Supporting Information:

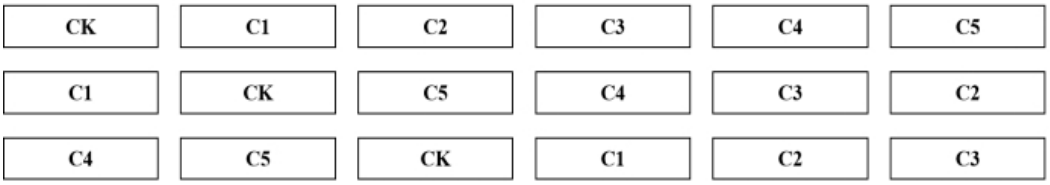


Figure S1 Distribution of the experimental plots.

Table S1 Nutrient inputs for different treatments (kg/hm^2).

Treatment groups	Nutrient input in swine manure liquid			Fertilizer nutrient input			Total nutrient		
	N	P	K	N	P	K	N	P	K
CK	0	0	0	0	0	0	0	0	0
C1	0	0	0	225	60	420	225	60	420
C2	157.8	60	420	67.2	0	0	225	60	420
C3	118.35	45	315	106.75	15	105	225	60	420
C4	78.9	30	210	146.1	30	210	225	60	420
C5	39.45	15	105	185.55	45	315	225	60	420

Note：

C1 treatment was treated with chemical fertilizer only.

C2 treatment was treated with swine manure liquid only.

C3 treatment was treated with 75% swine manure liquid and 25% chemical fertilizer.

C4 treatment was treated with 50% swine manure liquid and 50% chemical fertilizer.

C5 treatment was treated with 25% swine manure liquid and 75% chemical fertilizer.