the ground areas; a broad, virtually complete white cross-band beyond the cord, barely interrupted by a seam on vein  $M_{1+2}$ ; darkened wing-tip interrupted by a whitish spot near outer end of cell  $R_5$ ; cells  $C$  and  $Sc$  with the ground a trifle more yellowed; veins brown, more yellowed in the interspaces of the outer radial field. Venation: Outer half or more of vein  $R_{1+2}$  atrophied;  $Rs$  long, from two to two and one-half times  $m-cu$ .

Abdomen dark brown, the lateral margins of tergites with broad silvery grey areas. Ovipositor with the valves slender, straight, the margins of the cerci smooth.

*Hab.* North-east Burma.

*Holotype*, ♀, Lung Sa, Adung Valley, altitude 12,000 feet, August 12, 1931 (*Kingdon Ward and Lord Cranbrook*). *Paratopotypes*, 4 ♀♀, July 18–August 5, 1931; two specimens in Alexander Collection, received through exchange with Edwards, one with the manuscript name "*latistriga*".

One of the specimens bears a note by Edwards: "Differs from *leucosema* Edwards in the darker proboscis, broader dark stripe on head, black dorsum of abdomen, etc." These two species, with the further two immediately following, form a group of similar flies that are separable by the pattern of the body and wings, and in details of venation.

*Tipula (Oreomyza) limbinervis*, sp. n.

General coloration grey, the præscutum with four rich brown stripes; antennae with scape and pedicel yellow, flagellum black; first flagellar segment short, less than the succeeding two combined; knobs of halteres dark brown; femora brownish yellow, darkened outwardly, with a very vague obscure yellow ring; wings white, with a marbled brown and brownish grey pattern, beyond the cord appearing as seams to the veins;  $R_{1+2}$  entire,  $Rs$  relatively short; abdominal tergites brown with broad silvery grey borders.

*Female*.—Length about 16–17 mm.; wing 17–18 mm.; antenna about 2.8 mm.

Frontal prolongation of head medium brown, sparsely pruinose; nasus distinct; palpi brownish black. Antennae with scape and pedicel light yellow, flagellum black; first flagellar segment a little longer

than the second but much shorter than segments two and three combined; longest verticils exceeding the segments. Head light brownish grey, with indications of a narrow darker median line; front and orbits clear light grey.

Pronotum grey, vaguely patterned with darker on sides. Mesonotal præscutum clear light grey with four rich brown stripes, the intermediate pair contiguous in front, widely separated behind, lateral præscutal borders less evidently darkened; pseudosutural foveæ small, subcircular; posterior sclerites of notum clear light grey, each scutal lobe with two slightly separated to barely contiguous brown spots; scutellum and mediotergite with a very delicate central brown vitta. Pleura and pleurotergite light grey, the caudal border of the mediotergite darker; dorso-pleural membrane brown. Halteres with stem light yellow, knob dark brown. Legs with coxæ light grey, the fore and hind pairs a trifle more infuscated; femora brownish yellow, becoming darker outwardly, the tips dark brown, preceded by an even more extensive but very vague obscure yellow ring; tibiæ yellowish brown, the tarsi deepening to medium brown. Wings with the ground colour white, heavily marbled with dark brown and brownish grey; cell *C* and base of *Sc*<sub>2</sub> light yellow, cell *Sc* uniformly dark brown; darker brown areas at stigma and over the anterior cord, and as a large spot near mid-length of cell *R*<sub>3</sub> connecting veins *R*<sub>3</sub> and *R*<sub>4+5</sub>; elsewhere on wing-surface before cord with major brownish grey marblings, beyond the cord these areas darker and appearing as seams to the veins; before the cord the dark colour slightly exceeds the amount of pale ground, beyond the cord the reverse being true; veins dark brown. Venation: *R*<sub>1+2</sub> entire; *Rs* relatively short, about one-third longer than *m-cu*; *R*<sub>3</sub> strongly sinuous; petiole of cell *M*<sub>1</sub> subequal to or longer than *m*.

Abdominal tergites medium brown, with broad silvery grey lateral borders, margined internally with darker brown, the more basal segments a trifle paler; tergite one weakly pruinose; sternites pale brown, the posterior borders more pruinose. Genital shield rich chestnut-brown; cerci long and slender, nearly straight, the margins smooth.

*Hab.* North-east Burma.

*Holotype*, ♀, Lung Sa, Adung Valley, altitude 12,000 feet, October 8, 1931 (*Kingdon Ward* and *Lord Cranbrook*). *Paratopotypes*, 5 ♀♀, October 3-15, 1931; two in Alexander Collection, through exchange with Edwards.

While generally similar to *Tipula (Oreomyza) sublimata*, sp. n., the present fly is evidently quite distinct, especially in the structure of the antennæ. In the latter regard it is more like *T. (O.) leucosticta*, sp. n., which differs in all details of wing-pattern and venation. The specific name is that given by Edwards and distributed by him.

*Tipula (Oreomyza) sublimata*, sp. n.

General coloration grey, the præscutum with dark cinnamon-brown stripes; antennæ with first flagellar segment elongate; femora blackened

outwardly, without a subterminal yellow ring; wings whitish, heavily patterned with brown; vein *R*<sub>1+2</sub> entire; abdomen brown, the lateral borders silvery.

*Female*.—Length about 17 mm.; wing 16 mm.; antenna about 2.5 mm.

Frontal prolongation of head above black, dark brown on the sides and beneath; nasus very reduced; palpi black. Antennæ with the scape infuscated, sparsely pruinose; pedicel clear light yellow, flagellum black; flagellar segments nearly simple, with short verticils, the first segment longer than the succeeding two combined. Vertical tubercle grey, high and rounded; posterior vertex more infuscated, with vague indications of a capillary darker vitta, most evident behind; orbits adjoining the narrowest point of vertex narrowly darkened.

Pronotum grey, restrictedly patterned with brown, especially on the protuberant anterior face of the scutum. Mesonotum clear light grey, the præscutum with four clear-cut dark cinnamon-brown stripes, the interspaces opposite the anterior end of the lateral stripes suffused; each scutal lobe with two confluent brown areas; scutellum with a darkened spot on either side at base; mediotergite darkened, the surface sparsely dusted with yellowish grey, leaving areas of the ground exposed; pleurotergite infuscated, the katapleurotergite silvery grey. Pleura grey-pruinose, the ventral meron and ventral sterno-pleurite weakly infuscated; dorso-pleural membrane infuscated. Halteres with stem yellow, knob dark brown. Legs with the coxæ grey, the posterior pair a little darker; trochanters brown, with a darker brown apical spot on lower face; femora brown, vaguely brightened basally, the tips broadly black, without a subterminal yellow ring as in allied species; tarsi brown, passing into black. Wings with the ground colour whitish, heavily patterned with brown, the latter occurring as more or less zigzag areas crossing the wing before the cord and as seams along the veins beyond the cord; cell *C* brownish yellow, cell *Sc* clearer yellow; the amount of pale ground colour subequal to or a little less than the dark pattern; no continuous whitened cross-band beyond cord, this being interrupted by the dark seams along the veins; veins dark brown. Venation: *R*<sub>1+2</sub> entire but pale; *Rs* fully twice *m-cu*; cell 1st *M*<sub>2</sub> comparatively small; petiole of cell *M*<sub>1</sub> subequal to *m*.

Abdomen brown, the surface of the outer segments slightly pruinose; lateral borders of posterior half of tergites and sternites narrowly silvery. Genital shield chestnut-brown; valves of ovipositor long; cerci slender, straight, with smooth margins.

*Hab.* North-east Burma.

*Holotype*, ♀, Lung Sa, Adung Valley, altitude 12,000 feet, June 26, 1931 (*Kingdon Ward* and *Lord Cranbrook*).

In its lengthened first flagellar segment, the present fly agrees most nearly with species such as *Tipula (Oreomyza) leucosticta*, sp. n., differing in the coloration of the body, legs and wings, and in the details of venation.



*Tipula (Oreomyza) digesta*, sp. n.

General coloration grey, the præscutum with three vaguely indicated light brown stripes; frontal prolongation of head long, in direct alignment with the vertex; basal three segments of antennæ yellow, the outer ones darker; first flagellar segment shorter than the succeeding two combined; wings whitish subhyaline, marbled with brown and brownish grey, leaving a broad cross-band of the ground beyond the cord; vein  $R_{1+2}$  entire.

*Female*.—Length about 19 mm.; wing 19 mm.; antenna about 3 mm.

Frontal prolongation of head long, about equal to the remainder, light grey above, darker on sides; prolongation in direct alignment with the remainder of front, not angulated before the antennal bases as common in the genus; nasus distinct; palpi dark brown. Antennæ with basal three segments obscure yellow, the outer ones becoming gradually darkened; intermediate segments a trifle longer than the verticils; first flagellar segment shorter than the succeeding two taken together. Head above light grey, the vertex with a capillary brown median line.

Pronotum buffy grey, narrowly darkened medially. Mesonotum grey, the præscutum with three vaguely indicated light brown stripes, the scutal lobes patterned with the same colour; posterior sclerites of notum grey, the mediotergite with a narrow brown central line. Pleura and pleurotergite light grey; dorsopleural membrane pale. Halteres long, stem pale, knob dark brown. Legs with the coxæ light grey pruinose; trochanters brownish yellow; remainder of legs light brown, the outer tarsal segments passing into black. Wings whitish subhyaline, with a brown and brownish grey marbled pattern, the former represented by costal areas, including the postarcular region, at near mid-distance between the latter and origin of  $R_s$  where there is a third area; stigma and a confluent darkening over the anterior cord; wing-tip extensively darkened, the outer end of cell  $R_5$  chiefly pale; a broad complete white cross-band beyond cord, extending from costa beyond the stigma to the posterior border in cell  $M_3$ ; basad of the cord and behind the anterior border the dark colour slightly exceeds the ground in area; costal cell weakly infuscated, strongly cross-furrowed by elevated ridges to simulate pale veins; veins brown, yellow in the whitened areas. Venation:  $R_{1+2}$  entire; petiole of cell  $M_1$  subequal to  $m$ ;  $R_s$  long, about two and one-half times  $m-cu$  or slightly more;  $m-cu$  at fork of  $M_{3+4}$ .

Abdomen light brown, the lateral borders of the segments more grey pruinose; mid-dorsal area of tergites darker than the sublateral portions; basal tergites more heavily pruinose. Ovipositor with cerci very long and slender, straight, the margins smooth.

*Hab.* East Tibet.

*Holotype*, ♀, Poshö Lhodzong, altitude 12,600 feet, May 26, 1936 (*R. J. H. Kaulback*).

The long slender frontal prolongation of the head, in direct alignment with the vertex, is found also in *Tipula gracilirostris* Alexander, of western

China, an otherwise entirely distinct fly. In its general appearance the present fly is more like *Tipula (Oreomyza) leucosema* Edwards, *T. (O.) leucosticta*, sp. n., and various others described in this paper, differing in the structure of the head and various other characters.

*Tipula (Oreomyza) baileyi*, sp. n.

Size medium (wing, male, about 15 mm.); general coloration of head and thorax grey, the præscutum with three darker grey stripes that are narrowly bordered by brown; antennæ black, the basal two segments yellow; legs black, the femoral bases yellow; claws (male) simple; wings brownish yellow, restrictedly patterned with brown, including the stigma and a seam over the anterior cord; basal four abdominal segments chiefly yellow, the outer, ones black; male hypopygium with the caudal border of the ninth tergite bilobed; outer dististyle slender, gently narrowed outwardly; inner dististyle with the beak terminating in a small decurved point; gonapophysis with tip expanded into a weak spatula, the surface microscopically spiculose.

*Male*.—Length about 11–13 mm.; wing 12–14.5 mm.; antenna about 3.1–3.8 mm.

Frontal prolongation of head brownish black, sparsely pruinose; nasus elongate; palpi black. Antennæ moderately long as shown by the measurements; antennæ variable in colour, in the type with the scape and pedicel yellow, in the paratypes with the scape brownish black, the pedicel conspicuously yellow; flagellum black, the extreme base of the first segment vaguely more brightened; flagellar segments slightly incised, longer than the verticils. Head grey with a narrow brown central line, the genæ slightly darkened; vertical tubercle low.

Pronotum grey, restrictedly patterned with brown. Mesonotal præscutum grey with three brownish grey stripes that are narrowly bordered by still darker brown, most evident as lateral borders to the central stripe; each scutal lobe, with two separated dark brown areas; posterior sclerites of notum grey, the scutellum and mediotergite with a weak central brown line. Pleura grey, the dorsopleural region buffy. Halteres with stem yellow, knob dark brown. Legs with the coxæ buffy, grey pruinose, least extensively so on the posterior legs; trochanters yellow; remainder of legs black, the femoral bases narrowly yellow, most extensively so on the fore legs; claws small, simple. Wings with a strong brownish yellow tinge, the prearcular and costal fields more saturated yellow; stigma dark brown, conspicuous; a slightly paler brown cloud over the anterior cord; a narrow seam along vein  $Cu$  interrupted before the end; very narrow to scarcely evident brown seams at origin of  $R_s$  and over  $m-cu$ ; veins brown. No squamal setæ; veins beyond cord with abundant trichia. Venation:  $R_{1+2}$  entire;  $R_s$  relatively short, slightly more than twice  $R_{2+3}$  or one-fourth longer than  $m-cu$ , the latter some distance beyond the fork of  $M_4$ ; petiole of cell  $M_1$  and  $m$  subequal.

Abdomen with basal four segments yellow, the lateral borders of tergites very narrowly and inconspicuously darkened; tergites with a central spot on first segment, the elongate second segment almost unpatterned, the succeeding ones with a more delicate central vitta that widens behind; outer segments, including hypopygium, black. Male hypopygium with the ninth tergite transverse, the caudal border very gently emarginate to form two long rounded lobes, the margins with sparse delicate setae. Ninth sternite extensive, when viewed from beneath showing a narrow central stripe that is delimited by two nearly parallel pale lines; accessory sternal sclerite completely cut off at ends of sternite, dark coloured, provided with abundant long yellow setae. Outer dististyle long and relatively slender, narrowed very gradually to the obtuse glabrous tip, the remaining surface sparsely setigerous. Inner dististyle a compressed-flattened blade, its rostrum blackened, the tip highly polished and microscopically pointed beneath. Gonapophysis appearing as a slender rod, the dilated spatulate apex bent slightly dorsad, provided with a few scattered spicules. Aedeagus stout, darkened, broadest across base. Eighth sternite with the caudal margin gently convex, glabrous and entirely unarmed.

*Hab.* Tibet.

*Holotype*, ♂, Yatung, altitude 12,000 feet, September 21, 1928 (*Lt.-Col. F. M. Bailey*). *Paratypes*, 2 ♂♂, Changu, altitude 12,500 feet, October 1, 1928 (*Lt.-Col. F. M. Bailey*).

I am very pleased to name this interesting crane-fly for the collector, Colonel Bailey, who has secured numerous Tipulidae in Tibet that have been described by Edwards and myself. Superficially the present fly is most like *Tipula (Oreomyza) venerabilis* Alexander, of Kashmir, which is similarly a late season fly, being on the wing in September and October. The details of coloration and structure of the male hypopygium are quite distinct in the two flies.

*Lechria interstitialis*, sp. n.

General coloration of thorax fulvous-brown, the notum patterned with dark brown; head plumbeous-grey, the anterior vertex very narrow; femora obscure yellow, the tips narrowly infuscated; wings with a faint brownish grey tinge, the costal border slightly yellowed; *r-m* at fork of *Rs*; basal section of  $M_{1+2}$  much longer than the second section; *m* and basal section of  $M_3$  subequal.

*Female*.—Length about 8–8.5 mm.; wing 7–7.5 mm.

Rostrum grey; palpi brown. Antennae dark brown, the scape pruinose; flagellar segments subcylindrical, with the narrow apices of the more basal ones pale; verticils shorter than the segments. Head plumbeous-grey; anterior vertex very narrow, only slightly more than a single row of ommatidia.

Thoracic notum chiefly fulvous-brown, the praescutum in front and the scutal lobes darker brown; scutellum more yellowed, especially behind; mediotergite slightly pruinose, the pleurotergite extensively

yellowed. Pleura slightly pruinose. Halteres with stem yellow, knob infuscated. Legs with the coxae reddish yellow; trochanters yellow; femora obscure yellow, the tips narrowly but evidently infuscated; remainder of legs brownish yellow, the outer tarsal segments brownish black. Wings with a faint brownish grey tinge, the costal border slightly yellowed; veins brown, those in the basal and costal portions more brownish yellow. Venation: *r-m* at the fork of *Rs*; cell 1st  $M_2$  moderately long and narrow, the basal section of  $M_{1+2}$  much longer than the second section; *m* and basal section of  $M_3$  subequal in length; *m-cu* variable in position, from about its own length beyond the fork of *M* to nearly twice this length.

Abdomen chiefly obscure yellow, the tergites vaguely patterned with brown, sternites clearer yellow.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♀, Nedungade, January 2, 1939 (*P. Susai Nathan*). *Paratype*, ♀, December 10, 1938 (*P. Susai Nathan*).

*Lechria interstitialis* differs from the other regional members of the genus, *L. bengalensis* Brunetti and *L. longicellula* Alexander, in the details of coloration and venation.

*Antocha (Antocha) pterographa*, sp. n.

General coloration grey, the praescutum with three brown stripes; antennae dark brown; knob of halteres infuscated; wings whitened, conspicuously patterned with brown; *m-cu* a little less than its own length before the fork of *M*; male hypopygium with the posterior border of the tergite truncate; outer dististyle a gently curved darkened rod, the tip obtuse; gonapophyses appearing as two sets of arms, the inner pair a slender sinuous rod.

*Male*.—Length about 6 mm.; wing 7 mm.; antenna about 1.2 mm.

Rostrum and palpi dark brown. Antennae (male) relatively short, dark brown; flagellar segments oval, a trifle exceeding the verticils. Head above brownish grey, the front, orbits and genae clearer grey; anterior vertex broad.

Pronotum brown on central part, grey on sides. Mesonotal praescutum grey with three brown stripes, the broad central one weakly divided behind; posterior interspaces narrow; posterior sclerites of notum chiefly darkened, pruinose. Pleura brownish grey. Halteres with stem whitened, knob brown. Legs with the coxae infuscated; trochanters pale; remainder of legs dark brown, the extreme femoral bases more yellowed; claws (male) with a long conspicuous basal spine. Wings whitened, heavily and conspicuously patterned with brown, more so than in *nebulipennis*; distinct clouds over arculus, in cell *M* beyond the level of *Rs*, stigma, cord and outer end of cell 1st  $M_2$ ; somewhat paler clouds in outer radial field and at ends of both anal veins, that on 1st *A* larger; veins brown. Venation: *Sc* long,  $Sc_1$  ending nearly opposite the fork of *Rs*; cell 1st  $M_2$  closed, *m-cu* a little less than its own length before the fork of *M*.

Abdominal tergites dark brown, the sternites obscure brownish yellow, the posterior borders narrowly darkened; outer segments and hypopygium more uniformly dark brown. Male hypopygium with the tergite transverse, narrowed outwardly, the posterior border truncate; surface with numerous setae, distributed chiefly as a transverse band some distance back from the caudal margin. Outer dististyle a gently curved darkened rod, its apex obtuse. Inner dististyle a little longer, the apex obtuse; inner margin with numerous long strong setae. Phallosome with the apophyses of either side very different in appearance, the outer pair being short flattened blades, the inner ones as slender sinuous rods, the acute tips paler. Proctiger with numerous long strong setae. Aedeagus strongly decurved at apex.

*Hab.* Tibet.

*Holotype*, ♂, Gautsa, altitude 13,000 feet, June 13, 1928 (*Lt.-Col. F. M. Bailey*).

The most similar regional species is *Antocha (Antocha) nebulipennis* Alexander, of western China and Tibet, which has the wing-pattern distinct, as described, and with the structure of the male hypopygium quite different.

*Paradelphomyia (Oxyrhiza) mitra*, sp. n.

General coloration dark brown, the thoracic pleura striped longitudinally; antennae (female) 13-segmented, with three segments united into a compact yellow fusion-segment; halteres yellow, the outer end of stem darkened; wings whitish subhyaline, heavily patterned with brown; macrotrichia in outer ends of cells beyond cord;  $R_2$  transverse, placed just beyond the fork of  $R_{2+3+4}$ .

*Female*.—Length about 5.5 mm.; wing 5.2 mm.

Rostrum and palpi black. Antennae (female) 13-segmented, with an enlarged fusion-segment that evidently involves three segments; scape and pedicel black, fusion-segment light yellow, remainder of flagellum black; flagellar segments cylindrical, becoming more elongate outwardly, on the intermediate segments subequal to the longest verticils. Head grey.

Pronotum yellowish brown, grey pruinose; pretergites obscure yellow. Mesonotum dark brown, the surface sparsely yellow pollinose, isolating two darker brown intermediate præscutal stripes; centres of scutal lobes more darkened. Pleura and pleurotergite with two dark brown longitudinal stripes, separated by a paler line that extends from behind the fore coxae to the halteres; dorsopleural region pale. Halteres yellow, the outer end of stem more infuscated. Legs with the fore coxae brownish black, the remaining coxae light yellow, the middle pair whitish pruinose; trochanters obscure yellow; femora obscure yellow, the tips broadly darker, the bases less evidently so, this not apparent on the posterior legs. Wings whitish subhyaline, with a heavy brown pattern, including six large darker costal areas, the second at origin of  $R_s$ , fourth stigmal, last at  $R_4$ ; elsewhere about one-half the area is occupied by

slightly paler brown marks including major darkenings at ends of all longitudinal veins; cord and outer end of cell 1st  $M_2$  and fork of  $M_{1+2}$ ; still paler brown washes in cells  $R$ ,  $M$  and  $Cu$ ; veins light brown, slightly deeper in the darkened parts, yellow in the costal interspaces. Macrotrichia in outer ends of cells beyond cord; stigmal trichia abundant. Venation:  $Sc_1$  ending nearly opposite fork of  $R_s$ ,  $Sc_1$  alone nearly one-half  $R_{2+3+4}$ ;  $R_{1+2}$  about one-third longer than  $R_2$ , the latter transverse, placed just beyond the fork of  $R_{2+3+4}$ ; cell  $M_1$  nearly equal to its petiole;  $m-cu$  about two-thirds to nearly its own length beyond the fork of  $M$ .

Abdomen brownish black, the posterior borders of the segments narrowly pale. Ovipositor with the genital shield blackened; cerci elongate, horn-coloured.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♀, Naduvatam, altitude 6,000 feet, September 1950 (*P. Susai Nathan*).

The most similar regional species is *Paradelphomyia (Oxyrhiza) subnebulosa* Alexander, of Assam, which differs in the coloration of the body, legs and wings, the increased number of antennal segments, and the venation.

*Phyllolabis regelationis*, sp. n.

Generally as in *vulpecula* Alexander, of Szechwan, western China, differing especially in the coloration and venation of the wings.

Wings pale yellow, the costal border a trifle deeper in colour; stigma not or scarcely differentiated; a very small brown cloud over the anterior cord, best indicated by a deepening in colour of  $r-m$  and the ends of the adjoining veins, the other veins yellow. Wings broader than in *vulpecula*, the cells correspondingly wider;  $m-cu$  unusually far basad, opposite mid-length of cell 1st  $M_2$ . Macrotrichia of veins relatively short and pale, as compared with *beesoni* Alexander, *laudata* Alexander, *pictivena* Alexander, or *vulpecula* Alexander.

The position of  $m-cu$  and the pattern of the wings are distinctive.

*Hab.* North-east Burma.

*Holotype*, ♀, Lung Sa, Adung Valley, altitude 12,000 feet, August 16, 1931 (*Kingdon Ward and Lord Cranbrook*).

The type is preserved in my collection, having been received in an earlier exchange with Edwards. Mr. Paul Freeman was unable to locate the further specimens in the British Museum that were there at the time the exchange was made.

*Epiphragma (Epiphragma) adoxa*, sp. n.

Mesonotal præscutum with three brownish-grey stripes, the cephalic end more blackened; pleura brownish grey, spotted with brown; antennae black, the fusion-segment yellow; femora obscure yellow with a subterminal dark brown ring; wings with an ocellate brown pattern on a whitish subhyaline ground; beyond the cord, the dark areas relatively small and disconnected, not forming bands of any type;  $m-cu$  lying far basad, at or only a little beyond the fork of  $M$ ; male



hypopygium with the interbases appearing as long, gently curved slender blades, the tips acute.

*Male*.—Length about 11 mm. ; wing 10 mm.

*Female*.—Length about 11–12 mm. ; wing 10.5–11 mm.

Rostrum light brown, palpi black. Antennæ with scape and pedicel black, fusion segment light yellow, the remainder of flagellum black ; outer flagellar segments long-cylindrical, subequal to the longest verticils ; terminal segment a little shorter than the penultimate. Head buffy grey, the vertex with the centre brown.

Pronotum light brown. Mesonotal præscutum with three brownish-grey stripes that end some distance before the suture, their cephalic ends more blackened ; lateral præscutal border brown ; posterior sclerites of notum grey with a transverse brown area across the posterior half of the scutum and the base of scutellum. Pleura brownish grey, spotted with dark brown, including two areas on the propleura and scattered spots on the mesepisternum, dorsal pteropleurite and the pleurotergite. Halteres infuscated, the base of stem narrowly yellow, the apex of knob less evidently so. Legs with the coxæ pale, slightly pruinose, the apices narrowly darkened ; trochanters reddish yellow ; femora obscure yellow, with a subterminal dark brown ring, the pale apex much narrower ; tibiæ and tarsi light brown, the tips of the former slightly darkened. Wings with the ground colour whitish subhyaline, with a heavy brown pattern, the areas before cord, beyond arculus and over origin of *Rs* ocelliform, with large pale centres, the last extended caudad to the tip of vein 2nd *A* as a solidly darkened band ; at and beyond cord dark areas relatively small and disconnected, brown with more or less distinctly paler centres, not forming bands of any type ; veins dark, somewhat paler in the costal interspaces. Venation : *m-cu* unusually far basad, at or only a little beyond the fork of *M*.

Abdominal tergites brown, darker medially, the posterior borders narrowly grey ; sternites with the grey borders more extensive. Male hypopygium with the tergal lobes having almost the same outline as the central notch, their margins microscopically serrulate. Interbase appearing as long gently curved slender blade, its tip acute.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♂, Naduvatom, altitude 6,000 feet, September 1950 (*P. Susai Nathan*). *Allotopotype*, ♀. *Paratopotype*, ♀.

Among the previously described regional species, the present fly is most like *Epiphragma* (*Epiphragma*) *vicina* Brunetti, differing in all details of coloration and venation. I do not have a male of *vicina* for comparison.

*Clydonodozus nilgiricus*, sp. n.

General coloration of præscutum chestnut-brown, with four slightly darker stripes ; each scutal lobe with a large black spot ; knob of halteres brownish black ; femora yellow, the tips conspicuously blackened ; wings brownish yellow, restrictedly patterned with brown.

*Male*.—Length about 7.5 mm. ; wing 7.6 mm. ; antenna about 1 mm.

*Female*.—Length about 10 mm. ; wing 8 mm.

Rostrum dark brown above, restrictedly paler below ; palpi brownish black. Antennæ short, dark brown, scape pruinose ; flagellar segments subcylindrical to cylindrical, shorter than the conspicuous verticils. Head light grey with a dark brown central line on vertex, at its cephalic end elevated into a small tubercle ; anterior vertex broad, approximately five times the diameter of the scape.

Pronotum narrowly infuscated medially above, sparsely pruinose, the sides yellow. Mesonotal præscutum chestnut-brown, with indications of four slightly darker brown stripes, the lateral borders before the suture narrowly darkened ; scutum pruinose, the lobes patterned with brown, the cephalic lateral part of each with a large circular black spot ; scutellum brownish yellow, the sides pruinose ; postnotum brownish yellow, the cephalic half of the mediotergite pruinose ; pleurotergite brownish yellow, the ventral parts heavily pruinose. Pleura with the mesopleura heavily pruinose, the remainder, including the propleura, dorsopleural membrane and ventral sternopleurite obscure yellow. Halteres with stem yellow, knob brownish black. Legs with the coxæ yellow, the fore pair a trifle more darkened ; trochanters yellow ; femora yellow, the tips conspicuously and abruptly brownish black to black, more extensively so on the posterior legs whereabout the outer ninth is included ; tibiæ and basitarsus obscure yellow, the tips more narrowly brownish black, outer tarsal segments brownish black. Wings brownish yellow, the prearcular and costal fields clearer yellow ; a very restricted brown pattern, including the small stigma and greatly reduced seams at origin of *Rs*, along cord, tip of vein *R*<sub>3</sub>, outer end of cell 1st *M*<sub>2</sub> and fork of *M*<sub>1+2</sub> ; veins yellow, darker in the patterned areas, the outer medial veins less evidently darkened. Venation : *R*<sub>2+3+4</sub> and *R*<sub>2+3</sub> subequal ; cell *M*<sub>1</sub> subequal to or shorter than its petiole ; *m-cu* at or just before mid-length of cell 1st *M*<sub>2</sub>.

Abdomen yellow, the hypopygium a trifle darker.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♂, Cherangode, altitude 3,500 feet, November 1950 (*P. Susai Nathan*). *Allotopotype*, ♀.

*Clydonodozus nilgiricus* is quite distinct from the other Oriental species, including *C. curvinervis* Edwards, *C. griseiceps* de Meijere, *C. multistriatus* Enderlein, *C. pallens* (van der Wulp), *C. punctulatus* Enderlein, and *C. xanthoptera* Alexander, all of Borneo, Java and Sumatra. This is the first representative of the genus to be found in India but, since rather numerous species likewise occur in Tropical Africa, its occurrence here was anticipated.

*Erioptera* (*Teleneura*) *nebulifera*, sp. n.

General coloration of thorax brown, darker behind, the pleura with a darker brown dorsal stripe ; head grey ; antennæ black throughout ; legs obscure yellow, covered with abundant narrow dark-coloured scales ; wings obscure yellow, with pale brown clouds, those along the costal border

somewhat darker; male hypopygium with a single slender dististyle; gonapophyses appearing as narrow yellow blades, each with a strong tooth on inner margin at near mid-length.

*Male*.—Length about 3.5–4 mm.; wing 4–4.8 mm.

*Female*.—Length about 4–4.6 mm.; wing 4.6–5.2 mm.

Rostrum and palpi black. Antennæ black throughout; flagellar segments oval, shorter than the verticils. Head grey.

Pronotum brownish yellow, clearer yellow on sides. Mesonotum chiefly medium brown, darker behind, the lateral præscutal borders a little paler; posterior sclerites of notum darker, the postnotum extensively pale along the suture separating the mediotergite and pleurotergite. Pleura obscure brownish yellow, with a conspicuous darker brown dorsal stripe. Halteres dark brown, the base of stem yellow. Legs with the coxæ and trochanters yellow; remainder of legs chiefly obscure yellow, the colour obscured by setæ and abundant long narrow dark-coloured scales. Wings with the restricted ground colour obscure yellow, the surface with extensive pale brown clouds, including spots along the longitudinal veins, in cases confluent; a series of somewhat darker brown costal areas, subequal to or more extensive than the interspaces; veins brown, yellow in the restricted interspaces. Venation: as in the subgenus;  $R_{2+3+4}$  very long, nearly equal to  $R_s$ ;  $R_{2+3}$  subperpendicular, with  $R_2$  at the angle;  $m-cu$  at or close to fork of  $M$ ; vein 2nd  $A$  moderately sinuous, ending about opposite  $m-cu$ .

Abdomen brownish black, the genitalia of both sexes somewhat paler. Ovipositor with the cerci strongly developed, gently upcurved to the acute tips. Male hypopygium with the posterior border of the tergite conspicuously emarginate, the lobes with abundant spinous setæ. A single dististyle, slender, much shorter than the basistyle, provided with small tubercles on outer margin near base. Phallosome consisting of a central depressed plate and a pair of gonapophyses, the latter appearing as relatively narrow yellow blades, each with a strong tooth on inner margin at near mid-length.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♂, Naduvatam, altitude 6,000 feet, September 1950 (*P. Susai Nathan*). *Allotopotype*, ♀, in copula with the type. *Paratopotypes*, several of both sexes.

The most similar species is *Erioptera (Teleneura) annandaleana* nom. n. (for *Erioptera punctipennis* Brunetti, Fauna British India, Diptera Nematocera, pp. 449–450; 1912, nec *Erioptera (Symplecta) punctipennis* Meigen, Syst. Besch. Zweifl. Ins., i, 147, 1818), which differs from the present fly in the distinctive pattern of the body and appendages, including the wing. The former fly is from the eastern Himalayas and is still known only from the female sex.

*Molophilus (Molophilus) lancifer*, sp. n.

Belongs to the *gracilis* group and subgroup; antennæ (male) elongate, nodose; general coloration of thorax brownish yellow, the head darker;

pleura with a broad darker brown dorsal stripe; knob of halteres dark brown; male hypopygium with both dististyles simple, the inner one dilated on outer fourth into a head.

*Male*.—Length about 3.5 mm.; wing 4 mm.; antenna about 3.5 mm.

Rostrum and palpi dark brown. Antennæ (male) brownish black, the scape and pedicel obscure yellow, first flagellar segment brown; flagellar segments elongate-fusiform, the dilated central portion with a whorl of unusually long outspreading verticils. Head brown, sparsely pruinose.

Pronotum obscure yellow medially above, brown on the sides. Mesonotal præscutum, scutum and scutellum brownish yellow, postnotum brown, pruinose. Pleura yellow ventrally, broadly dark brown on dorsal portion to form a conspicuous stripe, the surface more or less pruinose. Halteres with stem yellow, knob dark brown. Legs with the coxæ and trochanters yellowish testaceous; remainder of legs brownish yellow with abundant dark setæ, the outer tarsal segments darker. Wings whitish subhyaline, the prearcular and costal regions a trifle more yellowed; veins brown, more yellowed in the brightened fields; trichia dark brown. Venation:  $R_2$  lying slightly distad of the level of  $r-m$ ; petiole of cell  $M_3$  long, nearly four times  $m-cu$ ; vein 2nd  $A$  sinuous, ending about opposite the posterior end of  $m-cu$ .

Abdomen dark brown, the hypopygium more brownish yellow. Male hypopygium with the dorsal lobe of the basistyle slender, projecting caudad to about two-thirds the length of the outer dististyle, with setæ virtually to the tip; mesal lobe of basistyle a broadly flattened plate, its inner apical angle a trifle more produced. Both dististyles simple, the outer a slender rod that narrows gradually into an elongate spine, the surface of the intermediate portion with abundant microscopic spinulæ; inner dististyle nearly as long, narrowed outwardly to near three-fourths the length, thence slightly expanded, terminating in a short acute spine, the dilated head with microscopic spinulæ.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♂, Cherangode, altitude 3,500 feet, November 1950 (*P. Susai Nathan*).

The present fly is readily distinguished from allied regional species, such as *Molophilus (Molophilus) laxus* Alexander, by the structure of the male hypopygium, particularly the dististyles.

*Toxorhina (Toxorhina) brevirama*, sp. n.

General coloration grey, the præscutum with three brown stripes; antennæ black; legs brownish black, the femoral bases restrictedly obscure yellow; wings with a strong dusky tinge, the base narrowly more yellowed;  $Sc$  relatively short,  $Sc_1$  ending a short distance before origin of  $R_s$ , cell  $M_2$  open by atrophy of  $m$ ,  $m-cu$  at or just before the fork of  $M$ ; abdomen brownish black; male hypopygium with a longitudinal row of strong black setæ on mesal face of basistyle; outer dististyle slender; arms of ædeagus short.

*Male*.—Length, excluding rostrum, about 5.5–6 mm.; wing 5–5.5 mm.; rostrum about 5–5.5 mm.

*Female*.—Length, excluding rostrum, about 7–7.5 mm.; wing 6–6.5 mm.; rostrum about 5–5.5 mm.

Rostrum brownish black, nearly as long as body. Antennæ black throughout. Head brownish grey, clearer grey on front and on genæ; anterior vertex broad.

Præscutum jutting far forward over the pronotum, touching the head or virtually so; disk with three brown stripes, the interspaces slightly paler brown, the lateral borders broadly grey; scutum with centres of lobes dark brown; posterior sclerites of notum light grey. Pleura blackened, heavily grey pruinose; dorsopleural membrane dark. Halteres with stem brownish yellow, knob brown to dark brown. Legs with the coxæ grey pruinose, the fore pair darkened basally; trochanters obscure yellow; remainder of legs brownish black, the femoral bases restrictedly obscure yellow basally. Wings with a strong dusky tinge, the base narrowly more yellowed; veins black, pale in the brightened part. Venation: *Sc* relatively short, *Sc*<sub>1</sub> ending a short distance before origin of *Rs*, *R*<sub>1</sub> ending nearly opposite mid-length of *Rs*; cell *M*<sub>2</sub> open by atrophy of *m*; *m-cu* at or just before fork of *M*.

Abdomen brownish black, pruinose; hypopygium brownish black. Male hypopygium with the mesal face of basistyle with a longitudinal row of strong black setæ and abundant long erect more delicate bristles. Outer dististyle a slender curved rod, narrowed to the acute tip. Inner dististyle longer, broad, the apex obtuse; outer margin beyond mid-length with a powerful recurved black spine. Arms of ædeagus short.

*Hab.* South India (Nilgiri Hills).

*Holotype*, ♂, Naduvatam, altitude 6,000 feet, September 1950 (*P. Susai Nathan*). *Allotopotype*, ♀, pinned with type. *Paratopotypes*, 11 ♂♀.

The only other described regional species is *Toxorhina* (*Toxorhina*) *incerta* Brunetti, of the eastern Himalayas, which differs in details of coloration and venation. In a later paper (*Rec. Indian Mus.* xv, 298, 1918), Brunetti provides further notes on the unique type and states that the pronotum is not at all produced over the neck. By this, it apparently means that the mesonotal præscutum is not so produced and in the present material this is by no means the case, as is described above. The markedly produced præscutum is a generic character that is found in all other members of the genus known to me.