

A Metapleural Generic Character in Topomyia Leicester

Elizabeth N. Marks
 National Mosquito Control Committee
 Department of Entomology
 University of Queensland
 St. Lucia, Brisbane 4067
 Australia

In descriptions of mosquitoes, the metapleuron (cf. Knight and Laffoon 1970) is generally disregarded and there appear to be no records of the occurrence of hairs or scales on it.

I first noted the presence of scales on the metapleuron of an undescribed species of Topomyia from New Guinea and in July 1968, checked type specimens in the British Museum (Natural History). I am grateful to Dr. P. F. Mattingly for the opportunity to do this. Dr. Alan Stone (in litt. 24 Sept. 1968) kindly provided notes on types in the U. S. National Museum, Washington.

Hairs or scales on the metapleuron of Topomyia are usually situated immediately below and behind the posterior spiracle. Their development and colour may prove of assistance in associating (or at least in preventing incorrect association of) males and females of one species.

As listed below, types of 26 of the 30 described species were examined, plus one undescribed species. The following were not seen: T. aureoventer (Theobald), T. dubitans Leicester, T. houghtoni Feng and T. pseudobarbus Baisas.

In types of two species the metapleuron was obscured, on three others scales were difficult to make out but appeared to be present, and in 22 species scales or hairs were definitely present. Their development seems to bear no relation to subgeneric groupings.

Topomyia (Topomyia) aenea Thurman. USNM, holotype male.
 6 or 7 broad, erect, black scales close to spiracle.

Topomyia (Topomyia) argyropalpis Leicester. BM, cotypes, 1 male, 1 female.
 Patch of semierect broad black scales.
 syn. gregoryi Ludlow. UNSM, holotype female.
 A patch of 10 or 12 scales close to spiracle very similar to aenea.

Topomyia (Topomyia) barbus Baisas. USNM, holotype male.
 Specimen very poor but can make out 3 or 4 yellowish erect broad scales.

Topomyia (Topomyia) dejesusi Baisas and Feliciano. USNM, Holotype male.
 A few scales very similar to aenea.

Topomyia (Topomyia) gracilis Leicester. BM, cotypes 1 male, 3 females.
 Male has 4 very narrow pale scales or hairs; females, about 6 pale scales (one with broad scales only, two with both narrow and broad scales).

Topomyia (Topomyia) hernandoi Baisas and Feliciano. USNM, holotype male.

A very small group of erect narrow brownish scales close to spiracle.

Topomyia (Topomyia) inclinata Thurman. USNM, holotype male.

A patch of about a dozen broad, erect white scales close to spiracle.

Topomyia (Topomyia) lindsayi Thurman. USNM, holotype male.

A small patch of broad, semierect white scales near spiracle.

Topomyia (Topomyia) minor Leicester. BM, cotypes 1 male, 1 female.

Male with fairly large patch of erect fine scales or hairs, mainly pale, one dark on one side. Female obscured by pin.

Topomyia (Topomyia) nigra Leicester. BM, cotypes 2 males, 1 female.

One male with about 4 fine hairs and 4 narrowish to slightly broadened scales; one male with 3 fine hairs or scales. Female obscured by pin.

Topomyia (Topomyia) pilosa Brug. BM, specimen labelled "Type ♀"; abdomen off, male terminalia mount on same pin.

4 or 5 fine hairs or narrow erect scales. One female, same collection data but no type label, similar.

Topomyia (Topomyia) rubithoracis Leicester. BM, cotypes 1 male, 1 female.

Small patch semierect, fairly broad white scales.

Topomyia (Topomyia) spathulirostris Edwards. BM, holotype male.

Very large patch broad white scales.

Topomyia (Topomyia) svastii Thurman. USNM, holotype male.

Cannot see metapleuron properly.

Topomyia (Topomyia) tenuis Edwards. BM, holotype male.

Left side denuded, right partly obscured, apparently a couple of broad white scales present.

Topomyia (Topomyia) tipuliformis Leicester. BM, cotypes 2 males.

Large patch semierect broad black scales. One male, same data as one cotype but not labelled "cotype", similar.

One female, placed with above in BM, "Ampang, 10/6/04", patch of broad and 1-2 narrow white scales. Leicester described the male only and this is presumably the specimen which Edwards (1922) thought might be the female of tipuliformis; the difference in metapleural scaling indicates this is unlikely.

Topomyia (Topomyia) trifida Edwards. BM, holotype male.

Metapleuron obscured.

Topomyia (Topomyia) unispinosa Thurman. USNM, holotype male.

1 or 2 narrow, pale, erect scales at margin of spiracle, very difficult to make out.

Topomyia (Topomyia) sp. UQ, BM, male, female, New Guinea.

Large patch semierect broad black scales.

Topomyia (Suaymyia) argenteoventralis Leicester. BM, cotypes 1 male, 1 female.
Large patch semierect broad black scales.

Topomyia (Suaymyia) auriceps Brug BM, holotype male.
Patch broad white scales. One female, same locality, not marked as paratype, similar.

Topomyia (Suaymyia) crinata Thurman. USNM, holotype male.
A dense patch of broad, appressed silvery scales nearly covering metapleuron.

Topomyia (Suaymyia) decorabilis Leicester. BM, cotypes 1 male, 1 female.
Very large patch flat broad white scales.

Topomyia (Suaymyia) imitata Baisas. USNM, holotype male.
A dense patch of broad, appressed, yellowish scales much as in crinata.

Topomyia (Suaymyia) leucotarsis Thurman. USNM, holotype male.
A patch of very broad, appressed pale scales across middle of metapleuron.

Topomyia (Suaymyia) papuensis Marks. UQ, holotype male, allotype female.
Apparently 1 or 2 dark narrow scales or hairs below spiracle, but difficult to be certain.

Topomyia (Suaymyia) pseudoleucotarsis Thurman. USNM, holotype male.
Much like leucotarsis but scales extending to bottom of metapleuron.

References

- Edwards, F. W. 1922. A synopsis of adult oriental culicine (including megarhinine and sabethine) mosquitoes. Part II. Indian J. med. Res. 10: 430-475. (Original not seen; cited by McDonald, W. W. and R. Traub. 1960. Malaysian parasites XXXVII. An introduction to the ecology of the mosquitoes of the lowland dipterocarp forest of Selangor, Malaya. Stud. Inst. med. Res. Malaya 29: 79-109).
- Knight, K. L. and J. L. Laffoon. 1970. A mosquito taxonomic glossary. III. Adult thorax. Mosq. Syst. Newsletter 2(3): 132-146.