



First descriptions of immatures for *Megistops* (Boheman) (Coleoptera, Chrysomelidae, Galerucinae) in a new host-plant family, with notes on life history and redescription of *M. vandepolli* Duvivier*

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Abstract

The adult of *Megistops vandepolli* Duvivier is redescribed and previously undescribed features such as mouth parts, wing venation and genitalia are included. Egg, mature larva and pupa are described and illustrated for the first time providing data for future phylogenetic studies in Galerucinae. *Megistops vandepolli* is found in *Buddleja stachyoides* Cham. & Schltl (Buddlejaceae); their larvae are leaf-miners and the pupation occurs in soil. Additional comments on its life history are also presented and discussed. The genus *Megistops* (Boheman) is added to this list of Alticini leaf-miners and a new family of host-plant is recorded for it.

Key words: Alticini, *Buddleja*, leaf-miner, morphology, pupa

Introduction

Megistops was proposed by Boheman in 1859 to include two species and, until the revision of Blake (1952), was comprised of 15 species; eight distributed in West Indies (from Cuba to Trinidad) and seven from South America. Blake (1952) described six more species, two from the West Indies, three from South America, and one from the mainland of Central America (Costa Rica); and provided keys for Central and South American species. Later, Savini (1993), based on specimens from Venezuela, added three other species. Currently, *Megistops* is distributed in Central America, West Indies and South America (Seeno & Wilcox 1982), and is comprised of 27 species (Savini 1993).

Megistops vandepolli was described by Duvivier (1889), with type-locality in Blumenau, State of Santa Catarina, Brazil. This species is also recorded in other Brazilian states (Blackwelder 1946), in the Paraguayan Chaco (Bechyné 1955), and Argentina (Lingafelter 1998). Nothing is known about its immatures and information on the biology of *Megistops* is scarce with references made only to the host-plant genera *Tabebuia* (Bignoniaceae), *Clusia* (Guttiferae), *Scirpus* (Cyperaceae) and *Murraea* (Rubiaceae) (Jolivet 1991). In this paper we record a new host-plant family, Buddlejaceae from which *M. vandepolli* was reared.

Megistops vandepolli, included in the Dibolina subtribe of the tribe Alticini (Scherer 1983, Savini 1993, Duckett *et al.* 2004), has been treated in a molecular and morphological phylogenetic analysis of the Chrysomelidae subfamilies (Gillespie *et al.* 2003, Duckett *et al.* 2004). As *M. vandepolli* was considered 'problematic' (Duckett *et al.* 2004), new information on this species will provide data for future phylogenetic analyses and will increase the taxonomic and biological knowledge of the Alticini. Therefore, the goal of this study is