## A NEW SPECIES OF *TABANUS* FROM THE ANGLO-EGYPTIAN SUDAN.

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## Tabanus kingi, sp. n. (Fig. 1.)

.—Length (four specimens) 13 to 16 mm.; width of head 4.4 to 5.5 mm.; width of front at vertex 0.5 mm. to just under 1 mm.; length of wing 10 to 13 mm.

Superficially somewhat resembling T. txniola, Pal. de Beauv., but distinguished by the more quadrate shape and blacker colour of the frontal callus (cf. fig. 2), the more ochraceous-rufous \* colour and usually greater breadth of

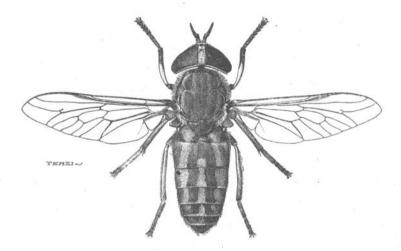


Fig. 1.—*Tabanus kingi*, Austen,  $\mathcal{Q}$ .  $\times$  3.

the proximal portion of the third joint of the antennæ, the absence of conspicuous longitudinal stripes on the dorsum of the thorax, the less clearly defined median stripe or median longitudinal series of lighter markings on the dorsum of the abdomen, by the presence of an appendix to the anterior branch of the third vein, and by the middle and posterior femora being fawn-coloured instead of slate-grey.—Dorsum of thorax mouse-grey, clothed with minute, appressed, buff-yellow mixed with minute black hairs; dorsum of abdomen tawny-ochraceous or ochraceous, with alternate longitudinal series of light and dark markings, lust

\* For names and illustrations of colours, see Ridgway, 'A Nomenclature of Colors for Naturalists' (Boston : Little, Brown, & Company, 1886).

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two segments clove-brown; wings tinged with sepia, anterior branch of third longitudinal vein bent at an angle, with a backwardly directed stump or appendix.

*Head* light grey, occiput somewhat darker than face and jowls, front yellowish grey, of moderate breadth, inner margins of eyes parallel, a more or less faintly marked light mummy-brown horizontal band between base of each antenna and margin of eye on same side; *frontal callus* black or clovebrown, rectangular, broader than high; front clothed with short, erect, blackish hair, immediately above callus with yellowish hair, lower surface of head clothed with whitish hair; *palpi* cream-coloured, proximal joint clothed with whitish hair, terminal joint moderately swollen at base, then tapering to a point, clothed with minute, appressed, pale straw-yellow hairs, sometimes mixed in front with a few minute black hairs; first and second joints of *antennæ* ochraceous-buff, first joint clothed below with pale yellowish and above with minute black hairs, third joint ochraceous-rufous with dark brown distal extremity, expanded portion of third joint fairly broad, terminal

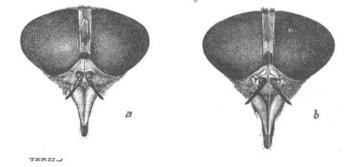


Fig. 2.-Heads of : a, Tabanus kingi, Austen, \$, and b, Tabanus tæniola, P. de B., \$.

annuli shorter than in T. taniola, Pal. de Beauv. Thorax: dorsum with but a faint trace of paler longitudinal stripes; swelling in presutural depression on each side tinged with fawn-colour, and clothed with fairly long blackish hair ; pleuræ and pectus grey or smoke-grey, clothed with whitish hair; scutellum agreeing with remainder of dorsum in coloration and hairy covering. Abdomen: dorsum marked as shown in fig. 1, except that the median pale greyish stripe, which is clothed with minute, appressed, yellowish hairs, is sometimes more distinctly composed of a series of truncate triangles; when abdomen is viewed at a low angle from behind, median stripe or truncate triangle on second (i. e. second visible) segment is seen to extend, like its successors, to front margin of segment ; hind margin of first segment with a small patch of vellowish hairs in middle line : admedian stripes dark sepia-coloured, clothed, like dark patch near each lateral margin of each of the first five segments, with minute black hairs ; each of first five segments with an elongate and somewhat ill-defined pale mark (clothed with minute buff-yellow hairs) on each side of middle line, between admedian stripe and dark patch near lateral margin; extreme lateral margins of first six segments clothed with whitish hair : hind margins of fifth and sixth segments clothed for most part with yellowish hair; sixth and seventh segments. except posterior and lateral margins of former, clothed with black hair; venter ochraceous-buff, clothed with minute, appressed, straw-yellow hairs, hind margins of second to sixth segments inclusive cream-coloured or whitish, seventh segment entirely or for most part dark greyish-brown, clothed with erect black hair, sixth segment also with some black hairs in centre, fifth and sixth segments sometimes more or less infuscated, especially towards posterior and lateral margins. Squamæ isabella-coloured, with buff margins. Halteres ochraceous-buff, tips of knobs cream-coloured. Legs: coxæ olive-grey or smoke-grey, clothed with whitish hair; rest of front legs black, except proximal halves, or rather less, of tibize, which are creamcoloured and clothed with minute, appressed, pale yellowish hairs; outer side of front femora greyish pollinose, clothed with fine yellowish hair: middle and hind femora fawn-coloured, clothed with pale yellowish hair : middle and hind tibiæ buff, brownish at tips, clothed partly with black and partly with yellowish hair; middle and hind tarsi dark brown, darker towards distal extremities.

ANGLO-EGYPTIAN SUDAN: type and two other specimens from Khor Arbat, Red Sea Hills, 12.iv.1910 (*H. H. King*); an additional specimen bred from larva taken at same time and place (*H. H. King*).

Type in the British Museum (Natural History).

Mr. H. H. King, in whose honour this species is named, and whose description of its life-history will be found on pp. 269-274, states that he took seven specimens of *T. kingi* ovipositing on rocks overhanging a shallow, brackish stream, rippling over rocks and stones, and that two more were caught on camels.

Tabanus kingi is allied to an at present undescribed species of Tabanus, of which specimens from Abyssinia are contained in the British Museum collection. The Abyssinian species, however, which agrees with T. kingi in the shape of its frontal callus and in the anterior branch of the third vein being bent at an angle and provided with an appendix, is distinguished from it, at any rate in the female sex, by :--the frontal callus being dark mummybrown instead of black or clove-brown; by the much darker colour of the dorsal surface of the body; by the dorsum of the thorax being distinctly striped, and clothed mainly with black instead of with buff-yellow hair; by the series of pale marks on the dorsum of the abdomen, outside the admedian stripes, taking the form of clearly defined light grey spots, which are distinctly ovate in shape; and by the ground-colour of all the femora, and not merely of those of the front legs, being black.