

AGRONOMIC TRAITS AND PRODUCTIVITY OF SWEET CORN AFFECTED BY NITROGEN AND INTERCROPPING

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ABSTRACT

An experiment was conducted at the Waimanalo Research Station of the University of Hawaii, Honolulu, to study the effect of nitrogen and inter-cropping on agronomic traits and productivity of sweet corn, during 1993-94. Sweet corn was planted as a sole crop and as an inter-crop in between sugarcane rows at N levels of 0, 75, 150 and 300 kg ha⁻¹. The results of the study indicated that cropping system did not affect number of ears plant⁻¹, fresh weight ear⁻¹, and number of grains ear⁻¹. Total fresh weight of ears ha⁻¹, was higher in inter-cropped corn. Ears plant⁻¹, in both cropping systems were the maximum at 300 kg N ha⁻¹. Fresh weight ear⁻¹ increased significantly up to 150 kg N ha⁻¹ in sole sweet corn and up to 300 kg N ha⁻¹ in inter-cropped sweet corn. Grains ear⁻¹ were similar at various applied N levels in sole corn, whereas, in inter-cropped sweet corn it increased with increasing N levels. Total fresh weight of ears ha⁻¹ was the maximum at 300 kg N ha⁻¹ (16.41 t ha⁻¹ in sole crop and 21.11 t ha⁻¹ in inter-cropped sweet corn).