

Impact of integrated weed management on growth, yield and economics of lentil (*Lens culinaris Medic*) under rainfed conditions of Bihar

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ABSTRACT : A field experiment was conducted on calcareous alluvial soil during the *rabi* season of 2012-13. The experiment comprising of nine weed management treatments were conducted in a randomized block design with four replications. The results revealed that the highest mean seed (1826 kg/ha) and stover (3097 kg/ha) yields were recorded under hand weeding twice at 20 and 40 DAS. The integrated treatment of pendimethalin @ 1.00 kg/ha followed by hand weeding at 40 DAS and pre-emergence herbicidal treatment of pendimethalin + imazethapyr @ 1.00 kg/ha were also found equally effective. Significantly higher values of growth characters and yield attributes viz., plant height, plant dry weight, crop growth rate, number of branches per plant, number of pods per plant, number of seeds per pod and test weight were recorded in these treatments. Harvest index, however, was not significantly influenced by various weed control treatments.

Key Words: Lentil, Herbicides, Integrated weed management and Nutrient uptake.