2016 XXV International Congress of Entomology
Orlando, Florida, USA | September 25-30

0789: The potential risk losses caused by *Dichelops melacanthus* (Dallas) to maize in the neotropics

Monday, September 26, 2016
04:00 PM - 04:15 PM
Convention Center - Room W230 C

Introduction: The incidence of the green-belly stink bug, *Dichelops melacanthus* (Dallas; Heteroptera: Pentatomidae) on maize crop in the neotropics (Brazil) has increased with time, especially due to the continuous availability of food throughout the year. This insect causes injury to seedlings, killing them shortly after their emergence from the soil. If the plant survives, it is possible to see areas with necrotic lesion that increase in a transverse pattern on the sheet, with perforations on the leaves or tillers (side shoots). This pest is currently one of the most important to maize, both, on conventional and on Bt hybrids.

Methods: Susceptibility of different maize cultivars has been evaluated in the greenhouse and in field tests comparing plots with or without the presence of different densities of the *D. melacanthus*, for varying periods of time. Resulting damage were assessed using a visual scale of injury and grain yield.

Results/Conclusion: Damaged maize plants by the insect reduced development up to 50% and became less competitive for water and nutrients uptake. In the field, with 1 adult per 5 plants during a week infestation period, there was an average reduction in grain yield between 20% and 33% depending on the cultivar tested. *D. melacanthus* became a major concern for Brazilian farmers that cultivate Bt corn, especially when corn is grown in the second season following soybean in the summer. In this case, seed treatment is an appropriate control measure to reduce the pest population and mitigate the resulting damage to the plant.

doi: 10.1603/ICE.2016.91435

Authors

Ivan Cruz
Embrapa Milho e Sorgo

Antônio Ricardo Panizzi
Embrapa Trigo

View Related Events

Symposium: 167 Symposium: True Bugs (Heteroptera) from the Neotropics: Advances on Basic and Applied Research

Program: Symposium

Day: Monday, September 26, 2016