

Influence of Levels of Nitrogen and Foliar Nutrition on Growth and Yield of Machine Transplanted rice

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ABSTRACT

A field experiment was conducted during *Kharif* 2013 under canal irrigation at Andhra Pradesh Rice Research Institute & Regional Agricultural Research Station – Maruteru, to study the influence of levels of Nitrogen and Foliar Nutrition on growth and yield of Machine transplanted rice. The experiment was laid out in a split plot design and replicated thrice. The results revealed that application of 150% recommended dose of nitrogen (135 kg ha⁻¹) recorded highest dry matter production, yield attributes and grain and straw yield. Foliar nutrition with different fertilizers at PI stage did not influence the dry matter production, yield attributes and grain and straw yield significantly. The interaction between nitrogen levels and foliar feeding treatments was found to be non-significant. The highest benefit cost ratio (2.9) was obtained with 150% Recommended Dose of Nitrogen (135 kg ha⁻¹). Relatively higher gross and net returns, higher benefit cost ratio (2.59) was with foliar application of 1% 19-19-19 over 2% KNO₃ and 2% DAP due to marginal increase in grain yield.

Key words : DAP, Foliar nutrition, Machine transplanted rice, Yield.