



Nutrient management practices for organic cotton production

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Abstract : A field experiment was carried out at Main Agricultural Research Station, Dharwad during *Kharif*, 2010 and 2011 to study the nutrient management practices for organic cotton production. The results of the two years pooled data revealed that, among the treatment combinations, integrated application of RDF + FYM and green leaf manure as mulch with application of jeevamrutha @ 500 l/ha recorded significantly higher number of bolls per plant (41.37), mean boll weight (5.05 g), kapas weight per plant (116.88 g), kapas yield (1858 kg/ha) over other treatments. Among the organic combinations application of compost (50%) + vermicompost (50%) equivalent to RDF + green leaf manure as mulch with application of jeevamrutha @ 500 l/ha recorded higher number of bolls per plant at 150DAS, mean boll weight, kapas weight per plant, kapas yield, net returns and B:C ratio and was at par with RDF + FYM and which was superior over RDF only. Among the nutrient management practices, application of FYM @ 5t per ha + RDF recorded significantly higher number of bolls per plant (40.13) at 150DAS, mean boll weight (4.87 g), kapas weight per plant (114.69), kapas yield (1777 kg/ha), net returns (Rs. 53530) and B:C ratio (2.67) over rest of the treatments. Among the organic manurial treatments, combined application of compost (50%) + vermicompost (50%) equivalent to RDF recorded significantly higher number of bolls per plant (36.53), mean boll weight (4.42 g), kapas weight per plant (107.96) and kapas yield (1579 kg/ha) over other organic manurial treatments but was at par with crop residue (50%) + vermicompost (50%) equivalent to RDF. However, crop residue (50%) + vermicompost (50%) equivalent to RDF recorded significantly higher net returns (57220) and B:C ratio (2.80) over other organic manurial treatments. Among the green manuring treatments, application of green leaf manure (GLM) @ 7.5 t per ha with jeevamrutha @ 500 l/ha surface applied recorded significantly higher number of bolls per plant (36.51), mean boll weight (4.46 g), kapas weight (109.08 g), kapas yield (1621 kg/ha), net returns (Rs. 55890) and B:C ratio (2.70) over other green manuring treatments and was at par with lucerene + jeevamrutha.

Key Words : Organic manures, Green manures, Liquid manures, Kapas yield

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