Nutrient management in yield of Semi-dry Rice (*Oryza sativa* L.) for North Coastal Zone of A.P

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ABSTRACT

Field experiment was conducted during *kharif*, 2015 on sandy loam soils of Agricultural College Farm, Naira to find out the response of NPK levels and time of application of nitrogen on semi-dry rice. The experiment was laid out in split-plot design with four NPK levels assigned to main plots and four time of application of nitrogen to sub plots, each replicated thrice. Application of 160-90-75 kg NPK ha⁻¹ with dhaincha as brown manuring (L_4) resulted in significantly superior performance in terms of growth and yield attributes and yield a well as B:C ratio compared to other levels. Among the different time of application of N treatments, scheduling N in four equal splits at 15, 45, 60 and 75 DAS (S_1) was found to significantly enhance growth parameters, yield attributes and yield as well as B: C ratio over rest of the treatments. Significantly higher grain (6228 kg ha⁻¹) and straw yield and B:C were associated with L_4 at S_1 , while they were found to be significantly lower with L_1 at S_4 except in case of productive tillers and straw yield, which were minimum with L_3 at S_4 .

Key words: Brown manuring, Dhaincha, Nutrient dynamics and semi-dry rice.