EVALUATION OF HIGH DENSITY PLANTING (HDP) IN MAURITIUS

By

S. SEERUTTUN, F. ISMAEL and C. BARBE

Mauritius Sugar Industry Research Institute, Réduit, Mauritius

Email: sseerutt@msiri.intnet.mu

NINE trials were established between 1999 and 2000 to evaluate two techniques of planting cane at higher densities, namely dual rows and close rows. The most common cane row spacing used in Mauritius is 1.6 m, whereas dual rows consist of pairs of cane rows 0.5 m apart with 1.8 m between their centres and close rows have three cane rows spaced at 0.5 m on a bed of 1.8 m width with 0.8 m between beds.

Sub-plot and sub-sub-plot treatments consisted, respectively, of two N fertiliser rates (normal and + 25%) and either two-sett densities (normal and a reduced amount) or two cane varieties. Increases in cane yield for plant cane and ratoon cane (1st or 2nd ratoon) varied across sites and were up to 11% with dual rows and 41% with close rows over the control with 1.6 m row spacing.

The trials have also revealed that a reduced sett density may be used and there is no need to increase the N fertiliser rate with HDP. Although yield increases with HDP have not been consistent so far, some producers are adopting the dual rows as it does not incur extra costs and is advantageous in terms of weed control (canopy closing approximately four weeks earlier) and efficiency of their chopper-harvesters (pour rate).