

Comparison commercial varieties with Bt lines of sweet corn on St. Croix, U.S. Virgin Islands

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Sweet corn production in St. Croix, US Virgin Islands has significantly decreased due to the high incidences of corn ear worms. A trial with seven varieties of sweet corn was conducted at the University of Virgin Islands on St. Croix. Three earworm resistant Bt lines; white super sweet, yellow super sweet corn were evaluated with two sweet corn varieties, 'Jubilee' and 'Hawaiian Super Sweet' and two roasting cultivars 'Mayorbella' and 'Errol'. The corn was planted at two week intervals from June 2008 to March 2009. Three rows per variety which were 25 ft long and 4 ft between rows with eight inches between plants. No pesticide was applied to the varieties to allow for natural exposing to pest and diseases. Plant height, cob diameter, cob length, insect's damage and sugar content were recorded at harvest for each planting. The data showed that the Bt sweet corn lines produced well in US Virgin Islands without the need to apply pesticide for control of European corn borer. The the Bt sweet corn produced great with a low pest infestation rate (< 8 %), low cost and maintenance, but it is most susceptible a rust during the months of January through March. These results indicate that the sweet corn can be produced in US Virgin Islands with a great acceptance in the market.

Palabras Claves/Key Words: *Zea mays*, Corn earworm