



RESEARCH ARTICLE :

Influence of integrated nutrient management practices on nutrient uptake of banana under irrigated conditions

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ARTICLE CHRONICLE :

Received :

11.07.2017;

Accepted :

26.07.2017

KEY WORDS :

Organic manures,
inorganic fertilizers,
Farm yard manure,
Nitrogen,
Phosphorus,
Potassium uptake

SUMMARY : Nutrient uptake is greatly influenced by combined application of organic manures along with chemical fertilizers in banana. Field investigations were carried out at Northern Block farm, Agricultural Research Station (Tamil Nadu Agricultural University), Bhavanisagar, Erode district of Tamil Nadu during 2010-11 and 2011-12 to study the effect of integrated nutrient management (INM) practices on nutrient uptake of banana under irrigated conditions. The INM treatments had significant effect on nutrient uptake by roots, corm, pseudostem, midrib, petiole, lamina, inflorescence and fruits. Among the treatments, combined application of 100 per cent RDF either with 40 per cent *WG organic soil* (T_3) or FYM @ 10kg plant⁻¹ (T_{12}) recorded the maximum uptake of nitrogen, phosphorus and potassium in different parts of banana as well as total nutrient uptake. During 2010-11, the maximum uptake of nitrogen was observed in T_3 (380 and 568 kg ha⁻¹) at shooting and at harvest stages, respectively and similar results were found during 2011-12 also (355 and 587 kg ha⁻¹) whereas it was at par with T_{12} . At harvest stage the maximum uptake of phosphorus was observed with 100 per cent RDF along with 40 per cent *WG organic soil* (87 and 84 kg ha⁻¹) but it was statistically at par with T_{12} . The same trend was noticed in potassium uptake also. Hence, it's concluded that integrated nutrient management practices *i.e.*, application of 100 per cent RDF either with 40 per cent *WG organic soil* or FYM @ 10kg plant⁻¹ recorded the maximum uptake of N, P and K by various parts of banana under irrigated conditions.

How to cite this article : Kuttimani, R., Somasundaram, E. and Velayudham, K. (2017). Influence of integrated nutrient management practices on nutrient uptake of banana under irrigated conditions. *Agric. Update*, 12(TECHSEAR-1) : 196-205; DOI: 10.15740/HAS/AU/12.TECHSEAR(1)2017/196-205.

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