

Effect of Stages of Harvest and Nutrient Management Practices on Juice Yield and Juice Quality Parameters of Sweet Sorghum (*Sorghum bicolor*)

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ABSTRACT

A field experiment was conducted during *kharij* 2011 and 2012 to study the influence of nitrogen, potassium levels and stages of harvest on sweet sorghum for juice yield and its quality parameters. Among stages of harvest significantly higher stalk yield (42.0 and 40.3 t ha⁻¹) brix (16.0 and 16.6%) sucrose (11.6 and 9.9%), Purity (59.2 and 72.5%) and maximum juice yield (17547 and 15662 L ha⁻¹) were recorded at physiological maturity stage compared to other stages of harvest. Application of 120 kg N and 40 kg K₂O ha⁻¹ resulted in significantly higher stalk yield (41.0 and 37.8 t ha⁻¹), juice extraction (40.0 and 37.8%), Juice yield (19183 and 16848 L ha⁻¹), brix (15.2 and 15.0%), sucrose (10.8 and 8.8%) and purity (57.2 and 71.0%). Application of higher dose of nitrogen and potassium nutrient levels did not prove significantly advantageous in all parameters. The lowest stalk, juice, brix, sucrose and purity were recorded with application of 60 kg N and 40 kg K₂O ha⁻¹ at all the stages of sweet sorghum

Key words : Brix, Juice extraction, Purity, Sucrose, Sweet sorghum.