

SRI experiences - during the samba season of 2002 at Pondicherry

Soil type: black clay

Variety: CR 1009 Long duration variety

Treatment details:

T1	14 days single seedlings, 40 x 40 cm spacing & less irrigation
T2	14 days single seedlings, 40 x 40 cm spacing & usual irrigation
T3	14 days single seedlings, 20 x 15 cm spacing & less irrigation
T4	14 days single seedlings, 20 x 15 cm spacing & usual irrigation
T5	33 days multiple seedlings, 40 x 40 cm spacing & less irrigation
T6	33 days multiple seedlings, 40 x 40 cm spacing & usual irrigation
T7	33 days multiple seedlings, 20 x 15 cm spacing & less irrigation
T8	33 days multiple seedlings, 20 x 15 cm spacing & usual irrigation

Results of the experiments

Treatments	Plant height (cm)	No.of productive tillers	No.of filled grains	Percentage of the filled grains (%)	Grain yield (Kg/ha)
T1	82.30	17.6	195.00	29.42	6437
T2	81.60	21.6	143.80	26.45	6025
T3	85.20	23.4	170.00	30.04	6625
T4	83.00	31.6	191.20	29.48	6550
T5	110.00	38.8	221.60	20.09	5212
T6	115.30	42.8	199.80	22.28	4500
T7	108.60	40.8	201.80	22.00	5675
T8	101.80	49.8	244.00	20.04	5400

Comparison between SRI (14 days old single seedling, alternate wetting and drying with need based watering at critical phases with wider spacing) and farmers practice (25-30 days old multiple seedling transplantation, conventional spacing and traditional water management practices)

Details	SRI	Farmers Practice
Yield (Kg/ha)	6437	5400
Yield over FP (%)	16.12	-
Reduction in seed rate/ha(%)	79.17	-
Duration (Days After Sowing)	135	155
Water use after transplanting(mm)*	120	600

- - calculated based on the number and depth of the irrigation

The treatment of 14 days old seedling with a spacing of 20 x 15 cm at alternate wetting and drying with critical irrigation at tillering, panicle initiation and grain filling produced a grain yield of 6.5 t/ha. The other main advantages are reduced nursery management, seed cost and water. Also farmers appreciated the reduction in the number of days to maturity.