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ECO FRIENDLY NUTRIENT MANAGEMENT PRACTICES FOR YIELD AND SOIL ORGANIC CARBON, IN BANANA

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ABSTRACT

To study the productivity of banana by the effect of nutrient management practices, field investigations was conducted from 2010-2012 at Northern Block Farm of Agricultural Research Station, Bhavanisagar (TNAU) of Tamil Nadu. Study results revealed that, when 100% recommended dose of fertilizer (RDF) is applied, along with 40% Wellgro soil, maximum number of hands (10.2 and 10.3) were recorded, along with the maximum number of fingers (136.3 and 145.2), total yield (72.8 and 77.1 t/ha) and bunch weight (23.9 and 25.3 kg/plant) during 2010-11 and 2011-12, respectively. By the integrated nutrient management practices, there was an influence of the quality parameter of the study in banana during both the years. With regard to organic carbon, when either 75 or 100 % of RDF is applied along with FYM @ 10 kg plant-1 or WG organic manures, maximum accumulation of carbon was found to be recorded in soil. When nutrient management practices are done, i.e., when there was a combined application of 40% Wellgro soil or Cow based Farm Yard Manure @ 10kg plant^{-1} with recommended dose of fertilizers to banana has been observed to be a good option that helps to increase soil nutrient status and yield parameters under climate and soil condition in Tamil Nadu, India.

KEYWORDS: Wellgro Soil, Wellgro Grains, Fertilizers, Farm Yard Manure, Yield, Quality