New occurrence of Gryon gallardoi (Brèthes, 1914) (Hymenoptera, Scelionidae) Hemiptera parasitoid in Brazil

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Abstract

The objective of this study was to investigate the occurrence of Gryon gallardoi (Brèthes, 1914) (Hymenoptera, Scelionidae) in the municipality of Itumbiara, Goias Brazil. The collections were weekly, with 10 traps, placed at ground level and randomly distributed, in a total of five basins in the pastures and five in the forest. These traps consisted of spherical yellow plastic basins, approximately 30 cm in diameter and 12 cm high where a mixture of 2 liters of water, 2 ml of detergent and 2 ml of formaldehyde were deposited. During 1998, 1013 specimens of Scelionidae were collected, and 109 specimens of G. gallardoi were identified, constituting 10.7% of the Scelionidae. A total of 480 samples were collected and 63 specimens were collected from pastures (57.8%) and 46 from the forest (42.2%). The results found in this work allow to extend the geographic distribution of G. gallardoi in Brazil.

Key words: Insects, eggs, idiobiont, biocontrol, agricultural pests


Introduction

Hymenoptera are entomophagous insects because of the frequency and effectiveness with which they attack insects considered agricultural pests, as about 50% have parasitic eating habits (CLAUSEN, 1940).

Scelionidae are solitary endoparasitoids, idiobiont of insect and spider eggs (GAULD & BOLTON, 1988; PACHECO & CORRÊA-FERREIRA, 2000). The family contains about 3000 species in 150 genera around the world. It has three subfamilies: Scelioninae, Teleasinae and Telenominae. Scelioninae parasitize eggs from Orthoptera, Heteroptera,
Embioptera, Hemiptera, Isoptera and Araneae (GAULD & BOLTON, 1988).

Gryon gallardoi (Bréthes, 1913) belongs to the subfamily Scelioninae and Gryonini tribe. It is a parasitoid of Hemiptera eggs from the Coreidae family that attack rice, potatoes, tobacco, tomatoes and papaya in Brazil (LOIACONO, 1980). This species is found in Argentina (Buenos Aires) and Brazil (Porto Alegre-Rio Grande do Sul) (LOIACONO, 1980).

In January 2001, the G. gallardoi parasitoid was found parasitizing eggs of Leptoglossus zonatus (Dallas, 1852) (Hemiptera, Coreidae) in maize crop in Itumbiara, Goiás, Brazil.

The objective of this study was to investigate the occurrence of G. gallardoi in the municipality of Itumbiara, Goiás Brazil.

Material and Methods
The insects were collected in pasture and native forest areas, at the Farm of the College of Agronomy of the Lutheran Institute of Higher Education in Itumbiara, Goiás, Brazil, from January to December 1998. The collections were weekly, with 10 traps, placed at ground level and randomly distributed, in a total of five basins in the pastures and five in the forest.

These traps consisted of spherical yellow plastic basins, approximately 30 cm in diameter and 12 cm high where a mixture of 2 liters of water, 2 ml of detergent and 2 ml of formaldehyde were deposited. Specimen identification was performed using the work of LOIACONO (1980).

Results and Discussion
During 1998, 1013 specimens of Scelionidae were collected, and 109 specimens of G. gallardoi were identified, constituting 10.7% of the Scelionidae. A total of 480 samples were collected and 63 specimens were collected from pastures (57.8%) and 46 from the forest (42.2%). Probably, the forest areas are important as places of origin of G. gallardoi, which is a natural enemy of other insects (Order Hemiptera) also present in this environment.

The results found in this work allow to extend the geographic distribution of G. gallardoi in Brazil.

References