

A SUPPLEMENTARY NOTE ON *PROSOPISTOMA* LATREILLE
(EPHEMEROPTERA).

By M. T. GILLIES.

IN a recent publication (Gillies, 1954), I gave a general account of the genus *Prosopistoma* Latreille with special reference to the morphology of both adults and nymphs. The description of the former was based on a series of imagines and subimagines of a new species from East Africa, *P. africanum*. No imagines of *Prosopistoma* had previously been described, but within six months of the publication of my account the imago of the well known European species, *P. foliaceum* (Fourcroy), was described independently by two French workers, Fontaine (1955) and Degrange (1955). Their accounts show that the adults of both species are very similar. The object of the present note is to comment on the few differences reported and also to provide an additional point of information on the gills of the African nymphs.

WING VENATION IN THE MALE.

Degrange records the presence of 14 main veins in the male wing, rather than the 13 depicted by Fontaine and myself. His figure shows these 14 veins together with two additional veins terminating on the inner border of the wing. Re-examination of a series of *P. africanum* males has shown that in this species also there is a single concave vein running alongside and parallel to the internal wing margin. I had previously mistaken this vein for the folded back margin of the wing—in dry wing mounts a slight degree of folding of the margin often occurs—and in my previous publication no mention was made of it. The wing of the male *P. africanum* is accordingly re-drawn here (fig. 1).

Degrange suggests that all the main veins are represented in the male wing,

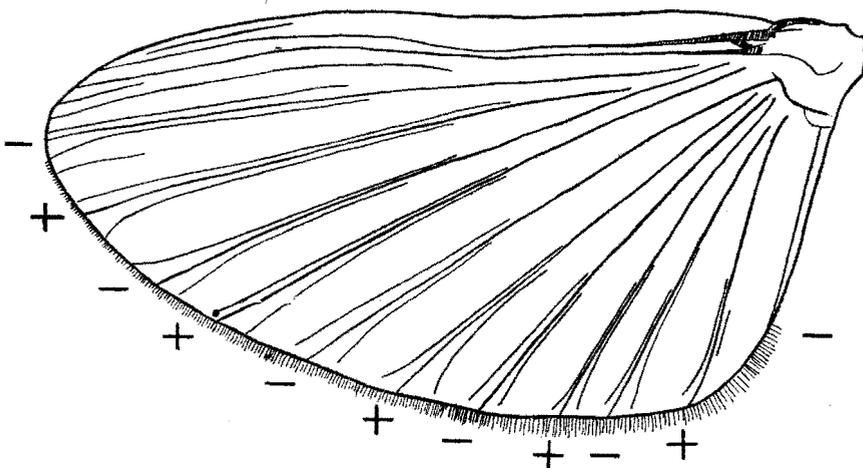


FIG. 1.—*Prosopistoma africanum* Gillies. Male fore wing.

and, if one accepts his interpretation of their homologies, then the most posterior vein in *P. africanum* is CuP(—), while in *P. foliaceum* it seems that the anal vein is present as well. The final concave vein is much nearer the inner wing margin in *P. africanum* than in *P. foliaceum*, and the intervening space would seem to be too narrow to accommodate any additional veins such as Degrange has depicted. In his figure, also, the wing fringe is shown as extending beyond the concave CuP to as far as the termination of the next vein behind it. In *P. africanum* the fringe ends abruptly at the termination of CuP. This character has been found to be constant in a series of adults examined. There seems, therefore, to be some discrepancy between the two accounts here, unless these small but distinct differences are of a specific nature.

THE SIXTH NYMPHAL GILL.

In my previous account I stated that a sixth gill was only present in the Madagascar species, *P. variegatum* Latreille, and was absent in *P. foliaceum*, *P. wouterae* Lieftinck and *P. africanum*. This was incorrect. It is true that Vayssière (1882) described only five gills in *P. foliaceum* and that Lieftinck (1932) recorded the presence of five gills in the Malayan species, *P. wouterae*. But by mischance I overlooked the amended description of *P. foliaceum*, given by Vayssière (1890), in which the presence of a minute sixth gill was recorded. I was also unaware at that time of the recent publication by Mme. Fontaine (Lafon, 1952), in which the sixth gill was described and clearly figured.

Through the kindness of Mme. Fontaine, I have been able to examine some specimens of *P. foliaceum* and to observe for myself this minute gill. Re-examination of some specimens of *P. africanum* has revealed the presence of a similar tiny structure, not more than 0.25 mm. long, situated on the dorsum of the sixth abdominal segment. It may be described as a trumpet-shaped, rolled up chitinous plate, the lip of the trumpet being split open on one side to near its base. An almost identical and slightly larger gill has also been found in the South African species *P. crassi* Gillies.

Thus it appears that a sixth gill is present in every species in which it has been sought. It is possible that it exists in *P. wouterae* as well; but that, owing to its small size, its presence has been overlooked.

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