Integrated nutrient management in Paddy- lathyrus cropping system in eastern Vidarbha region

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Rice is major cereal crop of India which occupies 11 % of World's crop area. Presently it is third important legume after chickpea and pigeon pea, predominantly grown in India. *Lathyrus* is rich in protein (28%) and minerals especially calcium, phosphorus and iron. Rice – lathyrus sequential cropping plays a significant role in total productivity of crops in Vidarbha. The experiment was conducted at College of Agriculture, Gadchiroli in split plot design with 4 main plot treatment to Paddy (N₁ - 100 % RDN, N₂ - 75% RDN through fertilizer + 25% N through Vermicompost, N₃ - 75% RDN through fertilizer +25% N through Paddy straw compost, N₄ - 50% RDN through fertilizer + 50 % RDN (Vermicompost + Paddy straw compost ), 3 subplot treatments to Lathyrus (F₁ - 0 % RDN, F₂ - 50 % RDN and F₃ - 100 % RDN) with 3 replications during 2011-12. Application of 75 % RDN through fertilizer+ 25% RDN through vermicompost to paddy recorded highest grain (4287 kg ha⁻¹) and straw yield (6011 kg ha⁻¹) of paddy. Application of 75 % RDN through fertilizer+ 25% RDN through vermicompost to paddy and 100 % RDN to lathyrus recorded highest GMR (Rs. 68958 ha⁻¹ and Rs. 67143 ha⁻¹). However, highest NMR Rs. 41142 ha⁻¹and Rs. 29834 ha⁻¹) and B:C ratio (2.48 and 1.92) recorded with application of 100 % RDN to paddy and lathyrus respectively.

Biography

G J Bhagat has completed his PhD at the age of 27 years from Dr. Panjabrao Deshmukh Krushi Vidyapeeth, Akola (M.H.). Presently he is working as Assistant Professor (Agronomy) at College of Agriculture, Gadchiroli, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola (Maharashtra). He has more than 11 years experience in Teaching, Research and Extension. He is expertise in teaching various courses of Agronomy to undergraduate students and also taught one course to P.G Students. He is working on two research project on Paddy-lathyrus cropping system and associated with one soil science project. He has published more than 10 papers in reputed national and international journals and more than 15 popular articles and technical articles reputed magazines. He has delivered more than 2 TV talks and several lectures in Agricultural Faculty and Farmers training programme and kisan mela.

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