

Yield and Quality of Aromatic Rice Influenced by Varied Levels of Nitrogen and Different Weed Management Practices under Aerobic Culture

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ABSTRACT

A field experiment was conducted at S.V. Agricultural College farm, Tirupati for two consecutive seasons of *rabi*, 2009, and 2010 on sandy clay loam soils to study the effect of varied nitrogen and weed management practices on yield and quality parameters of aromatic rice under aerobic culture. The results indicated that highest grain yield and milling percent of rice was realized with application of nitrogen at 140 kg ha⁻¹ where as highest straw yield and grain quality parameters *viz.*, kernel length, breadth, amylase and protein content of grain was realized with highest level *i.e.* 160 kg N ha⁻¹, while the lowest of all these parameters were recorded with 100 kg N ha⁻¹. Among weed management practices, pre emergence application of oxadiargyl @ 75 g ha⁻¹ supplemented with hand weeding at 25 DAS recorded the highest grain yield, straw yield, milling percent and protein content of grain. The quality parameters head rice recovery, L: B ratio and volume expansion of rice were not influenced either by nitrogen or weed management practices.

Key words : Aerobic culture, Aromatic rice, Herbicides, Nitrogen response, Quality parameters.