

Relative contribution and associations studies among cane yield and their components in sugarcane (*Saccharum* spp. hybrid)

■ S.G. GUDDADAMATH, SANJAY B. PATIL AND B.M. KHADI

SUMMARY

The present investigation was carried out at five locations with 25 sugarcane clones including six standard checks to estimate the association pattern, repeatability and path analysis of the various quantitative parameters during 2011 and 2012. Correlation coefficients indicated that cane yield was positively correlated with single cane weight (kg) and number of millable canes, whereas sucrose % and CCS % showed significant negative correlation with cane yield. Repeatability of characters was 0.32*, 0.33*, 0.52*, 0.15, 0.60* and 0.71* for HR brix sucrose %, cane yield, cane height, NMC and cane girth, respectively. Path analysis revealed that the number of millable canes was the most important character with the highest direct (1.9473) and indirect effects on cane yield, followed by single cane weight (0.957), Regression analysis concluded 81.13% of total cane yield was contributed by SCW and NMC.

Key Words : Association, Regression, Repeatability, Sugarcane

How to cite this article : Guddadamath, S.G., Patil, Sanjay B. and Khadi, B.M. (2014). Relative contribution and associations studies among cane yield and their components in sugarcane (*Saccharum* spp. hybrid). *Internat. J. Plant Sci.*, **9** (1): 21-26.

Article chronicle : Received : 09.07.2013; Revised : 19.09.2013; Accepted : 05.10.2013

MEMBERS OF THE RESEARCH FORUM

Author to be contacted :

S.G. GUDDADAMATH, Department of Genetics and Plant Breeding,
Sugarcane Breeder, Agricultural Research Station, SANKESHWAR
(KARNATAKA) INDIA
Email: somu.guddu@gmail.com

Address of the Co-authors:

SANJAY B. PATIL AND B.M. KHADI, Directorate of Research, University
of Agricultural Sciences, DHARWAD (KARNATAKA) INDIA