

Occurrence of *Trissolcus* sp. (Hymenoptera: Scelionidae) in eggs of *Leptoglossus zonatus* (Dallas, 1852) (Hemiptera: Coreidae) in maize crops in Itumbiara, State of Goiás, Brazil.

Ocorrência de *Trissolcus* sp. (Hymenoptera: Scelionidae) em ovos de *Leptoglossus zonatus* (Dallas, 1852) (Hemiptera: Coreidae) em lavoura de milho em Itumbiara, Estado de Goiás, Brasil.

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Abstract

This note reports the occurrence of the parasitoid *Trissolcus* sp. (Hymenoptera: Scelionidae) parasitizing eggs of *Leptoglossus zonatus* (Hemiptera: Coreidae) on maize crop (*Zea mays* L.) in Itumbiara County, State of Goiás, Brazil. Seventy-two eggs of *L. zonatus* were collected, from which six parasitoids of the genus *Trissulcus* emerged.

Key Words: Egg parasitoid, *Leptoglossus*, maize, Brazil.

Resumo

Esta nota registra a ocorrência do parasitóide *Trissolcus* sp. (Hymenoptera: Scelionidae) parasitando ovos de *Leptoglossus zonatus* (Hemiptera: Coreidae) em cultivar de milho (*Zea mays* L.) em Itumbiara, Estado de Goiás. Setenta e dois ovos de *L. zonatus* foram coletados, dos quais emergiram seis parasitóides do gênero *Trissulcus*.

Palavras-Chave: Parasitóide de ovos, *Leptoglossus*, milho, Brasil.

Qualitative and quantitative studies of natural enemies of rice pests are important requisites to promote natural biocontrol as integrated pest management. Among natural enemies, hymenopteran parasitoids play an important role in rice key pests. The abundance and diversity of parasitoid fauna in agro-ecosystems may vary with changes in management agricultural practices (BEEVI; LYLA, 2000; LYNCH; THOMAS, 2000).

All Scelionidae are idiobiont solitary endoparasitoids of insect and spider eggs. They have been used quite successfully in classical biological control programmes, mainly Hemiptera and Lepidoptera pests (HANSON; GAULD, 1995)

Leptoglossus zonatus commonly known as maize bug also occur on sorghum, bean, soybean, tomato and citrus. The insect sucks on grains and fruits inducing wilt, thus reducing yield. It is more serious,

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however, in relation to the maize crop where losses may reach 15%. This hemipterous occurs in Mexico, Central and South Americas (ZUCCHI; SILVEIRA NETO; NAKANO, 1993).

This note reports, for the first time in Goiás, the occurrence of *Trissolcus* sp. parasitizing eggs of *Leptoglossus zonatus*.

The experiment was carried out at the “Fazenda da Faculdade de Agronomia” (College of Agronomy Farm), located in Itumbiara County, State of Goiás, Central Brazil (18°25’S; 49°13’W). Samples were obtained in a 44m x 22m maize (*Zea mays*) field plot, where 50 ears of maize crop were randomly harvested, individualized in plastic bags and transferred to the laboratory of the “Instituto Luterano de Ensino Superior” for the naturally infested host eggs collect. The presence of eggs (egg masses on a straight line) was verified on each single ear of maize. In order to obtain parasitoids, each egg mass was placed near a small piece of maize leaf sheath inside a glass maintained in the laboratory, at room temperature (27°C), until emergence of parasitoids and/or nymphs of the insect pest.

Samplings were weekly taken from December 2001 to February 2002. Jorge Anderson Guimarães, from the “Universidade de São Paulo”, (Esalq), Piracicaba, State of São Paulo, identified the parasitoid species. Prevalence parasitism was computed by using the following formula: $P = (\text{parasitized eggs} / \text{total eggs}) \times 100$.

Seventy-two eggs of *L. zonatus* were collected, from which six parasitoids of the genus *Trissolcus* (Hymenoptera: Scelionidae) emerged. The prevalence of parasitism observed was 8,3%. Hymenoptera egg parasitoids are the most important factor of natural mortality of Hemiptera, their higher reproductive rates, their synchrony with host development rate, the possibility of mass production and absence of hyperparasitoids make these insects suitable agents for biological control (ORR, 1988).

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