

Influence of irrigation schedules and mulches on growth and quality of Sunflower (*Helianthus annuus* L.) in black soil of Northern Transitional Tract of Karnataka

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ABSTRACT

A field experiment was conducted to find the Influence of Irrigation Schedules and Mulches on Growth and Quality of Sunflower (*Helianthus annuus* L.) in medium deep black clayey soil of Main Agricultural Research Station, University of Agricultural Sciences, Dharwad during *rabi* 2003-04. The experiment consisted of four main plot treatments (0.4, 0.6, 0.8 IW/CPE ratio and critical stages) and three sub plot treatments (control, maize straw mulch and polythene mulch) with three replications laid out in split plot design. The results indicated significantly higher head diameter, number of seeds per head and seed weight per head in 0.8 IW/CPE ratio irrigation schedules as compared to 0.4, 0.6 IW/CPE ratio and critical stages. The growth components like plant height, number of leaves per plant, leaf area index and total dry matter production per plant at harvest were also higher in 0.8 IW/CPE ratio. The significantly higher head diameter, number of seeds per head and seed weight per head was recorded in mulch with polythene over rest of the treatments. Similar trends were also observed in growth components. Higher seed oil content (41.07%) and oil yield (795 kg/ha) over 0.4, 0.6 IW/CPE ratio and critical stages.

Key words : Irrigation schedules, Mulches, Sunflower

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