

## SCIENTIFIC NOTE: THE REAL LARVA OF *CASTNIA EUDESMIA* (LEPIDOPTERA: CASTNIIDAE)

Andres O. Angulo<sup>1</sup> and Tania S. Olivares<sup>2</sup>

<sup>1</sup>Departamento de Zoología. Facultad de Ciencias Naturales y Oceanográficas, Universidad de Concepción. Casilla 160-C. Concepción, Chile. E-mail: aangulo@udec.cl; <sup>2</sup>Casilla 4040 correo 3. Concepción. Chile. E-mail: tolivare@udec.cl

**Abstract.** A description of the larval stage of the bromeliad base borer, *Castnia eudesmia* is provided. This paper corrects the previous description for this species, which mistakenly was based on a saturniid larva.

**Key words.** *Adetomeris erythroptus*, Bromeliaceae, chaetotaxy, Chile, larval morphology, Neotropical, *Puya chilensis*, Saturniidae, South America, *Ormiscodes marginata*

In our previous paper related to this species (Angulo & Olivares, 1993), we erroneously described the immature stages of *Ormiscodes marginata* Phil. (Saturniidae) under the name *Castnia psittacus* (Molina, 1788). The latter moth species proved to be *Castnia eudesmia* Gray, 1838 (Miller, 1995). To correct our previous mistake, we now are describing the real larvae of *Castnia eudesmia* Gray. The larvae of *Castnia eudesmia* bores into the creeping stems of its hostplant *Puya chilensis* (Bromeliaceae). Pupae appear in January with half of the pupae sticking out of the stem (Fig.2); adult emerges out of this exposed pupal case. *C. eudesmia* larvae of all instars can be found simultaneously.

The hostplant is heavily utilized by various Lepidoptera larvae. In addition to *C. eudesmia*, the floral stems are bored by larvae of *Schistotheca canescens* Ragonot (Pyrilidae) (Angulo & Olivares, 2003); at the base and externally larvae of *Ormiscodes marginata* Phil. (Saturniidae) can be found (Angulo & Olivares, 1993), and at the base of leaves feed the larvae of *Adetomeris erythroptus* (Saturniidae)

*Castnia eudesmia* larvae were collected in January 1999 at Hualpén and Ramuncho (36°47'S 73°07'W), in the coastal environment shown in Fig. 1.

**Eggs** were previously described by Angulo (1998).

**Larva (Figs. 3, 5-12):** The larva is similar to a cerambycid beetle larvae. The last instar larvae are 7.5 to 8.0 cm in length; body flattened dorso-ventrally. Young larva is reddish, turnig whitish in the later instars; prothoracic shield is sclerotized and dark brown (Fig. 3). Head is shiny and dark-brown; at the top of the frontal triangle there is a lageniform prominence (which might be used for breaking out of the pupal case); inner labrum with 3 pairs of short setae and 3 pairs of very short spicules; outer labrum with 6 pairs of long setae positioned in two groups; mandibles are black, with 4 teeth (Fig.9), labium is whitish with a long and uniform spinneret with blunt apex (Fig. 8); prolegs are short with two rows of suboval crochets and covered with short spines (Fig. 10); spiracle is light-brown; tubercles setigerous; three of the setae are creamy similar to 4 and 5 all together situated down the spiracle; there are short spines located dorsally, down the medial band .

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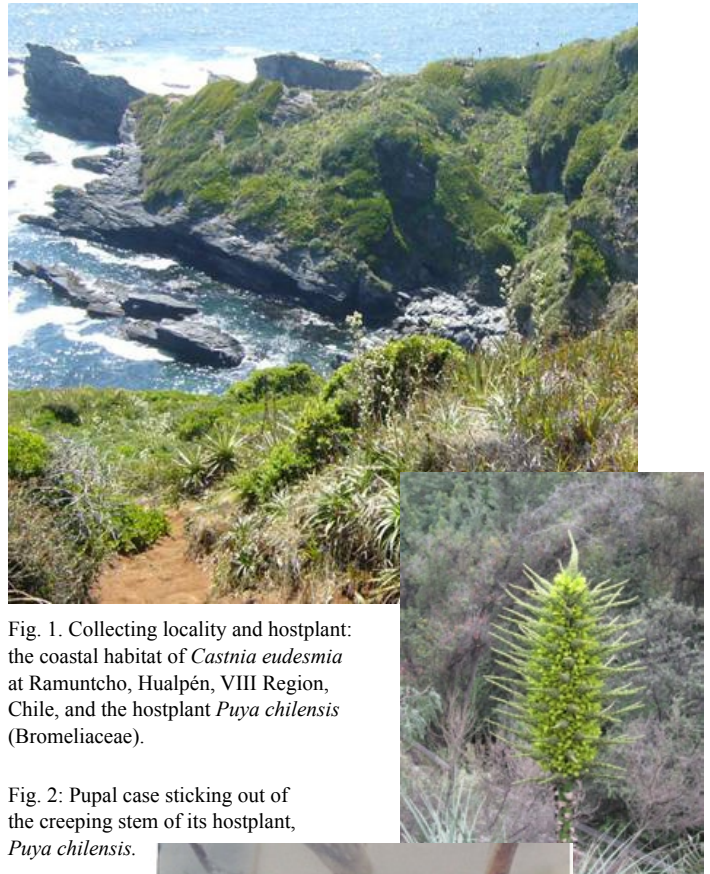


Fig. 1. Collecting locality and hostplant: the coastal habitat of *Castnia eudesmia* at Ramuncho, Hualpén, VIII Region, Chile, and the hostplant *Puya chilensis* (Bromeliaceae).

Fig. 2: Pupal case sticking out of the creeping stem of its hostplant, *Puya chilensis*.



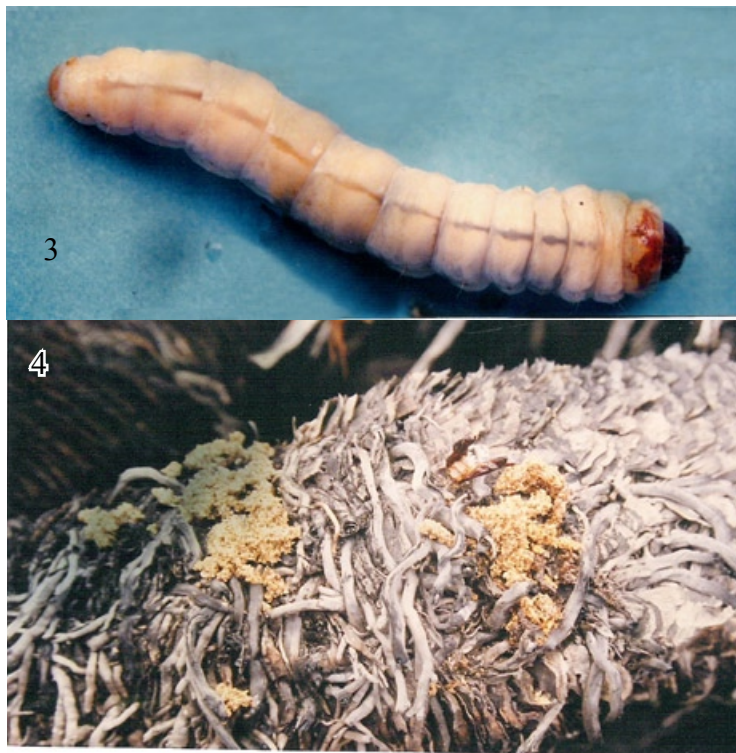


Fig. 3-4. Life history of *Castnia eudesmia*: (2) Pupal case sticking out of the creeping stem of its hostplant, *Puya chilensis*; (3) Mature larva; (4) Frass appearing on the hostplant as a result of feeding.

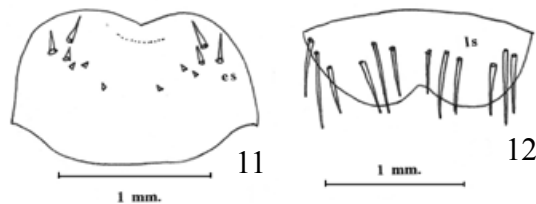
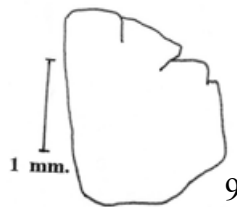


Fig. 9-12. Larval morphology of *Castnia eudesmia*: (9) mandible; (10) Crochets; (11) ventral view of labrum; (12) dorsal view of labrum

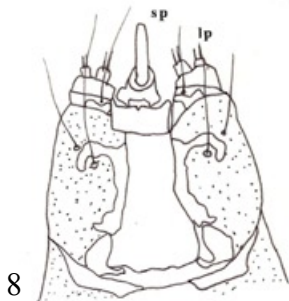
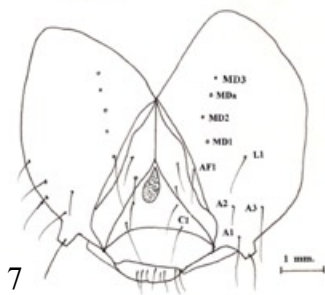
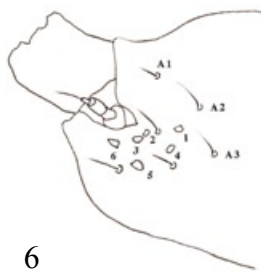
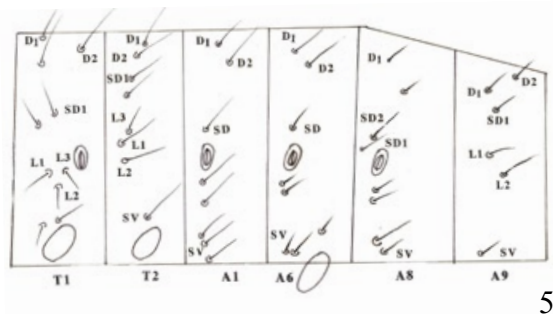


Fig. 5-8. Larval morphology of *Castnia eudesmia*: (5) Chaetotaxy; (6) Lateral view of cephalic capsule with ocular area; (7) Front view of cephalic capsule; (8) labium and hypopharyngeal complex.

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