Character Association Studies in First Clonal Generation of Sugarcane (Saccharum spp.)

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ABSTRACT

The correlation studies in first clonal stage involving 429 genotypes and four checks revealed that NMC at harvest, number of green leaves at 90, 120, 240 DAP and at maturity, biomass per cane, internode number, internode length, stalk length, stalk diameter, stalk volume, single cane weight, HR brix and HR brix yield showed positive and significant association with cane yield and also among themselves indicating that simultaneous selection for these characters would result in the improvement of cane yield in sugarcane. Path analysis revealed that HR brix yield, single cane weight and number of millable canes exhibited high positive direct effects on cane yield indicating that these were the major contributing characters to cane yield in sugarcane.

Key words: Correlations, Path analysis, Sugarcane.