

Larval galleries and pupal chambers of *Huequenía livida* (Germain, 1898) (Coleoptera: Cerambycidae)

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Description and photographs of larval galleries, pupal chambers and emergence holes of *H. livida* in *Araucaria araucana* dead branches are present.

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INTRODUCTION

The family Cerambycidae (Coleoptera: Chrysomeloidea) is represented by 845 species in Argentina. The larvae are phytophagous, most of them develop in dead wood but minorities do it in living plants (DI IORIO, 2005). The larval galleries and pupal chambers of this family had received little attention until the classification proposed by DUFFY (1953). More recently, descriptions of larval galleries and pupal chambers had been made in some Neotropical species (MEYER, 1967; NAPP, 1976, 1977; PENTADO-DIAS, 1978, 1979, 1980; DI IORIO, 1993a, 1993b, 1993c, 1995, 1996, 2006).

In 2005, *Huequenía livida* (Germain, 1898) was first recorded with the first known host plant in Argentina, *Araucaria araucana* (Mol.) Koch (TURIENZO, 2005). Turienzo obtained a winter and a summer generation in laboratory and the woods, from which the adults emerged, had kept for this study. The objective of this contribution is to describe and illustrate the larval galleries, pupal chambers and emergence holes of *H. livida* in *Araucaria* dead branches and

contributes with the biology of this Cerambycidae.

MATERIALS AND METHODS

Reared material obtained from Neuquén: San Martín de los Andes, 10-1-2005, P. Turienzo & O. Di Iorio leg [basal dead branches on living trees] (TURIENZO, 2005). The woods, with the respective traces are in authors' collection, Paola Turienzo, Buenos Aires (PTBA). Photographs of this material had been taken, and the corresponding measurements of pupal chambers (6 examples) and access/exit holes (15 examples) were obtained with a calibre (precision 0.01 mm). The terminology used here is those proposed by DI IORIO (1995).

RESULTS

The larval galleries are subcorticals, increasing in size when the larvae growth, and filled with compacted frass. In cases of high larval densities, it is not possible to distinguish between individual limits of the larval galleries (Fig. 1). In tiny branches (1 cm diame-



Figure 1. Larval biology of *H. livida* in *A. araucana*: larval tunnels filled with compacted frass, and without individual limits (high larval density).



Figure 2. Pupal chambers in cross-section.

ter), the larvae penetrate in the medullar region where they built the pupal chambers. These are direct and internal (DUFFY, 1953), and derived from a subcortical gallery (DI IORIO, 1995). In cross-section, the pupal chambers measure 3.93 ± 0.61 mm high and 6.18 ± 1.21 mm width (Fig. 2), oriented with the width parallel to the growth rings. In longitudinal

section, the pupal chambers measure 23.13 ± 5.64 mm total length (Fig. 3). Measurements of the access/exit holes were 3.09 ± 0.19 mm high and 4.73 ± 0.39 mm width (Fig. 4). The access/exit holes are horizontal (their width is transversal to the longitudinal axis of the branch). When the larval density is so high, the orientations of the access/exit holes are variable (Fig. 4). The adults build the emergence holes in the bark, located in front of the access/exit holes, and with the same orientation and measurements of this lasts.

DISCUSSION

MARTINS (2002) include the genus *Huequenienia* Cerda, 1986, in the tribe Achysonini.



Figure 3. Pupal chambers in longitudinal section.



Figure 4. Access/exit holes.

By the present, only the pupal chambers and larval galleries of one species of the genus *Achryson* were described. Larval galleries of *Achryson surinamum* (L., 1767) are internal (DI IORIO, 1996), and the pupal chambers correspond to the larval habit (DI IORIO, 1995), with the vertical emergence holes build by the adults (DI IORIO, pers. com.). The corresponding larval tunnels, pupal chambers and emergence holes for the genus *Huequenía* are, in consequence, completely different of the type-genus of this tribe. Species in both *Achryson* and *Huequenía* are nocturnal.

With this paper, the author contributes with some characteristics of one genus of this tribe but more studies must be done like describe immature stages to know the possible phylogenetics relations and possible diagnoses like simple keys for users like forest productors.

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RESUMEN

TURIENZO P. 2006. Galerías larvales y cámaras pupales de *Huequenía livida* (Germain, 1898) (Coleoptera: Cerambycidae). *Bol. San. Veg. Plagas*, **32**: 655-658.

Se presentan descripciones y fotografías de galerías larvales, cámaras pupales y orificios de emergencia de *H. livida* en ramas secas de *Araucaria araucana*.

Palabras clave: Biología larval, Escarabajos longicornios, *Araucaria*.

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