

# **Effect of Organic Manures and Levels of Phosphorus on Physico-Chemical Properties of Soils Under Rice-Blackgram Cropping Sequence**

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## **ABSTRACT**

A field experiment entitled “Phosphorus dynamics in relation to nutrient management in rice-blackgram cropping sequence” was conducted for two consecutive years (2017-2018 and 2018-2019) at Agricultural College Farm, Bapatla. The experimental soil was clay loam in texture, slightly alkaline in reaction, low in organic carbon and available nitrogen, medium in available phosphorus and high in available potassium. However, DTPA extractable micro-nutrients (Fe, Mn, Zn and Cu) were found to be above the critical limits. Further, the results revealed that significantly the lowest pH and EC were observed due to application of 100% RDNK with the combination of *Dhaincha* 10 t ha<sup>-1</sup> over RDNK alone at different growth stages of rice crop. However, the pH and EC were not significantly differed among the P levels from 0 to 120 kg P<sub>2</sub>O<sub>5</sub>/ha<sup>-1</sup>. Similar trend was followed at both flowering and harvest in succeeding blackgram.

**Key words:** *Organic manures, Phosphorus levels, pH and EC.*