

The Male of Aedes (Stegomyia) masseyi Edwards.

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To throw light on the affinities of this Ethiopian Stegomyia, which resembles the low country Ae. (S.) amaltheus De Meillon & Lavoipierre on the one hand and the high country Ae. (S.) keniensis van Someren on the other, the discovery of the male and early stages has long been awaited.

The following description of the male of Ae. masseyi, with notes on the female, is based on material (1 ♂, 5 ♀), hatched by A. W. McCrae from larvae found in a cut bamboo at Mbeya, in the southern highlands of Tanganyika, in December 1970.

Females agree with the description given in Edwards (1941) except, as noted by Mattingly (1953), there are a few narrow pale scales forming a thin border to the prescutellar bare space on 4 of the 5 specimens (the scutum of the fifth specimen is badly rubbed) and 2 have a few white scales at the base of the third hind tarsal segment. An additional difference is that none of the specimens has a median basal white patch on either tergum 2 or 7 and 1 has a median basal white patch on the first tergum.

Male. Scutal and leg markings the same as for the female except that, perhaps due to the condition of the scutum, which is slightly rubbed and discoloured, there appear to be no white scales round the prescutellar bare space. In addition the palps are black, with the usual white areas on the shaft as follows: - a large white patch above just beyond the base and a broad white band just beyond a half. The penultimate and ultimate segments both have a small spot of white scales below. The abdominal terga, like the associated females, are black with short basal bands on segments 3-6 and lateral white spots on segments 2-7; those on 6 & 7 visible from above. Hind tarsus 3 all dark on one side, the other leg with a few (3) white scales at the base of this segment. Genitalia. Gonocoxites short and broad with large, very hairy, basal mesal lobes, carrying on the external border, on prominent raised tubercles, 3-4 stout, fairly long, sharp pointed spines. Gonostylus curved, slightly tapered and with a short, blunt spine at the tip. Ninth tergum deeply excavated and with 8 long hairs on each lateral lobe.

Ae. masseyi therefore, has male genitalia resembling those of Ae. keniensis and typical of Edwards group A, thus differing from Ae. amaltheus which has genitalia of the type found in groups B and C. The early stages are still not known for certain but Mattingly and Lips (1953), assigned 2 larvae from Elizabethville to this species. These closely resemble Ae. keniensis, differing mainly in the form of the pecten spines. It would appear then that Ae. masseyi has close affinities to Ae. keniensis and is not akin to Ae. amaltheus.

It was suggested that Ae. keniensis might prove to be a subspecies of Ae. masseyi (van Someren, 1946) and Mattingly (1953) says that "keniensis seems clearly to be a highland form of masseyi" and goes on to suggest that Ae. masseyi may be precluded from the main distribution of Ae. keniensis by inadequate rainfall. The discovery of Ae. masseyi at Mbeya, 8.50 S, 33.15 E (5800 ft. with 35 " rain), the environment of which is similar to that of Njombe, 9.30 S, 34.45 E (6000 ft. with 40" rain), together with the slight but distinct morphological differences would suggest that Ae. masseyi and Ae. keniensis are distinct species with the southern highlands of Tanganyika possibly being near the northern limit of the former and the southern limit of the latter.

References

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