

The larva and female of *Culex* (*Lophoceraomyia*) *marksae* King & Hoogstraal (Diptera, Culicidae)

by

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KING & HOOGSTRAAL (1955) described *Culex marksae* from a single male, caught in a light trap at the edge of rain forest at 250 feet near Hollandia, Neth. New Guinea. Female, larva and breeding habits were unknown up to now.

Recently larvae of this species were collected in the Cyclop mountains near Ifar, at 1000 feet altitude. The larvae were taken from a shallow crevice, about 1 m in length and 30 cm wide, in a rock, in the heavily shaded bed of a mountain current. The water in this breeding place was partly filled with pebbles and decaying leaves. Water temperature was found to be almost constant (23° C.); direct sunlight only penetrates during about 20 minutes at noon and had no effect in warming up, also due to the considerable heat capacity of the rock.

Culex marksae was found associated with *Culex* (*Cul.*) *papuensis*, *Aedes* (*F.*) *allicola*?, *Ae.* (*F.*) *novalbitarsis* and *Ae.* (*F.*) *subalbitarsis*. The larval density was enormous at the time of collecting; all different instars were found together.

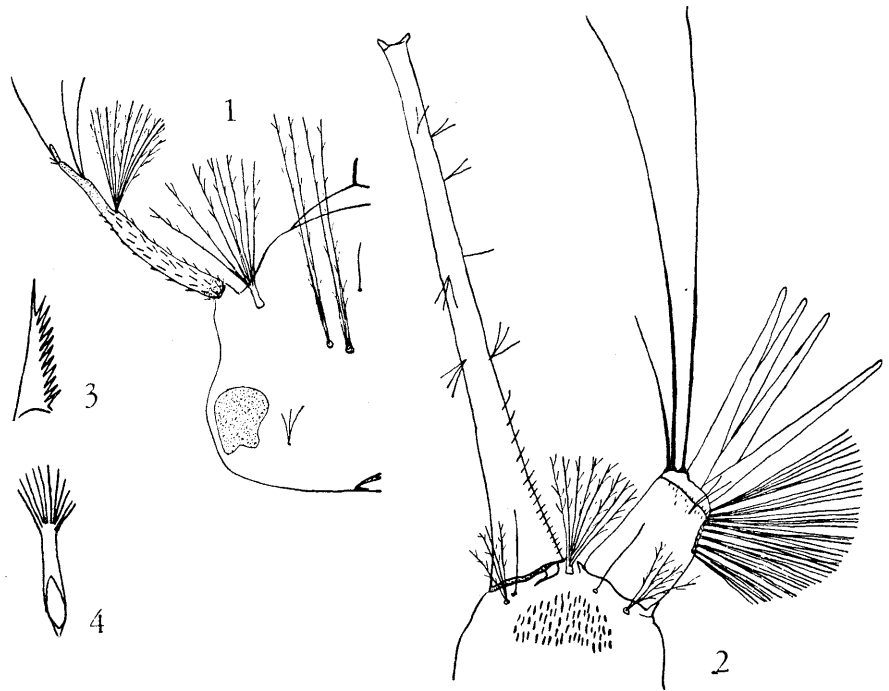
Relatively few other arthropod species were present: many very small surface running bugs, few small water beetles and a Helodidae larva, one single *Anisops*, Tendipedidae larvae, a few water isopods and one surface running *Dolomedes* spider predated on newly emerged mosquitoes. Small copepods were plentiful.

Larvae of *Culex marksae* were bred out in the laboratory and produced a series of males and females. The males, notable for the bicolorous fan on the antennae, agree with the description of the type specimen.

L a r v a. Head slightly broader than long. Antenna about as long as head, slightly curved, basal part covered with spicules, antennal tuft beyond middle, in fresh specimens basal part of shaft and part beyond antennal tuft dark and contrasting with creamy white region between; antennal tuft with about 20 frayed branches; subapical hairs bare, as long as tuft. Head hair A with 6—8 frayed branches, reaching to base of antennal tuft, basal stem conspicuously long; hair B and C close together, 2 branched, frayed. Comb on 8th abdominal segment with many, rather irregularly arranged, slender teeth, frayed at apex. Siphon long and slender, index 8—10 : 1, acus present; pecten in basal third part, 16—19 sharp teeth, apical ones slightly larger and further apart than basal ones, teeth with many lateral denticles; siphonal tufts 2 or 3 branched, only slightly longer than width of siphon. Anal segment about 2 times longer than wide, completely chitinous around, posterior margin with minute spicules; isc hair with 2 unequal branches, osc hair single; anal hair single-3-branched, small and bare; anal gills about twice as long as segment, slender, pointed at apex (see figure).

F e m a l e. Vertex of head covered with narrow brownish scales; flat and paler scales present in a narrow row along the border of the eyes. Proboscis and palpi entirely dark scaled, palpi about $1/5$ — $1/6$ of length of proboscis. Thorax with minute brown scales on scutum and scutellum; pleura bare, light brown. Legs

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Culex marksae, larva. 1. Head; 2. Terminal segments; 3. Pecten tooth; 4. Comb tooth.

covered with shining brown scales, posterior surface of femore partly whitish, especially in hind legs. Wing length 2.5 mm, wing scales shining brown. Abdominal tergites dark scaled, many scales, especially in the posterior segments, have a bronze reflection; sternites light, few dark scales on posterior segments.

Literature

- KING, W. V. & H. HOOGSTRAAL, 1955, Three new species of New Guinea *Culex*, subgenus *Lophoceraomyia*, with notes on other species, *Proc. Ent. Soc. Wash.* 57: 1-11.