

Weed Management in Rice Under Mechanized System of Rice Intensification

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ABSTRACT

An investigation was conducted on weed management in rice under mechanized SRI at Agricultural College Farm, Naira during *Kharif*, 2014 with ten weed management practices. Orthosulfamuron @ 100 g *a.i.* ha⁻¹ as pre-emergence sand mix application + Orthosulfamuron @ 100 g *a.i.* ha⁻¹ as post emergence at 20-25 DAP resulted in the highest growth parameters, number of tillers m⁻² and dry matter production and yield attributes viz., productive tillers m⁻², filled grains panicle⁻¹ and yield (5489 kg ha⁻¹) as well as net returns (42673 0 ha⁻¹) and B:C ratio (1.21). With respect to weed parameters, lowest weed dry matter, weed index and highest weed control efficiency at 50 DAP were registered with T₁₀ and it was on par with all other integrated weed management practices with all the parameters except with weed dry matter and weed control efficiency. Lowest growth parameters, yield attributes, yield as well as highest weed dry matter and weed index and lowest weed control efficiency were recorded with Weedy check. The study revealed that weeds in rice can successfully be managed under mechanized SRI in north coastal zone of Andhra Pradesh, with sequential application of Orthosulfamuron@ 100 g *a.i.* ha⁻¹ as pre and post emergence for higher productivity.

Key words : : Integrated weed management, Growth parameters, Mechanized SRI, Orthosulfamuron, Oxadiargyl, Power weeder, Yield