

RESEARCH ARTICLE

Varietal performance of rice under different source of nutrition in high altitude and tribal areas of Andhra Pradesh

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SUMMARY

A field experiment was conducted for two consecutive *Kharif* seasons of 2012-13 and 2013-14 in a Split Plot Design with three replications, at Agricultural Research Station, Seethampeta, Andhra Pradesh, India to generate scientific data on organic farming, integrated nutrient and pest management practices, chemical farming with four prominent varieties of rice *viz.*, MTU 1001, RGL 2538, BPT 5204 and MTU 7029 in high altitude and tribal areas of Andhra Pradesh. Results showed that, grain yield of rice was reduced in organic farming by 37 per cent and 30.23 per cent compared to chemical farming and INM practices. Growth, yield attributes of rice also reduced noticeably in organic farming. Whereas, organic farming recorded higher root biomass per hill at flowering, higher post nutrient status of available nitrogen, phosphorus and potassium and lesser incidence of diseases and pests over INM and chemical farming. Chemical farming recorded higher growth, yield attributes, yield and returns. Among the cultivars, MTU 1001 showed better performance and recorded the higher grain yield and straw yields and least affected by diseases and pests compared to other varieties.

Key Words : Rice, Organic farming, INM, Chemical farming, Varieties

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