

First record of the orchid bee *Euglossa viridis* (Perty) (Hymenoptera, Apidae, Euglossini) from Paraná State, southern Brazil

Giangarelli, DC. and Sofia, SH*.

Laboratório de Genética e Ecologia Animal, Departamento de Biologia Geral – CCB,
Universidade Estadual de Londrina – UEL, Rod. Celso Garcia Cid, Km 380,
CP 6001, CEP 86051-990, Londrina, PR, Brazil

*e-mail: shsofia@uel.br

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Euglossa viridis (Perty, 1833) is an orchid bee species with geographic distribution ranging from the Amazon Basin to the Atlantic Forest (Nemésio, 2009). In the Atlantic Forest this species is known to occur only in rainy coastal forests in the states of Pernambuco, Espírito Santo, Rio de Janeiro and São Paulo, having its southernmost distributional limit recorded at 23° S latitude. However, since males of *E. viridis* are rarely attracted to synthetic chemical baits, information about the geographic distribution of this species is still deficient (Nemésio, 2009).

Considering that the correct information about species distributional ranges is important both for biogeographic approaches and conservation measures, this study aimed to provide new data on *E. viridis* distributional extension throughout Atlantic Forest Domains. Samplings were carried out from April 2009 to March 2010, from 10:00 AM to 1:00 PM, in a well preserved Atlantic Rainforest remnant (Reserva Natural Salto Morato/RNSM) of about 2300 ha, located in the district of Guaraqueçaba, on the northern coast of Paraná (25° 09' -25° 11' S and 48° 16' -48° 20' W). The local climate is classified as Af (Köppen), tropical super humid, without a dry season or the occurrence of frost, with mean annual rainfall varying from 2000 to 3000 mm and mean temperatures above 22 °C and 18 °C in the warmest and coldest months, respectively (IAPAR, 1978). During the surveys, males of *E. viridis* were collected with an entomological net after being attracted to chemical baits of eugenol, eucalyptol, beta-ionone, methyl salicylate and benzyl benzoate; eugenol was the most attractive chemical, responsible for 46.2% of the *E. viridis* males captured in the study area.

A total of thirteen males of *E. viridis* were collected at RNSM. The present finding expands by about 300 km southwards the known geographic distribution of

this euglossine species. To date, the southern limit of geographic distribution of *E. viridis* was the Ubatuba region (southeastern Brazil), which has been designated as the southern distributional limit for other euglossine species as well (Nemésio, 2009).

E. viridis has been recognised as morphologically similar to the Central American *Euglossa cyanura* Cockerell, 1917 and *Euglossa (Euglossella) jacquelynae* Nemésio, 2007 from Central Brazil (Nemésio, 2007). In his recent illustrative essay on orchid bees from the Atlantic Forest, this author reports that *E. jacquelynae* has only been recorded from the westernmost limits of the Atlantic Forest Domain, whereas *E. viridis*, as previously mentioned, is a euglossine species usually found in coastal forests of this ecosystem (Nemésio, 2009). This new record of *E. viridis* in Paraná clearly contributes to a better understanding of distributional occurrence of this species and to future biogeographic approaches to euglossine fauna.

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