Undescribed Crane-Flies in the Paris Museum (Tipulidæ, Diptera):

African species, Part II

(continued),

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SUBFAMILY TUPULINAE.

TRIBE TIPULINI.

Genus Tipula Linnaeus.

Tipula rothschildi nov. sp.

Female subapterous; general coloration light yellowish brown; legs yellow, the tips of the femora and tibiae, and the tarsi dark brown; wings of the female much shorter than the halteres; abdomen yellowish, a dark brown spot on the first sternite.

Female. — Length 12 mm., wing about 1 mm.

Middle leg, femur, 4,4 mm.; tibia, 4,4 mm.; tarsus, 6 mm.

Hind leg, femur, 6 mm.; tibia, 6,9 mm.; tarsus, 6 mm.

Described from an alcoholic specimen.

Frontal prolongation of the head rather long, yellow; nasus comparatively short and stout; palpi dark brown, the last segment about equal to the two preceding taken together. Antennae with the scapal and first flagellar segment light yellow; remainder of the antennae broken. Head light brown.

Mesonotal praescutum light yellowish brown, the stripes indistinct, indicated behind at the suture as a semicircular dark brown mark. Pleura brownish yellow. Halteres light brown, the knobs broken. Legs short, obscure yellow, the tips of the femora and tibiae dark brown; tibial spurs long and slender; tarsi dark brown. Wings very small, the anal region

with a deep incision cutting off a prominent alula, wing obscure yellow with tree large brown blotches.

Abdominal segments dull yellow, the lateral and caudal margins of the segments indistinctly darkened; basal sternite with a dark brown blotch that is hard to see because of the large posterior coxae which overlie it. Ovipositor with the tergal valves long and straight, very slender; sternal valves ending a little before the tips of the tergal valves, very compressed, the apices subobtuse.

Habitat. — Abyssinia.

Holotype, ♀, Addis Abeba, May 1904 (Maurice de Rothschild).

Type in the Collection of the Paris Museum.

Tipula rothschildi is apparently related to T. capnioneura Speiser (Mt. Kilimandjaro) in the strongly atrophied wings of the female. It differs in the shape of the wings and in the coloration of the thorax, abdomen and legs. The bone-white bases of the sternal valves of the ovipositor are not evident in the present species. The dark spot at the base of the abdomen on the ventral side strongly suggests T. abyssinica Jaennicke (Abyssinia), which, however, is full-winged in both sexes.

## Tipula gaboonensis nov. sp.

General coloration yellow, the mesonotal praescutum with a brown median stripe and a dark brown spot at the lateral margin; scutellum with two dark brown spots on the anterior half; postnotum with a rounded dark brown spot on the lateral sclerites; legs very long, claws of male toothed; wings pale brown, the cord partly seamed with darker brown, male hypopygium with the ninth tergite suddenly narrowed, the apex deeply notched, the adjacent lobes slender, dark brown.

Male. — Length, 29 mm.; wing, 25.5 mm.; head alone, 4 mm.; thorax, 7 mm.; abdomen, 18 mm. Fore leg, femur, 16 mm.; tibia, 20,5 mm. Hind leg, femur, 17 mm.; tibia, 18,8 mm.

Female. - Wing, 27 mm.

Frontal prolongation of the head rather short, brown, the nasus very long and conspictious; mouthparts dark brown; palpi dark brown, the last segment brown at the base, thense fading into whitish, this terminal segment very clongate, about twice the three basal segments taken together. Antennae small for the size of the fly, the scapal segments obscure yellow;

flagellum dark brown, the segments with long, conspicuous verticils. Head brownish yellow, the vertex rather narrow.

Mesonotal praescutum light yellowish brown, more yellow laterally; a broad, darker brown median stripe; the usual three stripes are very indistinet, scarsely darker than the ground color; on the sides of the pracscutum opposite the anterior ends of the lateral stripes a small, rounded, dark brown spot, very conspicuous; scutum light yellowish brown, the lobes more greyish brown, margined along their proximal edge by a dark brown line; scutellum with the median lobe circular in outline, pale brownish yellow with two small, rounded dark brown spots on the anterior half; postnotum with the median sclerite yellow with two parallel, broad, dark brown lines, the lateral sclerites yellow with a conspicuous, small, rounded, dark brown spot, this about twice as large as the spot on the praescutum. Pleura yellow. Halteres brown, the base of the stem paler. Legs with the coxae and trochanters yellow; femora brownish yellow, the tips dark brownish black; tibiae brown, the tips narrowly dark brown; tarsi dark brown; claws of the male with a subacute tooth before midlength; the last tarsal segment with two tufts of black bristles on the ventral side at the base: claws of the female small and simple. Wings with a pale brownish tinge, the costal cell more yellowish, subcostal cell brown; stigma dark brown; conspicuous brown seams along the deflection of  $R_{4+5}$  and r-m, and along the basal deflection of  $Cu_1$ ; veins dark brown; macrotrichiae on the veins small and sparse. Venation as in the velutina group: Rs short; cell R2 very small and acutely pointed at its inner end;  $R_3$  in alignement with  $R_{2+3}$ , not bent toward  $R_{4+5}$  (as in T. alphaspis); cell M1 large, its petiole correspondingly shortened; basal deflection of  $Cu_1$  far beyond the fork of M, the fusion of  $M_3$  and  $Cu_1$  short.

Abdominal tergites largely dark brown, faded in the alcoholic type, the bases of the segments light yellow laterally and destitute of the small setae that cover the remainder of the segments; dorsomedian line of the tergites still darker; sternites more uniformly light yellow. Male hypopygium with the ninth tergite broad basally, the median area suddenly narrowed, the apex deeply notched, the lateral lobes thus formed slender, blackened, the acute tips deflected; these lobes and the entire dorsal surface of the tergite except the base with scattered small hairs. Pleural suture indicated beneath; outer pleural appendage pale in color, very broad, flattened, roughly trapezoidal in outline with the broad base outward, the dorsal outer angle slightly produced; surface of the lobe covered with moderately long hairs; inner pleural appendage projecting conspicuously beyond the genital chamber as an elongate, conical lobe, directed caudad, the apex roughened into conspicuous tubercles, the inner lobe projecting cephalad. Ninth sternite light yellow with a shallow, U-shaped median notch. Eighth sternite unarmed. Gonapophyses appearing as very slender,

straight, chitinized rods. In the female, the valves of the ovipositor are heavily chitinized, but the tips are broken in the unique type and cannot be further described.

Habitat. — French Congo, Southern Nigeria.

Holotype, &, Lambaréné, Ogooué R. French Congo, 1912 (R. Ellenberger).

Allotype,  $\ \$ , Oshogbo, Southern Nigeria, November 1910 (Dr. T. E. G. Mayer).

Type (alcoholic) in the Collection of the Paris Museum; allotype in the Collection of the British Museum (Natural History).

## Genus Nephrotoma Meigen.

## Nephrotoma imerina nov. sp.

General coloration orange-yellow, mesonotal praescutum with three black stripes; scutal lobes largely black; a black median line on scutellum and postnotum; abdomen reddish, with a black subterminal ring; eighth sternite of the rather large male hypopygium fringed medially with conspicuous golden-yellow hairs.

Male. — Length, 13 mm.; wing, 14,5 mm.; antennae, about 5 mm.

Female. - Length, about 16 mm.; wing, 14 mm.

Frontal prolongation of the head obscure yellow, dark brown dorso-medially; palpi yellow. Antennae moderately elongated, considerably shorter than in the corresponding sex of *N. madagascariensis*; basal segments yellow, the distal flagellar segments pale yellowish brown. Head orange-yellow, the vertical tubercle clearer orange; occipital mark triangular, brown.

Pronotum orange. Mesonotal praescutum orange yellow with three black stripes, the cephalic ends of the lateral stripes strongly outcurved; scutum yellow, the lobes black, being continuations of the lateral praescutal stripes: median area of scutum reddish with a brownish black median line; postnotum yellow with a broad, black median stripe. Pleura light yellow, indistinctly striped longitudinally with pale reddish, the dorsal stripe extending across the mesepisternum and mesepimeron, the ventral stripe occupying the mesosternum. Halteres yellow. Legs with the coxae and trochanters orange; femora yellowish, the tips broadly

blackened, broadest (2,5 mm.) on the fore legs, narrowest (1,5 mm.) on the hind legs; tibiae brownish yellow, the tips narrowly black; tarsi light brown, gradually passing into dark brown on the distal segments. Wings with a strong greyish yellow tinge, the costal and subcostal cells brighter yellow; stigma oval, pale brown. Venation: Rs moderately elongated, about one-half longer than the deflection of  $R_{4+5}$ ; cell  $M_1$  narrowly sessile.

Abdomen reddish; a black subterminal ring, in the male occupying segment seven and most of segments six and eight; seventh and eighth sternites largely black. Hypopygium moderately enlarged; ninth tergite with a deep, rounded median notch, the broad lateral lobes obliquely truncated; pleural appendages light orange-yellow, the outer pleural appendage tapering to the subacute tip. Eighth sternite with a profond median split, the contiguous margins with long, conspicuous fringes of golden-yellow hairs that completely conceal the emargination.

The female is generally similar to the male; in one specimen the abdominal tergites two to six each have an clongate-oval, black, median mark that does not attain either the caudal or cephalic margin; seventh segment entirely black with the exception of the narrow, posterior margin; lateral margins of the tergites narrowly brown; sternites generally similar to the tergites.

Habitat. — Madagascar.

Holotype, of, Imerina, Forêt d'Andrangoloaka, 1891 (A. Grandidier).

Allotopotype, Q.

Paratopotypes, 1 of, 1 \overline{9}.

Type in the Collection of the Paris Museum.

LES MOUSTIQUES DE FRANCE,

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PAR M. E. SÉGUY.

## Genre Ochlerotatus (1), (Suite.)

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Groupe punctatus-Mariae-maculiventris.

3. O. PUNCTATUS \* Meigen 1804, Klass., I, 6, 10; Schiner, F. A., II, 629 (1864); Villeneuve, Bull. Soc. Ent. Fr., 56, 10 (1919); Howard, Dyar et Knab, Mosq.

N. C. Amer., IV, 727.

Syn. dorsalis \* Meigen 1830, S. B., VI, 242, 18; Schiner, F. A., II, 626, 3 (1864); Blanchard, Moust., 287, 27 (1905); Theobald, M. C., II, 16 (1901); III, 251 (1903); Austen, Brit. bl. suck. flies, 26, pl. 9 (1906); Edwards, Bull. Ent. Res., II, 248, 4 (1912); Entom., XLV, 194, 1 (1912); - penicillaris Rondani 1872. l. c., IV, 31, 6; Blanchard, l. c., 315, 79 (1905); Brolemann, Ann. Soc. Ent. Fr., LXXXVIII,  $85 : \mathcal{O}; -100 : \mathcal{P}(1919); -$ Spenceri Theobald 1901, M. C., II, 99, 95; Howard, Dyar et Knab, l. c., IV, 723; - Curriei Coquillet 1901, Can. Ent., XXXIII, 259; Howard, Dyar et Knab, l.c., IV, 2, 634 (1917); - Willcocksi Theobald 1907, M. C., IV, 294.

Larve: Edwards, Bull. Ent. Res., VII, 217 (1917); Joyeux, Bull. Soc. Path. Exot., XI, 6, 533-538 (1918).

Ochlerotatus punctatus Seine-et-Oise: Janville (J. Surcouf); Morbi-Meigen (♀). han: La Trinité-sur-Mer (Surcouf: Mus. Paris); Loire-Inférieure, Hérault (D' Villeneuve); Charente-Inférieure : Saint-Georges-de-Didonne (P. Lesne : Mus. Paris).

(1) Voir Bulletin du Muséum, 1920. Nº 1, p. 51; Nº 2, p. 141; Nº 3, p. 223; Nº 4, p. 322.

