

Table S1 the soil proper

Soil depth	pH	TN	SOM	NH ₄ ⁺	NO ₃ ⁻	EP	EK
cm		g/kg	g/kg	mg/kg	mg/kg	mg/kg	mg/kg
0-20	6.4	1.83	20.12	9.31	10.81	10.62	60.43
20-40	6.7	1.42	14.21	9.45	7.57	8.47	48.14
40-60	6.8	1.37	8.14	1.41	2.12	4.13	85.41

TN: total nitrogen; SOM: soil organic matter; EP: NaHCO₃-extractable phosphorus; EK: ammonium acetate-extractable potassium

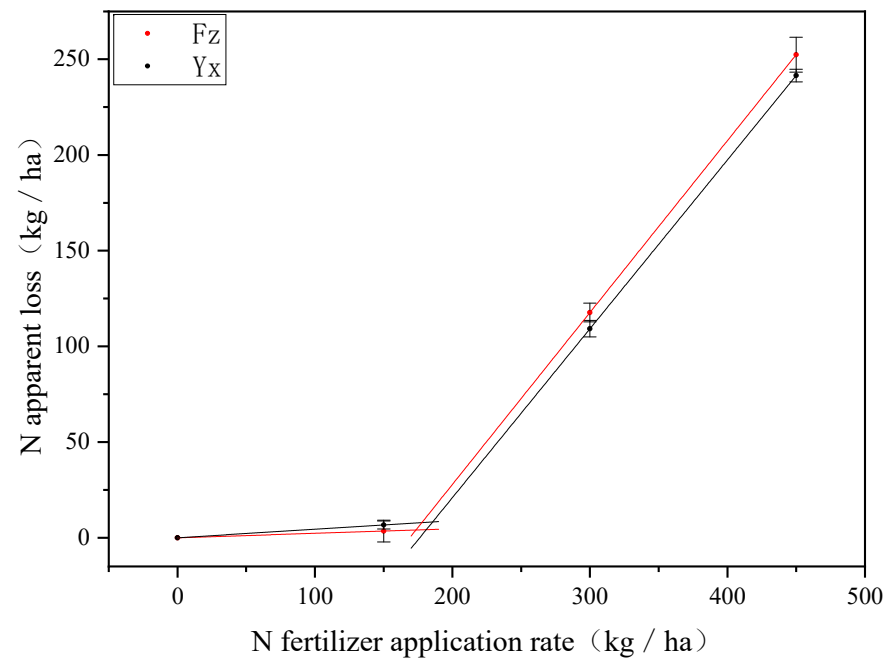


Figure S1. Relationship between N fertilizer application rate and N apparent loss. The description of treatment and genetic mustard were shown in the footnote of Figure 1.