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# Response of Different Organic Sources of Nutrients on Growth and Yield of Basmati Rice

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## ABSTRACT

The field experiment was conducted at Crop Research Centre of Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut (U.P.) during *kharif* season 2022 and 2023. The experiment was conducted under RBD design with ten nutrient management treatments *viz*. $T_1$: Control, $T_2$: Recommended dose of fertilizers NPK (120:60:40), $T_3$: 50 % N through Dhaicha + 25% N through FYM + 25% N through Vermicompost, $T_4$: 50 % N through Dhaicha + 25% N through FYM + 25% N through Vermicompost + Consortia + Biostimulant, $T_5$: 25 % N through Dhaicha + 25% N through FYM + 50 % N through Vermicompost, $T_6$: 25 % N through Dhaicha + 25% N through FYM + 50 % N through Vermicompost + Consortia + Biostimulant, $T_7$: 1/3 N through Dhaicha + 1/3 N through FYM + 1/3 N through Vermicompost, $T_8$: 1/3 N through Dhaicha + 1/3 N through FYM + 1/3 N through Vermicompost + Consortia + Biostimulant, $T_9$: 50 % N through FYM + 50 % N through Vermicompost, and $T_{10}$: 50 % N through FYM + 50 % N through Vermicompost + Consortia + Biostimulant. On the basis of pooled data, the yield attributes characters like: plant height, dry matter accumulation, number of effective tillers was found under treatment $T_2$ (Chemical fertilizer 120:60:40). Similarly, yield attributing characters such as panicle length (27.61 cm), filled grain per panicle (72.57), 1000 grain weight (27.38 g) were recorded maximum under (Recommended dose of fertilizers, NPK :120:60:40) and found at par with 50 % N through Dhaicha + 25% N through FYM + 25% N through Vermicompost + Consortia + Biostimulant ($T_4$). Highest grain yield (39.44 q/ha) and straw yield (64.47 q/ha)) was recorded under RDF followed by treatment $T_4$, and $T_3$ during both the years of experimentation.

**Keywords:** Basmati Rice, RDF, Dhaicha, V.C, FYM, growth and yields

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