

Effect of Organic Manures and Inorganic Phosphorus on Growth and Yield of Rice

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ABSTRACT

A field experiment was conducted on Phosphorus dynamics in relation to nutrient management in rice- blackgram cropping sequence at Agricultural College Farm, Bapatla. The results revealed that drymatter production, grain yield and straw yield of rice were significantly higher with the application of 100% RDNK in combination with *Dhaincha* @10t ha⁻¹ and it was on par with that of application of RDNK along with sunhemp @10t ha⁻¹. However the lowest grain and straw yields were recorded in RDNK alone during both the years of the study. Among the P levels, the treatment P₅ (120 kg P₂O₅ ha⁻¹) recorded significantly higher dry matter, grain and straw yield and it was on par with P₄ (90 kg P₂O₅ ha⁻¹) and P₃ (60 kg P₂O₅ ha⁻¹) while the lowest was recorded in P₁ (0 kg P₂O₅ ha⁻¹).

keywords: *Growth and yield, Organic manures, Phosphorus fertilizer.*