

Manshead - Thomson
& Kuhlou
on Gambiae complex.

M2/181/33

31 January 1963

Dear Mr Paterson,

I have been following closely your recent reports and correspondence about the research work on A. gambiae, and have been particularly interested to have your third and fourth quarterly reports which Dr Bruce-Chwatt has already acknowledged. As many of the features of this work have been discussed frequently and fully by you and Dr Bruce-Chwatt I will confine my own comments for the moment to the section on the naming of salt-water gambiae.

The new evidence you have produced adds very substantially to the earlier observations on physiological differences in larval reaction, on behaviour differences in houses, and on significant differences in infection rates between the two forms in the same locality, all indicating the separate identity of "salt-water gambiae". Normally, I think there would have been every justification to raise "salt water gambiae" to a specific rank, but as it is the implications of your findings are closely interwoven with Davidson's current work on the mating groups of the gambiae complex, work which is being continued and which will undoubtedly lead to further re-thinking on the whole A. gambiae taxonomy. In view of these developments, and of the fact that Mr Mattingly has been so closely involved in the taxonomic implications of these developments, I would consider that it is perhaps rather premature and untimely to introduce a new specific name for any one of this complex without close consultation with the other parties concerned.

You will remember the confusion which might well have been caused by Halcrow's (1957) introduction of "A. gambiae litoralis" into the literature, a situation which you were fortunately able to deal with by pointing out in your paper on "Status of the East African salt-water-breeding variant of Anopheles gambiae Giles", 1962, Nature, 195, 469, that the name A. litoralis was already occupied.

In the present case I think there is every advantage to be gained by the specialists involved working in unison rather than separately, especially on questions of taxonomy. I can speak with feeling on this point, because some years ago I was foolish enough to turn down a very reasonable suggestion made by Ribbands that we should publish a joint paper dealing with the taxonomy of A. gambiae var melas, which we both considered should be raised to a specific rank. As it was, Ribbands' reprint on adult and larval characters was published separately.

Mr H. E. Paterson
The South African Institute for Medical Research
P.O. Box 1038
Johannesburg
South Africa

Mr H. E. Paterson
Johannesburg
M2/181/33

2
31 January 1963

while my own contribution on the egg characters - which would have been much more effectively published in close conjunction with Ribbands' paper - appeared only incidentally as part of a very bulky report on the bionomics of A. gambiae and A. melas in coastal areas of Sierra Leone.

Bearing this in mind I feel strongly that a joint statement by you, Mattingly and Davidson would carry a very much greater weight of authority on any material dealing with the present A. gambiae complex.

In the meantime I note that you hope to continue this work for another year. Perhaps in the course of these investigations further light may be thrown on the different forms of A. gambiae in Mauritius, including the status of salt-water gambiae in that island. This is perhaps an additional reason for hesitancy on this point before making the irretrievable move of attaching a new specific name to "salt-water gambiae".

There are a few minor points in your report which you might like to rectify, namely that several works referred to in the text are not included in the References at the end. These are:

Iyengar, 1962;
Holstein, 1957;
Frisse & Holstein, 1956;
Paterson, 1961;
Davidson, 1962;
Evans, 1938;
Mackay, 1935;
Muirhead-Thomson, 1951;
Gebert, 1935;
Hara, 1957.

I look forward very much to hearing further progress of this very significant investigation in due course.

Yours sincerely,

Dr R. C. Muirhead-Thomson
Entomologist, Research and
Technical Intelligence
Division of Malaria Eradication