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NEW OR LITTLE-KNOWN SPECIES OF EXOTIC TIPULIDAE
(DIPTERA): VII.

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THE preceding part in this series of papers was published in 1949, *Proc. R. ent. Soc. Lond.* (B) 18: 153–159. The species treated herewith are from Africa, where they were taken chiefly by my friends, the late Drs. John G. Myers and Jacob A. Reis. The types are preserved in my collection.

***Tipula (Acutipula) auspicis* sp. n.**

Size relatively small (wing, male, about 15 mm.); antennae of male elongate, about one-half as long as body; general coloration of mesonotum reddish brown, the posterior sclerites and pleura yellow, unmarked; legs obscure yellow, the tips of the femora and tibiae narrowly and very inconspicuously darkened; wings with a very weak brownish tinge, cells *C* and *Sc* scarcely darker, stigma long and narrow, pale brown; *Rs* short and weak, about two-thirds *m-cu*; abdominal tergites reddish brown, sternites and hypopygium yellow; male hypopygium with the tergite produced into a narrow depressed-flattened blade that splits at apex into two weakly divergent earlike lobes, unprovided with spines; inner dististyle with the entire outer surface provided with very abundant erect spinous setae that are produced at tips into long hairlike points.

Male.—Length about 14 mm.; wing 15.5 mm.; antenna about 7 mm.

Frontal prolongation of head brown, relatively long; nasus small and inconspicuous, with long black setae; palpi black. Antennae (male) elongate, as shown by the measurements; scape, pedicel and extreme base of first flagellar segment yellow, remainder of organ black; flagellar segments long-cylindrical, with very feebly developed basal swellings, the verticils shorter than the segments, restricted to the enlargements; remainder of segments with an abundant erect white pubescence. Head cinnamon brown, the front paler; posterior orbits narrowly more yellowed.

Pronotum reddish brown medially, paling to yellow on the sides. Mesonotum chiefly reddish brown, without distinct dark pattern, the scutellum and postnotum more yellowed. Pleura yellow. Halteres pale brown, the base of the stem restrictedly yellow. Legs with all coxae and trochanters yellow; remainder of legs obscure yellow, the tips of the femora and tibiae narrowly and very inconspicuously darkened; outer tarsal segments scarcely infuscated. Wings with a very weak brownish tinge, cells *C* and *Sc* scarcely darker; stigma long and narrow, pale brown, inconspicuous; veins brown, in the costal field more yellowish-brown. Venation: *Rs* short and weak, about two-thirds *m-cu* and three-fifths the long R_{2+3} ; R_{1+2} gently upcurved; petiole of cell M_1 and *m* subequal; cell 1st M_2 relatively long, the second section of M_{1+2} more than twice the basal section.

Abdominal tergites reddish brown, sternites light yellow; hypopygium yellow. Male hypopygium with the caudal border of tergite produced into a narrow depressed-flattened blade, at apex split into two weakly divergent earlike lobes that are separated by a deep U-shaped notch; lobes virtually free from setae but with several microscopic punctures. Outer dististyle relatively long and narrow, the tip obtuse. Inner dististyle with the beak and outer part of the style very densely covered by a cushion of short erect spinous setae that are produced at tips into very long hairlike points; lower beak of style a low darkened flange that is produced into two spinous points, one at either end of the flange.

Holotype, ♂, CAMEROUN: Boopa, 9.iii.1931 (*J. A. Reis*).

Tipula (Acutipula) auspicis is most nearly related to *T. (A.) oryx* Alexander, which differs evidently in coloration and in all details of structure of the male hypopygium.

***Pseudolimnophila exsul* sp. n.**

Allied to *frugi*; general coloration of mesonotal praescutum reddish brown, with three narrow brown stripes; pseudosutural foveae blackened, tuberculate pits pale; antennae relatively long, black, the base of the first flagellar segment yellow; halteres darkened, the base of stem yellow; legs brown, tarsi deepening into black; wings with a strong brownish tinge, very restrictedly patterned with darker brown, chiefly including the stigma and a cloud over the anterior cord; *Rs* in direct longitudinal alignment with *R*₅; *r-m* at or just before the fork of *Rs*; *m-cu* at from one-third to one-fifth the length of cell 1st *M*₂; anterior arculus preserved; abdomen with tergites brown, their posterior lateral borders obscure yellow, sternites uniformly yellow.

Female.—Length about 8.5 mm.; wing 9 mm.; antenna about 3 mm.

Rostrum blackened, sparsely pruinose; palpi black. Antennae (female) relatively long, as shown by the measurements, black throughout with the exception of the narrow yellow base of the first flagellar segment; outer flagellar segments long-cylindrical, the longest verticils subequal in length to the segments; terminal segment subequal to or longer than the penultimate. Head grey, more brownish grey on the central part of vertex; anterior vertex about twice the diameter of scape with an oval impressed median area.

Pronotum dark brownish grey. Mesonotum chiefly reddish brown, with three narrow but relatively distinct brown stripes, the central one most distinct; pseudosutural foveae long-oval, blackened; tuberculate pits much paler, reddened, placed close to cephalic border, separated from one another by a distance equal to about one-third their own diameter; scutal lobes and disk of scutellum weakly darkened; mediotergite extensively grey pruinose, the lateral and posterior portions more brownish yellow; pleurotergite darkened, its cephalic part paler. Pleura brown, the pteropleurite behind and the meral area more yellowed. Halteres dusky, base of stem yellow, knob dark brown. Legs with the coxae testaceous yellow, the fore pair a trifle darker; trochanters obscure yellow; remainder of legs brown, the femoral bases a little brighter; tarsi passing into black. Wings with a strong brownish tinge, very restrictedly patterned with darker brown, the latter including the stigma, a cloud over the anterior cord, and more restricted areas over the origin of *Rs*, posterior cord and outer end of cell 1st *M*₂; prearcular field more brownish yellow; veins brown. Venation: *Sc*₁ ending just beyond the fork of *Rs*, *Sc*₂ near its tip; *R*₂ and *R*₂₊₃ subequal or the latter somewhat shorter; *R*₂₊₃₊₄ rather strongly arcuate; *Rs* in direct longitudinal alignment with *R*₅, the basal section of the latter lacking; *r-m* at or immediately before the fork of *Rs*; cell 1st *M*₂ rectangular, parallel-sided, with *m-cu* at from one-third to one-fifth its length; vein 2nd *A* strongly arcuated near outer end; anterior arculus preserved.

Abdominal tergites brown, the posterior lateral borders of the segments obscure yellow; dorsopleural membrane darkened; sternites clear light yellow.

Holotype, ♀, SUDAN: Outlaw's village, Boma Plateau, altitude 3700 ft., 20.ii.1939 (*J.G. Myers*); Collector's No. 10, 503.

By my key to the African species of *Pseudolimnophila* (1924, *Ark. Zool.* 16 (18): 4-7), the present fly runs to *frugi* (Bergroth), of South Africa, which appears to be the nearest described ally. The new form differs evidently in all details of coloration of the body, wings and legs, and in the details of venation. From the likewise allied *P. senex* Alexander, it differs in its smaller size and other characters.

***Pseudolimnophila bisatrata* sp. n.**

Generally similar to *aurantiaca*; size medium (wing, female, 8 mm.); general coloration of mesonotal praescutum and scutum almost uniform light fulvous yellow, without distinct markings; head dark brown, pruinose; antennae with scape brownish yellow, sparsely

pruinose, pedicel brownish yellow; pleural region yellow, on either side with two conspicuous subcircular black areas, one occupying most of the pleurotergite, the other much of the anepisternum; knob of haltere darkened; legs light brown; wings with a strong fulvous brown tinge, the prearcular and costal fields a little darker; stigma small, pale brown; vein R_2 very faint; veins R_3 and R_4 strongly divergent at tips; $m-cu$ just beyond the fork of M ; abdominal tergites dark brown, sternites obscure yellow.

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

Rostrum and palpi black. Antennae with scape light brownish yellow, sparsely pruinose; pedicel brownish yellow; flagellum broken. Head dark brown, pruinose.

Pronotum only moderately massive, brownish black in front, testaceous yellow behind. Mesonotal praescutum and scutum almost uniformly light fulvous yellow, without distinct markings; praescutum with anterior end narrowed and slightly projecting; scutellum slightly more infuscated; mediotergite pale brown, pleurotergite chiefly occupied by a major subcircular black spot, its cephalic part yellow. Pleura light yellow, the anepisternum chiefly occupied by another black spot, a trifle smaller than the one on the pleurotergite; dorsopleural membrane weakly brownish yellow. Halteres with stem yellow, knob darkened. Legs with the coxae and trochanters light yellow; remainder of legs light brown. Wings with a strong fulvous brown tinge, the prearcular and costal fields a trifle darker; stigma small, pale brown, only a little darker than the costal borders; veins brownish yellow. Venation: Sc_1 ending shortly beyond fork of Rs , Sc_2 a little removed from its tip; R_2 very faint, a trifle shorter than R_{2+3} ; veins R_3 and R_4 strongly divergent at tips so cell R_3 at margin is more extensive than cell R_2 and nearly five times cell R_4 ; $m-cu$ just beyond fork of M ; anterior arculus preserved.

Abdominal tergites dark brown; sternites obscure yellow. Valves of ovipositor elongate, horn-yellow.

Holotype, ♀, SUDAN-ETHIOPIA: Kende, Aloma Plateau, 13.xii.1938 (*J. G. Myers*); Collector's No. 10,223.

By my key to the African species of the genus (*loc. cit.* 16 (18): 4–7) the present fly runs most nearly to *aurantaca* Alexander, of South Africa (Southern Rhodesia), which seems to be the closest described ally. The present insect differs from all generally similar species by the very conspicuous paired black spots on the sides of the thorax.

***Trentepohlia* (*Trentepohlia*) *perpicturata* sp. n.**

General coloration yellow; knobs of halteres darkened; femora yellow, the tips paling to yellowish white; wings whitish, with three brown crossbands, the most basal one narrow, the others very broad, variegated by spots of the ground colour; abdomen bicoloured, dark brown, ringed with yellow, the subterminal segments uniformly blackened.

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

Rostrum and palpi black. Antennae black throughout, relatively elongate. Head chiefly dark in colour.

Thorax almost uniformly yellow, the pleura a trifle more darkened in the dorsopleural region. Halteres pale, the knobs darkened. Legs yellow, the femoral tips broadly but inconspicuously paling to yellowish white; tibiae and tarsi dirty whitish. Wings with the ground colour whitened, the prearcular and costal portions more yellowish; a heavy brown crossbanded pattern that is more extensive than the ground; basal band narrow, lying shortly beyond the arculus, extending from R to the anal angle, including the outer half of cell 2nd A , slightly interrupted in cell Cu ; second band very broad, almost quadrate in outline, lying chiefly before the cord, extending completely across the wing but paler, in the cubital and anal fields, variegated by pale greyish areas in cell Sc_1 , beyond vein Sc_2 on basal half of cell R_1 and near the outer end of cell R ; outer band subequal in extent to the last, involving the entire wing tip back to the level of the base of cell R_5 , variegated by an extensive ground area in cell R_3 and a smaller one near the outer end of cell R_5 ;

veins pale yellow, darkened in the brown areas. Venation: *Rs* long, arcuated at origin, exceeding *R*₃ but shorter than *R*₄; veins *R*₂₊₃₊₄ and *R*₃₊₄ meeting at an angle at point of departure of *R*₂; *m-cu* shortly before the fork of *M*.

Abdomen bicoloured, dark brown, segments two to six, inclusive, with a conspicuous basal yellow ring that likewise involves the posterior border of the preceding sternite; subterminal segments uniformly blackened.

Holotype, ♀, CAMEROUN: Sakbayeme, 1.viii.1931 (*J. A. Reis*).

Trentepohlia (*Trentepohlia*) *perpicturata* is very different from the now numerous Ethiopian species of the subgenus. The pattern of the legs and especially the very heavy wing pattern readily suffice to separate the fly from all such allies.

Erioptera (Podoneura) malagastica sp. n.

Very similar to the type of the subgenus, *anthracogramma* (Bergroth), differing especially in the structure of the male hypopygium.

Male hypopygium with the outer dististyle blackened, nearly straight, the stem stout, terminating in a strong straight spine, with a smaller appressed lateral spine on outer face; outer surface of style in the vicinity of the lateral spine with a few microscopic denticles and sparse erect setulae. Inner dististyle shorter, at apex narrowed into a strong blackened spine. Gonapophysis appearing as a curved blackened horn. In *anthracogramma* the dististyles and gonapophyses are slightly different, especially the inner dististyle, which is broadly obtuse at apex.

Holotype, ♂ on microscope slide, MADAGASCAR: Vinanitelo.

Toxorhina (Toxorhina) taeniomera sp. n.

Size small (wing, male, less than 4 mm.); general coloration of body grey, the praescutum and scutum patterned with darker; rostrum, halteres and legs blackened; wings whitish subhyaline, unpatterned; veins brownish black, conspicuous; *m-cu* before the fork of *M*; abdomen, including hypopygium, uniformly dark brown; male hypopygium with the dististyle profoundly divided to form two separate arms or branches; aedeagus with the arms unusually long and slender, each exceeding the total length of the combined basistyle and dististyle.

Male.—Length, excluding rostrum, about 4 mm.; wing 3.8 mm.; rostrum about 2.6 mm.

Female.—Length, excluding rostrum, about 5.5 mm.; wing 4.5 mm.

Rostrum black, elongate, about two-thirds the length of wing. Antennae black throughout; flagellar segments oval to short-cylindrical. Head dark leaden grey, the broad anterior vertex more silvery grey.

Pronotum and cervical region brownish grey. Mesonotum grey, the praescutum with three poorly defined darker stripes that are confluent behind; scutal lobes similarly darkened. Pleura uniformly dark grey, including the dorsopleural membrane. Halteres brownish black, the base of stem restrictedly brightened. Legs with the coxae dark plumbeous grey; trochanters dark brown; remainder of legs brownish black, only the femoral bases a trifle more brightened. Wings whitish subhyaline, unpatterned; veins brownish black, conspicuous. Venation: Cell 1st *M*₂ large, *m* much shorter than the basal section of *M*₃; in one wing of type, cell 2nd *M*₂ with a short petiole to form an element *M*₁₊₂₊₃; *m-cu* in male almost its own length before the fork of *M*, in female much closer to this fork, the distance slightly variable.

Abdomen, including hypopygium, uniformly dark brown. Male hypopygium with the dististyle profoundly divided to form a second branch or inner style at base of the primary arm, the latter an elongate relatively slender blade, gradually narrowed to the oblique apex, on basal half of outer margin with a high flange; inner branch or style only about one-third the length of the primary one, appearing as a slender, gently curved rod. Aede-

gus with the arms unusually long and slender, gradually narrowed and sinuous, the length of either arm exceeding the total combined length of the basistyle and dististyle.

Holotype, ♂, FRENCH EQUATORIAL AFRICA: Brazzaville, 2.ii.1938 (*J. A. Reis*). Allotype, ♀, CAMEROUN: Momjipome, 20.i.1938 (*J. A. Reis*).

The present fly is closest to *Toxorhina (Toxorhina) cisatlantica* Speiser, likewise from the Cameroun, which is still known to me only from the original description. This differs from the present fly in several important regards, as in the coloration of the body and legs, and in the whitened halteres. The elongate arms of the aedeagus seem to be a character of both of these flies.

Styringomyia subimmaculata sp. n.

Size small (wing, male, about 4 mm.); general coloration obscure yellow, without distinct pattern; legs obscure yellow, unpatterned, only the terminal tarsal segment black; wings greyish yellow, the dark pattern very restricted, best indicated by a darkening of the *r-m* crossvein; male hypopygium with the spine of the basistyle long and black, approximately twice the lobe; setae of outer dististyle three or four in number, very weak; ninth tergite a broad cushion with a further narrow median lobe on outer portion.

Male.—Length about 6.5 mm.; wing 4.1 mm.

Rostrum and palpi pale brown. Antennae pale yellow, the basal segments a trifle darker; verticils long and conspicuous, black. Head pale brown, with erect black bristles.

Thorax above chiefly obscure yellow, without distinct pattern. Pleura yellow. Halteres weakly infuscated. Legs with the coxae and trochanters yellow; remainder of legs obscure yellow, without distinct pattern on any of the segments, the terminal tarsal segment abruptly black. Wings pale greyish yellow, the prearcular field a little clearer yellow; no dark pattern excepting a vague cloud over *r-m*; veins yellow, *r-m*, fork of M_{1+2} , *m-cu* and the tip of vein *2nd A* a trifle darker. Venation: Cell *2nd M*₂ short-petiolate; *m-cu* about its own length beyond the fork of *M*; vein *2nd A* curved gently into the anal margin.

Abdomen pale brownish yellow, without distinct pattern; hypopygium yellow, with parts of the styli and phallosome blackened. Male hypopygium with the ninth tergite a broad cushion, clothed with abundant recurved spinous setae; median portion of cushion further produced into a narrow median lobe. Ninth sternite a narrow pale lobe that bears two stout blackened setae at apex. Basistyle with the terminal spine single, long and black, approximately twice as long as the lobe. Outer dististyle elongate, pale, the apex weakly darkened, bearing a single powerful seta at apex; setae along face of style weak, three or four in number. Middle dististyle much smaller than the inner one, bearing three concentrated groups of long peg-like spines, two of these marginal, the third placed lower on the face of style, all groups with about a dozen spines each. Inner dististyle a very large expanded blade, the outer apical angle produced into a slender arm that bears two strong spines; margin of style, beginning at base of this arm, with a row of long spinous setae, totalling about twenty, the more basal ones much more slender and weaker; apex of style laterad of the arm with a further close comb of about fifteen blackened spines; basal angle of style produced into a small acute point. Phallosome with the apex consisting of two blackened cultrate blades, the upper margin with a single strong spine.

Holotype, ♂, CAMEROUN: Momjipome, along stream, 20.1.1938 (*J. A. Reis*).

The present fly is readily distinguished from all other similar regional species by the virtually unpatterned legs, unusually restricted wing pattern, and the structure of the male hypopygium. In some respects it agrees with *Styringomyia impunctata* Edwards, of northern Nigeria, differing in the pattern of the legs, the venation, and in the structure of the hypopygium.