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Immature stages of *Calycopis caulonia* (Hewitson, 1877) (Lepidoptera, Lycaenidae, Theclinae, Eumaeini), with notes on rearing detritivorous hairstreaks on artificial diet

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Abstract

Details of egg, larval, and pupal morphology are described and illustrated for *Calycopis caulonia* (Hewitson). In particular, larval chaetotaxy is documented for the first time in *Calycopis*. Lab methods for inducing wild-caught *Calycopis* females to lay eggs and for rearing larvae on artificial diet are reported. These methods may be useful in several ways in resolving the basic taxonomy of *Calycopis*. Evidence concerning detritivory and myrmecophily in *C. caulonia* is discussed.

Key words: Lycaenidae, Theclinae, Eumaeini, *Calycopis*, systematics, life history, biology, detritivory, myrmecophily, artificial diet, rearing

Introduction

Egg, larval, and pupal morphology of Neotropical hairstreak butterflies (Lycaenidae, Theclinae, Eumaeini) remains poorly known even though the taxonomic usefulness of morphological features of the early stages in determining and understanding evolutionary patterns has long been known (see contributions in Stehr 1987). Fragmentary larval food plant information is available for about 25% of eumaeine species (Robbins unpubl.), but comprehensive life history information that can be used on a comparative basis is lacking (Duarte 2003; Duarte in prep.). Our poor knowledge of eumaeine immatures is directly attributable to the paucity of material deposited in the world's major museums and the difficulty in finding the early stages.

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