

Effect of Withholding Irrigation Water after Complete Heading on Rice Yield and Components in Mwea-Kenya

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ABSTRACT Rice is a major source of calories and protein in many countries of Africa. In Kenya, rice production is practiced in large scale rice irrigation schemes but water shortages continue to impede productivity in those areas. Therefore, the research investigated effect of withholding water after complete heading on yield and its components. A split plot arrangements in Randomized Complete Block Design (RCBD) with three replicates were used in two sites. Water withholding regimes were the main plots while varieties were the sub plots. Data was scored on various variables. ANOVA was done using SAS program version 9.2. Results from the study indicated that there were no significant difference ($p>0.05$) on the yield and yield components across sites when water was withheld. There were significant differences ($p<0.05$) for varieties which indicated that they were distinct. Water applied in paddy rice may be effectively rationed thereby increasing the acreage and production.