



RESEARCH ARTICLE :

Effect of soil test based nutrient management approaches on growth and yield of dry direct seeded rice (Dry DSR)

■ RAGHAVENDRA, K. NARAYANA RAO, S.P. WANI, M.V. RAVI, H. VEERESH, A.S. CHANNABASAVANNA AND MAHADEVA SWAMY

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SUMMARY : An experiment was conducted during *Kharif* and *Rabi* seasons of 2015-16 and 2016-17 in the farmer field of Vijayanagar camp, Tq/Dist: Raichur, to identify the suitable nutrient management approaches for enhancing production potentials of Dry DSR-mustard cropping system. The experiment consisted of ten treatments with application of different category of nutrients as per soil test based nutrient management approaches including control and farmers fertilizers practice. Significantly higher grain (54.73 q ha^{-1}) and straw (68.38 q ha^{-1}) yield of rice was recorded in SSNM approach targeted yield of 55 q ha^{-1} (T_8) and the increase was to an extent of 7.9 and 16.7 per cent, respectively when compared to Farmers' Fertilizer Practice (FFP). The increase in grain and straw yield of rice in T_8 could be due to the maximum number of panicles per m^{-2} (438.1), Length of panicle (19.8cm), Number of grains per panicle (143.9), Test weight (13.98 g), lower sterility percentage (6.8), higher plant height (72.8cm), higher dry matter production ($62.25 \text{ g plant}^{-1}$), higher number of tillers m^{-2} (678.0) and maximum leaf area ($1418 \text{ cm}^2 \text{ plant}^{-1}$).

KEY WORDS :

Dry direct seeded rice, Targeted yield approach, Soil test, Growth, Yield

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Author for correspondence :

RAGHAVENDRA

Department of Soil
Science and Agricultural
Chemistry, University of
Agricultural Sciences,
RAICHUR (KARNATAKA)
INDIA

See end of the article for
authors' affiliations