

Grain Yield and Water use Efficiency of Rice as Influenced by Transitions in Rice Cultivation in Krishna Western Delta Command Area of Andhra Pradesh

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ABSTRACT

In the farmers fields of Modukuru No.2 branch canal command of Krishna Western Delta, Guntur District of Andhra Pradesh, different lowland rice production systems have been studied for their grain yield and water use efficiency during *Kharif* 2005 and 2006. Among the rice production systems, System of Rice Intensification (SRI) recorded highest mean grain yield (6900 kg ha⁻¹) followed by Semi-dry Rice (6300 kg ha⁻¹) and rotational system of irrigation (5900 kg ha⁻¹) when compared to farmers practice of growing rice with continuous flooding (5000 kg ha⁻¹). SRI also resulted in higher mean water use efficiency (11.5 kg ha.mm⁻¹) when compared to farmers practice of flood irrigation (4.5 kg ha.mm⁻¹).

Key words : Efficiency, Grain yield, Rice, Transitions.