**Table S1** Locality and voucher information for populations of *Rhododendron purdomii* and *R.concinnum* used in this study

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Population code | n | Locality | Latitude (°N) | Longitude(°E) | Elevation (m) | Voucher accession no. |
| *R. purdomii* | LJS | 11 | Laojun Mountain, Luoyang, Henan | 33°43′5.66″N | 111°38′23.59″E | 2170 | LY2020051601 |
| *R. purdomii* | LYW | 15 | Longyuwan, Luoyang, Henan | 33°39′37.41″N | 111°47′13.31″E | 2120 | LY2020051701 |
| *R. purdomii* | LJL | 17 | Laojieling, Nanyang, Henan | 33°39′51.48″N | 111°46′22.66″E | 1800 | LY2020082601 |
| *R. concinnum* | CYS | 10 | Yao Mountain, Pingdingshan, Henan  | 33°43′33.48″N | 112°14′40.92″E | 1870 | LY2019062101 |
| *R .concinnum* | CLJ | 10 | Laojun Mountain, Luoyang, Henan | 33°43′26.74″N | 111°38′36.6″E | 1970 | LY2020051635 |

n number of sampled individuals.