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*CULEX (CULEX) NAKURUENSIS* SP. N. (DIPTERA, CULICIDAE),  
A REMARKABLE NEW MOSQUITO FROM THE EAST AFRICAN  
HIGHLANDS.

By P. F. MATTINGLY.

(*British Museum (Natural History)*.)

THE holotype male of this very interesting species was presented to the British Museum by Mrs. E. C. C. Van Someren, who received it for identification from the hospital at Nakuru where it was collected. The description which follows is based on this specimen and on two paratype males from Subukia in the Nakuru district received on loan from the United States National Museum at Washington through the kindness of Dr. E. A. Chapin, Director of the Division of Insects, and Dr. Alan Stone of the Bureau of Insect Identification.

*C. nakuruensis* appears to be quite closely related to *Culex mirificus* Edwards (1913, 1941), which was found in the same area, but the male terminalia are even more remarkable. The highly complex style recalls the Ethiopian species of the sub-genus *Mochogenes*, while the large patch of setae at the base of the coxite is unique among Old World *Culex* with the exception of *mirificus*, although characteristic of certain New World sub-genera. The very deeply divided apical lobe with its curious ornamentation strongly recalls the same New World sub-genera and is quite unique among the Old World species. The nearest approach among the latter is perhaps to be found in the sub-genus *Neoculex*. The paraprocts and 9th tergite are of the kind normally found in the typical sub-genus and, as the paraproct appears to afford the best sub-generic character in this group, no hesitation is felt in including this species with *mirificus* in *Culex* s. str.

***Culex (Culex) nakuruensis* sp. n.**

*Adult*.—♂. *Head*: Palps exceeding the proboscis by about the length of the terminal joint, the last two segments upturned as is usual in the sub-genus, but less hairy than usual, much as in *mirificus*. Decumbent scales of vertex all narrow and pale, upright scales mostly dark. Tori and clypeus bare. Proboscis dark above, paler for most of its length below. *Mesonotum* with integument brown, with a median and two lateral dark stripes, covered with narrow reddish gold scales, the general effect being reddish. Dorsocentral and acrostichal bristles well developed. Pre-scutellar area and scutellum with narrow pale scales. *Pleurae* pale. Lower mesepimeron with a single bristle. No post-spiracular or pre-alar scales. Sternopleural scale patch small. Upper and lower mesepimeral patches well developed. *Halteres* pale creamy except for a blackish patch on the upper surface of the knob. *Wings* all dark, wing scales narrow. Fork of vein 2 about 3 × as long as its stem. 7th (anal) vein at most faintly indicated. *Legs* dark except for the femora, which are pale behind and below almost to the tip. In the case of the hind femur the pale scaling extends on to the anterior surface, where it forms a pale ventral stripe. First segment of hind tarsus slightly shorter than tibia. Fore claws large, strongly toothed, unequal. Pulvillus well developed. Terminal segments of mid legs missing. Hind claws small, equal, simple, pulvillus well developed. *Abdomen* with tergites dark except for small basal lateral patches faintly indicated on the 6th and 7th. Sternites pale with dark patches in the mid-line and, in some cases, in the apical corners as in the *pipiens* group.

*Terminalia* (fig. 1).—Style showing an extreme form of the type of modification found in the *Neoculex* group of sub-genera, particularly *Mochthogenes*, with the distal portion expanded and membranous and bent downwards and inwards through an acute angle beyond the spiny crest, which is here represented by an area of minute pilose setae. Extreme tip with two digitate terminal appendages and a minute, sharply pointed, colourless seta. Coxite very broad, with a conspicuous patch of setae on the inner aspect near

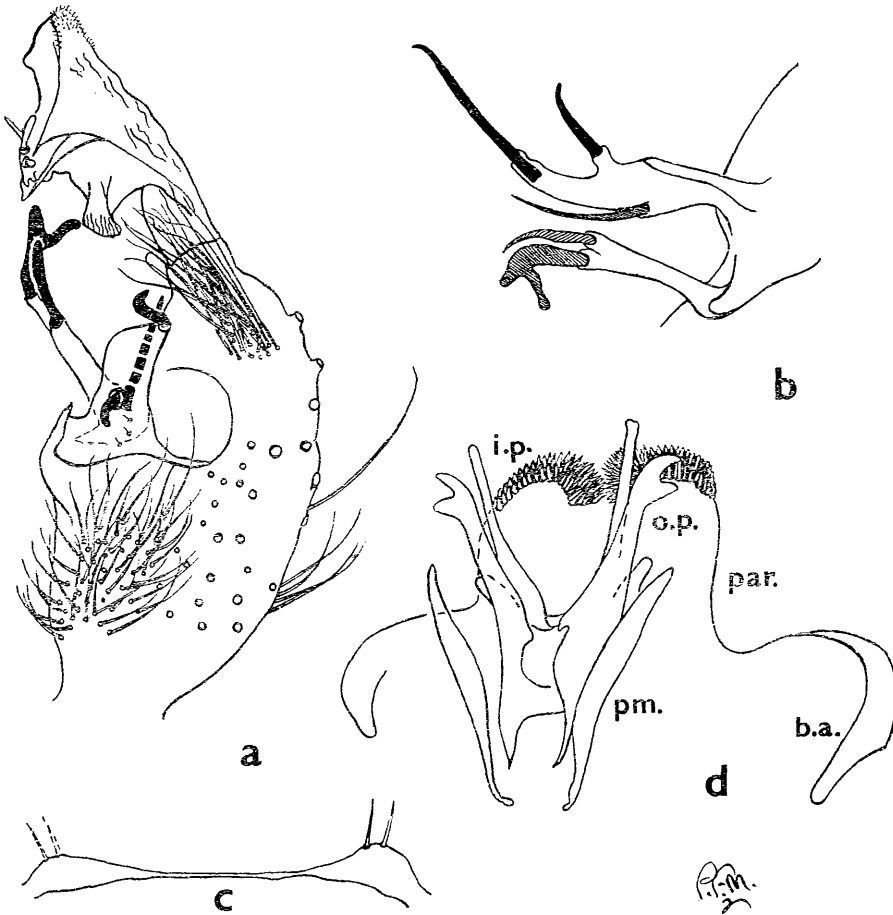


FIG. 1.—*Culex (Culex) nakuruensis* sp. n. Male terminalia. *a*, Coxite and style; *b*, sub-apical lobe of coxite from a different aspect; *c*, 9th tergite; *d*, phallosome and paraproct; *b.a.*, basal arm of paraproct; *i.p.*, inner plate of phallosome; *o.p.*, outer plate of phallosome; *par.*, paraproct; *pm.*, paramere.

the base and another near the articulation of the style. The sub-apical lobe is strongly developed and very deeply cleft into a cylindrical arm, bearing a furcate and a simple, pointed spine, and a broad lobe with two very dark, strongly sclerotized spines arising from the inner edge and a more slender one arising from the outer edge. The outer surface of the coxite bears a number of very long setae similar to those found in *mirificus*. The outer division of the phallosome is expanded and concave at the tip, the inner simple. The

paraprocts are of the type normally found in the typical sub-genus with well-developed crown of spines and a comparatively short basal arm. The lobes of the 9th tergite are small and widely separated.

♀ and early stages unknown.

*Breeding-places* unknown. The allied *C. mirificus* was obtained from highly alkaline waters at the edge of Lake Nakuru (Hopkins, 1936).

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