



Research Article

## Conjunctive use of organic and inorganic nutrient influences on nutrient uptake and yield of rainfed rice

■ PANKAJ KUMAR PANKAJ, GOURAV KUMAR JATAV, R.P. SINGH, T.K. SINGH AND NIRMAL DE

Received : 28.03.2013; Revised : 22.04.2013; Accepted : 21.05.2013

MEMBERS OF RESEARCH FORUM :

**Corresponding author :**  
**NIRMAL DE**, Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, (B.H.U.) VARANASI (U.P.) INDIA  
Email: nirmalde@gmail.com

**Co-authors :**  
**PANKAJ KUMAR PANKAJ AND GOURAV KUMAR JATAV**,  
Department of Soil Science and Agricultural Chemistry, Institute of Agricultural Sciences, (B.H.U.) VARANASI (U.P.) INDIA

**R.P. SINGH AND T.K. SINGH**,  
Department of Agronomy, Institute of Agricultural Sciences (B.H.U.) VARANASI (U.P.) INDIA

### Summary

A field experiment was carried out during *Kharif season* of 2008 to 2011 at Banaras Hindu University, Varanasi, India. The experiment was laid out with six treatments namely, Control (no nutrient supplemented), 100% RDF (80-40-30 kg ha<sup>-1</sup> N:P:K), 100% N through FYM, 50% N through FYM, 50% RDF + 50% N through FYM and Farmer's Practice (only 20 kg N ha<sup>-1</sup>) in an Inceptisol of transect 4 of the Indo Gangetic Plain (IGP) region. The experiment indicated that combined application of 50% RDF + 50% N through FYM was a superior treatment for increasing grain as well as straw yield. The results further demonstrated that the conjunctive use of organic and inorganic source of fertilizer significantly increased both the concentration and uptakes of N, P, K and S by rice at harvest under rainfed condition.

**Key words :** Rainfed rice, FYM, Nutrient uptake

**How to cite this article :** Pankaj, Pankaj Kumar, Jatav, Gourav Kumar, Singh, R.P., Singh, T.K. and De, Nirmal (2013). Conjunctive use of organic and inorganic nutrient influences on nutrient uptake and yield of rainfed rice. *Asian J. Soil Sci.*, 8(1): 162-166.