

2013 Sugarcane Beetle Study

Julian Beamon

USDA-ARS, Southern Insect Management Research Unit

Introduction

USDA-ARS, SIMRU is in the second year of a sugarcane beetle cage study to evaluate the efficacy of various insecticides for the control of soil insects in sweetpotato. The cages are infested each year with 40 sugarcane beetles per treatment rep to determine how effective the pre-plant insecticides used by commercial growers are in the control of the sugarcane beetle.

Material and Methods

This study was done in a 1/8 acre screen cage with one plant per foot in plots of four rows. We conducted weekly checks of 100 total sweeps in four different locations. Weed management is necessary to ensure a productive yield however our primary focus is the insects and damage from the infestation of sugarcane beetles. A two row low drift boom sprayer calibrated to deliver 12gpa was used to deliver all insecticide applications. The black light trap set up at random locations was used in the collection of the sugarcane beetles.

Result and Discussion

According to the Arthropod Management Test 2012, Volume 37, Section E65, the majority of root damage in the current trial was attributed to sugarcane beetles. Sugarcane beetle damage ranged from 1.0 - 33.0 percent. We found that using Lorsban and Admire Pro can significantly reduce the damage. Using these two pesticides we recorded damage from 2.0 – 18.0% which is about half of the damage seen without the use of pesticides.

References:

Evaluation of Various Insecticide Regimes for Control of Sugarcane Beetle and Wireworms in Sweetpotato, 2011. Larry Adams, Southern Insect Management Research Unit. Arthropod Management Test 2012, Volume 37 Section E65

Acknowledgements:

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Photo at left, SIMRU's 1/8th acre research cages. Photo at right, sugarcane beetle.