



## Effect of Crop Geometry and Drip Irrigation Levels on Growth, Yield and Water Use Efficiency of Pearl Millet (*Pennisetum glaucum*) in Irrigated Western Arid Rajasthan

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**Abstract:** An increase in yield attributes, seed, straw and biological yield with increase in irrigation levels from 40% to 80% ETc was evident. However, 60% and 80% ETc gave at par yield but both were superior to surface irrigation. The highest water use efficiency ( $6.00 \text{ kg ha}^{-1} \text{ mm}^{-1}$ ) was with drip irrigated at 60% ETc as compared to surface irrigated crop ( $2.82 \text{ kg ha}^{-1} \text{ mm}^{-1}$ ). Highest seed ( $21.70 \text{ q ha}^{-1}$ ), straw ( $98.97 \text{ q ha}^{-1}$ ), biological ( $120.66 \text{ q ha}^{-1}$ ) yield and water use efficiency ( $5.44 \text{ kg ha}^{-1} \text{ mm}^{-1}$ ) was with normal sown crop (60 cm row spacing) at 60 cm drip line spacing which was at par with paired row sown crop (45cm x 75cm paired row) at 120 cm drip line spacing.

**Key Words:** Crop geometry, Drip irrigation, Pearl millet, Seed yield, Water use efficiency

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