

SHORT COMMUNICATION

STUDIES ON PHYSICO-CHEMICAL PARAMETERS OF GUAVA (*PSIDIUM GUAJAVA* L.) CV. L-49 THROUGH DRIP IRRIGATION AND MULCHING UNDER AGRO-CLIMATIC CONDITION OF CHHATTISGARH PLAINS

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Abstract: The experiment was carried out during the year 2009-2010 in Randomized Block Design (RBD) with five replications and eight treatments allocating mulching with different irrigation levels viz., 100%, 80% and 60% of water through drip and flood irrigation. The guava variety L-49 was taken with the objectives to study scheduling of irrigation under drip irrigation systems, to workout the water requirement of guava and to assess the effect of black plastic mulch on physico-chemical composition of guava fruits. The use of 80 per cent water through drip irrigation with plastic mulch was found effective for guava plants. The plants in respect of fruit weight, fruit volume, pulp: seed ratio, TSS (maximum), pH (maximum) and non-reducing sugar (maximum) were found superior under 80 per cent water through drip with plastic mulching. Whereas, the treatment having 60 per cent water through drip with plastic mulch was found effective for fruit diameter, weight of pulp, reducing sugar (maximum), acidity (minimum) and total sugar (maximum). The treatment under 100 per cent water through drip with plastic mulch recorded maximum ascorbic acid (%) in the fruits.

Keywords : Drip irrigation, mulching, guava, physico-chemical parameters

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