

Description of a new species of *Euglossa* (Hymenoptera: Apidae: Euglossini) with notes on comparative biology

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Abstract

Here, we describe *Euglossa rufipes* Rasmussen & Skov **sp. nov.** from remnants of Andean rainforest in western Peru and Ecuador. The species closely resembles *E. asarophora* Moure & Sakagami, but males can be distinguished by the red color of the hind tibia and by genital characters. We summarize the known biological information for both species.

Key words: cryptic species, orchid bees, pollination, chemical baits.

Introduction

Euglossini, the orchid bees, is a tribe of long-tongued pollinators found only in the New World. The nest-building females have a corbicula, a basket-like structure on the hind tibia for carrying nest material and provisions, which groups the orchid bees with the honey bees, stingless bees, and bumble bees in the “corbiculate” Apinae clade (Hymenoptera: Apidae) (Michener 2000). Male orchid bees have unique morphological features on the legs that are used to collect scents from orchids and other sources. The scents are stored in the highly modified hind tibia and most likely used in relation to mating (Bembé 2004, Eltz *et al.* 2005a). Males can be attracted to artificial scent baits, a technique widely used since its discovery (Dodson *et al.* 1969) and which has resulted in the collection and description of many new species (taxonomic papers cited in Roubik and Hanson 2004).

The tribe encompasses almost 200 described species divided into five genera (Michener 2000, Cameron 2004) with generic relationships hypothesized by Michel-Salzat *et al.* (2004). The genus *Euglossa* accounts for more than 50% of the species diversity and is sometimes divided into six subgenera (e.g., Ramírez *et al.* 2002, Cameron