

Zammara smaragdula Walker, 1858 (Hemiptera: Cicadidae): First record for Brazil

Douglas Henrique Bottura Maccagnan^{1*}, Nilza Maria Martinelli², Geert Goemans³ and Edson Guilherme⁴

1 Universidade Estadual de Goiás, Unidade Universitária de Iporá. Avenida R-2, Q. 1, CEP 76200-000, Iporá, GO, Brasil.

2 Universidade Estadual Paulista, Faculdade de Ciências Agrárias e Veterinárias, Departamento de Fitossanidade. Via de Acesso Prof. Paulo Donato Castellane, s/n, CEP 14884-900, Jaboticabal, SP, Brasil.

3 University of Connecticut. 75 North Eagleville Road, Unit 3043, Storrs CT 06269, U.S.A.

4 Universidade Federal do Acre. Departamento de Ciências da Natureza, BR-364, km 04, Campus. CEP 69915-900, Rio Branco, AC, Brasil.

* Corresponding author. E-mail: douglashbm@hotmail.com

ABSTRACT: The present note reports the first record for Brazil of the cicada *Zammara smaragdula* Walker, 1858 (Hemiptera, Cicadidae, Zammarini). This new record brings the number of reported Cicadidae species for Brazil to 153, including three species in the genus *Zammara*.

Cicadas (Hemiptera: Cicadoidea) are generally large insects that are distinguished by the sound they emit. There are currently 152 species reported from Brazil (Sanborn 2008; Santos and Martinelli 2009a, b; Santos *et al.* 2010). But, because of the limited number of studies on the Brazilian fauna due to very limited collecting and the small number of professionals working on this group, this number is certainly underestimated.

The tribe Zammarini was first described by Distant (1905) as the Division Zammararia, characterized by their expanded pronotal margins, usually angulated medially. Zammarini have a distribution restricted to tropical and subtropical regions of the Americas. The genus *Zammara* Amyot and Audinet Serville, 1843 is currently composed of 15 species (Goemans 2010), and of these, only the species *Zammara strepens* Amyot and Audinet Serville, 1843 and *Zammara tympanum* (Fabricius, 1803) are recorded as occurring in Brazil (Metcalf 1963; Duffels and van der Laan 1985).

A male specimen of *Zammara smaragdula* Walker, 1858 (Figure 1) was collected on 18-II-2010 in gallery forest at the mouth of the river Jurupari, Acre state, Brazil, (7°51'32" S, 70°51'10" W). The collected specimen was deposited in the Entomology Collection at the Phytosanitation Department of the Faculdade de Ciências Agrárias e Veterinárias of the UNESP (FCAV/UNESP), Jaboticabal, São Paulo, Brazil.

When alive, *Z. smaragdula* has an iridescent blue-green color and can be easily diagnosed by the pattern of spots on their forewings. Initially, this species was reported only for South America (Walker 1858), without providing any specific location, neither does the type specimen have any location data. Currently this species is known to occur in Mexico (Sanborn 2006a; 2007), Guatemala (Sanborn 2006b) and Colombia (Sanborn 2010). Bartholomew and Barnhart (1984) carried out physiological studies with *Z. smaragdula* in Panama. However, this species is not listed for this country in the list provided by Wolda and Ramos

(1992). Young (1972; 1973) attributes ecological notes for *Z. smaragdula* in Costa Rica, but the pictures presented by the author are not consistent with this species. Probably the correct species is *Z. smaragdina* Walker, 1850. However, in later publications, as indicated by the pictures presented,



FIGURE 1. Male of *Zammara smaragdula* from the state of Acre, Brazil. Scale 1cm.

the author starts to correctly determine both species, thus providing the true ecological notes for *Z. smaragdula* from Costa Rica (Young 1980a, b, c, d; 1981a, b). Since the records of occurrence for *Z. smaragdula* did not include Brazil, the collection herein reported represents a new record for the country.

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