

Abstract

The study was conducted at Egerton University in 2010/2011 in a split plot experiment, arranged in a randomized complete block design. The research was replicated three times and repeated once. Main plots were assigned to potato cultivars (Tigoni and Asante), while subplots were assigned to Biozyme® foliar feed rates (0, 125, 250, 500 and 750 ml/ha). Each subplot was planted with 28 seed potato tubers spaced at 30 cm x 70 cm in four rows. A distance of 1 m separated adjacent subplots and main plots. During the growth period, data collected included chlorophyll content, flowering characteristics and days to potato physiological maturity which was subjected to analysis of variance and means separated using LSD at P=0.05. Biozyme® application increased the chlorophyll content and flowering characteristics but reduced the days to physiological maturity. The 750ml/ha Biozyme® foliar feed increased chlorophyll content by 19.45spads, number of flowers set by 21.86%and reduced the days to physiological maturity by 21 days as compared to the control rate (0 ml/ha). Increased chlorophyll content and better flowering exhibited by effects of Biozyme® are good characteristics as these parameters impact on potato growth and development that determine potato yield.