

# **Studies on Yield and Nutrient Uptake of *Kharif* Rice as Influenced by Different Levels of Nitrogen and Phosphorus**

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## **ABSTRACT**

A field experiment was conducted for two consecutive years (2008-2009 and 2009-2010) on sandy clay loam soil of Agricultural college farm, Bapatla to study the yield and nutrient uptake of *kharif* rice (cv BPT. 5204) as influenced by different levels of nitrogen and phosphorus. The twelve treatments consisted of four nitrogen levels i.e. 80 kg N ha<sup>-1</sup>, 120 kg N ha<sup>-1</sup>, 240 kg N ha<sup>-1</sup>, green manuring @5 t ha<sup>-1</sup> and three phosphorus levels i.e. 0, 30 and 60 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup>. Application of 240 kg N ha<sup>-1</sup> in combination with 60 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> significantly increased the grain yield, straw yield and nitrogen and phosphorus uptake as well as NPK status of soil after harvest of rice over other levels of nitrogen and phosphorus. However, it was on a par with that of application of 240 kg N in combination with 30 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup>, but P status of soil was significantly influenced by N and P interaction during both the years of the study.

**Key words :** Available soil NPK status, *Kharif* rice, N and P uptake, Yield.