

Supplementary Materials:

Table S1. The Second National Soil Census Nutrient Classification Standard of China.

Grades	SOC (g·kg ⁻¹)	TN (g·kg ⁻¹)	AN (mg·kg ⁻¹)	TP (g·kg ⁻¹)	AP (mg·kg ⁻¹)	Interpretation
I	>40	>2	>150	>2	>40	Very high
II	30~40	1.5~2	120~150	1.5~2	20~40	High
III	20~30	1~1.5	90~120	1~1.5	10~20	Upper
IV	10~20	0.75~1	60~90	0.75~1	5~10	Middle
V	6~10	0.5~0.75	30~60	0.5~0.75	3~5	Low
VI	≤6	≤0.5	≤30	≤0.5	≤3	Very low

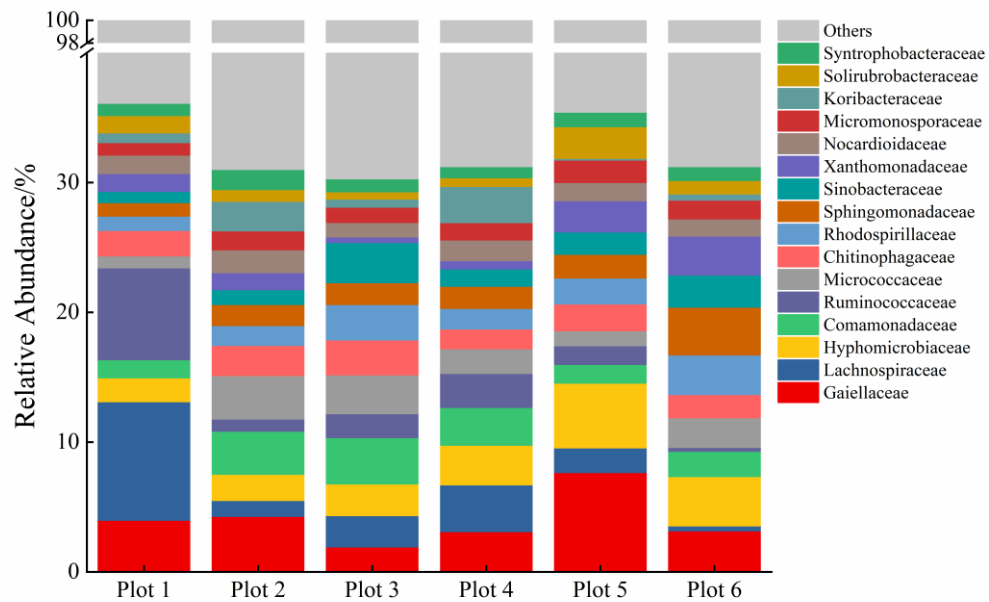


Figure S1. Bacterial community composition at the level of family in different plots. The family with relative abundance greater than 1% were defined as dominant family, and sequences not classified to any taxonomy and phylogenetic groups accounting for ≤1% of all classified sequences are summarized in the group “Others”.

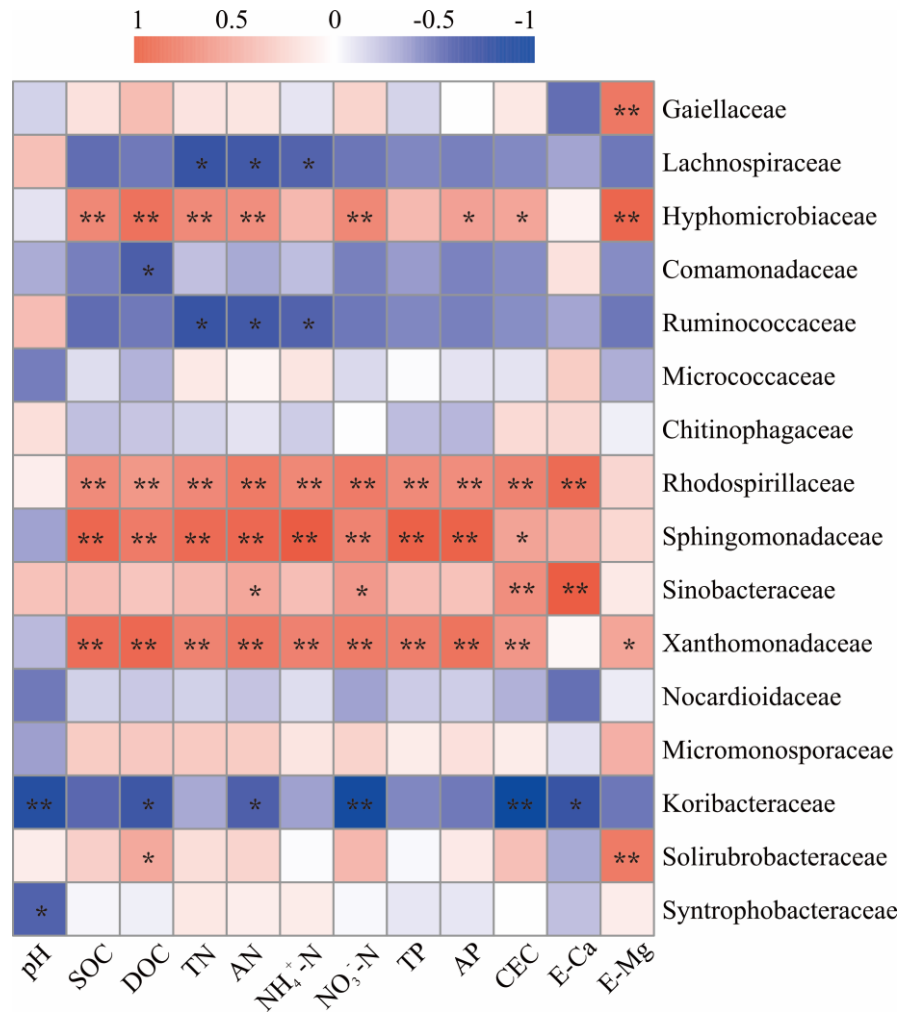


Figure S2. Correlations of dominant family and soil physicochemical properties, * $p < 0.05$ (Pearson correlation, two-tailed), ** $p < 0.01$ (Pearson correlation, two-tailed).