

Table S1. Agronomic traits of 10 rice varieties grown under different nitrogen levels.

Varieties		Milled rice yield (ton/ha)			Plant height (cm)			Tiller number			Thousand grain weight (g)			Spikelet number per panicle		
		0%	50%	100%	0%	50%	100%	0%	50%	100%	0%	50%	100%	0%	50%	100%
Indica	Hanareum4	2.77	5.08	6.41	63.8	77.4	81.4	6.7	13.4	15.7	21.5	21.0	21.3	112	162	170
	Geumgang1	3.48	5.94	7.04	61.8	73.7	75.8	8.3	11.0	15.4	21.9	21.8	22.8	133	169	164
	Milyang392	2.94	4.79	6.55	65.2	77.6	79.2	5.1	8.3	10.4	23.7	23.1	23.8	141	155	176
	IR72	3.17	4.52	6.07	58.4	69.0	70.7	8.2	16.1	20.3	20.5	21.0	21.6	113	117	120
	93-11	3.31	4.38	5.80	64.2	74.2	78.2	8.5	12.2	16.0	19.5	19.0	19.5	115	172	176
	IR64	2.87	4.65	6.25	60.2	71.5	71.8	8.8	13.5	19.5	20.1	20.5	20.7	110	162	169
Japonica	Saeilmi	3.56	5.25	5.59	57.1	79.3	78.0	5.0	14.0	14.4	22.1	22.3	21.9	112	140	153
	Sobi	3.02	5.03	5.26	65.0	87.0	87.2	4.1	12.3	11.1	26.5	27.4	28.5	115	132	152
	Nampyeong	3.43	5.21	5.41	55.2	78.2	77.5	5.2	12.2	13.5	21.4	21.2	21.5	105	128	147
	Misojinmi	3.13	5.11	5.49	58.7	80.8	80.0	6.6	13.5	13.8	20.5	21.2	21.5	116	155	164

Table S2. Chemical characteristics of soil of experimental soil.

Fertilization Level (%)	pH (1:5)	T-N (mg/kg)	EC (ds/m)	Organic matters (%)	P ₂ O ₅ (mg/kg)	K (cmolc/kg)	Ca (cmolc/kg)	Mg (cmolc/kg)	Na (cmolc/kg)
0	5.87	0.07	0.41	2.03	42.32	0.15	5.51	1.32	0.21
50	5.81	0.20	0.68	2.91	458.21	0.39	6.36	1.16	0.21
100	5.56	0.33	1.26	3.68	913.13	1.21	7.56	1.25	0.23