



Bioefficacy of post emergence herbicides for weed control in soybean [*Glycine max* (L.) Merrill] under Chhattisgarh conditions

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Abstract : A field experiment was conducted at the Research cum Instructional Farm, Department of Agronomy, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.), during *Kharif* season of 2010, to find out the bioefficacy of post emergence herbicides for weed control in soybean [*Glycine max* (L.) Merrill] under Chhattisgarh conditions. All the weed management practices were found effective in controlling the weeds. The maximum total and species wise weed density of *Echinochloa colonum*, *Cynodon dactylon*, *Bracharia ramosa*, *Digitaria sanguinalis*, *Dinebra retroflexa*, *Cyperus rotundus*, *Alternanthera sessilis*, *Parthenium hysterophorus* and *Euphorbia geniculata* were observed under weedy check (T_{13}) and minimum were observed under treatment farmer's practice (hand weeding twice) at 20 DAS and 40 DAS (T_{12}). Highest weed control efficiency and seed yield was noted under treatment hand weeding twice at 20 DAS and 40 DAS (T_{12}) and lowest weed control efficiency was observed in weedy check (T_{13}). The economic returns in terms of net returns, additional return over weedy check and B:C ratio were maximum under hoeing twice (by wheel hoe) at 15 DAS and 35 DAS (T_{11}) followed by farmer's practice (hand weeding twice) at 20 DAS and 40 DAS (T_{12}), imazethapyr 10 SL @ 100 g ha⁻¹ fb hoeing (by wheel hoe) at 35 DAS (T_{10}) and imazethapyr 10 SL @ 100 g ha⁻¹ fb HW at 35 DAS (T_9).

Key Words : Herbicides, Weed control, Soybean

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