A MITE (ACARI: ERYTHRAEIDAE) AS UNUSUAL PARASITE ON AN ADULT CADDISFLY (TRICHOPTERA: HYDROPTILIDAE) FROM THE DOMINICAN REPUBLIC (WEST INDIES)

by

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ABSTRACT


First known case of a caddisfly (adult Leucotrichia tubifex Flint, 1964) parasitized by a mite (larva of Leptus sp.) belonging to another group than Hydrachnellae.

Key words: Trichoptera: Hydroptilidae, Acari: Erythraeidae, parasitism, Dominican Republic.

INTRODUCTION

It is a well-known fact that adult caddisflies (Trichoptera) are – like other, mostly amphibiotic, insects – very frequently parasitized by larvae (nymphs) of various Hydrachnellae. For instance, numerous infested – and in some cases heavily infested – specimens belonging to various species of Trichoptera were caught by the first author on several Caribbean islands. But a mite belonging to another group than Hydrachnellae was never found as para-
FIG. 1. Female *Leucotrichia tubifex* Flint, 1964 parasitized by larva of *Leptus* sp.
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The host

*Leucotrichia tubifex* Flint, 1964 is a representative of the 'microcaddisfly' family Hydroptilidae, first described from Puerto Rico and subsequently recorded also from Jamaica and Hispaniola (Haiti and the Dominican Republic). In material sampled with an UV-lamp by the first author in this last country (Botosaneanu 1995) it was encountered in small numbers in samples from 3 localities in the Cordillera Central. A sample from Rio Yaque del Norte at 'La Cienaga', a short distance W from Jarabacoa – Manavao (25.04.1995) contained also 2 ♀♀, one of them parasitized by a mite obviously not belonging to Hydrachnellae. The parasite is fastened in a rather lugubrious manner (Fig. 1) to the throat of the host, more exactly between its lateral cervical sclerites.

*Figs. 2-5.* Female genitalia of *Leucotrichia tubifex* Flint, 1964. 2: segments VIII and beyond, ventral; 3: sclerite of segment VIII, lateral, apodeme broken; 4-5: the internal sclerites, lateral and ventral.

The aim of the present paper is to shortly describe for the first time such a case.
We take this opportunity for illustrating (Figs. 2-5) the female genitalia of *L. tubifex* with more details than in the original description (FLINT 1964, figs. 11D,E).
Figs. 8-11. Larva of *Leptus* sp. 8: leg I; 9: palpal tibia, dorsal; 10: palpal tibia and tarsus, ventral; 11: a dorsal idiosomal seta strongly magnified.
THE PARASITE

The parasitic mite larva belongs to the superfamily Erythraeoidae. It keys out as the genus *Leptus* Latreille, 1796, by having: one pair of eyes, coxal fields II and III with one seta, and the trochantera of legs I and II each with one seta. Because of the palpal genu and femur having one B seta each, the species belongs to group IV according to FAIN (1991); there are about one hundred species known in this group, which will be listed in a paper by A. FAIN (in prep.). WELBOURN (1983) lists 31 species of *Leptus* with their hosts. The papers quoted above as well as other relevant publications record no *LEPTUS* species as parasitic on Trichoptera, and none was found in the Dominican Republic.

An illustration is here given (Figs. 6-11) for this *Leptus* sp. larva.

REFERENCES


