

Table S1. Specific information on the provenance of the five *P. cyrtonema*.

Sample name	Specific provenance	Latitude (N)	Longitude (E)	Average Temperatures (°C)	Annual Rainfall (mm)
Huanggang	Huanggag, Hubei	30°31'24"	114°55'37"	17.41	1536.10
Chizhou	Chizhou, Anhui	30°40'16"	117°30'19"	16.75	1431.59
Qingyang	Qingyang, Anhui	30°34'15"	117°48'22"	16.53	1485.03
Yueyang1	Yueyang, Hunan	29°32'42"	113°32'17"	17.51	1349.47
Yueyang2	Yueyang, Hunan	29°32'52"	113°32'08"	17.51	1349.47

Note: Data on average temperature and annual rainfall in 1950-2023 were obtained from the National Centers for Environmental Information (<https://www.ngdc.noaa.gov/>) (accessed on 3 December 2023).