

Table S1 Sampling points information

Populations	Latitude	Longitude	Altitude	Annual mean temperature	Annual mean precipitation	Sample size/tree
Jiufeng, Beijing, China (JF)	40°03'N	116°05'E	400m	12.5°C	628.9mm	10
Maiji Mountain, Gansu, China (MJS)	34°21'N	106°01'E	1400m	9.0°C	689.2mm	10
Lantian, Shaanxi, China (LT)	34°04'N	109°22'E	760m	13.1°C	720.4mm	12
Wuzi Mountain, Shaanxi, China (WZS)	32°57'N	107°51'E	700m	12.9°C	912.4mm	10
Baiwa Mountain, Shanxi, China (BWS)	37°20'N	111°15'E	1250m	8.0°C	518.6mm	10