Supplementary Material

Figure S1 Relative abundance of dominant bacterial (a) and fungal (b) genera. PP, PF, RF, EQ and BP refer to the background (inoculum) soils of *Poa poophagorum*, *Potentilla fragarioides*, *Rhododendron fortunei*, *Enkianthus quinqueflorus*, and *Betula platyphylla*, respectively. CPP, CPF, CRF, CEQ, and CBP refer to the soil conditioned by the above species.

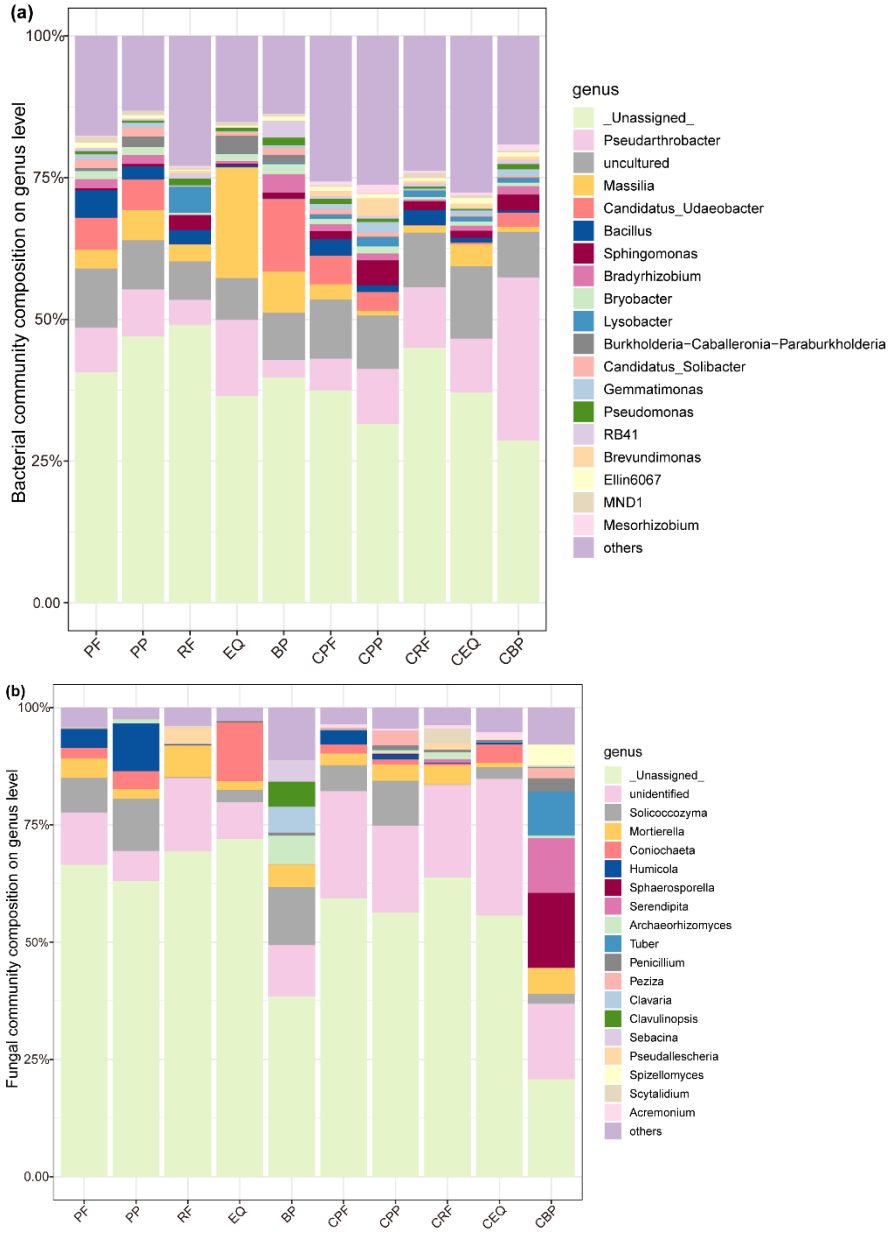

Figure S2 Spearman correlation analysis between the relative abundance of soil fungal functional groups and seedling biomass. AP, soil available phosphorus; NO_3^-, soil nitrate nitrogen; NH_4^+, soil ammonium nitrogen; SOC, soil organic carbon; Biomass, total seedling biomass. Asterisks represents significant effects (*, p<0.05; **, p<0.01).

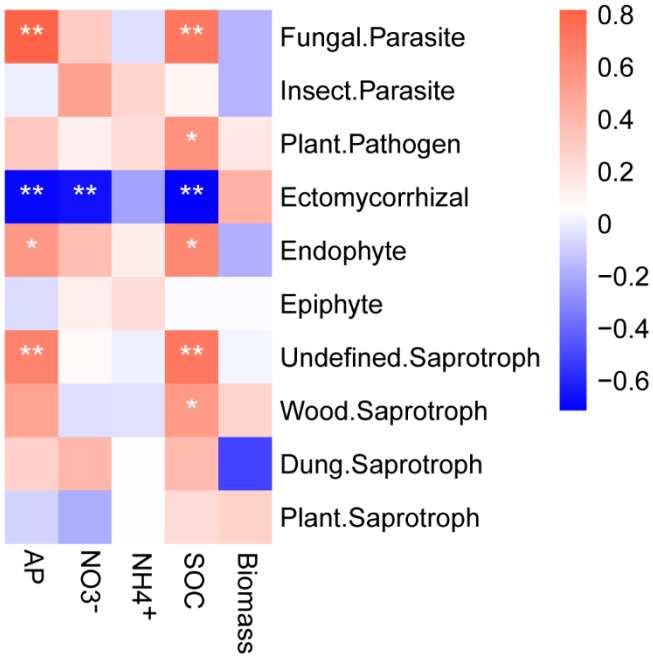

Figure S3 Principal coordinates analysis of (a) bacterial and (b) fungal communities based on Bray–Curtis distances.

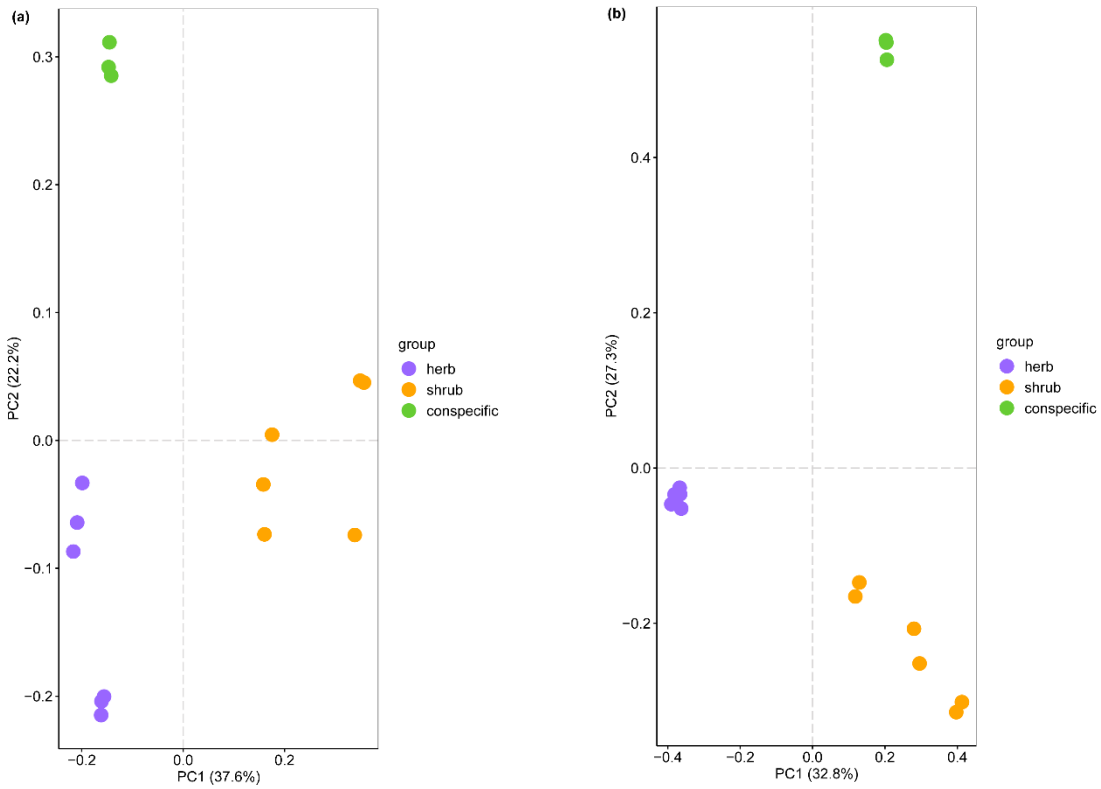

Table S1 Sequence numbers of the dominant genera of ECM under different treatments.

PF	PP	RF	EQ	BP	CPF	CPP	CRF	CEQ	CBP	genus
5	3	0	43	9	5	19	21	31	597	g__Hebeloma
2	2	0	0	1	0	5	2	0	614	g__Pulvinula
0	2	0	0	0	0	2	0	0	37	g__Geopora
3	2	0	0	3	2	**42**	0	0	**4896**	g__Sphaerosporella
8	2	0	1	8	2	1	0	0	3	g__Pseudotomentella
12	2	0	2	420	1	3	0	0	27	g__Russula
2	4	0	1	6	10	18	6	9	2970	g__Tuber
1	1	0	0	1421	2	6	0	0	143	g__Sebacina
1	0	0	7	4	2	0	1	0	14	g__Clavulina
7	1	0	1	742	1	0	0	0	8	g__Amphinema
0	1	0	0	362	0	8	0	0	28	g__Tomentella
7	0	0	0	342	0	0	0	0	28	g__Inocybe
1	0	0	0	46	0	0	0	0	2	g__Xerocomus
2	0	0	0	0	0	0	0	0	48	g__Efibulobasidium
0	0	0	0	0	0	2	0	0	179	g__Naucoria
0	0	0	0	63	0	4	0	0	31	g__Wilcoxina
0	0	0	0	101	0	0	0	0	1	g__Laccaria
51	1	0	0	20	0	7	0	1	15	g__Cortinarius
20	0	0	0	0	0	0	0	0	0	g__Suillus
0	0	0	2	43	0	0	0	0	3	g__Piloderma

Abbreviations are explained in Figure 1 and Figure S1.