Abstract

The present paper aimed to study the yield of sugar and alcohol from the third ratoon of sugar cane in coastal tablelands of Paraiba, subjected to different levels of irrigation (0, 50, 100 and 150% of the applied amount of water used in the Farm) under two schemes of covering fertilization (72 and 276 kg ha⁻¹), taking as reference the variety SP 791011. The effective precipitation occurred during the crop cycle was 775 mm and the amount of water applied with irrigation were 152, 290 and 393 mm. The applications of water were made through a towable central pivot irrigation system, in shifts of 12 days and the evapotranspiration calculated on the tank class "A", minus the effective precipitation. The experimental design was performed by a factor analysis type 2 x 4 (two levels of fertilizer and four levels of irrigation), with three replications. The covering fertilization × irrigation interaction did not significantly affect the efficiency of the third ratoon of sugar cane. The increase in irrigation levels resulted in increases in the production of stems, the gross income of sugar and alcohol in gross income.

Keywords

Saccharum officinarum L., sugar cane production, central pivot irrigation system.