

**Table S1** Results of the multiple correspondence analyses of variables in categories of AMF infection characteristics, soil properties, C, N, and P contents and their stoichiometric ratios of plant communities.

<b>Variables</b>	<b>Component 1</b>	<b>Variables</b>	<b>Component 1</b>
<b>AMF infection characteristics</b>		<b>C, N, and P stoichiometric ratios</b>	
F	0.899	Aboveground biomass C/N	-0.657
R	0.774	Root C/N	-0.015
AR	0.826	Above ground biomass C/P	0.555
FR	0.144	Root C/P	0.975
Eigenvalue	2.111	Aboveground biomass N/P	0.974
Cumulative variance (%)	52.770	Root N/P	0.723
<b>Soil properties</b>		Eigenvalue	3.163
STC	0.990	Cumulative variance (%)	52.711
STN	-0.984		
STP	0.991		
Eigenvalue	2.929		
Cumulative variance (%)	97.633		
<b>Plant C, N, and P contents</b>			
Aboveground biomass C	0.815		
Root C	0.621		
Above ground biomass N	0.614		
Root N	-0.284		
Aboveground biomass P	0.731		
Root P	-0.981		
Eigenvalue	2.886		
Cumulative variance (%)	48.099		

Fig. S1 The conceptual model displaying the expected direct and indirect pathways for soil properties on AMF infection and plants C, N, P stoichiometry. Single-headed arrows refer to unidirectional causal relationships, and double-headed arrows indicate non-causal covariance.

