COMPARATIVE PERFORMANCE OF SUGARCANE GENOTYPES FOR RATOONABILITY IN EARLY CLONAL SELECTION STAGES

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Abstract:

Sugarcane plays a crucial role in the economics of farmers and in the survival of the everexpanding sugar industry in Egypt. Eighteen promising genotypes and two commercial varieties were evaluated at two locations in middle and southern Egypt during 2010 (plant cane), 2011 (first ratoon) and 2012 (second ratoon). Significant differences among evaluated genotypes for all measured traits across all crop cycles were observed. Stalk diameter of 12 genotypes decreased with older crop cycles whereas stalk length of 10 genotypes increased with older crop cycles. Stalk weight of 15 genotypes decreased from plant cane to first ratoon. Cane yield of genotypes G99-103 and G2004-121 exceeded the control variety GT54-9 significantly across all crop cycles. Generally, cane yield decreased significantly in the second ratoon by 4.36% compared to first ratoon. Genotype G2004-136 produced high cane and sugar yields in the second ratoon indicating superiority in ratoonability.

Keywords:

Saccharum, sugarcane, genotypes, clonal selection, crop cycle, cane yield, sugar yield, ratoonability

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