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Integrated nutrient management in transplanted rice(Oryza sativa L.)

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ABSTRACT

A field experiment was conducted during the rainy season on heavy black clayey soils for 13 years (1995-2007) at Vyara, Gujarat to the study effect of integrated nutrient management on transplanted rice (Oryza sativa) productivity. The experiment was comprised of various quantity of pressmud (5,10,15,20t/ha), farmyard manure-FYM (10 t/ha) along with recommended dose of fertilizer (RDF) and without organics(only RDF). The rice grain and straw yield was significantly higher with integrated nutrient application (pressmud @ 20 t/ha + RDF), which remained at par with pressmud @ 15 t/ha + RDF or FYM@ 10 t/ha + RDF. The growth and yield attributing characters as well as soil and plant analysis results were not affected, except organic carbon and available P status of soil. The highest net return was reported with inorganic fertilizer than INM treatments. Similar trend was observed in BCR value also.

Key words: Transplanted rice, Pressmud, FYM, NPK uptake, INM