

# Effect of Phosphorus Management on Yield of Direct Sown Rice

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## ABSTRACT

An experiment was conducted to study the “Phosphorus management in direct sown rice in sandy clay soil” at Agricultural College Farm, Bapatla during *kharif*, 2018. The experimental soil was sandy clay in texture, neutral in reaction and non-saline. There was a significant improvement in the yield attributes, grain and straw yield of direct sown rice with application of 100% RDP + Vesicular Arbuscular Mycorrhiza (T<sub>4</sub>). Application of phosphorus along with bio fertilizers showed significant influence on microbial population. Enzymatic activities like dehydrogenase and urease activity at tillering, panicle initiation and at harvest was not significantly influenced by the treatments while acid and alkaline phosphatase activity at tillering, panicle initiation and at harvest was significantly influenced by treatment which received 100% RDP + Vesicular Arbuscular Mycorrhiza (T<sub>4</sub>) and it was on par with T<sub>3</sub>. The increased activity of phosphates enzyme in soil might be due to increased solubilization and mobilization of soil through the activity of phosphatase enzyme which was increased when PSB and AMF were used.

**Key words:** *Phosphorus, PSB, VAM, Yield*