Table S1. Pearson correlation analyses of the relationships between soil physicochemical properties and enzyme activities.

Enzyme activities	TN	TP	TK	Available nitrogen	Available phosphorus	Available potassium	Ammonium nitrogen	Nitrate nitrogen	pH	SOC	MBC	DOC	Bulk density
Urease	-0.11	-0.23	0.14	0.19	0.35	0.55	**0.88****	0.53	0.28	0.04	0.49	0.25	0.44
Alkaline phosphatase	**0.60***	0.50	0.55	0.57	-0.11	-0.16	-0.12	0.12	0.49	**0.92***	0.54	**0.65***	**-0.66***
Sucrase	**0.94****	**0.60***	**0.63***	0.19	-0.22	-0.08	-0.15	0.24	0.35	**0.69***	0.37	**0.63***	-0.47
Amylase	0.57	0.37	0.20	0.29	-0.39	-0.50	-0.16	-0.29	0.40	**0.78****	0.27	0.56	**-0.83****
Ligninase	0.20	0.32	-0.06	-0.51	**-0.62***	-0.37	-0.06	-0.09	0.32	0.20	0.34	0.44	-0.32
Cellulase	-0.22	-0.20	-0.23	0.44	0.27	0.05	-0.23	-0.02	-0.19	0.03	-0.38	-0.18	-0.07
β-Glucosidase	0.24	-0.17	-0.42	-0.41	**-0.62***	-0.37	0.39	-0.03	**0.68***	0.28	0.05	0.48	-0.46

Notes: TN, total nitrogen; TP, total phosphorus; TK, total potassium; SOC, soil organic carbon. MBC, Microbial biomass carbon; DOC, dissolved organic carbon. *$p < 0.05$; **$p < 0.01$.
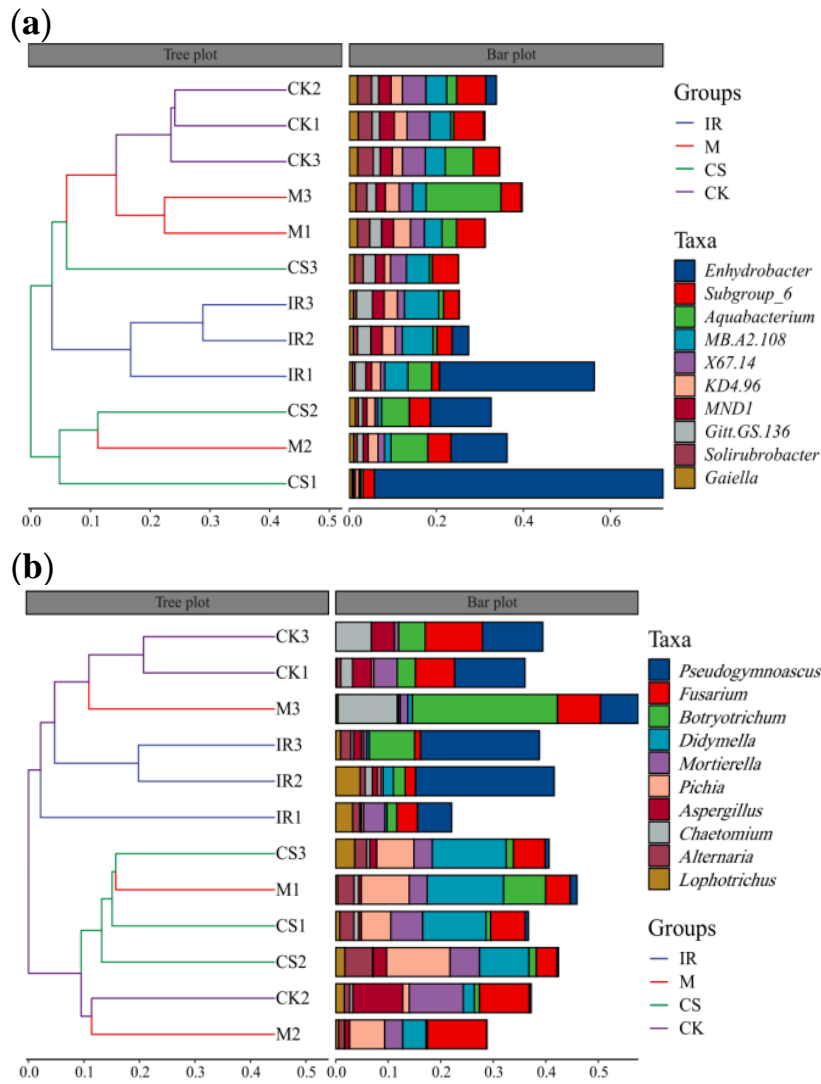
Figure S1. Hierarchical clustering analysis of soil bacterial and fungal communities associated with different sample plots. (a) Soil bacteria; (b) soil fungi. The left panel was a hierarchical clustering tree diagram, in which samples were clustered by their similarity. The shorter the branch length between samples, the more similar they were. The panel on the right was a stacked bar graph of the top 10 microorganisms by abundance at the genus level.