

# The Changes in Soil Microbial Communities and Assembly Processes along Vegetation Succession in a Subtropical Forest

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## Appendix A. Supplementary data

**Table S1** Soil physical and chemical characteristics from Abandoned lands (AL), Deciduous broad-leaved forests (DB), Coniferous forests (CF), Coniferous broad-leaved mixed forests (CB), and Evergreen broad-leaved forests (EB).

Sample ID	TOC(g/kg)	TN(g/kg)	C: N ratio	pH	Moisture (%)
<b>0-10cm</b>					
AL	18.04±2.12c	0.97±0.08a	18.65±0.62a	5.39±0.25a	29.20±2.81a
DB	33.04±7.18bc	2.29±1.20a	17.33±13.05a	5.59±0.39a	26.52±1.73a
CF	57.80±24.39ab	3.04±1.25a	20.86±11.97a	4.87±0.48a	25.84±3.56a
CB	33.25±14.89bc	1.25±0.09a	26.79±7.40a	4.77±0.29a	25.89±4.98a
EB	79.14±4.42a	2.62±0.80a	32.59±11.85a	4.68±0.93a	27.59±6.15a
<b>10-30cm</b>					
AL	16.33±1.20b	0.86±0.06a	19.12±2.66a	5.33±0.20a	21.51±1.28a
DB	24.94±10.44b	2.07±0.56a	13.47±8.63a	5.37±0.41a	23.86±0.84a
CF	29.74±3.92b	2.15±0.31a	14.04±2.78a	4.98±0.22a	20.41±2.20a
CB	25.00±3.92b	1.17±0.54a	24.45±13.11a	4.77±0.18a	21.93±5.21a
EB	55.73±5.02a	2.65±1.45a	27.67±18.52a	4.96±0.69b	26.04±5.07a

The different letters indicate significant differences between different succession period ( $P < 0.05$ ).

**Table S2** Effects of forest succession on the composition of fungal and bacterial communities. Abandoned lands (AL), Deciduous broad-leaved forests (DB), Coniferous forests (CF), Coniferous broad-leaved mixed forests (CB), and Evergreen broad-leaved forests (EB).

	Group	Variation (R)	P_value	P_adj_BH	Sig
<b>Bacteria</b>	AL/DB	0.8444444444	0.003	0.006	**
	AL/CF	0.998148148	0.003	0.006	**
	AL/CB	1	0.006	0.0075	**
	AL/EB	1	0.005	0.007142857	**
	DB/CB	0.766666667	0.004	0.006666667	**
	DB/EB	1	0.003	0.006	**
	DB/NF	1	0.003	0.006	**
	CF/CB	0.448148148	0.002	0.006	**
	CF/EB	0.448148148	0.007	0.007777778	**
	CB/EB	0.227777778	0.062	0.062	
<b>Fungi</b>	AL/DB	0.905555556	0.004	0.008	**
	AL/CF	1	0.001	0.0075	**
	AL/CB	1	0.002	0.0075	**

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AL/EB	1	0.006	0.008571429	**
DB/CB	0.8	0.003	0.0075	**
DB/NF	0.974074074	0.005	0.008333333	**
DB/NF	0.727777778	0.003	0.0075	**
CF/CB	0.3	0.012	0.013333333	*
CF/EB	0.272222222	0.008	0.01	*
CB/EB	0.131481481	0.107	0.107	

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Significance was tested with a permutational multivariate analysis of variance (999 permutations)

using Bray–Curtis dissimilarity matrices for the two communities. \*\*\*  $P < 0.001$ ; \*\*  $P < 0.01$ ; \*  $P$

$< 0.05$ .