Effect of zinc fertilization on growth and yield of coloured rice [*Oryza sativa* L.]

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ABSTRACT

A field experiment was carried out during *kharif*, 2023 on a sandy clay loam soil at the Agricultural College Farm, Bapatla to study the effect of zinc fertilization on the growth, yield attributes, yield of coloured rice. The experiment was laid out in split plot design with four coloured rice varieties as main plot treatments and four zinc fertilization at different growth stages as sub plot treatments. The results of the investigation revealed that the highest number of tillers m⁻², drymatter production (kg ha⁻¹), productive tillers m⁻², number of grains per panicle, grain yield, straw yield and harvest index were realized with M_4 (Kujipatalia variety) except the plant height and test weight characters which were recorded highest with Navara variety. Among all Zn fertilization stages, the highest values of all the above parameters were found with application of ZnSO₄ @ 0.2% at tillering, panicle initiation and booting stages. Hence, it was concluded that the Kujipatalia variety combined with the application of ZnSO₄ @ 0.2% at tillering, panicle initiation and booting stages was found to be superior.

Key words : *Coloured rice, Zinc fertilization, Growth and Yield*