

Supplementary Materials: Effects of Conservation Tillage and Nutrient Management Practices on Soil Fertility and Productivity of Rice (*Oryza sativa* L)-Rice System in North Eastern Region of India

Gulab Singh Yadav, Rahul Datta, Shamina Imran Pathan, Rattan Lal, Ram Swaroop Meena, Subhash Babu, Anup Das, S. N. Bhowmik, Mrinmoy Datta, Poulami Saha and Pawan Kumar Mishra

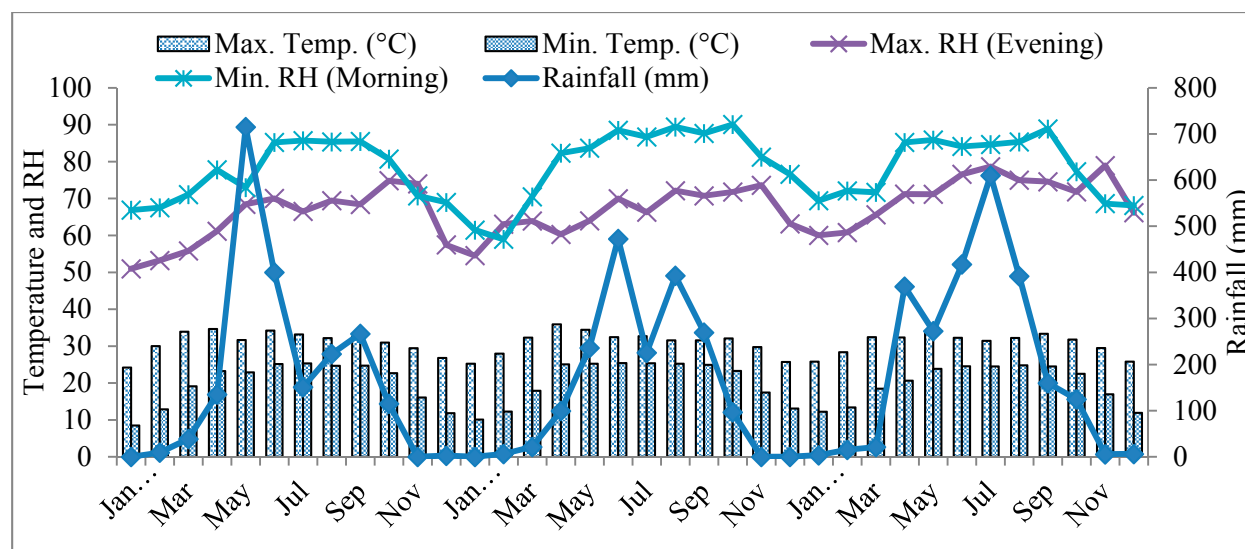


Figure S1. Average monthly weather data from 2013–2015.

Table S1. Details of the tillage and other cultural operations done in rice–rice system.

Operation	Soil depth (cm)	Objective	Convention tillage (CT)	Reduced tillage (RT)	No-till (NT)
Deep spading with the manual labor	15–20 cm	Incorporation of rice residue and weed biomass	1 time	-	-
Shallow plowing with power tiller	10–15 cm	Partial incorporation of rice residue and weed management	3 times	2 times	-
Puddling with power tiller	10–15 cm	Water retention and weed control	2 times	-	-
Glyphosate application	-	Weed control	-	-	Seven days before transplanting
Cellulose decomposing micro-organism (CDM) application	-	Decomposition of surface rice residues and weed biomass	-	Fifteen days before transplanting	Fifteen days before transplanting
Farmers practice (FP)	Conventional tillage with puddling + 40 kg nitrogen (N) and 9 kg phosphorus (P) ha ⁻¹ + 30% residue incorporation +FYM 5 Mg ha ⁻¹ once in two years to first crop ie., wet season rice (WR)				
Recommended dose of fertilizer (RDF)	80 kg N, 18 kg P and 33.3 kg potassium (K) ha ⁻¹ in WR and 100 kg N, 18 kg P and 33.3 kg K ha ⁻¹ in dry season rice (DR)				
Integrated nutrient management (INM)	25% N through <i>Gliricidia</i> spp. Leaves and twigs as green leaf manure (GLM) + 60 kg N, 9 kg P, 17 kg K, 2 kg Boron (B) and 5 kg zinc (Zn) ha ⁻¹ + CDM				
Cellulose decomposing micro-organism (CDM)	<i>Trichoderma viride</i> @ 4 g L ⁻¹ water (600 litre water/ha) was sprayed 15 days before transplanting of WR on rice stubbles				