

Table S1. Shrubs and their basic growth characteristics.

Species	Description
<i>Alangium chinense</i>	Deciduous tree or shrub, 3–5 m tall, found in montane or sparse forests
<i>Cupressus funebris</i>	Coniferous species, fast growing and adaptable, can be used as afforestation species
<i>Rubus coreanus</i>	Shrub, 1–3 m tall, in thickets on mountain slopes or in valleys, riversides, roadsides
<i>Broussonetia papyrifera</i>	Tree, strong, masculine species, extraordinarily adaptable and resistant to adversity
<i>Toona ciliata</i>	A masculine, deep-rooted species that likes warmth and is shade intolerant
<i>Elaeagnus pungens</i>	Evergreen erect shrub, not afraid of sun exposure, also has strong shade tolerance
<i>Zanthoxylum bungeanum</i>	Small deciduous tree, 3–7 m tall, spines on stem often fall early, drought tolerant, sun-loving
<i>Vitex negundo</i>	Shrub or small tree with strong sprouting ability and adaptability
<i>Pyracantha fortuneana</i>	Evergreen shrub or small tree, likes strong light, tolerant of barrenness
<i>Coriaria nepalensis</i>	Shrub, very adaptable, tolerant of drought and infertile conditions
<i>Ligustrum lucidum</i>	Evergreen tree or shrub, water and moisture tolerant, light and shade tolerant
<i>Rhamnus davurica</i>	Adaptable, hardy, drought tolerant, infertile, born in shady and wet places
<i>Myrsine africana</i>	Shrubby plant, grows in sparse forests or forest margins on barren slopes, shade tolerant
<i>Sapium sebiferum</i>	Tree, light-loving species, with certain requirements for light and temperature
<i>Rhus chinensis</i>	Small tree or shrub, light-loving, well-developed root system, fast growth
<i>Vernicia fordii</i>	Deciduous tree, likes warm and humid climates

Table S2. The niche overlap of shrub populations under different reconstruction patterns.

		Niche Overlap														
Species	<i>Rubus coreanus</i>	<i>Alangium chinense</i>	<i>Broussonetia papyrifera</i>	<i>Elaeagnus pungens</i>	<i>Zanthoxylum bungeanum</i>	<i>Vitex negundo</i>	<i>Myrsine africana</i>	<i>Rhus chinensis</i>	<i>Vernicia fordii</i>	<i>Coriaria nepalensis</i>	<i>Sapium sebiferum</i>	<i>Rhamnus davurica</i>	<i>Cupressus funebris</i>	<i>Ligustrum lucidum</i>	<i>Toona ciliata</i>	
<i>Pyracantha fortuneana</i>	0.702	0.456	0.612	0.402	0.441	0.528	0.339	0.573	0.558	0.770	0.548	0.519	0.513	0.382	0.652	
<i>Rubus coreanus</i>		0.186	0.461	0.538	0.288	0.449	0.359	0.489	0.438	0.820	0.651	0.895	0.645	0.700	0.925	
<i>Alangium chinense</i>			0.608	0.288	0.606	0.740	0.799	0.530	0.456	0.176	0.134	0.128	0.573	0.167	0.058	
<i>Broussonetia papyrifera</i>				0.593	0.780	0.692	0.501	0.918	0.667	0.447	0.607	0.470	0.402	0.561	0.249	
<i>Elaeagnus pungens</i>					0.588	0.323	0.540	0.580	0.687	0.421	0.493	0.625	0.438	0.693	0.409	
<i>Zanthoxylum bungeanum</i>						0.565	0.478	0.771	0.311	0.474	0.477	0.242	0.371	0.292	0.186	
<i>Vitex negundo</i>							0.592	0.641	0.336	0.385	0.509	0.318	0.660	0.361	0.301	
<i>Myrsine africana</i>								0.469	0.547	0.259	0.183	0.443	0.758	0.437	0.287	
<i>Rhus chinensis</i>									0.541	0.516	0.442	0.528	0.297	0.535	0.329	
<i>Vernicia fordii</i>										0.166	0.370	0.558	0.340	0.647	0.257	
<i>Coriaria nepalensis</i>											0.564	0.628	0.553	0.397	0.844	

<i>Sapium sebiferum</i>	0.585	0.602	0.622	0.51 3
<i>Rhamnus davurica</i>	0.597	0.896		0.76 2
<i>Cupressus funebris</i>		0.554		0.56 2
<i>Ligustrum lucidum</i>				0.44 5
<i>Toona ciliata</i>				

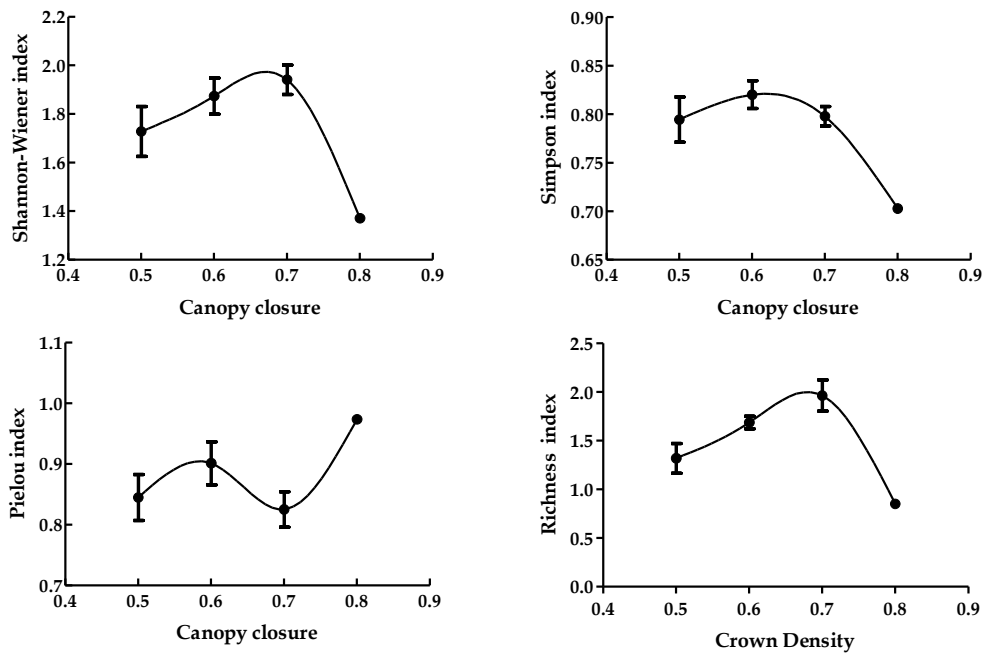


Figure S1. Diversity index at different canopy closures after forest reconstruction (all patterns).