EFFECT OF FYM AND WEED MANAGEMENT ON WEED DYNAMICS AND YIELD OF DIRECT SEEDED RICE (ORYZA SATIVA L.) UNDER MINIMUM TILLAGE

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Abstract: Results revealed that, FYM @ 5 t ha⁻¹ (F1) has significant impact on total tillers m⁻² and effective tillers m⁻². Hand weeding twice at 25 & 45 DAS (W7) produced significantly highest number of effective tillers meter⁻², test weight (g). Highest grain yield (4.21 t ha⁻¹), straw yield (5.52 t ha⁻¹) and harvest index (51.54 %) was recorded under hand weeding twice at 25 & 45 DAS (W7), followed by Chemical weeding with bispyribac Sodium @ 20 g ha⁻¹ 25 DAS (W1), which gave grain yield (4.03 t ha⁻¹), straw yield (5.25 t ha⁻¹) and harvest index (51.37 %). The lowest was recorded under unweeded check (W8). In the experimental field, *Commelina benghalensis* L., *Cyanotis axillaris* Schult. F., *Cyperus difformis* L., *Echinochloa colona* (L.) Link, *Monochoria vaginalis (Burm.f.) Kunth* were dominant weeds. The lowest weed density, weed dry matter production and relative weed density were recorded under hand weeding twice at 25 & 45 DAS (W7), followed by Chemical weeding with bispyribac Sodium @ 20 g ha⁻¹ 25 DAS (W1).

Keywords: Oryza sativa, Weed management, Yield

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