

FERTIGATION RECOMMENDATION FOR CHILLI UNDER DR IRRIGATION

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Few farmers in Sri Lanka do use drip fertigation for chilli (*Capsicum annum* L) cultivation, though there is no fertigation recommendation for chilli yet. Therefore a field study was conducted at Field Crops Research and Development Institute, Mahailuppallama, in Yala 2013 to find out a fertigation recommendation for Chilli under drip irrigation in Reddish Brown Earth Soil using test variety KA-2. Five treatments; 50% of the Department of Agriculture (DOA) fertilizer recommendation as manual application (T₁), 50% of the DOA fertilizer recommendation with fertigation in five splits (T₂), 100% of the DOA fertilizer recommendation as manual application (T₃), 100% of the DOA fertilizer recommendation with fertigation in five splits (T₄) and 100% of the DOA fertilizer recommendation with fertigation with each irrigation event (T₅) were tested in a Randomized Complete Block Design with three replicates. Irrigation was practiced in one day irrigation interval. Plant height and canopy diameter were taken after two months from transplanting. Green chilli yield was taken as the yield parameter. Treatment T₅ was given significantly higher yield

compared to the T₁ and T₃. Treatments T₂, T₄ and T₅ were recorded insignificant variations with T₃ and T₁. Plant height and canopy diameter of T₄ and T₅ were significantly higher than the other treatments. Plant canopy diameter of T₂ and T₅ were significantly higher than the T₁. Results revealed that, fertigation on chilli with each irrigation event significantly increased green chilli yield compared to the manual application of fertilizer. Plant height significantly increased with fertigation with DOA recommended dose.

Key words : Chilli, Drip irrigation, Fertigation