

EFFECT OF WEED AND INTEGRATED NUTRIENT MANAGEMENT ON YIELD OF POTATO (*SOLANUM TUBEROSUM*) UNDER DRIP IRRIGATION

Chandresh Kumar Chandrakar, G.K. Shrivastava, S.K. Dwivedi and Ashish Kumar Chandrakar

Department of Agronomy, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.)

Abstract : A field experiment was conducted at IGKV, Raipur (C.G) during *rabi* 2010-11. The soil of experimental site was clay loam in texture, neutral in soil reaction. The climate of the region is sub humid with an average annual rainfall of 1200-1400 mm. Results revealed that drip irrigation 100 % or 125 % of OPE proved comparable and gave higher growth parameters, yield attributes (number of stolons plant⁻¹, number of tubers plant⁻¹, fresh weight, dry weight of tubers, tuberization efficiency) and total tuber yield of potato crop as compared to furrow irrigation. The herbicide Metribuzin (500 g a.i. ha⁻¹PE) proved better among other weed management practices recorded the maximum growth parameters, yield attributes (number of stolons plant⁻¹, number of tubers plant⁻¹, fresh weight, dry weight of tubers, tuberization efficiency) and total tuber yield of potato crop. Application of 75% N inorganic fertilizer + 25 % N organic (Poultry manure) + PSB + Azotobactor produced significantly highest growth parameters, yield attributes (number of stolons plant⁻¹, number of tubers plant⁻¹, fresh weight & dry weight of tubers, tuberization efficiency) and total tuber yield.

Keywords : Drip irrigation, Weed management, Integrated nutrient management, Potato

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