

Table S1. Basic physical and chemical properties of the soil before fertilization.

Fertilization treatments	SOC (g/kg)	TN(g/kg)	TP(g/kg)	AN(mg/kg)	AP(mg/kg)	pH
CK	2.68	0.32	0.53	26.40	2.28	8.47
O	4.73	0.51	0.58	38.20	9.08	8.45
ON	4.24	0.52	0.59	44.40	5.14	8.41
ONP	4.27	0.49	0.74	33.70	32.89	8.43
OP	4.64	0.54	0.77	36.50	42.06	8.38
NK	2.84	0.36	0.52	28.50	1.11	8.45
NP	3.37	0.41	0.72	35.40	19.30	8.44
NPK	3.21	0.37	0.66	29.20	20.38	8.38
PK	2.77	0.32	0.70	24.00	19.02	8.47

Notes: CK: no fertilization; O, 0.75 kg/m² organic fertilizer; ON, 0.75 kg/m² organic fertilizer and 0.021kg/m² nitrogen; ONP, 0.75 kg/m² organic fertilizer, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; OP, 0.75 kg/m² organic fertilizer and 0.017 kg/m² phosphorus; NP, 0.017 kg/m² phosphorus and 0.021kg/m² nitrogen; NK, 0.012 kg/m² potash and 0.021kg/m² nitrogen; NPK, 0.012 kg/m² potash, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; PK, 0.012 kg/m² potash and 0.017 kg/m² phosphorus.

Table S2. The slope parameters of the linear regression models for soil organic carbon (SOC) content.

Fertilization treatments	Equations	R²	P
CK	Y=0.12X-240.32	0.886	0.002
O	Y=0.24X-477.02	0.825	0.005
ON	Y=0.23X-464.51	0.871	0.002
ONP	Y=0.15X-303.15	0.381	N
OP	Y=0.21X-411.61	0.706	0.018
NK	Y=0.12X-228.61	0.839	0.004
NP	Y=0.13X-253.18	0.934	0.000
NPK	Y=0.12X-239.15	0.899	0.001
PK	Y=0.13X-259.64	0.963	0.000

Notes: CK: no fertilization; O, 0.75 kg/m² organic fertilizer; ON, 0.75 kg/m² organic fertilizer and 0.021kg/m² nitrogen; ONP, 0.75 kg/m² organic fertilizer, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; OP, 0.75 kg/m² organic fertilizer and 0.017 kg/m² phosphorus; NP, 0.017 kg/m² phosphorus and 0.021kg/m² nitrogen; NK, 0.012 kg/m² potash and 0.021kg/m² nitrogen; NPK, 0.012 kg/m² potash, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; PK, 0.012 kg/m² potash and 0.017 kg/m² phosphorus.

Table S3. The slope parameters of the linear regression models for soil total nitrogen (TN) content.

Fertilization treatments	Equations	R²	P
CK	Y=0.006X-12.580	0.734	0.014
O	Y=0.017X-32.632	0.846	0.003
ON	Y=0.017X-33.550	0.821	0.005
ONP	Y=0.010X-20.195	0.206	N
OP	Y=0.012X-23.470	0.491	N
NK	Y=0.005X-10.448	0.568	N
NP	Y=0.006X-11.656	0.472	N
NPK	Y=0.005X-9.008	0.627	0.034
PK	Y=0.005X-10.089	0.747	0.012

Notes: CK: no fertilization; O, 0.75 kg/m² organic fertilizer; ON, 0.75 kg/m² organic fertilizer and 0.021kg/m² nitrogen; ONP, 0.75 kg/m² organic fertilizer, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; OP, 0.75 kg/m² organic fertilizer and 0.017 kg/m² phosphorus; NP, 0.017 kg/m² phosphorus and 0.021kg/m² nitrogen; NK, 0.012 kg/m² potash and 0.021kg/m² nitrogen; NPK, 0.012 kg/m² potash, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; PK, 0.012 kg/m² potash and 0.017 kg/m² phosphorus.

Table S4. The slope parameters of the linear regression models for soil total phosphorus (TP) content.

Fertilization treatments	Equations	R²	P
CK	$Y=0.005X-8.544$	0.283	N
O	$Y=0.003X-6.171$	0.161	N
ON	$Y=-0.001X+2.917$	0.060	N
ONP	$Y=0.009X-17.891$	0.791	0.007
OP	$Y=0.007X-12.418$	0.576	0.048
NK	$Y=0.000X-0.375$	0.006	N
NP	$Y=0.006X-10.876$	0.400	N
NPK	$Y=0.009X-17.323$	0.825	0.005
PK	$Y=0.008X-14.477$	0.743	0.013

Notes: CK: no fertilization; O, 0.75 kg/m² organic fertilizer; ON, 0.75 kg/m² organic fertilizer and 0.021kg/m² nitrogen; ONP, 0.75 kg/m² organic fertilizer, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; OP, 0.75 kg/m² organic fertilizer and 0.017 kg/m² phosphorus; NP, 0.017 kg/m² phosphorus and 0.021kg/m² nitrogen; NK, 0.012 kg/m² potash and 0.021kg/m² nitrogen; NPK, 0.012 kg/m² potash, 0.021kg/m² nitrogen and 0.017 kg/m² phosphorus; PK, 0.012 kg/m² potash and 0.017 kg/m² phosphorus.