Euglossa samperi n. sp., a new species of orchid bee from the Ecuadorian Andes (Hymenoptera: Apidae)

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Abstract

A new species of orchid bee in the genus *Euglossa* is here described. *Euglossa samperi* **n. sp.** Ramírez occurs on the Pacific foothills of the Ecuadorian Andes. Based on morphological characters, this new taxon is assigned to the subgenus *Glossurella*, one of the most species-rich, yet poorly known groups of orchid bees.

Key words: Orchid bee, Euglossini, Ecuador, Esmeraldas, Chocó, endemism, *Glossurella*, bursigera species group, *Euglossa,* genitalia

Introduction

Orchid bees pollinate ca ~700 spp. of Neotropical orchids (Williams 1983, Ramirez *et al.* 2002), and, as a result, a considerable body of research has focused on these charismatic animals during the past 150 years (Roubik & Hanson 2004). Male bees collect fragrances (sesquiterpenes and derivative compounds) from orchid flowers and other sources and store them in specialized pockets located in their hind legs. In the process, these males pollinate orchid flowers (Roubik & Hanson 2004). During courtship, hovering males present their fragrance bouquets to females by transferring samples from their hind legs to small hair patches on their middle tibiae, which they then ventilate by pressing against a rapidly oscillating jugal comb—a set of short blades anchored to the wing base (Bembé 2004, Eltz *et al.* 2003, Eltz *et al.* 2005).

Most of the currently known orchid bee taxa were described between 1960 and 1985, soon after the discovery of chemicals baits that readily attract male bees (Dodson *et al.* 1969). However, a number of new species have also been described recently (*e.g.* Oliveira & Nemesio 2003, Roubik 2004, Ramírez 2005, Anjos-Silva & Rebelo 2006, Oliveira 2006, Rasmussen & Skov 2006, Parra-H *et al.* in press). These new discoveries come from