



Three new species of *Euglossa* Latreille (Hymenoptera: Apidae) from Brazil

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Abstract

Euglossa (*Euglossella*) *jacquelynae* **sp. n.**, from Central Brazil, *Euglossa solangeae* **sp. n.**, from coastal southeastern Brazil, and *Euglossa* (*Euglossa*) *sovietica* **sp. n.**, from the western Brazilian Amazon, are described as new species. *Euglossa solangeae* **sp. n.** is believed to belong to the *Euglossa stellfeldi* Moure species group—a discussion on the placement of this group is also presented – and *Euglossa sovietica* **sp. n.** is treated as a member of *Euglossa purpurea* Friese species group.

Key words: Apini, *Euglossa jacquelynae*, *Euglossa solangeae*, *Euglossa sovietica*, Euglossina, new species, Neotropics, orchid bees, taxonomy

Introduction

Euglossa Latreille (Hymenoptera: Apidae: Apini: Euglossina) is the most speciose genus of the neotropical subtribe Euglossina, with some 110 species currently recognized as valid (see Roubik & Hanson 2004, Bembé 2007). Nevertheless, new species are still being described (*e. g.* Roubik 2004, Nemésio 2006, Rasmussen & Skov 2006, Bembé 2007). Six subgenera are currently recognized in *Euglossa*: *Euglossa* Latreille, *Glossura* Cockerell, *Euglossella* Moure, *Dasystilbe* Dressler, *Glossurella* Dressler, and *Glossuropoda* Moure. Internal arrangements in all subgenera have been a matter of debate and some changes have been proposed (see Moure 1967, Dressler 1978, Moure 1989, Roubik 2004). Michener (2000) even synonymized all subgenera under *Euglossa*, but this proposition has not been followed by subsequent authors (see Silveira *et al.* 2002, Roubik 2004, Bembé 2007). A full re-evaluation of the taxonomic status of these subgenera as well as the relationships among them awaits the results of comprehensive phylogenetic analyses.

In spite of several inventories carried out in Brazil during the last decades (*e. g.* Rebêlo & Garófalo 1991, 1997, Morato *et al.* 1992, Oliveira & Campos 1996, Neves & Viana 1997, Tonhasca Jr. *et al.* 2002, Nemésio 2003, Nemésio & Morato 2004, 2006, Sofia & Suzuki 2004, Sofia *et al.* 2004, Nemésio & Silveira 2006, 2007), most of the country remains virtually unexplored for its orchid-bee fauna. Although orchid bees have been regarded as bees typical of forested areas, very little is known about the faunistic composition of orchid bees in “cerrado” (Brazilian savanna) areas, with the exception of a few sporadic studies (Rebêlo & Cabral 1997, Nemésio & Faria Jr. 2004). Preliminary results of recent inventories of orchid bees in gallery-forests and cerrado areas in Central Brazil by S. C. Augusto and colleagues (unpublished data) have shown that the orchid bee fauna of this region may be richer and more diverse than once expected. Some male orchid bees collected by S. C. Augusto in the municipality of Caldas Novas, state of Goiás, belong to an undescribed species very similar to the Central American *Euglossa cyanura* Cockerell and the Amazonian *E. viridis* (Perty). Other males collected by S. C. Augusto, this time in the southeastern part of São Paulo state, a coastal area,