Response of Brinjal to different levels of Drip Irrigation with and without Mulch on Growth, Yield and Water Use Efficiency

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ABSTRACT

The combination of drip irrigation with plastic mulch enables better plant micro climate and contributes to higher yields. Field experiment was carried out at Precision Farming Development Centre (PFDC), College of Agriculture, Rajendranagar, Hyderabad on a sandy loam soil having adequate drainage during *Kharif*- 2004, 2005 and 2008 to evaluate the response of different levels of irrigation with and without black LDPE mulch film. Brinjal crop irrigated with drip at 0.80 PE (Pan Evaporation) combined with plastic mulch (T₆) recorded the highest benefit cost ratio which was recorded 47.59 % more yield than the conventional method of irrigation and it was recorded the better Water Use Efficiency than the conventional method of irrigation as 2.92 t/ha-cm. Hence treatment drip irrigation at 0.8 PE with plastic mulch can be recommended.

Key words : Brinjal, Drip irrigation, Plastic mulching.