



## Biology and description of a new species of *Lophyrocera* Cameron (Hymenoptera: Eucharitidae) from Argentina

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### Abstract

Descriptions of the adults, eggs and planidia of a new species of *Lophyrocera* (Hymenoptera: Eucharitidae) from north-western Argentina (Tucumán) are provided. Females deposit their eggs into the fruits of the shrub *Vassobia breviflora* (Sendth) (Solanaceae). The host of *L. variabilis* is an unidentified species of *Camponotus* Mayr (Formicidae: Formicinae).

**Key words:** eggs, planidia, host ant, host plant, *Lophyrocera*

### Introduction

*Lophyrocera* Cameron (Hymenoptera: Eucharitidae) includes six species distributed across South and Central America and the western United States: *L. daguerrei* (Gemignani) (Argentina), *L. plagiata* (Walker) and *L. pretendens* (Walker) (Brazil), *L. chilensis* (Brèthes) (Chile), *L. stramineipes* Cameron (Panama), and *L. apicalis* Ashmead (USA: Arizona, California, Colorado, South Dakota, Texas, and Washington) (Heraty 2002; Noyes, 2008). Only *Lophyrocera daguerrei* (Gemignani) has been documented to occur in Argentina (Gemignani, 1947; De Santis, 1967, 1998; Heraty, 2002). This species was originally described by Gemignani (1947) in the genus *Tetramelia* Cameron, and subsequently transferred to *Lophyrocera* by De Santis (1998). *Tetramelia* was treated as a junior synonym of *Lophyrocera* by Heraty (2002). The ant host for *Lophyrocera* is currently unknown, and the only information on biology was based on observations of the oviposition behaviour of *Lophyrocera* sp. at Rancho Grande Reserve, Porto Velho, Rondonia, Brazil (Heraty, 2002). *Lophyrocera* is nested within a clade of eucharitids that parasitize Camponotini, and members of this tribe are the inferred hosts for the genus (Heraty, 2002). A new species, *Lophyrocera variabilis*, was discovered in north-western Argentina, and its description and information on life history and immature stages are included herein.

### Materials and methods

Thirteen nests of *Camponotus* sp. (Formicidae: Camponotini) were sampled from roadsides in Los Chorrillos, Tucumán (26°18'37''S 64°58'13''W and 26°18'40''S 64°57'55''W; 1350-1400 m). The adults, brood, and debris were placed in 550 c.c. styrofoam containers; water was added slowly to the bottom of the container through a plastic tube every 30 minutes over 12 hours, causing the ants to bring their progeny to the surface. This behaviour was used to collect the immature stage.