INFLUENCES OF SPACING AND WEED MANAGEMENT PRACTICES ON YIELD AND ECONOMICS OF WET DIRECT SEEDED RICE (ORYZA SATIVA L.)

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Abstract: A field experiment was conducted during *kharif* season of 2014-15 at the Research cum Instructional Farm, Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.). The experiment was laid out in randomized block design comprises of eleven treatments with three replications. Among the spacing 20×10 cm and 20×20 cm, the effective tillers m⁻², total grains panicle⁻¹, filled grains panicle⁻¹ were significantly higher at 20×20 cm with respective level of weed management. However, hand weeding twice and herbicidal weed management was at par with both spacing. Among the spacing 20×10 cm and 20×20 cm, At spacing 20×20 cm, bidirectional mechanical weeding thrice (T₁₀) produced the maximum grain (49.12 q ha⁻¹) and straw yield which was at par with bidirectional mechanical weeding twice. Among the spacing 20×10 cm and 20×20 cm, the grain and straw yield was at par with respective level of weed management. Among different spacing and weed management practices the higher gross return (₹ 69,759 ha⁻¹) obtained under bidirectional mechanical weeding thrice. However, the maximum net return (₹ 38,565 ha⁻¹) and benefit cost ratio (2.61) were obtained at spacing 20×20 cm with herbicidal weed management (Pyrazosulfuran as pre-emergence followed by Bispyribac-Na as post emergence).

Keywords: Management, Rice, Seed, Weed, Kharif season

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