

Table S1. Correlation coefficient of AM and ECM fine root C:N:P stoichiometry with climate and soil pH.

Fine root elements	Mycorrhizal type	MAT		MAP		SoilpH	
		Significance	R ²	Significance	R ²	Significance	R ²
C	AM	P<0.01	0.036	P<0.01	0.067	P<0.01	0.13
	ECM	P>0.05	-	P>0.05	-	P>0.05	-
N	AM	p>0.05	-	P<0.01	0.03	P>0.05	-
	ECM	P<0.01	0.075	P>0.05	-	P>0.05	-
P	AM	P<0.01	0.054	P<0.01	0.06	P<0.05	0.014
	ECM	P<0.01	0.093	P<0.01	0.05	P>0.05	-
C:N	AM	P>0.05	-	P>0.05	-	P>0.01	0.026
	ECM	P>0.05	-	P>0.05	-	P>0.05	-
C:P	AM	P<0.01	0.102	P<0.01	0.146	P<0.01	0.064
	ECM	P<0.01	0.19	P<0.01	0.15	P>0.05	-
N:P	AM	P<0.01	0.08	P<0.01	0.027	P<0.01	0.022
	ECM	P<0.05	0.024	P<0.01	0.088	P>0.05	-

AM: arbuscular mycorrhiza, ECM: ectomycorrhiza, MAP: mean annual precipitation, MAT: mean annual temperature.

Table S2. Correlation coefficient of AM and ECM fine root C:N:P stoichiometry with climate and soil pH.

Fine root elements	Mycorrhizal type	Soil C		Soil N		Soil P		Soil C:N		Soil C:P		Soil N:P	
		Significance	R ²										
C	AM	P>0.05	-	-	-	-	-	-	-	-	-	-	-
	ECM	P>0.05	-	-	-	-	-	-	-	-	-	-	-
N	AM	-	-	P>0.05	-	-	-	-	-	-	-	-	-
	ECM	-	-	p>0.05	-	-	-	-	-	-	-	-	-
P	AM	-	-	-	-	P<0.05	0.011	-	-	-	-	-	-
	ECM	-	-	-	-	P<0.01	0.22	-	-	-	-	-	-
C:N	AM	-	-	-	-	-	-	P<0.01	0.038	-	-	-	-
	ECM	-	-	-	-	-	-	P>0.05	-	-	-	-	-
C:P	AM	-	-	-	-	-	-	-	-	P<0.01	0.062	-	-
	ECM	-	-	-	-	-	-	-	-	P<0.05	0.069	-	-
N:P	AM	-	-	-	-	-	-	-	-	-	-	P<0.01	0.021
	ECM	-	-	-	-	-	-	-	-	-	-	P<0.01	0.22

AM: arbuscular mycorrhiza, ECM: ectomycorrhiza, MAP: mean annual precipitation, MAT: mean annual temperature.