



RESEARCH PAPER

Effect of organic nutrient management practices on yield and nutrient uptake of aerobic rice

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Abstract : The present investigation was undertaken during *Kharif* 2011 at University of Agricultural Sciences, Dharwad to know the response of organic nutrient management practices on yield and nutrient uptake of aerobic rice. The experiment was laid out in Split Plot Design with 2 main plot treatments, 8 sub plot treatments and 2 controls. The main plot treatments comprised of M_1 -EC (1/3) + VC (1/3) + GLM (1/3) equivalent RDN and M_2 -EC (1/3) + VC (1/3) + GLM (1/3) equivalent to RDF + FYM, sub plot treatment comprised of L_1 - bio-digester @ 500 l ha⁻¹ applied at planting, 30 and 60 DAS applied to soil, L_2 -jeevamrut @ 500 l ha⁻¹ applied at planting, 30 and 60 DAS applied to soil, L_3 -*Panchagavya* @ 5 per cent foliar application at panicle emergence and flowering stages, L_4 - cow urine @ 10 per cent foliar application at panicle emergence and flowering stages, L_5 - L_1 + *Panchagavya* @ 5 per cent foliar application at panicle emergence and flowering stages, L_6 - L_1 + cow urine @ 10 per cent foliar application at panicle emergence and flowering stages, L_7 - L_2 + *Panchagavya* spray @ 5 per cent at panicle emergence and flowering stages and L_8 - L_2 + cow urine @ 10 per cent foliar application at panicle emergence and flowering stages and two controls were RDF only and RDF + FYM. Application of different organic manures significantly increased the yield and nutrient uptake of aerobic rice. The Results revealed that integrated application of M_2 -EC (1/3) + VC (1/3) + GLM (1/3) equivalent to RDF + FYM with soil application of jeevamrut @ 500 l ha⁻¹ at planting, 30 and 60 DAS + *Panchagavya* foliar application @ 5 per cent at panicle emergence and flowering stages recorded significantly higher grain yield (3837 kg ha⁻¹) and straw yield (5855 kg ha⁻¹) with higher nutrients uptake.

Key Words : Aerobic rice, Bio-digester, *Panchagavya*, Jeevamrut, Nutrient uptake, Cow urine

View Point Article : Sahare, Divya and Babalad, H.B. (2016). Effect of organic nutrient management practices on yield and nutrient uptake of aerobic rice . *Internat. J. agric. Sci.*, **12** (1) : 95-100.

Article History : Received : 21.04.2015; Revised : 11.12.2015; Accepted : 23.12.2015