



Response of strawberry to organic versus inorganic fertilizers

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ABSTRACT

The aim of this research was designed in order to optimize integrated plant nutrient supply (IPNS) through balanced fertilization of organic, inorganic and microbial inoculants in strawberry cv. Chandler. The potential efficiency of bio-organics used along with chemical fertilizers on cropping behaviour, physical-chemical and biological properties of rhizosphere soil, fruit yield, quality attributes and leaf nutrient content was investigated. The significant improvement in physico-chemical properties of the soil and nutrient uptake was recorded. The uninoculated control received farmyard manure (FYM) and inorganic nitrogen (N) recorded the highest cation exchange capacity (CEC) and soil organic carbon (OC) content. Highest available N and phosphorus (P) of soil were recorded in vermicompost and inorganic N applied in two and one split, respectively. The concentration of micronutrients cations viz., iron (Fe), zinc (Zn), manganese (Mn) in soil was higher in treatment received vermicompost and inorganic N in two splits. The integration of bio-organic nutrient supplements also significantly enriched the microbial status of the rhizosphere soil, leaf nutrient concentration and maintained soil health and productivity on long term basis for sustainable fruit production.

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KEYWORDS

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