

## NUMERICAL DATA

### Effect of different approaches of fertilizer recommendations on yield, nutrient uptake and economics of rice (2018)

**Table 1: Effect of different approaches of fertilizer recommendations on grain and straw yield of rice grown under SRI**

Treatment	Grain yield (t ha <sup>-1</sup> )	Straw yield (t ha <sup>-1</sup> )	Percent deviation
Farmers' Practice	2.68	6.93	-
General Recommended Dose	3.06	7.32	-
Soil test based	3.08	7.93	-
STCR based for yield target of 3.5 t ha <sup>-1</sup>	3.30	8.07	-5.7
STCR based for yield target of 4 t ha <sup>-1</sup>	3.63	8.70	-9.3
STCR based for yield target of 4.5 t ha <sup>-1</sup>	4.00	9.23	-11.1
STCR based for yield target of 5 t ha <sup>-1</sup>	4.46	10.03	-10.8
Control	2.28	6.27	-
CD (P = 0.05)	0.30	0.39	-

### Effect of treatments on profitability of rice grown under SRI (2018)

Treatment	Cost of cultivation (₹ha <sup>-1</sup> )	Gross returns (₹ ha <sup>-1</sup> )	Net returns (₹ ha <sup>-1</sup> )	B:C Ratio
Farmers' Practice	30271	56145	25875	1.85
General Recommended Dose	34803	62572	27768	1.80
Soil test based	34427	64493	30066	1.87
STCR based for yield target of 3.5 t ha <sup>-1</sup>	32216	67968	35753	2.11
STCR based for yield target of 4 t ha <sup>-1</sup>	33713	74433	40721	2.21
STCR based for yield target of 4.5 t ha <sup>-1</sup>	35358	81083	45726	2.29
STCR based for yield target of 5 t ha <sup>-1</sup>	36784	89802	53017	2.44
Control	30000	48727	18727	1.62

Sale price of rice grains (₹kg<sup>-1</sup>) = 14.50, Straw rate = 250 ₹q<sup>-1</sup>. Cost of nutrients (₹ kg<sup>-1</sup>) Urea = 5.41, SSP = ₹ 10.5, MOP = ₹ 16.8. FYM = ₹ 1000 t<sup>-1</sup>. General cost of cultivation without fertilizers = ₹ 30,000 ha<sup>-1</sup>

**Source:** [www.phytojournal.com/archives/2018/vol7issue2/PartK/7-1-408-560.pdf](http://www.phytojournal.com/archives/2018/vol7issue2/PartK/7-1-408-560.pdf)

## Legacy effects of long-term nitrogen fertilizer application on the fate of nitrogen fertilizer inputs in continuous maize. (2018)

Mean grain yields (2000–2014) and selected soil properties (0–15 cm) for the long-term N rate experiments in central and southern IA. Standard errors are shown in parentheses. Regression coefficients for significant responses of yield and soil properties to historical N rate are provided in the footnotes.

Historical N rate (kg N ha <sup>-1</sup> yr <sup>-1</sup> )	Historical grain yield (Mg ha <sup>-1</sup> yr <sup>-1</sup> ) <sup>a</sup>	Bulk density (g cm <sup>-3</sup> ) <sup>b</sup>	Sand content (g 100 g <sup>-1</sup> soil) <sup>c</sup>	pH <sup>d</sup>
<b>Central</b>				
0	4.16 (0.28)	1.34 (0.04)	38.0 (1.9)	6.7 (0.2)
67	8.18 (0.16)	1.38 (0.04)	36.4 (3.0)	6.4 (0.2)
135	10.59 (0.11)	1.33 (0.02)	36.7 (2.3)	6.2 (0.1)
202	11.12 (0.13)	1.34 (0.02)	36.8 (3.1)	6.0 (0.1)
269	11.60 (0.17)	1.32 (0.05)	36.3 (2.7)	6.2 (0.2)
<b>Southern</b>				
0	2.10 (0.19)	1.28 (0.04)	4.0 (0.2)	6.3 (0.1)
45	3.58 (0.08)	1.24 (0.03)	4.3 (0.2)	6.5 (0.2)
90	4.84 (0.11)	1.24 (0.03)	4.5 (0.5)	6.3 (0.1)
135	6.49 (0.21)	1.23 (0.03)	4.5 (0.2)	6.1 (0.1)
179	7.93 (0.17)	1.25 (0.03)	4.5 (0.4)	6.2 (0.1)
224	8.59 (0.23)	1.21 (0.03)	4.7 (0.5)	6.2 (0.1)
269	9.18 (0.31)	1.23 (0.03)	4.7 (0.7)	6.0 (0.2)

- Central: Yield = 4.16 + 0.072\*Rate – 0.00018\*Rate<sup>2</sup> for Rate < 200, Yield = 11.35 for Rate > 200; Southern: Yield = 1.95 + 0.040\*Rate – 0.000046\*Rate<sup>2</sup> (Poffenbarger et al., 2017).
- Bulk density values averaged across subplot types at five-leaf maize growth stage. Central: Bulk dens = 1.36 – 0.00015\*Rate (P < 0.001 for intercept, P < 0.10 for linear coefficient); Southern: Bulk dens = 1.26 – 0.00015\*Rate (P < 0.001 for intercept, P < 0.10 for linear coefficient).
- Sand = 37.4 – 0.0046\*Rate (P < 0.001 for intercept, P < 0.10 for linear coefficient); Southern: non-significant response.
- Central and southern: pH = 6.47 – 0.0015\*Rate (P < 0.001 for intercept and linear coefficient).

**Source:** <https://doi.org/10.1016/j.agee.2018.07.005>

## Effects of Varieties and Nitrogen Fertilizer on Yield and Yield Components of Maize on Farmers Field in Mid Altitude Areas of Western Ethiopia. (2017)

Varieties	2013		Leaf area (cm <sup>2</sup> )		2014		2013		Leaf area index		2014	
	F-1	F-2	F-3	F-4	F-5	F-6	F-1	F-2	F-3	F-4	F-5	F-6
<b>BH-540 (50% RR)</b>	652 4	524 5	658 2	844 7	5920	588 0	3.48	2.80	3.51	4.50	3.16	3.14
<b>BH-540 (100% RR)</b>	650 2	5241	670 6	704 6	6800	958 9	3.47	2.80	3.58	3.76	3.63	5.11
<b>BH-543 (50% RR)</b>	674 6	522 3	745 7	685 1	7444	658 9	3.60	2.79	3.98	3.65	3.97	3.51
<b>BH-543 (100% RR)</b>	727 2	747 2	734 7	690 1	6355	779 7	3.88	3.98	3.92	3.68	3.39	4.16
<b>BH-661 (50% RR)</b>	731 4	709 6	706 1	676 9	8145	7188	3.90	3.78	3.77	3.61	4.34	3.83
<b>BH-661 (100% RR)</b>	766 1	588 2	770 9	791 5	7794	641 2	4.09	3.14	4.11	4.22	4.16	3.42
<b>BH-660 (50% RR)</b>	820 5	6181	742 3	549 4	7198	734 8	4.38	3.30	3.96	2.93	3.84	3.92
<b>BH-660 (100% RR)</b>	738 2	569 0	808 8	684 7	6597	889 7	3.94	3.03	4.31	3.65	3.52	4.74
<b>BH-140 (50% RR)</b>	738 1	749 6	608 8	487 2	6763	6118	3.94	4.00	3.25	2.60	3.61	3.26
<b>BH-140 (100% RR)</b>	705 4	643 4	780 0	745 2	6905	7143	3.76	3.43	4.16	3.97	3.68	3.81
<b>BH-543</b>	602 6	639 0	665 5	483 7	6594	4315	3.21	3.41	3.55	2.58	3.52	2.30
<b>LSD (5%)</b>	163 8	209 6.4	1881 .8	176 8.6	1275.7	320 7	0.87	1.118	1.00 36	0.943	0.681	1.710
<b>CV (%)</b>	13.5 5	19.8 1	15.4 0	15.5 6	10.77	26.8	13.6	19.81	15.4 0	15.56	10.77	26.8

F-1–F6 = farmers' names (Takele Uluma, Adisu Fufa, Adisu Likessa, Mulatu Shukar, Tesfaye Tsagaye, and Gutu Tolera), NS = nonsignificant difference at 5% probability level; 50% and 100% RR = half and full doses (55 and 110 kg N ha<sup>-1</sup>) recommended for maize.

**Source:** <https://www.hindawi.com/journals/ija/2017/4253917/>