



SCIENTIFIC RESEARCH DOCUMENTING AND EXPLAINING SRI

Morphological and Physiological Changes Induced by SRI Management

An assessment of physiological effects of system of rice intensification (SRI) practices compared with recommended rice cultivation practices in India -- A.K. Thakur et al., *Experimental Agriculture*, 46: 77-98 (2010).

The effects of planting pattern and water regime on root morphology, physiology and grain yield of rice – A. Mishra and V.M. Salokhe, *Journal of Agronomy & Crop Science*, 196: 368-378 (2010).

Morphological and physiological responses of rice roots and shoots to varying water regimes and soil microbial densities -- A. Mishra and N. Uphoff, *Archives of Agronomy & Soil Science*, 59: 705-731 (2012).

Interactions among Plant Density, Irrigation, and Nitrogen Fertilizer Applications

Effect of plant density and nitrogen fertilizer rates on grain yield and nitrogen uptake of hybrid rice (*Oryza sativa L.*) -- X. Q. Lin et al., *Journal of Agricultural Biotechnology & Sustainable Development*, 1: 44-53 (2009).

Influence of the System of Rice Intensification on rice yield and nitrogen and water use efficiency with different N application rates -- L. Zhao et al., *Experimental Agriculture*, 45: 275-486 (2009).

Comparative performance of rice with System of Rice Intensification (SRI) and conventional management using different plant spacings -- A. K. Thakur et al., *Journal of Agronomy & Crop Sciences*, 196: 146-159 (2010).

Differential responses of system of rice intensification (SRI) and conventional flooded-rice management methods to applications of nitrogen fertilizer -- A.K. Thakur et al., *Plant & Soil*, 370: 59-71 (2013).

Effects of SRI Management on Crop Water Saving and Water Productivity

Comparison on water savings of paddy rice under System of Rice Intensification (SRI) growing rice in Mwea, Kenya -- J.A. Ndiiri et al., *International Journal of Current Research & Review*, 4: 63-73 (2012).

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Effects of SRI Management on Greenhouse Gas Emissions

A Life Cycle Assessment (LCA) of greenhouse gas emissions from SRI and flooded rice production in SE India -- A. Gathorne-Hardy et al., *Taiwan Water Conservancy*, 61: 110-125 (2013).

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Effect of SRI water management on water quality and greenhouse gas emissions in Korea -- J.D. Choi et al., *Irrigation & Drainage*, 63: 263-270 (2014).

Effects of SRI Management on Root Growth

Seedling characteristics and the early growth of transplanted rice under different water regimes -- A. Mishra and V.M. Salokhe, *Experimental Agriculture*, 44: 1-19 (2008).

Rice yield and its relation to root growth and nutrient-use efficiency under SRI and conventional cultivation: An evaluation in Madagascar -- J. Barison and N. Uphoff, *Paddy & Water Environment*, 9: 65-78 (2011).

Effects of SRI Management on Soil Biology and Crop Performance

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A review of studies of SRI effects on beneficial organisms in rice soil rhizospheres -- I. Anas et al., *Paddy & Water Environment*, 9: 53-64 (2011).

Effects of water management and organic fertilization with SRI crop practices on hybrid rice performance and rhizosphere dynamics -- X.Q. Lin et al., *Paddy & Water Environment*, 9:33-39 (2011).

Comparisons of yield, water use efficiency, and soil microbial biomass as affected by the System of Rice Intensification -- L. Zhao et al., *Communications in Soil Science & Plant Analysis*, 41: 1-12 (2010).

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Gender Effects of SRI Practice

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Doing different things or doing it differently? Rice intensification practices in 13 states of India – K. Palanisami, K.R. Karunakaran, U. Amarasinghe and C.R. Ranganathan, *Economic & Political Weekly*, 48: 51-58 (2013).

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Adaptation of SRI to Unirrigated/Rainfed Rice Cultivation

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Application of SRI Principles and Practices to Other Crops

The system of crop intensification: Reports from the field on improving agricultural production, food security, and resilience to climate change for multiple crops -- B. Abraham et al., *Agriculture & Food Security*, 3:4 (2014). <http://www.agricultureandfoodsecurity.com/content/3/1/4>

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