

Table S1 The biomass of shrubs, herbs and litter in different vegetation types

Vegetation types	Shrub aboveground biomass (g m ⁻²)	Shrub belowground biomass (g m ⁻²)	Herb aboveground biomass (g m ⁻²)	Herb belowground biomass (g m ⁻²)	Litter biomass (g m ⁻²)
<i>R. pseudoacacia</i> forest	35.43±10.25	20.89±9.18	102.34±59.89	38.74±14.87	753.43±197.29
<i>P. tabulaeformis</i> forest	99.26±35.46	45.38±12.11	25.78±11.30	20.25±8.05	1637.19±478.87
Shrubland	492.63±46.46	210.97±21.28	61.14±9.36	49.81±5.79	24.26±3.07
Abandoned farmland	65.20±5.67	39.78±4.87	74.90±6.34	55.90±8.70	19.62±2.14

Note: Data are expressed as mean±SE.

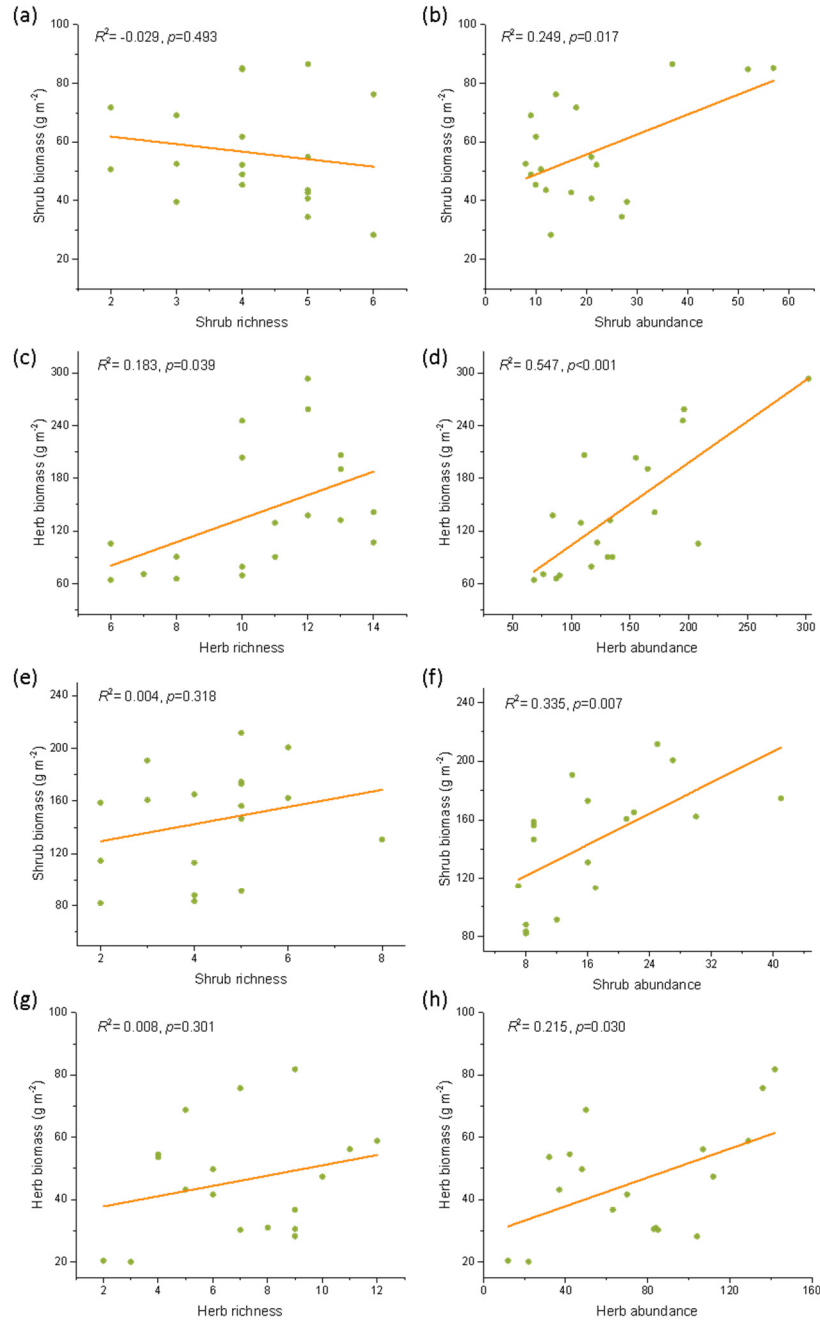


Figure S1. Relationship between richness, abundance and biomass of shrubs and herbs in *R. pseudoacacia* forests (a, b, c, d) and *P. tabulaeformis* forests (e, f, g, h).

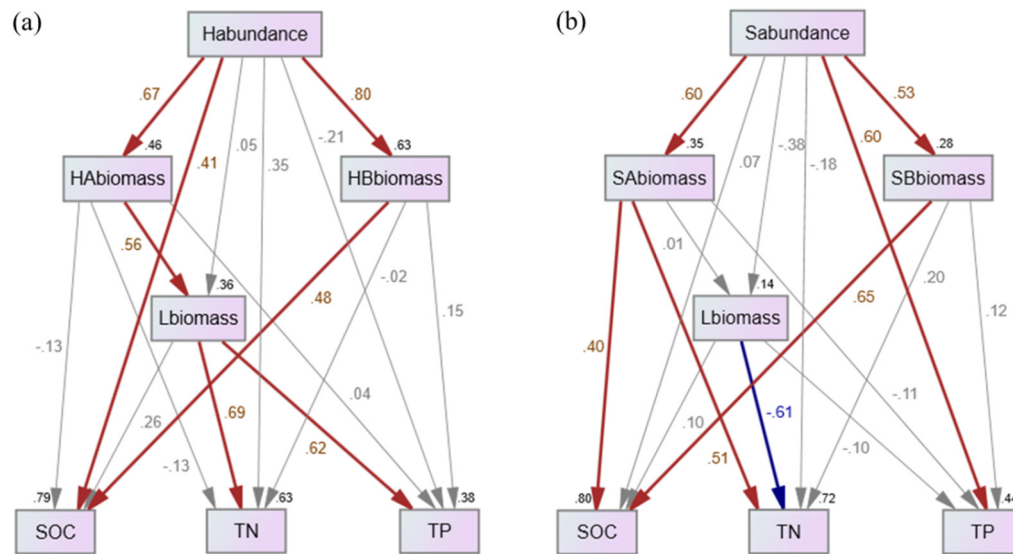


Figure S2. Direct and indirect effects of understory plant abundance on SOC, TN and TP. Herb and shrub abundance are the most significant vegetation factors affecting soil nutrients in the *R. pseudoacacia* (a, $\chi^2 = 6.202$, DF = 5, CMIN/DF = 1.240, GFI = 0.917, CFI = 0.984, RMSEA = 0.116) and *P. tabuliformis* forest (b, $\chi^2 = 5.375$, DF = 5, CMIN/DF = 1.075, GFI = 0.924, CFI = 0.994, RMSEA = 0.066), respectively. Brown and navy arrows indicate significant positive and negative correlations ($p < 0.05$), respectively. The number above the box represents the multiple R². Habundance, herb abundance; HABiomass, herb aboveground biomass; HBbiomass, herb belowground biomass; Sabundance, shrub abundance; SABiomass, shrub aboveground biomass; SBbiomass, shrub belowground biomass; Lbiomass, litter biomass.