



Effect of varying irrigation regimes on irrigation water saving and water expense efficiency in furrow transplanted and furrow irrigated rice (*Oryza sativa* L.) on sandy loam soil in Central Punjab

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Abstract : A field investigation was carried out in Punjab Agriculture University, Ludhiana during the *Kharif* 2005 to evaluate the effect of varying irrigation management practices in furrow and bed transplanted rice on irrigation water saving and water expense efficiency. Bed and furrow transplanting under various methods of irrigation *i.e.* (F), (Inun. B+F) and (Inun.B), were at par with each other. Pretilachlor @ 0.75kg/ha applied as sand mix one DAT gave significantly better control of weeds species in bed and furrow transplanting when irrigation water was allowed just to pass over the bed for first 15 days after transplanting under (Inun. B+F) method of irrigation in comparison to irrigation in furrow throughout after transplanting under (F) method of irrigation. The treatment 2R/F(Inun. B+F) × herbicide yielded at par, resulted in 19.9 per cent saving in total water expense, 23.9 per cent saving in terms of net water expense and 27.7 per cent increase in net water expense efficiency when compared with recommended practice × herbicide *i.e.* Flat(BM) × herbicide.

Key Words : Bed/furrow transplanting, Border method of irrigation, Inundating, Water expense efficiency, Rice

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