

NOTA / NOTE

An abnormal leg in *Enaphalodes rufulus* (Haldeman, 1847) (Coleoptera: Cerambycidae) from Rhode Island, U.S.A.

Raul Nascimento Ferreira

6 Fairview Dr., Pawcatuck CT 06379-1223, USA. e-mail: insectcatcher@comcast.net

Abstract: A case of symphisopody and ectromely in a leg of an *Enaphalodes rufulus* (Haldeman, 1847) (Coleoptera : Cerambycidae) collected in the State of Rhode Island, U.S.A. is presented.

Key words: Coleoptera, Cerambycidae, *Enaphalodes rufulus* (Haldeman, 1847), Teratology, Faunistic.

Resumen: Una pata anormal en un *Enaphalodes rufulus* (Haldeman, 1847) (Coleoptera: Cerambycidae) de Rhode Island, U.S.A. Se presenta un caso de sinfisopodia y ectromelia en la pata de un *Enaphalodes rufulus* (Haldeman, 1847) (Coleoptera: Cerambycidae) capturado en el estado de Rhode Island, U.S.A.

Palabras clave: Coleoptera, Cerambycidae, *Enaphalodes rufulus* (Haldeman, 1847), Teratología, Faunística.

Recibido: 28 de julio de 2013

Aceptado: 7 de agosto de 2013

Publicado on-line: 12 de septiembre de 2013

Introduction

In modern biology, Teratology refers to the study of monstrosities, malformations or abnormalities defined by the deviation from a stable and specific form.

Balazuc (1947) gave the classification used today and stated that the existence of abnormal insects may be due to alterations in the embryonic or post-embryonic development caused by genetic or environmental factors.

Teratological insects are not frequently found, but the taxonomic entomologist, from time to time, comes in contact with interesting cases. Every year, in the past decade, I have come across more specimens but I have not always included them in the priority list of publications, because they showed only minor abnormalities. However, even minor cases are important because they could provide an alert for environmental contaminants, ecological alterations or genetic changes in insect development.

Recently Ferreira (2008, 2011) reported some abnormalities in Coleoptera from Connecticut and stated that such anomalies are the result of a purely physical problem which can be related to physiological or environmental influences during development.

Material and Results

Specimen studied: Specimen studied: U.S.A., Rhode Island, Washington County, Westerly VII-23-1990.

The specimen here reported was identified as *Enaphalodes rufulus* (Haldeman, 1847) (Figure 1) and was collected in Rhode Island, Washington County, Westerly near the Airport on VII-23-1990 by

the author. At the time the specimen was collected it appeared to be normal. Although slow in his movements, the anomaly did not affect the specimen in trying to escape the first time that I attempted to catch him.

This cerambycid presents a symphysopody (fusion of the leg segments) and an ectromely (reduction of appendages) on the right middle leg (Figure 3). After examination and comparison with the normal middle leg (Figure 2), I could verify that the right middle leg presents the mesotrochanter reduced to 3/4 of the size of the normal size, and the mesofemur is about 1/2 the normal size, deformed, narrower and curved away of the body. The three tarsomera of the mesotarsus are fused and showing only a fine line at the junction. The claws and spurs are, also, reduced (Figure 3).

It is interesting to speculate about the probable cause of such injury. A mere mechanical pressure would seem not to be a reasonable explanation, even if the pressure was in early stages. In this case the leg abnormality lies in some unusual influence during its embryological period.

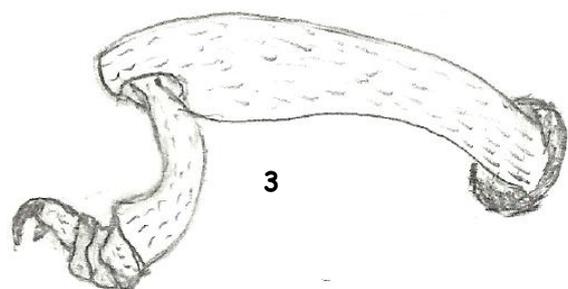
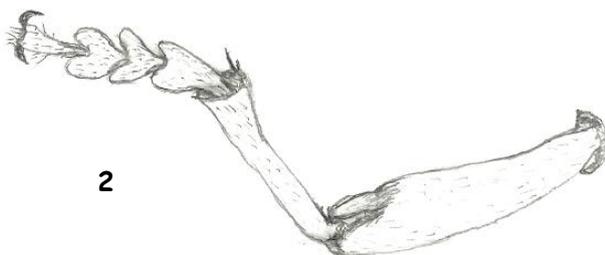
The specimen is in the collection of the author.

Aknowledgements

I thank Dr. Jane O'Donnell (University of Connecticut, Storrs) and Dr. Raymond Pupedis (Yale University, Peabody Museum of Natural History, New Haven) for reviewing a draft of the manuscript and offering critical comments and suggestions for improvements.

Literature Cited

BALAZUC, J. 1947. La tératologie des coléoptères et expériences de transplantation sur *Tenebrio molitor* L. *Mémoires du Muséum National d'Histoire Naturelle* **25**: 1-293. ● FERREIRA, R.N. 2008. A teratological specimen of *Calosoma sycophanta* (L.) (Coleoptera, Carabidae) from Connecticut, U.S.A. *Entomological News* **119**(3): 307-309. ● FERREIRA, R.N. 2011. Three anomalies of Coleoptera (Carabidae, Staphylinidae and Scarabaeidae) from Connecticut. *Insecta Mundi* **169**: 1-3.



Figs. 1-3.- *Enaphalodes rufulus* (Haldeman, 1847). 1.- Habitus. 2.-Ventral view of normal middle leg. 3.- Ventral view of abnormal middle leg.