Evaluation of Crop Establishment Techniques and N Levels on Growth and Yield of Rice

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ABSTRACT

A field experiment was conducted for two consecutive years 2015-16 and 2016-17 at Agricultural Research station, Ragolu, Andhra Pradesh, with four establishment techniques as main plots and five nitrogen levels as sub plots in a split plot design on sandy clay loam soil. The study revealed that planting with machine technique was stastically on par with normal planting, showing significantly higher values of growth and yield attributes. Growth characters like plant height, drymatter production and yield attributes like number of grains /panicle, filled grains / panicle and test weight were stastically higher in planting with machine technique. Highest grain yield of 6572 kg ha^{-1} and 6954 kg ha^{-1} during 2015 and 2016, respectively was recorded in planting with machine technique. The plant growth characters, yield attributes, grain and straw yields were significantly higher with application of nitrogen @ 210 kg N ha^{-1} and it was comparable with 180 and 150 kg N ha^{-1} during both the years of study.

Key words : *Crop establishment techniques, grain yield, N levels, Rice.*