# Production Potential and Economics of Aerobic Rice-based Cropping Systems in Southern Agroclimatic Zone of Andhra Pradesh

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**ABSTRACT**

Field experiments were conducted during Kharif and rabi seasons 2011-12 and 2012-13 at the dry land farm of S.V.Agricultural college, Tirupati to study about the nutrient management in aerobic rice - based cropping systems. The significantly higher rice equivalent yield was with sunhemp-rice-groundnut cropping system during both the years of study. The residual effect of different graded nutrient levels to *kharif* aerobic rice on *rabi* crops shown that rice equivalent yield was highest with 175% recommended dose of nutrients (140-70-70 N, $P_2O_5$ and $K_2O$ $kgha^{-1}$), but it was comparable with 150% recommended dose of nutrients (120-60-60 N, $P_2O_5$ and $K_2O$ kg $ha^{-1}$). Among all the cropping systems, sunhemp-rice-groundnut recorded the highest gross returns, net returns and benefit cost ratio under the influence of 175% recommended dose of nutrients applied to *kharif* rice, but it was on par with 150% recommended dose of nutrients.

**Key words :** Aerobic rice, Cropping system, Graded nutrient levels.