

## Description of the pupae of *Lepidophora culiciformis* Walker, 1850 (Diptera, Bombyliidae, Ecliminae) and host records

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### Abstract

The pupae of *Lepidophora culiciformis* Walker, 1850 is described and illustrated. Three species of Sphecidae (Hymenoptera) are recorded as hosts of the immature stages of *L. culiciformis*. The geographical range of the species is also enlarged.

**Key words:** *Lepidophora culiciformis*, Ecliminae, Bombyliidae, Diptera, pupa, morphology

### Introduction

*Lepidophora* Westwood was traditionally classified among the Toxophorinae (Hull, 1973; Painter & Painter, 1974; Zaitzev, 1992) based on the wing scales and on the enlarged prothorax. Paramonov (1949) revised the *Lepidophora* species and presented a key to segregate the adults. No references to the immature stages or hosts relationships were presented. Hall (1969) showed that *Eclimus* Loew, *Thevenetimyia* Bigot and *Marmasoma* White, should be removed from the Cylleniinae where they were previously placed. He also excluded them from the Toxophorinae. He proposed placing them in the subfamily Ecliminae. Hull (1973) redescribed the genus *Lepidophora* and stated that the immatures live in the nests of wasps. He also presented a list of known hosts of *L. lepidocera* (Wiedemann), 1828. The author also noted (page 43 of his monograph) that the pupa of *Lepidophora* is unlike that of *Toxophora*, which suggests it should be placed in a tribe within the Bombyliinae. Despite this suggestion, the taxonomic change was not effectively proposed at that time, as no mention to it appears elsewhere on text. Greathead (1988) reviewed the genera of Ecliminae and redefined the limits of the subfamily, including in it *Lepidophora*. Yeates's (1994) classification of the Bombyliidae proposed that the wing scales and the enlarged prothorax were independently derived in *Lepidophora* and *Toxophora*, corrobo-