

NOTE ON A FLAGELLATE PARASITE FOUND IN CULEX FATIGANS.

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IN 1898 I published¹ a brief account of certain amœbulæ and flagellulæ found by me during the previous year in mosquitoes near and in Ootacamund, India. Similar parasites were frequently observed by me subsequently in various species of Culicina, especially in *C. fatigans* Wiedemann, and once in an Anophelina. Since then what appear to be the same, or at least closely allied, organisms have been described as occurring in Anophelina by Chatterjee, Stephens and Christophers, and Léger, the last of whom named them *Chrithidia fasciculata*. Their habitat appears to be principally the intestinal cavity of the larva, pupa and imago. Many of them (as still well shown in an unstained preparation of my own made in Calcutta in 1899) have a considerable resemblance to trypanosomes—a resemblance which appears to be further suggested by the stained preparations of Léger, Christophers, and Stephens.

My object in calling attention to these old observations of mine is to suggest that they may have an important connection with the work of F. Schaudinn² on the development of *Halteridium danilevskyi* of *Athene noctua* in *Culex pipiens*. As is well known, he considers that the zygote of this parasite of the owl may produce in *C. pipiens* certain organisms closely resembling trypanosomes. The facts, however, that

¹ Report on a Preliminary Investigation into Malaria in the Sigur Ghat, Ootacamund. *Transactions of the South Indian Branch of the British Medical Association*, vol. VIII. No. 5, February, 1898, Madras, pp. 148 and 149.

² Generation und Wirtswechsel bei Trypanosoma und Spirochæte. *Arbeiten a. d. Kais. Gesundheitsamte*, vol. xx. 1904.

the *Chrithidia*, which are also so like trypanosomes, occur in *C. fatigans*, which is very closely allied to *C. pipiens*, and that they may occur in all stages of the insect, raise the question whether his neutral forms may not have really been other parasites of *C. pipiens*, quite distinct from the Hæmosporidia of the owl. The matter will be more fully dealt with in a future publication.