Research Paper

Response of rice (*Oryza sativa*) varieties to different levels of nitrogen under rainfed upland condition of Mizoram

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ABSTRACT : A field experiment was conducted during 2012 and 2013 at Kolasib District of Mizoram on the response of rice (*Oryza sativa* L) varieties to different levels of nitrogen. Plant height and dry matter production were the highest with 'Bhalum 3' at 90 kg N/ha. Panicles/m², filled grains/panicle, grain (4.50 tons/ha) and straw yield and nitogen uptake by grain and straw were also significantly higher with 'Bhalum 3'. Increasing levels of nitrogen enhanced panicles/m², filled grains/panicle, grain and straw yield and nitrogen uptake by grain and straw only up to 90 kg N/ha. Varieties and nitrogen levels interacted significantly and the highest grain yield and economics were recorded with 'Bhalum 3' at 90 kg N/ha and it was found to be optimum combination for upland rice.

Key Words : Rainfed, Nutrient, Upland, Panicle, Yield

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