YIELD ADVANTAGE OF OPTIMAL, SUB OPTIMAL AND INTEGRATED NUTRIENT MANAGEMENT ON YIELD POTENTIAL AND ECONOMICS OF RICE (ORYZA SATIVA) IN RICE-WHEAT (TRITICUM AESTIVUM) CROPPING SYSTEM

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Abstract: The present investigation was carried out at IGKV., Raipur (C.G.) during kharif season of 2010. The soil of experimental field was 'Inceptisols' locally known as Matasi. The experiment was laid out in randomized block design with 3 replications. The results revealed that T10 consisting of 50% RDF + 50% N through green manuring recorded the highest growth and yield attributing characters and recorded maximum net return (Rs. 46,117 ha\(^{-1}\)) and NPK content in soil under investigation. Application of 100% RDF (80:60:40 kg NPK ha\(^{-1}\)) also proved superior over other integrated nutrient management systems consisting of farmyard manure and rice residues for yield (55.19 q ha\(^{-1}\)), net return (Rs.44,962 ha\(^{-1}\)) and B:C ratio (2.52). Sub-optimal doses of nutrients failed to provide considerable yield advantage and nutrients build-up in soil as compared to optimal level or integrated nutrient management options.

Keywords: Economics, Integrated nutrient management, Nutrient uptake, Rice-wheat cropping system, Yield potential.

REFERENCES


