Effect of Different Organic Nutrient Sources on Growth, Yield and Quality of Okra (*Abelmoschus Esculentus* L.)

D Alekhya John, P Prabhu Prasadini, D Jagdishwar Reddy and Ch Sujani Rao

Department of Environmental Science and Technology

Acharya N.G. Ranga Agricultural University, Rajendranagar, Hyderabad-500030

ABSTRACT

Organic nutrient sources namely New Suryamin, Aishwarya, EM compost and Urban compost were evaluated in combination with inorganic fertilizers on plant growth, yield and quality of okra (bhendi) during *kharif*, 2011 at College Farm, ANGRAU, Rajendranagar. The treatments consisted of T₁ (control), T₂ (Inorganic NPK- 100%RDF), T₃ (New Suryamin @ 50 kg ha⁻¹), T₄ (New Suryamin @ 25 kg ha⁻¹ + 50% RDF), T₅ (Aishwarya @ 120 kg ha⁻¹), T₆ (Aishwarya @ 60 kg ha⁻¹ + 50% RDF), T₇ (EM compost @ 5 t ha⁻¹), T₈ (EM compost @ 2.5 t ha⁻¹ + 50% RDF), T₉ (Urban Compost @ 5 t ha⁻¹) and T₁₀ (Urban Compost @ 2.5 t ha⁻¹ + 50% RDF). Plant growth in terms of plant height, leaf area and dry matter production; fruit yield and quality in terms of ascorbic acid were studied. Initially, at vegetative phase Aishwarya @ 60 kg ha⁻¹ + 50% RDF and later at fruiting stage EM compost @ 2.5 t ha⁻¹ + 50% RDF combinations recorded highest values of plant height and leaf area. EM compost @ 2.5 t ha⁻¹ + 50% RDF combination performed best recording highest values of drymatter, yield (5.7 t ha⁻¹) and ascorbic acid (13.67 mg per 100 g).

Key words : Organic nutrient sources, Okra, Quality, Yield.