Effect of Integrated Use of Organic and Inorganic Sources of Nutrients and Biofertilizers on Nitrogen and Phosphorus Fractions of Soil in Maize – Onion Cropping System

P Venkata Subbaiah, A Sairam, P C Rao, M V S Naidu

Department of Soil Science and Agricultural chemistry, College of Agriculture, Rajendra Nagar, Hyderabad-500030, Andhra Pradesh.

ABSTRACT

A field experiment was conducted in *kharif*, (maize) and *rabi*, (onion) during 2009-10 to study the effect of integrated use of organic and inorganic sources of nutrients and biofertilizers on soil nitrogen and phosphorus fractions in maize-onion cropping system in Alfisols of Hyderabad. The results revealed that application of 75% RDF along with 25% N or P substituted through vermicompost or poultry manure with addition of *Azotobacter* or phosphorus solubilising bacteria recorded increased nitrogen and phosphorus fractions, whereas in *rabi* fertilized onion recorded maximum nitrogen and phosphorus fractions, when compared to unfertilized one. Within fertilized and unfertilized onion INM treatments showed highest nitrogen and phosphorus fractions as compared to other treatments

Key words: Maize, Nitrogen, Onion and Phosphorus fractions.