

Influence of integrated nutrient management on yield, economics and nutrient uptake of hybrid rice (*Oryza sativa* L.)

Veerendra Kumar, H.C. Tripathi and S.K. Mishra

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ABSTRACT: An experiment to study the impact of integrated nutrient management on yield, economics and nutrient uptake of hybrid rice was conducted in sandy loam Udic ustochrepts soil at Fertilizer Research Station, Pura of C.S. Azad University of Agriculture and Technology, Kanpur during *Kharif* 2007 and 2008. Eight different treatments of integrated nutrient management with RDF were tested against RDF alone and control in RBD replicated four times. Results revealed that RDF + FYM₅ t/ha + GM *in situ* + S 40 kg/ha + Zn 15 kg/ha + Mn 10 kg/ha + Fe 10 kg/ha produced highest rice yield of 70.94 q/ha followed by RDF + FYM + GM with 68.16 q/ha seed yield without significant variation. Net return was obtained highest Rs. 52543/ha under RDF + FYM + GM treatment followed by Rs. 51152/ha under RDF + GM treatment. Uptake of N, P, K and S followed the same pattern of seed yield. However, integrated treatments of biofertilizers or organic manures registered significantly higher seed yield, net return and nutrient uptake over RDF alone. RDF alone produced 53.44 q/ha seed yield and earned Rs. 42257/ha net return which were much higher than the seed yield (25.84 q/ha) and net return recorded under control treatment.

Key Words: Hybrid rice, Integrated nutrient management, Biofertilizers, Organic manures, S, Micronutrients