

Effect of Integrated Nutrient Management Practices on Growth and Yield of Maize under Rainfed Condition

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ABSTRACT

A field experiment was conducted to evaluate the integrated use of organic and inorganic source of nutrient on growth, yield and yield parameters of hybrid maize during *kharif* season 2009 at Main Agricultural Research Station, Dharwad (Northern transition Zone) of Karnataka. The results of the study revealed that application of enriched FYM @ 7.5 t ha⁻¹ recorded significantly higher grain yield, harvest index and dry matter accumulation at harvest and was on par with FYM @ 7.5 t ha⁻¹, vermicompost @ 2.5 t ha⁻¹ and poultry manure @ 1.0 t ha⁻¹. Organic manures application did not influence significantly on stover yield, 1000 grain weight, number of grains per cob, number of rows per cob, number of grains per row, cob diameter, cob length and cob weight of maize. Significantly higher stover yield, number of grain per row, cob weight, dry matter accumulation at 60 DAS and at harvest were noticed with application of 150% RDF. Poultry manure @ 1.0 t ha⁻¹ with 150% RDF application recorded significantly higher number of grains per row and harvest index. Application of FYM @ 7.5 t ha⁻¹ with 150% RDF and enriched FYM @ 7.5 t ha⁻¹ with 150% RDF recorded significantly higher cob weight and stover yield, respectively.

Key words : Inorganic, Integrated nutrient management, Maize, Organic, Rainfed.