

Abstract

Mwea irrigation scheme presents itself as the most hard-hit with climate change impacts particularly drought; Mwea is endowed with modern irrigation infrastructure for rice production, though the watering practice meant to equitably allow every farm with crops to access water effectively and efficiently. In order for all crops in every farm to benefit equitably from such irrigation, therefore, watering of crops in the farms needs scheduling. In that view, therefore, an experiment was set out at KALRO-Mwea to investigate the effect of irrigation scheduling on growth parameters of two Nerica rice varieties. The experiment was laid out in a Randomized Complete Block Design in split-plot arrangement replicated thrice. It was justifiable to adopt this design for purposes of controlling variation in the experiment taken through taking account of spatial effects in the experimentation. Two rice varieties (Nerica 4 and Nerica 11) formed the main plots and four irrigation schedules (Daily, Every 4 days, Every 5 days and Weekly) formed the sub plots. Results indicated that the treatments significantly influenced plant height, fresh leaf weight, dry leaf weight, chlorophyll content, panicle length and panicle number of the two Nerica varieties at maturity. On the basis of research findings, it is recommended to the farmers in Mwea that the Nerica 4 on every 3 days and weekly irrigation schedules will be the best method to adopt.