

# **Productivity and Quality of Rice as Influenced by Crop Establishment Techniques and Nitrogen Levels**

**P Amara Jyothi, M Martin Luther, A Upendra Rao, K L Narasimha Rao and P Ratna Prasad**  
Department of Agronomy, Agricultural College, Bapatla,

## **ABSTRACT**

A field investigation was carried out during 2015-16 and 2016-17 at Agricultural Research Station, Ragolu, Andhra Pradesh, with four establishment techniques (Dry direct sown rice, aerobic rice, planting with machine and normal planting) as main plots and five nitrogen levels (90, 120, 150, 180 and 210 kg ha<sup>-1</sup>) as sub plots in split plot design on sandy clay loam soil. The study revealed that planting with machine technique was stastically on par with normal planting and resulted in significantly higher rice grain yield. Quality parameters like protein content, milling per cent, hulling per cent, head rice recovery and volume expansion ratio were not affected by establishment techniques but significantly influenced by nitrogen levels. The grain and straw yield and quality parameters were significantly higher with application of nitrogen @ 210 kg N ha<sup>-1</sup> and it was comparable with 180 and 150 kg N ha<sup>-1</sup> during both the years of the study.

**Key words :** *Crop establishment techniques, Grain yield, N levels, Quality parameters, Rice.*