

ABSTRACT

The Effects of Antitranspirants on the Growth, Yield and Water Relations of Sweet Corn (*Zea mays* L. var. *saccharata* Sturt) cv. "Sure Sweet"

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Water stress can be a major constraint if attempts are made to produce sweet corn (*Zea mays* L. var. *saccharata* Sturt) during periods of limited water availability. The potential of antitranspirants as a means of alleviating the adverse effects of water stress on the growth, yield and water relations of the crop was evaluated in five experiments at the University of the West Indies, Trinidad. The results suggested that vapor gard (2.5 and 5%), a film forming antitranspirant and alachlor (40 mg a.i. l^{-1}), a stomatal closing one, may have considerable potential for counteracting the adverse effects of water stress and improving the growth, yield and water use of sweet corn under glasshouse conditions. However, further testing under field conditions to verify the findings of the glasshouse trials are necessary and the economics of use of the antitranspirants need to be examined.