

IMPACT OF DRIP IRRIGATION SYSTEM CONFIGURATIONS ON BANANA

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ABSTRACT

A field experiment was undertaken to analyze effect of system configurations on banana productivity. Strip plot design with twelve treatment combinations comprised of irrigation regimes as a first factor with three levels viz 0.8 IW/ETc (I_1), 1.0 IW/ETc (I_2) and 1.2 IW/ETc (I_3) and system configurations as second factor with four levels viz; circular pattern (D_1), Single lateral (2X4 lph emitter) (D_2), Star emitter (D_3) and Single lateral (1X8 lph emitter)(D_4). Each treatment was replicated five times. The combined effect was analyzed in terms of initiation of flowering, plant girth, number of leaves, harvesting time, bunch weight, yield per hectare, numbers of finger and water use efficiency. Economics of each configuration and irrigation regimes was also calculated. System configurations significantly affected in banana crop. Irrigating around the plant yielded higher than a single point or two point application of water.

KEYWORDS: Micro Irrigation, Drip Irrigation, Micro Irrigation in Banana