

Integrated Nutrient Management with Vermicompost on Yield, Quality and Uptake of Nutrients by Crops in Onion – Radish Cropping System

T Prabhakar Reddy, G Padmaja and P Chandrasekhar Rao

Department of Soil Science & Agricultural Chemistry, College of Agriculture, Rajendranagar,
ANGRAU, Hyderabad- 500 030, Andhra Pradesh

ABSTRACT

A field experiment was conducted on a sandy loam soil during *kharif* (onion) and *rabi* (radish) seasons of 2007-08 with a view to study the effect of integrated use of nitrogen (0, 60, 90 and 120 kg N ha⁻¹) and vermicompost (0, 5 and 10 t ha⁻¹) on performance of crops in terms of yield, quality and nutrient uptake. Among the different combinations, application of 10 t vermicompost ha⁻¹ + 120 kg N ha⁻¹ recorded significantly highest fresh bulb yields and total uptake of N, P, K and S by onion at harvest. The radish crop grown during *rabi* responded favorably to the residual and cumulative treatments. The highest root yield and total nutrient uptakes of N, P, K and S by radish at harvest was recorded in residual and cumulative treatments receiving 10 t vermicompost ha⁻¹ + 120 kg N ha⁻¹. With regard to quality parameters of onion and radish the effect of levels of nitrogen, vermicompost and their interactions showed significant effect.

Key words : Nitrogen, Onion, Radish, Vermicompost