RESEARCH PAPER International Journal of Agricultural Sciences, January to June, 2010, Vol. 6 Issue 1 : 327-329

Effect of integrated nutrient management on nutrient uptake and economics of maize (*Zea mays* L.)

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ABSTRACT

An experiment was conducted during *Rabi* season of 2007-08 on sandy loam soil at Agriculture college, V.C. farm, Mandya, Karnataka to study the Effect of integrated nutrient management on nutrient uptake and economics of maize (*Zea mays* L.). The study comprised of twelve treatments consisting of four different organic sources of nutrients and these organic sources were combined with 50, 75 and 100 per cent recommended dose of nitrogen. The results revealed that combined application of recommended dose of NPK (150:75:40 kg/ha) + FYM 10 t/ha recorded higher grain yield (65.9 q/ha), gross returns (Rs. 44,375/ha), B:C ratio (2.62), nitrogen, phosphorus and potassium uptake (160.8, 41.9 and 77.8 kg/ha, respectively) followed by 75 % recommended through nitrogen fertilizers and 25 % nitrogen through poultry manure which were at par with each other. Lowest grain yield (47.3 q/ha), gross returns (Rs. 31,970/ha), B:C ratio (1.99), nitrogen, phosphorus and potassium uptake (86.1, 22.1 and 77.8 kg/ha, respectively) were noticed in the treatment receiving 100 per cent recommended dose of NPK through chemical fertilizer (150:75:40 kg/ha).

Key words : Economics, Nutrient, Uptake, Yield, Maize

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