

# Insecta, Hemiptera, Cicadidae, *Quesada gigas* (Olivier, 1790), *Fidicina mannifera* (Fabricius, 1803), *Dorisiana viridis* (Olivier, 1790) and *Dorisiana drewseni* (Stål, 1854): First records for the state of Mato Grosso do Sul, Brazil

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**ABSTRACT:** No information is given for the distribution of Cicadidae in the state of Mato Grosso do Sul, central Brazil. Thus, the present note reports the species *Quesada gigas*, *Fidicina mannifera*, *Dorisiana viridis* and *D. drewseni* for the first time in this state.

Little is known about the geographic distribution patterns of cicada species in Brazil. The most comprehensive work is by Martinelli and Zucchi (1997a), which reviews the geographical distribution of coffee cicadas in Central and South America. However, with regard to the state of Mato Grosso do Sul, no information on Cicadidae is mentioned in the literature.

*Quesada gigas* (Olivier, 1790) (Cicadinae: Hyantiini) has a wide geographical distribution, with occurrences in North America, Antilles (Metcalf 1963), and Central America (Young 1976; 1980; 1981; Sanborn 2006). In Brazil this species is found in the states of Minas Gerais, São Paulo, Paraná, Ceará, Espírito Santo (Martinelli and Zucchi 1997a), Bahia (Marques *et al.* 2004), Pará, Maranhão (Zanuncio 2004) and Distrito Federal (Motta 2003). Among cicadas, *Q. gigas* has been considered to be a major pest of coffee crops (Martinelli and Zucchi 1997b).

*Fidicina mannifera* (Fabricius, 1803) (Cicadinae: Fidicinini) is found in most of the countries adjacent to Brazil (Metcalf 1963), as well as in Costa Rica (Young 1972; 1976; 1981). In Brazil this species occurs in the states of Pará, Mato Grosso, São Paulo, Rio de Janeiro, Rio Grande do Sul (Martinelli and Zucchi 1997a), Bahia (Marques *et al.* 2004) and Distrito Federal (Motta 2003).

*Dorisiana viridis* (Olivier, 1790) (Cicadinae: Fidicinini) is also found in the neighboring countries of Brazil, and collections are reported for the states of Amazonas, Pará, Goiás, Mato Grosso, São Paulo (Martinelli and Zucchi 1989b; 1997a) and Distrito Federal (Motta 2003). *Dorisiana drewseni* (Stål, 1854) is recorded in Argentina (Metcalf 1963), Uruguay (Ruffinelli 1970), and Brazil in the states of Minas Gerais, São Paulo, Paraná (Martinelli and Zucchi 1997a) and Distrito Federal (Motta 2003).

In the state of Mato Grosso do Sul, adults of the species *Quesada gigas*, *Fidicina mannifera*, *Dorisiana viridis* and *D. drewseni* were collected systematically using an entomological net in the city of Campo Grande (20°29'59" S, 54°36'42" W). Collections occurred between the months

of September and January from 2004 to 2007. Occasional collections were also made in Dourados (22°10'07" S, 54°32'33" W), São Gabriel do Oeste (19°24'21" S, 54°31'23" W) and Costa Rica (18°32'40" S, 53°7'35" W) during the same time period. The adult specimens of the species were identified based on the descriptions and illustrations of Martinelli and Zucchi (1987; 1989a; b; 1997a). The exuviae were identified using the dichotomous key of Motta (2003). These identifications were later confirmed by specialists.

*Quesada gigas* was recorded in Campo Grande (central region of the state), Dourados (south) and Costa Rica (northeast). This species was recorded only in urban areas. On the campus of the Universidade Federal de Mato Grosso do Sul, in Campo Grande, thousands of exuviae of this species were observed.

*Fidicina mannifera* was observed in the urban areas of Campo Grande, Dourados, and São Gabriel do Oeste (also central region of the state). However, this species was also observed in rural areas and in riparian vegetation. Previously, *D. viridis* and *D. drewseni* were recorded only in Campo Grande on the campus of the Universidade Federal de Mato Grosso do Sul, and in an adjacent riparian forest. The collected specimens were deposited in the Coleção Zoológica de Referência da Universidade Federal de Mato Grosso do Sul (ZUFMS 01, ZUFMS 02, ZUFMS 03, ZUFMS 04, ZUFMS 05).

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