



RESEARCH PAPER

Performance of different varieties of late planting rice cultivation under various nitrogen levels on growth and yield parameters

Pankaj Kumar Bagri*, B.K. Tiwari and S.S. Bhadauria

Department of Agronomy, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, College of Agriculture, Gwalior (M.P.) India (Email: pankajbagri.panna@gmail.com)

Abstract : Rice is very responsive to nitrogen fertilization under late transplanted conditions, however, nitrogen use efficiency by different varieties may vary. A field study was conducted during the rainy season of 2018 to assess the performance of three nitrogen levels in six rice varieties under the late planted condition at Agriculture Research Farm, JNKVV, College of Agriculture, Rewa (M.P.). The experiment was carried out in a split-plot design with three replications. The total number of treatments was Three nitrogen levels (N_1 - 80 kg ha⁻¹, N_2 -100 kg ha⁻¹, N_3 -120 kg ha⁻¹) and six rice cultivars (V_1 - Kalanamak, V_2 - IR-64, V_3 - Chittimuthyalu, V_4 - BPT5204, V_5 - IET-26375 and V_6 - IET-26383). variety IET-26375 recorded significantly higher growth parameters viz. number of leaves plant⁻¹ (38.75), plant height (89.68), number of tillers hill⁻¹ (13.49), panicle length (27.8 cm), grain yield (45.60 q ha⁻¹), straw yield (65.78 q/ha) and harvest index (0.41). Among the nitrogen levels, N_3 -120 kg N ha⁻¹ was recorded significantly higher above the same parameter as compared to other nitrogen levels. Hence, the application of N @ 120 kg ha⁻¹ along with rice variety IET-26375 can be recommended for achieving higher rice yield and nutrient efficiency in Madhya Pradesh.

Key Words : Different varieties, Late planting rice cultivation, Nitrogen levels, Growth, Yield parameters

View Point Article : Bagri, Pankaj Kumar, Tiwari, B.K. and Bhadauria, S.S. (2023). Performance of different varieties of late planting rice cultivation under various nitrogen levels on growth and yield parameters. *Internat. J. agric. Sci.*, **19** (RAAAHSTSE) : 147-150, DOI:10.15740/HAS/IJAS/19, RAAAHSTSE-2023/147-150. Copyright@2023: Hind Agri-Horticultural Society.

Article History : Received : 13.03.2023; Accepted : 20.03.2023