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Efficacy and economics of weed management practices in direct seeded rice (*Oryza sativa* L.) under rainfed lowland ecosystem

Pooja Kumari[1], J.P. Singh[1], Dharminder[1], Shyama Kumari[1] and Shiveshwar Pratap Singh[2]

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ABSTRACT : A field experiment was carried out at the Agricultural Research Farm, Rajendra Agricultural University, Pusa, Samastipur, Bihar (India), during *kharif* season of 2014 to evaluate the weed management practices under direct seeded rice. The weed management factor under study comprised of 12 weed management treatments on direct seeded rice was laid out in Randomized Block Design and replicated thrice. The data revealed that maximum weed control efficiency, lowest weed population,weed dry weight and weed index were recorded under treatment T_2-Weed free (3 hand weeding at 20,40 and 60 DAS). Among different weed management treatments,T_{11}-Pendimethalin 1 L/ha (2 DAS) *fb* Bispyribac-Na 30 g/ha (20 DAS) + Hand weeding (40 DAS) had efficiently control the complex weed flora. On economical basis T_{12}-Brown manuring with *Sesbenia aculeate* knock down with 2, 4-D @ 0.75 kg/ha at 35 DAS showed its superiority over rest of the treatments.

Key Words : Brown manuring, direct seeded rice, herbicide (pre & post emergence), weeds