

Growth, Yield Attributes, Yield and Nutrient Uptake of Rice (*Oryza sativa L.*) as Influenced by Organic Manures and Zinc Supplementation at Different Nitrogen Levels

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ABSTRACT

A field experiment was conducted at the Agricultural College Farm, Bapatla on a sandy clay loam soil during 2010 – 11 and 2011 -12 to study the integrated use of higher levels of nitrogen in conjunction with organic manures and zinc supplementation. The experiment was laid out in a split plot design replicated three times. The study revealed that the highest growth parameters of rice such as plant height, number of tillers m⁻², drymatter production, yield attributing parameters such as number of productive tillers m⁻², number of filled grains panicle⁻¹, 1000 grain weight, grain yield, straw yield and harvest index of rice and nutrient uptake were realised with M₃ (Greenmanuring *in situ* + ZnSO₄ @ 50 kg ha⁻¹ as basal) along with the application of 180 kg N ha⁻¹ during both the years of study. The highest blackgram productivity was also recorded with same treatment during both the years of study.

Key words : Blackgram, Growth, Manures, Nitrogen, Rice, Yield attributes, Zinc.