

## NOTA / NOTE

# Two combined abnormalities in a male of *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera: Corydalidae) from Connecticut (U.S.A.).

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**Abstract:** A case of two combined anomalies in a male of *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera: Corydalidae) from Connecticut, U.S.A. are reported. This teratological case represents the third abnormality reported in Corydalidae and is a contribution more to the knowledge of teratological insects in Connecticut.

**Key words:** Megaloptera, Corydalidae, *Corydalus cornutus* (Linnaeus, 1758), Anomalies, Atrophy, Simphysopody, Teratology, Faunistics, U.S.A.

**Resumen:** Dúas anomalías combinadas num macho de *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera: Corydalidae) de Connecticut (Estados Unidos da América). Dase a coñecer o caso de dúas anomalías combinadas num macho de *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera: Corydalidae) de Connecticut, Estados Unidos da América. Este caso é assinalado pola terceira vez na familia Corydalidae e representa una nova contribución para o estudo dos insectos teratolóxicos de Connecticut.

**Palabras clave:** Megaloptera, Corydalidae, *Corydalus cornutus* (Linnaeus, 1758), Anomalías, Atrofia, Simfisopodia, Teratología, Faunística, Estados Unidos da América.

**Recibido:** 19 de enero de 2016

**Publicado on-line:** 17 de febrero de 2016

**Aceptado:** 8 de febrero de 2016

## Introduction

The Eastern Dobsonfly *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera: Corydalidae) is a large megalopteran with a wingspan of about 12 cm, whose males have large mandibles used to repel other males but despite their ferocious look they are harmless. However the females and larvae can inflict a strong pinch. They live in fast moving rivers and brooks where they prey on the larval stages of aquatic insects, small fish and tadpoles. They are common throughout the New England area. The adults can be found near the larval habitat during the day under leaves and at night can be attracted to light, like the specimen object of this study.

Specimens with the kind of abnormalities described here have been observed in other insect orders, namely by Ferreira (1966) or Ortuño & Vique (2007) but as far as I could research this is the third record of abnormalities in Corydalidae. The first one involved a duplication of a leg of a larva Wickham (1903), whilst the second one was present in a male with a bifurcated left antenna and the hind left leg with a bifurcation of the 4<sup>th</sup> tarsomere and a triplication of the 5<sup>th</sup> tarsomere (Elzinga, 1968). Both cases were reported affecting the species *Corydalus cornutus* (Linnaeus, 1758).

## Material and results

**Specimen studied:** *Corydalus cornutus* (Linnaeus, 1758) (Megaloptera, Corydalidae), USA, Connecticut, Windham Co. Thompson, 24-VII-2011, Raul Nascimento Ferreira Collection (RNFC).

**Abnormality type:** Unilateral atrophy and simphysopody type 3-4-5 in the left front leg (Fig. 1).

According to classification by Balazuc (1948), we are dealing here with an atrophy where the femur is 1/4 reduced and 1/3 the tibia. The tarsomeres show a combination of an atrophy and a simphysopody where the first and second tarsomeres are reduced, the 3<sup>th</sup> and the 4<sup>th</sup> are fused underneath, the 4<sup>th</sup> fused partially outside with the 5<sup>th</sup> and the latter totally fused underneath with the 4<sup>th</sup> giving the appearance of only four tarsomeres (Fig. 2b) in contrast with the right front normal leg (Fig 2a). This deformity may have been caused during the final stage of the larval development by a predator and having the larva escaped with the inflicted wound.

## Acknowledgements

I appreciate the assistance of my son José E. Ferreira for helping to improve the first draft of the manuscript and to the editors for their final review.

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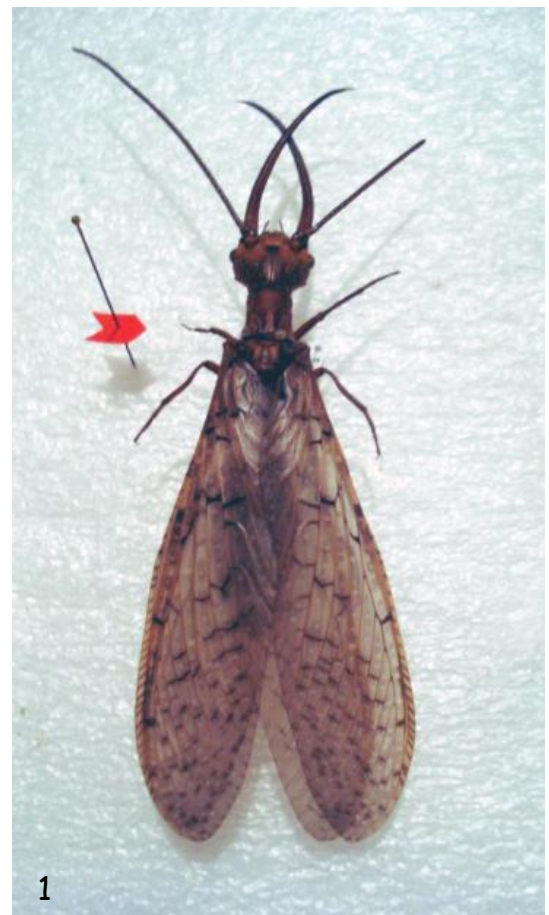


Fig. 1. - Habitus of *Corydalus cornutus* (Linnaeus, 1758) showing its abnormal left front leg.

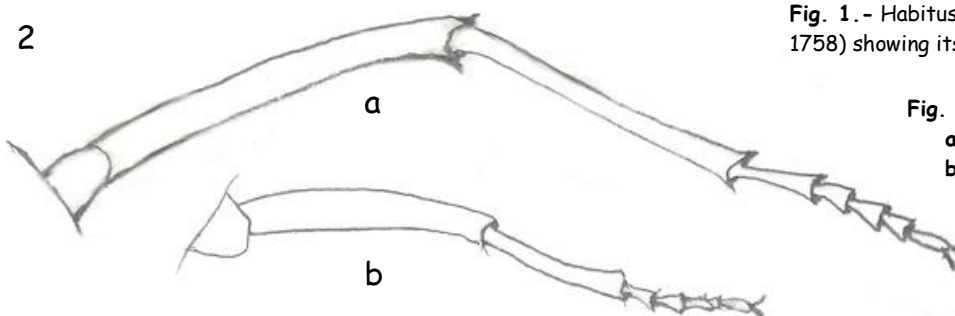


Fig. 2. - Drawings of front legs.

a. - Normal right leg.

b. - Abnormal left leg.