Response of Medium Duration Rice Varieties to Nitrogen in Coastal Andhra Pradesh

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ABSTRACT

A field experiment was conducted at Regional Agricultural Research Station, Maruteru during *kharif*, 2017-2018 to study the effect of different levels of nitrogen on growth and yield of medium duration rice varieties. The treatments comprised of three levels of nitrogen (50% RDN, 100% RDN and 150% RDN) and four medium duration varieties. The results revealed that application of 150% RDN significantly recorded highest growth and yield attributes *viz.*, plant height, number of tillers per m², drymatter accumulation, more number of productive tillers per m², number of filled grains per panicle and panicle weight. Among medium duration varieties MTU 1153 recorded highest grain yield due to significant variations with respect to yield attributes *viz.*, length of panicle, number of filled grains per panicle weight over the rest of varieties and lowest yield of MTU 7029, MTU 1075 and MTU 1001 was due to less number of filled grains, length of panicle and panicle weight. The study indicated that application of 150% RDN to MTU 1153 recorded highest grain yield and harvest index over the rest of the varieties.

Key words: Medium duration varieties, Recommended dose of nitrogen, Yield attributes.