

UNDESCRIBED CRANE-FLIES IN THE PARIS MUSEUM (TIPULIDÆ, DIPTERA):

AFRICAN SPECIES OF THE SUBFAMILY TIPULINÆ, TRIBE TIPULINI,

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SUBFAMILY TIPULINÆ.

TRIBE TIPULINI.

GENUS *Tipula* Linnaeus.

*Tipula dahomiensis*, nov. sp.

General coloration brownish orange; antennae rather long, the flagellum dark brown; legs long and slender, the metatarsi longer than the tibiae, claws toothed; wings subhyaline, the costal cell more yellowish, the stigma dark brown; abdomen orange-brown with a black subterminal ring.

*Male*. — Length about 18 mm., wing about 15 mm. 5.

Frontal prolongation of the head long and slender, yellowish orange; palpi dark brown, the last segment rather short, not as long as the two preceding taken together. Antennae with the scapal segments orange-brown, the base of the third segment similar; remainder of the organ dark brown. Antennae rather elongate, if bent backward extending to beyond the wing-root; flagellar segments elongate-cylindrical, the basal swelling with long black verticils that are but little shorter than the segments that bear them. Head brownish orange.

Thorax brownish orange throughout, the praescutum without distinct stripes. Halteres brown, the stem somewhat paler. Legs long and slender, the coxae brownish orange; trochanters dull yellow; femora and tibiae yellowish brown, the tips darker brown; tarsi dark brown; metatarsi longer than the tibiae; claws with a long slender tooth before midlength.

(1) Voir *Bulletin du Muséum*, 1919, p. 606, 1920, p. 51.

Wings subhyaline, the costal cell more yellowish; stigma dark brown; veins dark brown. Venation:  $R_s$  long, a little longer than  $R_{2+3}$ ;  $R_2 + 3$ , almost in a straight line with  $R_3$ ;  $R_2$  faint and evidently in the process of atrophy, the base of cell  $R_2$  acute; cell 1st  $M_2$  narrow; petiole of cell  $M_1$  short, the cell large and ample; *m-cu* obliterated by the punctiform contact of  $Cu_1$  on  $M_3 + 4$ .

Abdomen orange-brown; a subterminal black ring including segments seven and eight and all but the base of six; hypopygium orange-yellow. Male hypopygium with the sclerites of the ninth segment fused into a continuous ring. Tergal region flattened or but slightly convex, the caudal margin with a flattened blade on either side of the median line, separated from one another by a deep U-shaped notch; viewed from the side these lobes are seen to be rather deep, compressed blades. Pleural region slightly produced caudally, the appendages borne at the apex; outer pleural appendage large, flattened, pale yellow, inner pleural appendage a rather simple compressed blade, the posterior lobe with the outer face densely clothed with whitish appressed hairs. Sternal region very extensive, deeply incised medially. Eighth sternite with a rather large median area of long yellowish hairs that are directed toward the median lines.

*Habitat*. — Dahomey.

Holotype, ♂, Environs de Porto-Novo, 1909. (Waterlot.)

Type in the Paris Museum.

*Tipula mossambicensis*, nov. sp.

General coloration brown; legs brownish yellow, the femora and tibiae tipped with darker; wings brown, longitudinally streaked with whitish.

*Female*. — Length 13 mm, 7; wing, 11 mm. 8.

Frontal prolongation of the head dark brown, sparsely light yellow pollinose; nasus lacking. Palpi dark brown, the last segment short, not as long as the two preceding taken together. Antennae with the first six segments light yellow, the remaining segments dark brown; the first flagellar segment is long with a conspicuous basal enlargement that is longer than the second scapal segment; remaining flagellar segments long-cylindrical with a short whitish pubescence; the verticils are very minute, on the basal flagellar segments occurring near midlength and near the apex; on the distal flagellar segments only the apical bristle persists. Head dark brown, paler adjoining the inner margin of the eyes.

Thorax brown, the praescutum with two indistinct intermediate brown



stripes; scutellum and postnotum yellowish brown. Pleura brownish yellow, with dark brown blotches. Halteres pale yellow with the knobs dark brown. Legs with the coxae brown; trochanters dull yellow; femora and tibiae brownish yellow, the tips broadly dark brown; tarsi light brown, the outer tarsal segments passing into black. Wings brown, longitudinally streaked with white, a broad interrupted streak extending from the outer ends of cells *R* and *M* through cells 1st *M*<sub>2</sub> and *R*<sub>5</sub> to the wing-margin; a pale area before and beyond the stigma, the latter in cell *R*<sub>2</sub>; the base of cell 1st *A* pale; stigma and veins dark brown. Venation: Cell 2nd *R*<sub>1</sub> very small; cell 1st *M*<sub>2</sub> rather long and narrow; petiole of cell *M*<sub>1</sub> short; fusion of *Cu*<sub>1</sub> and *M*<sub>3+4</sub> extensive, greater than *m* alone, the fusion beginning some distance beyond the fork of *M*.

Abdominal tergites brown, the smooth basal ring darker brown, posterior tergites yellowish laterally; valves of the ovipositor long and acicular, almost straight, reddish brown.

*Habitat.* — Mozambique.

Holotype, ♀ Vallée du Pungoué Guengere. 1906. (G. Vasse.)

Type in the Paris Museum.

*Tipula mossambicensis* is close to *T. jonesi* Alexander (Natal) and, with this species, forms a well-marked group or subgenus. It is readily told from *T. jonesi* by the less conspicuous pubescence on the much shorter flagellum, the very differently colored legs (which in *T. jonesi* have the femora dark brownish black, the tibiae abruptly whitish), and the darker wings with fewer white streaks. The venational details are different in the two species, especially the length of the medial crossvein which is long, with the cell 1st *M*<sub>2</sub> widest distally in *T. jonesi*, much shorter, with the cell 1st *M*<sub>2</sub> widest basally in *T. mossambicensis*.

#### GENUS *Nephrotoma* Meigen.

##### *Nephrotoma scalarifer*, nov. sp.

Antennae with the basal segments yellow, the apical segments dark brown; mesonotum shiny yellow, the praescutum with three stripes, the median stripe much paler than the lateral stripes; pleura with large whitish areas on the mesepimera; fore femora largely blackened, hind femora with the apical third blackened; wings grayish, the apex darkened; abdominal tergites yellow, the lateral and caudal margins broadly black producing a ladder-like appearance.

*Female.* — Length about 15 mm., wing, 13 mm.

Frontal prolongation of the head reddish, the palpi dark brown. Antennae with the three basal segments yellow, the others segments gradually passing into dark brown. Head deep orange, the vertical tubercle distinct; occipital mark large, broadly triangular, pale brown.

Pronotum above dull yellow. Mesonotal praescutum shiny yellow with three darker stripes, the median stripe pale reddish brown, narrowed behind and ending before the suture; lateral stripes shiny throughout, much darker than the median stripe, wine-brown, their outer ends curved outwards; scutum yellow, the lobes with two large confluent reddish black spots that continue forwards to the suture; scutellum brownish testaceous; postnotum light yellowish white, the posterior margin with two irregularly circular spots of brown. Pleura yellow, the lateral portions of the postnotum and the mesepimera between the wing-root and the mesocoxa china-white, this also including the mesosternum between the mesocoxa and metacoxa; a large reddish black spot on the mesosternum immediately in front of the mesocoxa; mesepisternum with indistinct reddish blotches. Halteres dark brown, the tips of the knobs indistinctly yellow. Legs with the coxae reddish yellow; trochanters dull yellow; femora dull brownish yellow, broadly tipped with dark brown, very extensive on the fore legs where less than the basal third is pale, narrowest on the hind legs where the basal two-thirds are pale; fore tibiae and tarsi brownish black; hind tibiae and tarsi dark brown, the former tipped with still darker brown. Wings grayish, the costal and subcostal cells more yellowish; wing-apex indistinctly darkened; stigma oval, dark brown; an indistinct brown seam along the cord continued to cell 1st *M*<sub>2</sub>. Venation: Cell 1st *M*<sub>2</sub> broadly sessile; fusion of *Cu*<sub>1</sub> and *M* slight.

Abdominal tergites yellow, the lateral margins of the segments narrowly blackened, on the second to seventh segments with a broad black caudal margin; less distinct transverse markings on the first tergite and very faintly on the basal half of the second tergite. Ovipositor reddish horn-colored.

*Habitat.* — Egyptian Soudan.

Holotype, ♀, Province de Sennar. 1907 (Ch. Alluaud).

Type in the Paris Museum.