

## Effect plastic mulching on fertigation of grafted brinjal under drip irrigation system

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■ **ABSTRACT** : Field studies were conducted at PFDC farm, of Tamil Nadu Agricultural University, Coimbatore to evaluate the effect of plastic mulching and fertigation on grafted brinjal under drip irrigation. The experiments were laid in Strip Plot Design with twenty seven treatments which included three mulching levels such as 25  $\mu$  thickness plastic mulch, 50  $\mu$  thickness plastic mulch and control; three Irrigation levels at 60 per cent  $ET_0$ , 80 per cent  $ET_0$  and 100 per cent  $ET_0$  and three fertigation levels with 80 per cent, 100 per cent and 120 per cent recommended dosage of fertilizer (RDF) which were replicated thrice. The results showed that the plastic mulch suppress the population of weeds as compared to without mulch treatments. The highest fertilizer use efficiency (416.5 kg ha<sup>-1</sup>.kg of N, 555.3 kg ha<sup>-1</sup>.kg of P and 833.00 kg ha<sup>-1</sup>.kg of K) was recorded in treatment under 25 $\mu$  plastic mulch at 80 per cent  $ET_0$  with 100 per cent RDF. The use of mulch increased the yield of the grafted brinjal as compared to the treatments without mulch.

■ **KEY WORDS** : Fertigation, Drip irrigation, Mulching, Grafted brinjal

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