NUMERICAL DATA

Effects of nitrogen fertilization rate on tocopherols, tocotrienols and c-oryzanol contents and enzymatic antioxidant activities in rice grains (2019)

Effects of different nitrogen fertilization rates on the soil chemical properties and rice grain weight

Treatments	pH (w/ v = 1:1)	EC (dS m^{-1})	TN (g kg^{-1})	Mehlich III P (mg kg-1)	Mehlich III K (mg kg^{-1})	OM (g kg-1)	Grains (DW; g plant-1)
Before planting							
	5.3 ± 0.1ab	**0.8 ± 0.1a**	**1.7 ± 0.1a**	**52.2 ± 0.2a**	**165 ± 4a**	**38.9 ± 0.2a**	
After harvesting							
0 N	**5.2 ± 0.1b**	**0.3 ± 0.1b**	**1.4 ± 0.1b**	**25.9 ± 6.8b**	**36.3 ± 1.4b**	**36.8 ± 0.9b**	**19.2 ± 3.6b**
0.5 N	**5.4 ± 0.1ab**	**0.3 ± 0.1b**	**1.5 ± 0.1b**	**29.9 ± 4.1b**	**37.6 ± 5.1b**	**36.0 ± 2.1b**	**25.3 ± 2.3ab**
1 N	**5.4 ± 0.2ab**	**0.3 ± 0.1b**	**1.4 ± 0.1b**	**31.6 ± 4.3b**	**37.8 ± 5.9b**	**37.0 ± 1.8ab**	**21.9 ± 5.6ab**
2 N	**5.5 ± 0.1a**	**0.3 ± 0.1b**	**1.5 ± 0.1b**	**29.8 ± 1.3b**	**35.5 ± 4.2b**	**36.1 ± 2.3b**	**31.1 ± 8.9a**
3 N	**5.5 ± 0.1a**	**0.3 ± 0.1b**	**1.4 ± 0.1b**	**30.1 ± 2.4b**	**36.8 ± 5.0b**	**36.2 ± 2.1b**	**30.9 ± 2.1a**

Values are mean ± standard deviation (n = 4). Averages followed by the same letter in the same column are not significantly different as analyzed by Duncan's multiple range tests at P \0.05. EC = Electric conductivity; TN = Total nitrogen; OM = Organic matter; DW: Dried

Weight

Source: https://link.springer.com/content/pdf/10.1007%2Fs12298-018-0617-1.pdf

Effects of different nitrogen fertilization rates on the contents of total vitamin E, total tocopherols (Toc), total tocotrienols (T3), c-oryzanol and vitamin E analogs (a-, b-, c-, and d-Toc and T3) in rice grains

Treatments		**Contents (mg kg^{-1}, DW)**			
		Total vitamin E	Total Toc	Total T3	**c-Oryzanol**
0 N		43.7 ± 2.6b	19.8 ± 1.4ab	23.9 ± 2.1b	**161 ± 13a**
0.5 N		43.1 ± 8.3b	20.0 ± 4.6ab	23.1 ± 3.9b	**112 ± 15b**
1 N		39.1 ± 0.9b	18.6 ± 1.5b	20.4 ± 1.8b	**115 ± 12b**
2 N		55.1 ± 4.2a	24.5 ± 2.5a	30.6 ± 1.6a	**93 ± 4b**
3 N		47.2 ± 0.9ab	22.2 ± 1.0ab	25.0 ± 1.7b	**96 ± 10b**
Correlation coefficient (r)		0.5441	0.6719	0.4556	**– 0.8009**
	α-Toc		β-Toc	γ-Toc	**ɗ-Toc**
0 N	**15.22 ± 1.25a**		0.89 ± 0.05bc	3.71 ± 0.31b	**0.05 ± 0.01a**
0.5 N	**14.73 ± 3.88a**		0.86 ± 0.24c	4.32 ± 1.30b	**0.07 ± 0.01a**
1 N	**13.16 ± 1.52a**		0.70 ± 0.17c	3.89 ± 1.50b	**0.05 ± 0.01a**
2 N	**14.50 ± 1.82a**		1.52 ± 0.34a	8.44 ± 1.03a	**0.07 ± 0.01a**
3 N	**14.78 ± 3.00a**		**0.89 ± 0.05bc**	**6.08 ± 1.66b**	**0.05 ± 0.01a**

	α-T3	**β-T3**	**γ-T3**	**ɗ-T3**
0 N	10.26 ± 0.42ab	0.14 ± 0.04a	12.58 ± 2.05b	**0.94 ± 0.17a**
0.5 N	10.56 ± 0.44ab	0.20 ± 0.25a	12.60 ± 2.05b	**0.89 ±0.18ab**
1 N	9.14 ± 0.88b	ND	10.68 ± 2.21b	**0.63 ±0.06ab**
2 N	10.58 ± 1.37ab	ND	18.37 ± 0.63a	**0.60 ± 0.07b**
3 N	**11.15 ± 0.57a**	**ND**	**13.19 ± 2.52b**	**0.69 ±0.23ab**

Values are mean ± standard deviation (n = 4). Averages followed by the same letter in the same column are not significantly different as analyzed by Duncan's multiple range tests at P \ 0.05. ND: Not detected; DW: Dried weight

Among the different treatments, it was noted that increasing rates of nitrogen fertilization were able to increase the dried weight of rice grains, and reached the highest at the 2 N treatment. Results also showed that the 2 N treatment exhibited significantly higher total vitamin E, total Toc and total T3 contents than that of the control group.

Source: https://link.springer.com/content/pdf/10.1007%2Fs12298-018-0617-1.pdf

Biochar increases 15N fertilizer retention and indigenous soil N uptake in a cotton-barley rotation system (2019)

Effects of N fertilizer (0, 75, 150 and 300 kg N ha−1) on soil properties after harvest of the two crops (which form of N fertilizer

N fertilizer level	Total N	NH_4^+	NO −	Dissolved organic C	Microbial biomass C	pH
(kg N ha^{-1})	(g kg^{-1})	(mg kg^{-1})				
CottOn 0	0.78 ± 0.013 d	4.64 ± 0.16 d	1.08 ± 0.05 f	31.5 ± 3.3 b	71.1 ± 6.1 c	**6.80 ± 0.07 b**
	0.78 ± 0.013 d	4.10 ± 0.12 e	0.88 ± 0.04 g	41.3 ± 2.2 a	109.9 ± 5.7 ab	**7.26 ± 0.06 a**
75	0.81 ± 0.015 c	4.98 ± 0.17 d	1.56 ± 0.04 d	32.1 ± 3.2 b	77.6 ± 6.7 c	**6.85 ± 0.08 b**
	0.82 ± 0.021 c	4.93 ± 0.14 d	1.35 ± 0.04 e	40.5 ± 2.0 a	113.5 ± 6.3 a	**7.24 ± 0.10 a**
150	0.84 ± 0.018 b	5.75 ± 0.19 c	2.03 ± 0.09 c	33.9 ± 2.8 b	85.8 ± 6.9 c	**6.81 ± 0.07 b**
	0.84 ± 0.017 b	5.71 ± 0.16 c	1.87 ± 0.09 c	41.1 ± 2.7 a	117.8 ± 10.6 a	**7.27 ± 0.06 a**
300	0.88 ± 0.022 a	6.93 ± 0.19 a	3.37 ± 0.10 a	33.8 ± 3.5 b	87.1 ± 5.6 bc	**6.84 ± 0.07 b**
Source of variation	0.89 ± 0.023 a	6.48 ± 0.20 b	2.93 ± 0.09 b	43.1 ± 3.4 a	116.1 ± 8.8 a	**7.26 ± 0.07 a**
N fertilizer (N)	..	..	..	NS	.	NS
Biochar (B)	NS	.	..	..	..	**.**
B× N	NS	NS	NS	NS	NS	**NS**
Barley 0	0.71 ± 0.011 d	3.70 ± 0.06 d	0.65 ± 0.04 d	30.8 ± 2.8 a	67.7 ± 7.1 b	**6.83 ± 0.09 b**
	0.71 ± 0.016 d	3.96 ± 0.07 d	0.68 ± 0.04 d	33.5 ± 3.2 a	68.0 ± 6.2 b	**7.16 ± 0.06 a**
75	0.74 ± 0.010 c	4.43 ± 0.11 c	1.03 ± 0.05 c	30.7 ± 2.2 a	73.3 ± 7.0 ab	**6.86 ± 0.10 b**
	0.75 ± 0.013 c	4.61 ± 0.11 c	0.90 ± 0.04 cd	34.2 ± 2.2 a	74.7 ± 5.5 ab	**7.13 ± 0.08 a**
150	0.77 ± 0.013 b	5.13 ± 0.07 b	1.46 ± 0.09 b	33.2 ± 2.9 a	76.3 ± 6.7 ab	**6.85 ± 0.07 b**
	0.78 ± 0.017 b	5.14 ± 0.06 b	1.46 ± 0.15 b	34.6 ± 3.4 a	81.4 ± 5.9 ab	**7.13 ± 0.08 a**
300	0.82 ± 0.013 a	6.10 ± 0.10 a	2.52 ± 0.06 a	31.0 ± 2.0 a	77.4 ± 6.8 ab	**6.86 ± 0.07 b**
Source of variation	0.82 ± 0.011 a	5.92 ± 0.10 a	2.55 ± 0.11 a	34.0 ± 2.3 a	80.1 ± 6.1 a	**7.14 ± 0.07 a**
N fertilizer (N)	..	..	..	NS	NS	**NS**
Biochar (B)	NS	NS	NS	.	.	**..**
B× N	**NS**	**NS**	**NS**	**NS**	**NS**	NS

Values of all parameters are shown as the means ± standard errors. Different lowercase letters in a single column represent statistical class among the treatments at $p < 0.05$. Significant at $p < 0.01$; significant at $p < 0.05$; NS, non-significant.

Source: https://sci-hub.tw/https://doi.org/10.1016/j.geoderma.2019.113944

Effects of N fertilizer (0, 75, 150 and 300 kg N ha^{-1}) on cotton root biomass, morphology, and N condition (2019)

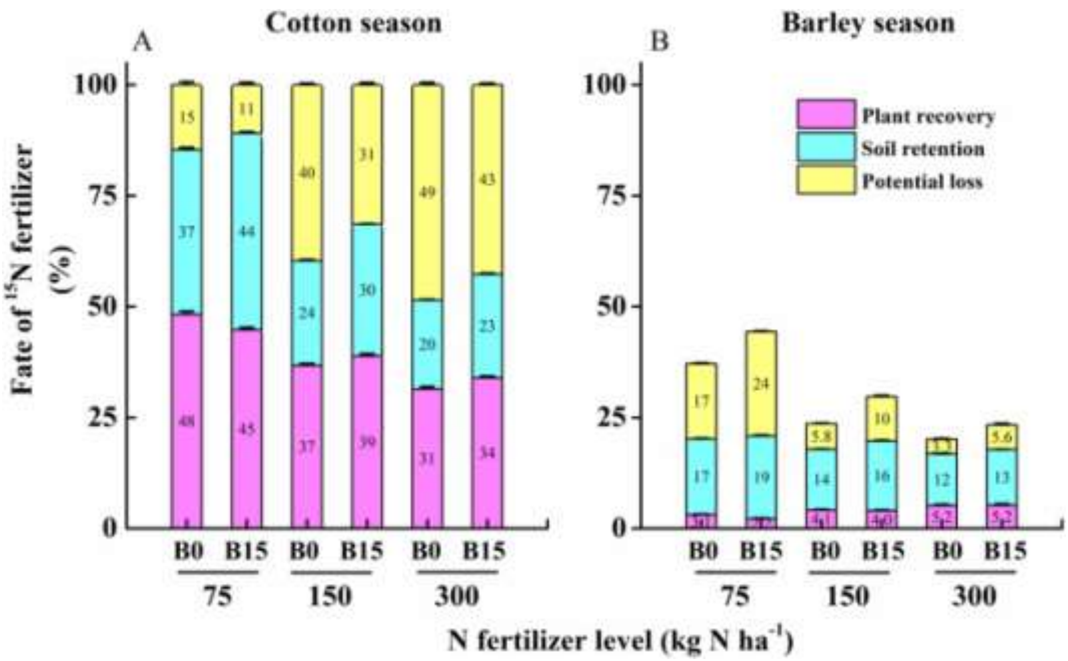
N fertilizer level	Root biomass	Length	Surface area	SRL	SRSA	N content	N uptake
(kg N ha^{-1})	(g pot^{-1})	(cm pot^{-1})	(cm^2 pot^{-1})	(cm g^{-1})	(cm^2 g^{-1})	(%)	**(mg pot^{-1})**
0	7.9 ± 0.2 e	178 ± 16 d	466 ± 33 e	23 ± 1.9 cd	59.0 ± 2.7 cd	1.22 ± 0.06 bc	**96.0 ± 2.5 d**
	8.9 ± 0.5 de	287 ± 11 b	774 ± 55 bc	33 ± 1.7 a	87.5 ± 7.4 a	1.02 ± 0.08 d	**90.2 ± 5.0 d**
75	9.0 ± 0.3 d	204 ± 15 cd	532 ± 44 de	23 ± 2.1 bcd	59.0 ± 3.3 cd	1.20 ± 0.08 bcd	**108.2 ± 13.0 c**
	9.9 ± 0.5 cd	320 ± 17 a	803 ± 62 bc	35 ± 2.5 a	84.9 ± 6.3 ab	1.07 ± 0.05 cd	**101.5 ± 8.6 cd**
150	10.3 ± 0.3 c	206 ± 18 cd	576 ± 61 de	20 ± 2.3 de	55.8 ± 2.2 d	1.42 ± 0.04 a	**146.7 ± 14.1 b**
	12.1 ± 0.4 b	322 ± 16 ab	879 ± 75 ab	27 ± 2.1 b	72.7 ± 4.2 bc	1.20 ± 0.07 bc	**145.5 ± 15.2 b**
300	12.1 ± 0.3 b	220 ± 12 c	656 ± 70 cd	18 ± 1.8 e	54.1 ± 4.9d	1.46 ± 0.05 a	**176.4 ± 10.9 a**
	13.3 ± 0.3 a	336 ± 18 a	990 ± 68 a	25 ± 2.1 bc	74.5 ± 5.1 ab	1.28 ± 0.06 ab	**170.8 ± 11.3 a**
Source of variation							
N fertilizer (N)	**	*	*	*	NS	*	**
Biochar (B)	**	**	**	**	**	**	**NS**
B× N	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**

Notes: specific root length (SRL) was calculated by dividing root length by root dry biomass, specific root surface area (SRSA) was calculated by dividing root surface area by root dry biomass. Values of all parameters are shown as the means ± standard errors. Different lowercase letters in a single column represent statistical class among the treatments at $p < 0.05$. Significant at $p < 0.01$; significant at $p < 0.05$; NS, non-significant.

Source: https://sci-hub.tw/https://doi.org/10.1016/j.geoderma.2019.113944

Biochar increases 15N fertilizer retention and indigenous soil N uptake in a cotton-barley rotation system (2019)

Effects of biochar (B0: 0 and B15: 15 t ha−1) and N fertilizer (75, 150 and 300 kg N ha−1) on the fate of 15N fertilizer in plant-soil system during cotton (A) and barley (B) seasons.



Source: https://sci-hub.tw/https://doi.org/10.1016/j.geoderma.2019.113944

Effect of bag-controlled release fertilizer on nitrogen loss, greenhouse gas emissions, and nitrogen applied amount in peach production (2019)

The integrated Global Warming Potential (GWP) of CO2 and N2O of the different treatments

Treatment	GWP			
	20-Year	100-Year	500-Year	
ECF BCRF Control	68.85a 51.02b 12.93d	69.33a 51.26b 12.95d	66.13a 49.65b 12.85d	

BCRF: bag-controlled release fertilizer(95 g/bag) with ordinary composite mixed fertilizer. Urea, diammonium hydrogen phosphate, and potassium sulfate in a ratio of 41:14:40 (N:P2O5:K2O). ECF: equal amount of common composite fertilizer mixed in the same ratio of N:P2O5:K2O as the BCRF. Control: no fertilizer application.
Different lower-case letters indicate a significant difference between treatments (P<5%).

Source: https://www.sciencedirect.com/science/article/pii/S0959652619321808

Effect of bag-controlled release fertilizer on nitrogen loss, greenhouse gas emissions, and nitrogen applied amount in peach production (2019)

Nitrogen applied amount in the main peach producing areas of China.

Fertilization mode	Area	Variety type	Yield (kg$ha^{-1})	Number of farmers	Nitrogen input (kg$ha^{-1})
BCRF	Demonstration peach orchard	Early maturing variety	33463.4	21	**64.4**
		Medium maturing variety	41293.1	20	**85.9**
		Late maturing variety	48702.7	27	**107.4**
Common fertilization mode	SD	Early maturing variety	33238.4	87	**305.5**
		Medium maturing variety	41173.1	106	**343.7**
		Late maturing variety	48852.7	56	**391.9**
	HB	Early maturing variety	33103.4	62	**351.7**
		Medium maturing variety	40333.1	59	**398.0**
		Late maturing variety	47832.8	42	**452.2**
	HN	Early maturing variety	31333.5	76	**295.5**
		Medium maturing variety	37783.2	58	**331.6**
		Late maturing variety	45357.9	46	**375.9**
	LN	Early maturing variety	0	0	**0**
		Medium maturing variety	37460.8	21	**391.9**
		Late maturing variety	41293.1	7	**402.0**
	SX	Early maturing variety	30193.6	23	**209.0**
		Medium maturing variety	37273.3	26	**277.4**
		Late maturing variety	44787.9	18	**339.7**
	GS	Early maturing variety	28873.6	19	**265.3**
		Medium maturing variety	37138.3	31	**295.5**
		Late maturing variety	**45267.9**	**14**	**309.5**

BCRF: bag-controlled release fertilizer (95 g/bag) with ordinary composite mixed fertilizer. Urea, diammonium hydrogen phosphate, and potassium sulfate in a ratio of 41:14:40 (N:P2O5:K2O). Some farmers planted more than one type of variety. SD, HB, HN, LN, SX, and GS denote the peach plantation sites in Shandong, Hebei, Henan, Liaoning, Shanxi and Gansu provinces, respectively. Demonstration parks were distributed in Shandong, Hebei, Henan, Liaoning, Shanxi, and Gansu provinces.

As compared with common fertilizer application methods (application of common composite fertilizer), the use of BCRF can reduce the amount of nitrogen fertilizers used by 69.1e81.7%, 69.0e78.4%, and 65.3e76.2% for early-maturing, medium-maturing, and late-maturing peach varieties, respectively.

Source: https://sci-hub.tw/https://doi.org/10.1016/j.jclepro.2019.06.219

Enhanced efficiency nitrogen fertilizers maintain yields and mitigate global warming potential in an intensified spring wheat system (2019)

Grain yield (Mg ha^{-1}, dry mass at 14% water content), direct emission factors (EFN_2O, %), cumulative N_2O emissions (kg N_2O-N ha^{-1}), CH4 uptake (kg CH_4-C ha^{-1}), CO_2 flux (Mg CO_2-C ha^{-1}), nitrogen use efficiency (NUE, kg grain kg^{-1}), global warming potential (GWP, kg CO_2-eq. ha^{-1} y^{-1}), and greenhouse gas intensity (GHGI, kg CO_2-eq. kg^{-1} grain) during the two-year study.

Year	Treatments	Yield	N_2O		CH_4	CO_2	NUE	GWP	GHGI
			Cumulative	EFN2O	Cumulative	Cumulative			
			emissions		emissions	emissions			
2014	CK[a]	3.95 ± 0.44b[b]	0.44 ± 0.07d		−0.25 ± 0.06a	3.53 ± 0.16a		172.99 ± 27.21d	**45.91 ± 8.32c**
	Con	6.49 ± 0.52a	1.36 ± 0.04a	0.34 ± 0.03a	−0.38 ± 0.05b	3.52 ± 0.08a	31.57 ± 5.34b	552.50 ± 14.06a	**86.31 ± 4.82a**
	Opt	6.23 ± 0.34a	1.03 ± 0.10b	0.33 ± 0.07a	−0.19 ± 0.04a	3.44 ± 0.20a	29.69 ± 1.39b	420.12 ± 40.01b	**68.41 ± 8.02b**
	Opt + NI	6.35 ± 0.24a	0.80 ± 0.03c	0.20 ± 0.05b	−0.25 ± 0.06a	3.16 ± 0.19a	44.29 ± 5.59a	321.87 ± 11.57c	**50.82 ±2.14bc**
	Opt-SRF	6.29 ± 0.49a	0.87 ± 0.02bc	0.24 ± 0.05ab	−0.17 ± 0.01a	3.05 ± 0.15a	49.18 ± 1.92a	356.29 ± 6.48bc	**57.42 ±3.58bc**
2015	CK	3.26 ± 0.30b	0.41 ± 0.03d		−0.11 ± 0.06a	2.08 ± 0.22a		165.59 ± 9.17d	**52.14 ±5.58bc**
	Con	6.23 ± 0.18a	1.39 ± 0.14a	0.36 ± 0.06a	−0.13 ± 0.06a	2.05 ± 0.06a	30.66 ± 2.66b	572.60 ± 57.38a	**91.66 ± 8.06a**
	Opt	6.53 ± 0.45a	1.04 ± 0.09b	0.35 ± 0.05a	−0.12 ± 0.06a	1.85 ± 0.31a	47.73 ± 7.83a	428.69 ± 34.32b	**66.14 ± 4.97b**
	Opt + NI	6.30 ± 0.35a	0.71 ± 0.05c	0.18 ± 0.03b	−0.13 ± 0.05a	1.81 ± 0.29a	55.13 ± 5.62a	291.67 ± 19.42c	**46.25 ± 1.53c**
	Opt-SRF	6.41 ± 0.23a	0.95 ± 0.08bc	0.30 ± 0.05ab	−0.14 ± 0.08a	1.62 ± 0.18a	51.23 ± 2.36a	392.57 ± 33.88bc	**61.26 ± 4.72bc**
Mean	CK	3.61 ± 0.13b	0.42 ± 0.03d		−0.18 ± 0.01a	2.81 ± 0.19a		169.29 ± 10.92d	**47.22 ± 3.72c**
	Con	6.36 ± 0.30a	1.37 ± 0.06a	0.35 ± 0.02a	−0.25 ± 0.04a	2.79 ± 0.07a	23.55 ± 1.12b	562.55 ± 25.51a	**89.12 ± 6.27a**
	Opt	6.38 ± 0.28a	1.03 ± 0.06b	0.34 ± 0.04a	−0.16 ± 0.02a	2.64 ± 0.26a	35.45 ± 1.57a	425.20 ± 26.88b	**66.83 ± 4.08b**
	Opt + NI	6.33 ± 0.17a	0.75 ± 0.04c	0.18 ± 0.03b	−0.19 ± 0.02a	2.49 ± 0.24a	35.14 ± 0.93a	306.77 ± 14.57c	**48.43 ± 1.30c**
	Opt-SRF	**6.35 ± 0.17a**	**0.91 ± 0.04bc**	**0.27 ± 0.03ab**	**−0.16 ± 0.04a**	**2.34 ± 0.17a**	**35.30 ± 0.93a**	**374.43 ± 17.03c**	**59.14 ± 3.68b**

a Abbreviations for treatments are the same as Fig. 2.

b Data are means ± standard error (n = 4), different lowercase letters indicate significant differences between treatments by LSD (at P < 0.05).

Source: https://www.sciencedirect.com/science/article/pii/S0378429019315102

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^{-1})	Straw yield (t ha^{-1})	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^{-1}	3.30	8.07	-5.7
STCR based for yield target of 4 t ha^{-1}	3.63	8.70	-9.3
STCR based for yield target of 4.5 t ha^{-1}	4.00	9.23	-11.1
STCR based for yield target of 5 t ha^{-1}	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^{-1})	Gross returns (₹ ha^{-1})	Net returns (₹ ha^{-1})	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^{-1}	32216	67968	35753	2.11
STCR based for yield target of 4 t ha^{-1}	33713	74433	40721	2.21
STCR based for yield target of 4.5 t ha^{-1}	35358	81083	45726	2.29
STCR based for yield target of 5 t ha^{-1}	36784	89802	53017	2.44
Control	30000	48727	18727	1.62

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

Source: 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^{-1} yr^{-1})	**Historical grain yield** (Mg ha^{-1} yr^{-1})[a]	**Bulk density** (g cm^{-3})[b]	**Sand content (g 100 g^{-1} soil)**[c]	**pH**[d]
Central				
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)
Southern				
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)

a) Central: Yield = 4.16 + 0.072*Rate – 0.00018*Rate2 for Rate < 200, Yield = 11.35 for Rate > 200; Southern: Yield = 1.95 + 0.040*Rate – 0.000046*Rate2 (Poffenbarger et al., 2017).
b) 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).
c) Sand = 37.4 – 0.0046*Rate (P < 0.001 for intercept, P < 0.10 for linear coefficient); Southern: non-significant response.
d) 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^2)		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
BH-540 (50% RR)	6524	5245	6582	8447	5920	5880	3.48	2.80	3.51	4.50	3.16	3.14
BH-540 (100% RR)	6502	5241	6706	7046	6800	9589	3.47	2.80	3.58	3.76	3.63	5.11
BH-543 (50% RR)	6746	5223	7457	6851	7444	6589	3.60	2.79	3.98	3.65	3.97	3.51
BH-543 (100% RR)	7272	7472	7347	6901	6355	7797	3.88	3.98	3.92	3.68	3.39	4.16
BH-661 (50% RR)	7314	7096	7061	6769	8145	7188	3.90	3.78	3.77	3.61	4.34	3.83
BH-661 (100% RR)	7661	5882	7709	7915	7794	6412	4.09	3.14	4.11	4.22	4.16	3.42
BH- 660 (50% RR)	8205	6181	7423	5494	7198	7348	4.38	3.30	3.96	2.93	3.84	3.92
BH-660 (100% RR)	7382	5690	8088	6847	6597	8897	3.94	3.03	4.31	3.65	3.52	4.74
BH-140 (50% RR)	7381	7496	6088	4872	6763	6118	3.94	4.00	3.25	2.60	3.61	3.26
BH-140 (100% RR)	7054	6434	7800	7452	6905	7143	3.76	3.43	4.16	3.97	3.68	3.81
BH-543	6026	6390	6655	4837	6594	4315	3.21	3.41	3.55	2.58	3.52	2.30
LSD (5%)	1638	2096.4	1881.8	1768.6	1275.7	3207	0.87	1.118	1.0036	0.943	0.681	1.710
CV (%)	13.55	19.81	15.40	15.56	10.77	26.8	13.6	19.81	15.40	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−1) recommended for maize.

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