A Note on Scale Distribution in Aedeomyia Theobald

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ABSTRACT. Scaling of the abdominal pleural membrane in females of *Aedeomyia* catasticta Knab is reported and records of scale patches on other unusual sites in this genus are reviewed.

Adults of the genus *Aedeomyia* Theobald have scales in places where they are seldom seen in Culicidae. Belkin (1962), in his description of females of this genus, gave a detailed account of scale distribution, including the following sites: laterodorsad of antennal bases, laterad at base of clypeus, along apical rim of antennal scape, on prosternum, on antecoxal and postcoxal membranes, underneath paratergite, and on metameron.

Skuse (1889), in describing A. venustipes (Skuse), wrote "both joints of the scapus covered with brown and white scales, those of the second overlapping the basal half of the third joint, so that these two appear to be one long robust joint". Since the latter phrases clearly describe the appearance of the first and second flagellomeres in A. venustipes, it seems that Skuse's "first joint of the scapus" was the pedicel, and he did not observe the scaling of the scape described by Belkin.

An extensive (though not exhaustive) search of the literature indicates that, apart from Edwards (1941) who noted "prosternum scaly (an unusual condition)", no authors prior to Belkin (1.c.) specifically mentioned scales on any of these sites, nor were they described by Tyson (1970) except on metameron. Tyson's illustrations of *A. catasticta* Knab and *A. venustipes* females show scales on postcoxal membrane, underneath paratergite and on metameron, but none on scape.

In females of A. catasticta and A. venustipes from Australian localities, scales are present on all the sites listed above. In males of these species they are present laterodorsad of antennal bases, laterad at base of clypeus, or on scape, though due to the large size of the pedicel and the collapse of the eyes in dry specimens, it is difficult to be certain of this.

Neither Belkin (1.c.) nor Tyson (1.c.), nor the numerous earlier authors consulted, recorded scales on the abdominal pleural membrane in Aedeomyia.

In north Queensland A. catasticta is sometimes attracted in large numbers to MV lights used for general entomological collecting. In a series of 66 females and 9 males from the Iron Range and Laura areas of Cape York Peninsula, collected by Mr. M. S. Moulds in 1974 and preserved in ethanol, most females have distended abdomens (a few dissected are gravid). These show the pleural membrane of abdominal segments 2-7 to be densely clothed with

1/Mail address: Department of Entomology, University of Queensland, St. Lucia 4067, Australia. scales. In pinned females with distended abdomens from other localities, the continuous dense scaling from the dorsum to the venter obscures the margins of terga and sterna. When the female abdomen is not distended the scaled membrane is infolded between the terga and sterna, as is well shown in cleared specimens.

The abdominal pleural membrane is rarely visible in males. One Laura male has the membrane of segments 3-6 visible and, except for one scale possibly in situ on segment 3, it is without scales, nor is there any indication of a scaled membrane in cleared specimens.

It seems likely that scaling of the pleural membrane of the female abdomen will prove to be a generic character but the single pinned female of *A. venustipes* examined does not have its abdomen distended and females of other species have not been seen.

References

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