

RESEARCH PAPER

Estimation of yield and nutrient uptake by onion under the influence of inorganic, organic and bio-fertilizers

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An investigation was carried out to assess the integrated use of inorganic, organic (FYM, pressmud, poultry manure and vermicompost) and bio-fertilizers (*Azotobacter*, *Azospirillum* and phosphate solubilizing bacteria) on yield, nutrient uptake by onion and nutrient pool of the soil during *Rabi* season of the year 2013-14. There was a significant effect of various treatment found on the yield, nutrient uptake and soil nutrient reserve. Maximum yield per hectare were found in 50 per cent recommended NPK + 50 per cent vermicompost while minimum yield was observed in control. Maximum uptake of nitrogen and potassium was obtained in treatment combination 50 per cent recommended NPK + 50 per cent vermicompost whereas maximum uptake of phosphorus was found in treatment combination 50 per cent recommended NPK + 50 per cent pressmud. Among different treatment combination highest nitrogen and potassium reserve in soil was found in treatment combination 50 per cent recommended NPK + 50 per cent vermicompost while maximum value for organic carbon percentage was in sole vermicompost application.

Key words : FYM, Pressmud, Vermicompost, Poultry manure, Biofertilisers, Nutrient uptake

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