

UNDESCRIBED SPECIES OF NEMATOCEROUS DIPTERA. PART XIII¹

By CHARLES P. ALEXANDER, Amherst, Mass.

The preceding part under this general title appeared in 1963 (Bul. Brooklyn Ent. Soc. 58: 6-11). Species considered at this time include the families Ptychopteridae, Blepharoceridae and Tipulidae, with materials from Assam, Australia, New Caledonia and California. All types of the novelties are preserved in my personal collection.

PTYCHOPTERIDAE

Ptychoptera sikkimensis, n. sp.

Size relatively large (wing of male 10 mm. or more); head black, rostrum yellow; mesonotal praescutum and scutum polished black, posterior sclerites of notum orange; pleura yellow dorsally, the ventral portion with major blackened areas; femora yellow, tips abruptly black; tibiae black, the posterior pair with a broad nearly terminal yellow ring; wings brownish yellow, prearcular and costal regions clearer yellow; abdomen yellow basally, the posterior borders of tergites blackened, the amount increasing on outer segments, the end of abdomen, with the hypopygium, black; male hypopygium with outer tergal lobes small and slender.

Male—Length about 10-11 mm.; wing 10-11 mm.; antenna about 4.4-4.5 mm.

Female—about 10 mm.; wing 11 mm.

Rostrum and mouthparts orange; basal three segments of palpus obscure yellow, the terminal segment black. Antennae black, basal half of scape obscure yellow. Head black.

Pronotum and pretergites obscure yellow. Mesonotal prae-

¹ Contribution from the Entomological Laboratory, University of Massachusetts.

scutum with disk and the scutal lobes uniformly polished black, humeral region yellowed; scutellum and postnotum orange, ventral end of pleurotergite brownish black. Pleura with major blackened areas on propleura, sternopleurite and ventral pteropleurite, less conspicuously so on lower anepisternum; dorsopleural membrane yellow. Halteres yellow, extreme apex of knob vaguely infuscated. Legs with coxae and trochanters light yellow; femora yellow, tips abruptly black, slightly broader on fore femora; tibiae black, with a broad nearly terminal yellow ring on posterior pair, barely indicated on mid-tibiae; tarsi black. Wings brownish yellow, prearcular and costal fields clearer yellow; very narrow to scarcely evident darkenings in stigmal region, over *r-m* and basal section of M_{3+4} ; veins dark brown, more yellowed in the brightened fields. Venation: *r-m* at near three-fourths *Rs*; cell 2nd *A* narrower than in *tibialis*.

Basal abdominal segments yellow, posterior borders of tergites blackened, very narrow on segment two, the color increasing in amount outwardly; outer segments and hypopygium uniformly blackened; basal sternites yellow. Male hypopygium with outer tergal lobes small and very slender, tips obtuse, inner lobes corrugated; paired sternal blades short, oval in outline. Dististyle with stem fringed with long light yellow setae, apical spine long and slender.

Habitat—India (Sikkim).

Holotype—♂, Yedang, in *Rhododendron* association, 9,680 feet, 10 June 1959 (Fernand Schmid). *Allotype*: ♀, teneral damaged, Yagtang, in *Rhododendron* association, 11, 600 feet, 17 June 1959. *Paratypes*: ♂♂, Chachu, in *Rhododendron* association, 9,950 feet, 17 May 1959 (Fernand Schmid).

The nearest regional ally is *Ptychoptera tibialis* Brunetti (*atri-tarsis* Brunetti), which differs in the distinct coloration of the body and legs and in the details of the male hypopygium, including the tergite, dististyle and inner sternal armature.

BLEPHAROCERIDAE

Philorus vanduzeei, n. sp.

Male—Length about 12 mm.; wing 10 mm.; antenna about 1.5 mm.

Female—Length about 13 mm.; wing 10 mm.

Differs from the genotype, *Philorus yosemite* (Osten Sacken), in the unicolorous wings of both sexes and, especially, in the hypopygial structure of the male.

Terminal segment of antenna longer than the penultimate. Wings virtually hyaline in both sexes. Anal lobe of wing much less developed than in *yosemite*, in the latter extended basad to almost opposite the wing insertion. In *yosemite* the wings of male strongly infuscated on about the proximal two-thirds, the apex paling to hyaline, the secondary venation in the cubital and anal fields white and very distinct against the ground. In *vanduzeei* the secondary venation is very faint and more difficult to detect in both sexes. Male hypopygium with the outer dististyle very large, divided into two broadly flattened plates, the outer one narrowed into a point that is tipped with a few long setae; inner blade even larger, more or less folded, the lower parts broadly obtuse. Inner dististyle much smaller, constricted beyond the base, the elongate outer blade with an appressed pendant outer portion.

Habitat—California (San Diego County).

Holotype—♂, mounted on two microscope slides, Alpine, 9 April 1915 (M. C. Van Duzee). *Allotopotype*, ♀, on slide, with the type.

Named for the late Millard C. Van Duzee, distinguished student of the Dolichopodidae. I am indebted to Dr. Charles L. Hogue, Curator of Entomology at the Los Angeles County Museum, and to Mr. D. G. Gibo, who collected material of *Philorus yosemite*.

TIPULIDAE

Plusiomyia kraussiana, n. sp.

Size large (wing of female to 23.5 mm.); general coloration of thorax dark brownish gray, the praescutum with inconspicuous stripes, scutellum abruptly yellowed; antennae with proximal two flagellar segments each with single branches, segments three through nine with two unequal branches that exceed the segments in length; femora yellow, tips abruptly black; wings with a strong brownish tinge, prearcular field more darkened; veins beyond cord without macrotrichia excepting a sparse series on R_{4+5} ; vein M_{3+4} very long.

Female—Length about 27–35 mm.; wing 17.5–23.5 mm.; antenna about 4.2–5 mm.

Frontal prolongation of head relatively short, less than the remainder of head, brownish black; no nasus; palpi short, black, terminal segment shorter than the penultimate. Antennae 15-segmented; scape dark brown, pedicel light yellow, flagellum light brown, the branches black; first flagellar segment with a short apical branch, that of the second segment more than twice as long; flagellar segments three to nine inclusive each with two unequal branches,

the longest exceeding the segments; four outer segments simple. Head black, sparsely pruinose; anterior vertex less than twice the diameter of the scape.

Pronotum brownish black. Mesonotal praescutum dark brown with four still darker inconspicuous stripes, the intermediate pair strongly narrowed and widely separated behind, lateral praescutal borders more blackened; scutum dark brown, lobes extensively darker; scutellum abruptly yellow, parascutella dark; mediotergite dark, silvery gray pruinose, on either side of basal half with a blackened spot. Pleura and pleurotergite brownish gray, dorso-pleural membrane paler brown. Halteres dark brown. Legs with coxae brownish gray; trochanters dark brown; femora yellow, the tips rather narrowly and abruptly black; tibiae yellow; proximal two tarsal segments yellowed, the tips narrowly darkened, outer segments black. Wings with a strong brownish tinge, prearcular field more blackened; veins brown. Veins unusually glabrous, beyond cord with a very few small scattered trichia on distal section of R_{4+5} , the glabrous condition contrasting with that of *neocaledonica* where all veins beyond cord have abundant elongate trichia. Venation: R_{2+3} subequal to Rs ; cell M_1 sessile; M_{3+4} very long, about two and one-half to three times the basal section of M_{1+2} .

Abdomen elongate; tergites dark reddish orange, the posterior borders narrowly, the sublateral areas broadly, blackened, lateral tergal borders narrowly light gray; sternites chiefly reddish orange, outer segments more uniformly darkened; genital shield polished black. Ovipositor with cerci very long and slender, virtually straight.

Habitat—New Caledonia.

Holotype—♀, Col de la Pirogue, 13 February 1962 (N. L. H. Krauss). *Paratypes*: 2 ♀♀, Montagnes des Koghis, February 1962 (Krauss).

Named for Noël L. H. Krauss, who has collected insects in every faunal region on earth, and to whom I am indebted for many new and rare crane-flies. The species is entirely different from the only other regional member of the subgenus, *Plusiomyia neocaledonica* Alexander. It is a larger fly with the general coloration of the thorax darkened except for the yellow scutellum, the yellow femora with abruptly blackened tips, and with the costal border of the wing undarkened. Particular attention is called to the unusually glabrous wing veins.

***Gymnastes (Paragymnastes) comes*, n. sp.**

Thorax polished yellow, the praescutal disk and scutal lobes pol-

ished black; antennae of male elongate, about two-thirds the wing; femora brownish yellow, tips broadly blackened, preceded by narrow yellowed rings; wings conspicuously patterned with brownish black and white, the cells beyond cord chiefly darkened, with broad white bands before cord and near wing base; basal abdominal tergites light brown, outer segments brownish black; male hypopygium with the outer dististyle blackened, very strongly bent at near mid-length, apex obtuse.

Male—Length about 4.5 mm.; wing 4.5 mm.; antenna about 3 mm.

Female—Length about 5.5 mm.; wing 5 mm.

Rostrum yellow, with long black setae; palpi black. Antennae with scape yellow, pedicel brown, flagellum black; in male, antennae very long, flagellar segments elongate-cylindrical, much shorter than in *dasycera*, the erect vestiture correspondingly shorter but conspicuous. Head of male polished dark brown, of female yellow with a transverse brown band on the broad anterior vertex.

In the male, the pronotum and broad lateral margins of the praescutum polished yellow, the disk, with the scutal lobes, polished black, median region of scutum, scutellum and anterior half of mediotergite polished yellow, the last with two confluent black areas on posterior half; pleurotergite weakly darkened. In the female, anterior half of praescutum yellow, central area ferruginous, posterior margin of mediotergite likewise ferruginous. Pleura polished yellow. Halteres brownish black. Legs with coxae and trochanters light yellow; femora brownish yellow, tips broadly blackened, preceded by a narrow more yellowed ring; tibiae and tarsi black; scales of legs broad, leaflike. Wings of male conspicuously patterned, the ground brownish black, with major whitened areas, including a broad band before cord, more obscured behind Cu_1 , and with large areas in bases of cells R and M and in the bases of the Anal cells, including the prearcular field; beyond the cord the outer medial cells paler brown than the radial field; veins brownish black, including those in the whitened areas. In the female, wing apex beyond cord more uniformly blackened, central whitened band complete, subbasal whitened areas more confluent, forming a broad diffuse band. Conspicuous macrotrichia on veins beyond general level of origin of R s, including nearly complete series on Cu_1 and 2nd A , lacking on 1st A . Venation: R_{2+3+4} about one-third longer than R_3 .

Abdominal tergites light brown, sternites yellowed, hypopygium more brownish black. Male hypopygium with the outer dististyle

blackened, very strongly bent at near midlength, the apex obtuse.

Habitat—New Caledonia.

Holotype—♂, Montagnes des Koghis, February 1962 (Krauss).
Allotopotype: ♀.

The only other regional member of the genus with patterned wings is *Gymnastes (Paragymnastes) dasycera* Alexander, readily told by the much longer antennae of the male, the only slightly patterned wings, and in the structure of the male hypopygium, including the outer dististyle.

***Horistomyia oxycantha*, n. sp.**

Generally similar to the genotype, *Horistomyia leucophaea* (Skuse), differing conspicuously in the structure of the male hypopygium, particularly the phallosome.

Wings with the stigma and darkened seam along vein *Cu* more conspicuous than in *leucophaea*. Venation: Veins R_3 and R_4 only slightly divergent, cell R_3 at wing margin about one-half more extensive than cell R_4 and less extensive than cell R_2 ; in *leucophaea*, vein R_4 is deflected more strongly toward the wing tip, cell R_3 being from about two and one-half to nearly three times as extensive as cell R_4 and slightly more than cell R_2 . Male hypopygium with the phallosome relatively small, the various elements weak and not expanded at their tips, all being extended into acute pale points, the largest element with three or four long slender subterminal spines, subappressed, directed outwardly. In *leucophaea*, the strongest phallosomic element is conspicuously dilated at apex, the weakly developed subterminal spines recurved. *Horistomyia occidentalis* Alexander and *H. victoriae* Alexander have the hypopygial details quite distinct.

Habitat—Australia (New South Wales).

Holotype—♂, Kutinga, near Tamworth, 24 August 1960 (M. Edwards).