

A NEW VARIETY OF *ARMIGERES* FROM LAGOS, WITH DESCRIPTIONS OF THE LARVAL AND PUPAL STAGES

BY

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During 1926-27 Mr. L. H. Dunn bred out several *Armigeres* from larvae collected chiefly from bamboos in Lagos. I have been very kindly allowed to examine the material, which includes well-preserved larval and pupal pelts, and a good series of males and females, and find that it adds considerably to our knowledge of the generic status of *Armigeres* and throws some light on the value of the specific characters used to separate *A. argenteoventralis* Theo. from *A. albomarginata* Newst.

The specimens show differences from both these forms and they are described below as a variety of *A. albomarginata* Newst., named in honour of its discoverer. The characters of this variety strongly suggest that *A. argenteoventralis* should be considered as a variety of *A. albomarginata*, but it may be better to await the discovery of the larvae of the older forms before making any change in the synonymy.

I have recently seen two females of *A. argenteoventralis*, bred from larvae taken by Dr. R. M. Gordon, in tree rot-holes near Mabang, Sierra Leone. In these specimens the deep border of dense white scales at the front of the mesonotum is a striking character.

***AEDES (ARMIGERES) ALBOMARGINATA*, var. *DUNNI* n. var.**

FEMALE. Differs from *A. albomarginata* Newst. as follows:—head without a posterior patch of pale scales, and with the white border to the eyes greatly reduced; mesonotum with the pale scales bordering the anterior margin absent or reduced to about three scales or less.

Head with very distinct small, anterior, white patch in the middle. Mesonotum clothed with blackish-brown scales

MALE. External characters as in female.

Hypopygium—Clasper, as shown in the illustration (fig. 2, C).

LARVA. The larva differs from that of *A. obturbans* chiefly in having a pecten and a bristle on the siphon tube.

The head, as seen in the pelts, is roughly quadrangular in outline. The antennae are small and have a fine double bristle on the outer third. The arrangement of the hairs of the head (fig. 1, D), differs

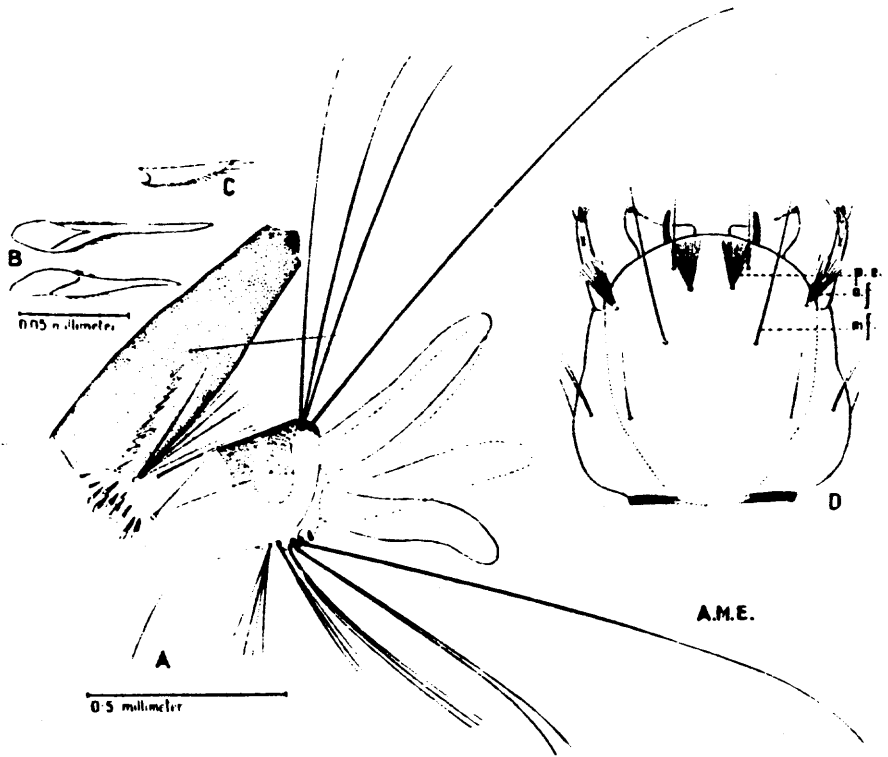


FIG. 1. *Aedes (Armigeres) albomarginata*, var. *dunnii*, n. var. Larva. A.—Siphon tube and tenth segment, lateral view; B.—Spines of lateral comb; C.—Spine of pecten; D.—Head, dorsal view.

from that of *A. obturbans* and *A. debensti*. The clypeal hairs are situated much further from the anterior margin of the head than in those species, and inner clypeal hairs are not represented in this African form. The posterior clypeal hairs (*p.e.*) are multiple with from fourteen to seventeen branches. Mid frontal hairs (*m.f.*) are well developed and simple, and the outer frontal hairs (*o.f.*) have

about eight branches. The thoracic chaetotaxy differs from that of *A. obturbans* chiefly in having the lateral multiple hairs of the meso- and meta-thorax composed of a much smaller number of branches. The numbers for the meso-thorax, from above downwards, are one, five, five, six; the meta-thorax has two tufts of six hairs. There is a pair of large stellate hairs on the dorsum of the meta-thorax. The abdominal chaetotaxy is much more developed than that of *obturbans*. The arrangement of the lateral series is as follows:—first segment with a multiple (5) and a double hair; second segment with two double hairs; third to sixth segments with very long double hairs; seventh segment with a shorter, but stout, triple hair. Long sub-ventral, double hairs are present on segments three to five, and long triple, sub-dorsal hairs on segments five and six. In addition there are a number of shorter hairs of varying lengths and character.

The siphon tube is about three times as long as broad, with a pecten of about twelve spines which are delicately fringed along the ventral border and have two or three longer terminal hairs. A single long bristle arises beyond the pecten. The comb consists of from eight to twelve teeth arranged in a single, or an irregular, double row. The gills are evidently not developed to such enormous proportions as those of *A. obturbans*. The hairs forming the ventral fan are poorly developed.

PUPA. Unlike *A. obturbans*, the paddles have no fringe, but the edges show minute serrations when examined with the one-sixth objective.

The arrangement of the hairs on the dorsal surface of the last six abdominal segments is shown in the illustration (fig. 2, *A*). The first abdominal segment has the usual dendritic hairs and in front of them a long and a short hair and also two short hairs anteriorly on the lateral margin. The respiratory trumpet (fig. 2, *B*) is deeply pigmented, rather broad posteriorly, and narrowed slightly beyond the middle.

HABITAT. One larva was collected from a tree-hole, the others from bamboos.

Type ♂ and ♀, Lagos, 1927, L. H. Dunn. Other specimens collected in Lagos by Mr. Dunn: five ♂♂ and four ♀♀, 1927; two ♂♂, 1926. Types in the collection of the Liverpool School of Tropical Medicine.

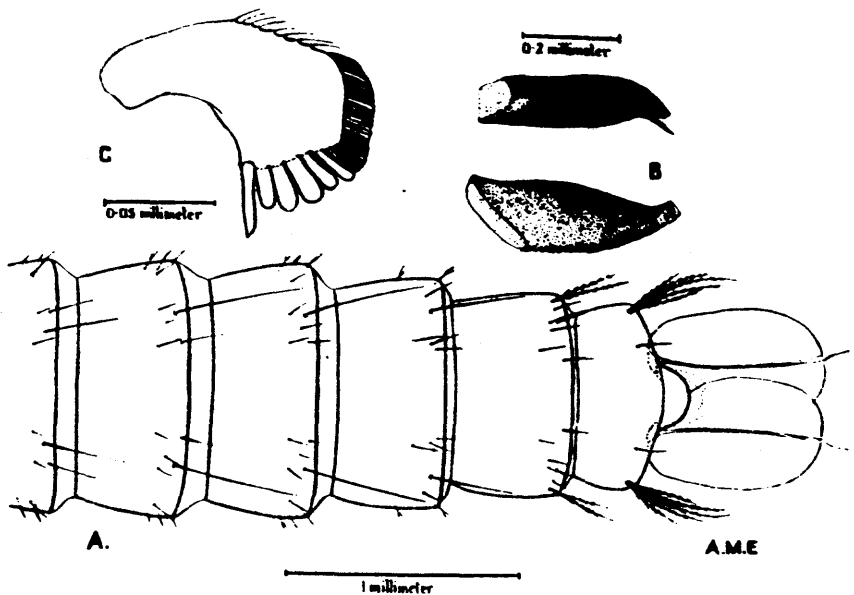


FIG. 2. *Aedes (Armigeres) albomarginata*, var. *dunni*, n.var. A.—Part of abdomen of pupa, dorsal view; B.—Respiratory trumpet, posterior and lateral view; C.—Clasper of ♂ hypopygium.

Edwards (1925), writing of the genus *Armigeres*, states that it is so close to *Aedes* that 'they may have to be re-united.' The absence of a pecten in the larva was 'the main reason for keeping *Armigeres* distinct from *Aedes*' (Edwards, 1921). The presence of these spines in a reduced condition on the siphon tube in this African form is, therefore, of considerable importance from the point of view of the generic status of *Armigeres*, and clearly confirms Edwards' suggestion that this should again rank as a sub-genus of *Aedes*.

In a later paper I hope to describe two other interesting larvae collected by Mr. Dunn, in Lagos.

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