

GROWTH, YIELD AND QUALITY OF SUGARCANE (*SACCHARUM OFFICINARUM* L.) AS INFLUENCED BY DIFFERENT VARIETIES AND NUTRIENT MANAGEMENT PLANTED IN SPRING SEASON OF CHHATTISGARH PLAINS

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Abstract: A field investigation was carried out at Research cum Instructional Farm of IGKV, Raipur, Chhattisgarh during spring season of 2014-15 to evaluate the effect of different varieties of sugarcane and nutrient management on growth, yield and quality of sugarcane. Experiment was laid out in split plot design (SPD) with three replications. The treatments consisted of five varieties viz., SG-Co-86032, Local Rasgulla, MSG-CoM-0265, SG-CoC-671 and EG-VSI-08121 in main plots and four nutrient management treatment of N: P₂O₅:K₂O kg ha⁻¹ (200:70:70, 250:80:80, 300:90:90 and 350:100:100) in sub-plots. Among the varieties tested, Local Rasgulla was recorded significantly improvement of higher growth, yield attributes and yield in terms of tillers (124.99 ×10³ ha⁻¹), plant height (319.20 cm), single cane weight (1374 g), average cane diameter (3.15 cm) and cane yield (97.51 t ha⁻¹) were recorded under the variety Local Rasgulla. Among the nutrient management treatments higher no of tillers (117.42 ×10³ ha⁻¹), plant height (311.50 cm), Single cane weight (1387 g), average cane diameter (3.11 cm) and cane yield (103.45 t ha⁻¹) was recorded with application of 350: 100:100 kg N: P₂O₅:K₂O kg ha⁻¹.

Keywords: Varieties, Nutrient management, Sugarcane, Cane yield

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