

Research Note

Effect of irrigation and fertigation levels on water use efficiency of cabbage (*Brassica oleracea var. Capitata* L.)

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Summary

The experiment was conducted in *Rabi* season during the year 2007-08 at Horticultural Research Farm, IGKV, Raipur (C.G.). There were 25 treatment combinations involving 5 irrigation levels (Furrow irrigation at 1.2 IW/CPE, drip irrigation at 100, 80, 60 and 40 per cent PE) and 5 nitrogen levels (50, 75, 100, 125 and 150 per cent of recommended dose of fertilizer) through fertigation. The results indicate that water use efficiency (WUE) was found higher under drip irrigation at 40 per cent PE ($9.80 \text{ q ha}^{-1} \text{ cm}^{-1}$) over furrow irrigation at 1.2 IW/CPE ($8.08 \text{ q ha}^{-1} \text{ cm}^{-1}$). Different nitrogen levels resulted in significant WUE. Highest WUE was recorded with 150 per cent of recommended dose of nitrogen ($9.62 \text{ q ha}^{-1} \text{ cm}^{-1}$).

Key words : Cabbage, Drip irrigation, Fertigation, Water use efficiency (WUE), and Irrigation Scheduling

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