

THE MOSQUITOES OF LIBERIA (DIPTERA : CULICIDAE).

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THIS is the second of a series of papers based on material collected by the author between April, 1953, and May, 1954, in the Liberian Hinterland and later studied at the British Museum (Natural History). In this paper are described a new species of the genus *Uranotaenia* Lynch Arribalzaga and various hitherto undescribed stages in the life cycles of nine other species of Culicini.

As in the first paper in this series, the nomenclature adopted in the descriptions of pupae is that of Knight and Chamberlain (1948) as modified by Belkin (1952, 1954), the references to which were given in that paper.

*Uranotaenia pseudohenrardi* sp.n.

This species belongs to the *shillitonis* group of the genus *Uranotaenia*, in which the mesonotal scales are all broad and flat and the acrostichal bristles are absent. It is very similar to *U. henrardi* Edwards, which may be distinguished by its acrostichal bristles and distinctive phallosome.

*Male*.—*Head*: Clothed above with broad flat scales which are a pale mauve or brown, depending on the position of the light; a few erect scales on the nape; proboscis, palpi and antennae dark. *Thorax*: Integument pale brown except for a round, dark brown patch in front of each wing root; acrostichal bristles absent, dorso-central and lateral scutal bristles dark and very conspicuous; mesonotal scales all very broad and flat, the same colour as the head scales; a patch of similar scales on the *apn*; the dark patches in front of the wing roots covered with flat broad black scales as in *henrardi*; pleurae pale brown, paler ventrally; a row of flat broad white scales on the posterior border of the sternopleura, no scales on the mesepimeron; spiracular, posterior pronotal and lower mesepimeral bristles single. *Legs*: As in *shillitonis* and *henrardi*, the ventral surfaces of the femora pale, the anterior coxae without scales; no special secondary sexual characters other than unequal claws on the mid-tarsi. *Abdomen*: Dark brown without markings. *Wings*: All scales dark, the outstanding scales very broad, venation as in *shillitonis*. *Terminalia* (fig. 2 e, f): Ninth tergite as in *shillitonis* without the tooth-like projections of *henrardi*, coxite similar to that of *shillitonis* and *henrardi*, but basal lobe with about 10 equal and rather short bristles; style short and thick, tapering gradually and ending bluntly; phallosome with one large beak-like terminal tooth and a simple bulge representing the basal teeth. (*Note*.—The phallosome is rather similar to that of a new species of this genus being described by M. Hamon which is otherwise quite distinct, lacking the dark prealar spot—*personal communication from M. Hamon*.)

*Female*.—Ornamentation as in the male. The female of *henrardi* has yet to be discovered, but it is probable that the only difference between it and that of *pseudohenrardi* will be the absence of acrostichal bristles in the latter.

*Note*.—*U. henrardi* was described by Edwards in 1935 from two males only. One of these from Uganda, Kalinzu Forest, is in the British Museum, where it was available for comparison with *pseudohenrardi*.

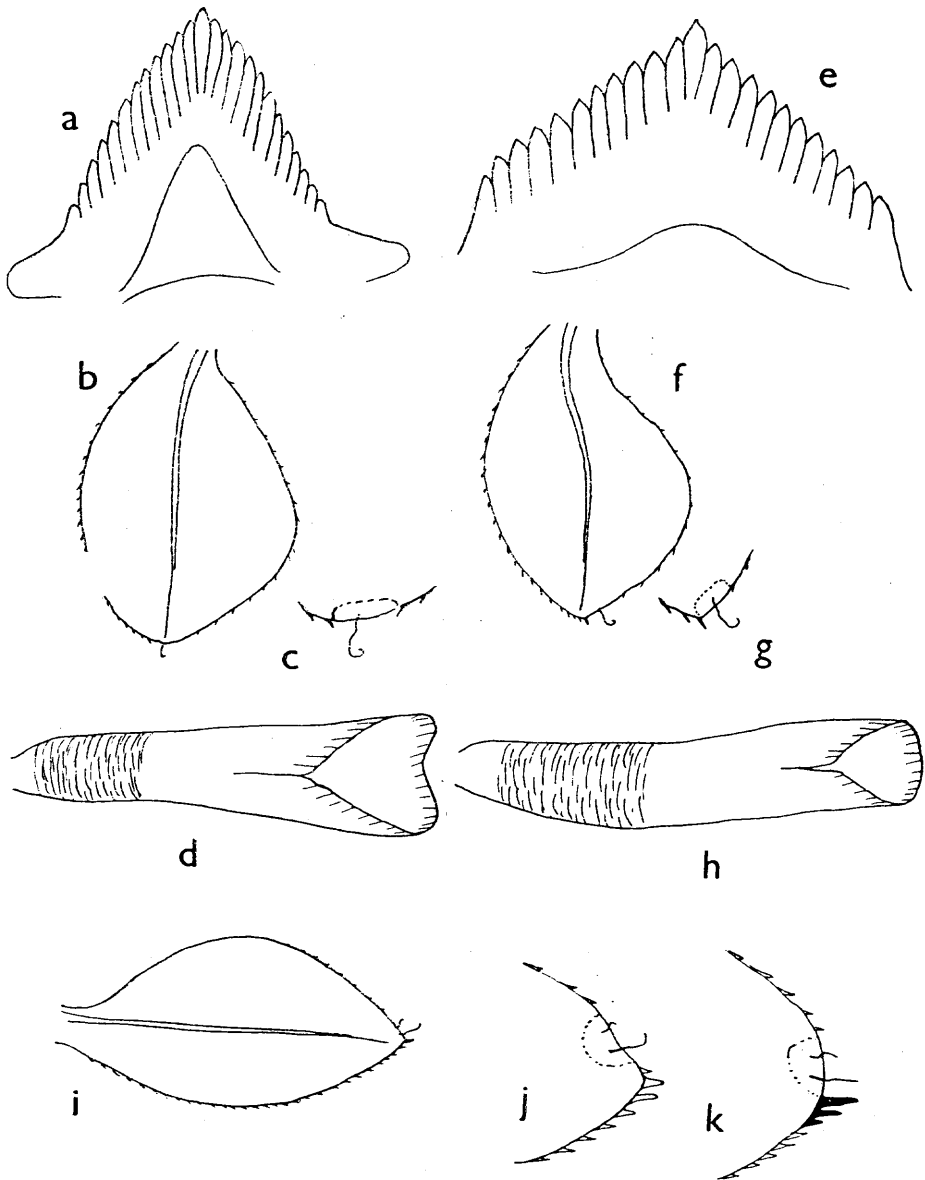


FIG. 1.—(a)–(d) *Uranotaenia pallidocephala* Theobald. (e)–(h) *U. philonuxia* Philip. (i, j) *U. nigromaculata* Edwards. (k) *U. mashonaensis* Theobald. (a), (e) Larva-mentum; (b), (f), (i) pupa-paddle; (c), (g), (j), (k) pupa-apex of paddle enlarged; (d), (h) pupa-trumpet.

(fig. 3, *d-f*) mainly in the antennae, which are dark on the basal two-thirds and the comb spines which are shorter, darker and more numerous than in *malfeyti*.

*Head* (fig. 3, *a*): Antennae spiculate, infuscated on the basal two-thirds, tuft beyond three-quarters; clypeal spines simple or with a large basal barb; setae A, B and C with

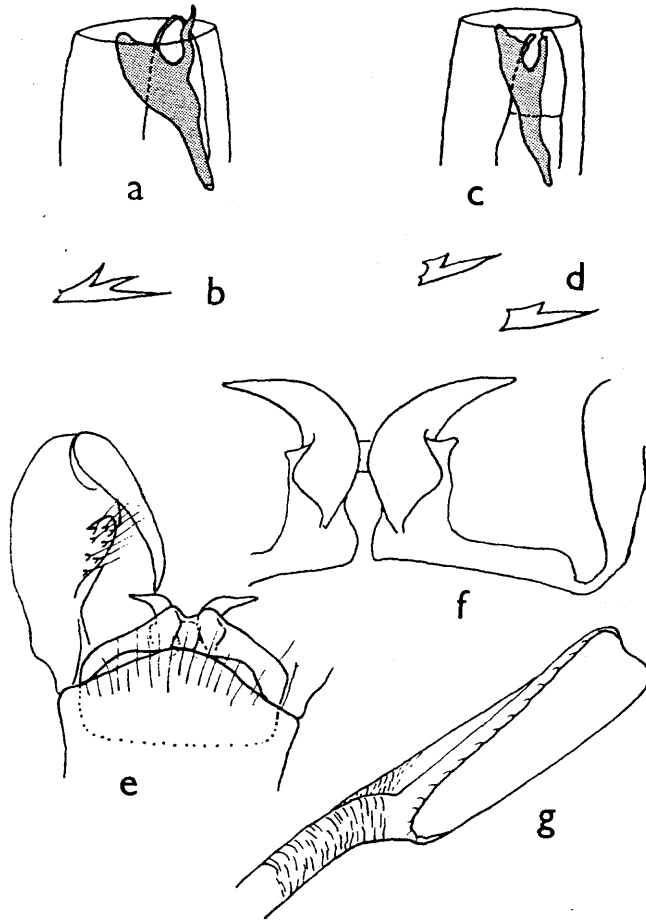


FIG. 2.—(a), (b) *Culex (Culicomyia) nebulosus* Theobald. (c), (d) *C. nebulosus* var. *pseudocinereus* Theobald. (e), (f) *Uranotaenia pseudohenrardi* sp. n. (g) *U. chorleyi* Edwards. (a), (c) Larva—"Stirrup-shaped piece" of siphon; (b), (d) larva—pecten spines; (e), (f) imago—male terminalia; (f) imago—phallosome enlarged; (g) pupa—trumpet.

10-12, 2 and 6-8 branches, *d* with 3-5 branches, *e* long and single, *f* with 5-8 shorter branches. *Abdomen*: Comb with 11-14 spines with a delicate fringe reaching two-thirds (fig. 3, *b*), dark brown or black and slenderer than in *malfeyti*, shorter than the pecten spines (fig. 3, *c*); subventral tuft of the siphon with 7-8 branches; lateral seta of the saddle 4-5 branched, about as long as the saddle; upper caudal seta 3 or 4, lower 3-branched.