## Supplementary materials for

**Plant functional trait responses to dolomite and limestone karst forests in Southwest China**

**Table S1.** The 20 most abundant tree species investigated in Liping limestone karst plots in Southwest China. M\_DBH represents mean diameter at breast height; M\_TH represents mean tree height.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Family** | **Number of per hectare** | **M\_DBH /cm** | **M\_TH/m** | **Seed type** | **Flowering time/Month** | **Life form** | **Wood Density** |
| *Platycarya strobilacea* Sieb. et Zucc. | Juglandaceae | 1425 | 6.1 | 8.9 | Small | May | Deciduous | Medium |
| *Cyclobalanopsis phanera* (Chun) Y. C. Hsu et H. W. Jen | Fagaceae | 1025 | 7.2 | 10.7 | Large | April | Evergreen | Medium |
| *Quercus variabilis* Blume | Fagaceae | 825 | 9.9 | 12.3 | Medium | March | Evergreen | High |
| *Gleditsia sinensis* Lam. | Leguminosae | 775 | 6.9 | 10.5 | Medium | March | Deciduous | High |
| *Kalopanax septemlobus* (Thunb.) Koidz. | Araliaceae | 650 | 9.2 | 11.8 | Small | July | Deciduous | Low |
| *Pyrus pseudopashia* Yü | Rosaceae | 625 | 5.6 | 8.5 | Large | April | Deciduous | Medium |
| *Quercus phillyraeoides* A. Gray | Fagaceae | 625 | 5.6 | 7.0 | Medium | March | Evergreen | High |
| *Quercus senescens* Hand.-Mazz. | Fagaceae | 575 | 5.9 | 7.6 | Medium | March | Evergreen | High |
| *Cyclobalanopsis glauca* (Thunberg) Oersted | Fagaceae | 550 | 5.8 | 7.5 | Medium | April | Evergreen | High |
| *Quercus fabri* Hance | Fagaceae | 450 | 11.1 | 13.0 | Medium | April | Deciduous | High |
| *Sinoadina racemosa* (Sieb. et Zucc.) Ridsd. | Sinoadina | 375 | 6.5 | 10.2 | Small | May | Deciduous | No data |
| *Rhus chinensis* Mill. | Anacardiaceae | 300 | 5.8 | 9.3 | Small | August | Deciduous | Low |
| *Carpinus turczaninowii* Hance | Betulaceae | 300 | 5.2 | 8.1 | Medium | March | Evergreen | Medium |
| *Quercus acutissima* Carr. | Fagaceae | 250 | 6.7 | 10.0 | Medium | March | Evergreen | High |
| *Loropetalum chinense* (R. Br.) Oliver | Hamamelidaceae | 225 | 5.4 | 4.8 | Small | March | Evergreen | High |
| *Choerospondias axillaris (*Roxb.) B. L. Burtt & A. W. Hill | Anacardiaceae | 200 | 10.8 | 13.7 | Medium | March | Deciduous | Medium |
| *Liquidambar formosana* Hance | Hamamelidaceae | 150 | 9.2 | 13.1 | Small | March | Deciduous | Medium |
| *Ligustrum lucidum* Ait. | Oleaceae | 150 | 9.2 | 13.0 | Small | May | Evergreen | Medium |
| *Distylium myricoides* Hemsl. | Hamamelidaceae | 150 | 5.4 | 8.8 | Small | April | Evergreen | No data |
| *Albizia kalkora* (Roxb.) Prain | Leguminosae | 125 | 5.8 | 9.2 | Medium | May | Deciduous | Medium |

**Table S2.** The 20 most abundant tree species investigated in Shibing dolomite karst plots in Southwest China. M\_DBH represents mean diameter at breast height; M\_TH represents mean tree height.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Family** | **Number of per hectare** | **M\_DBH /cm** | **M\_TH/m** | **Seed type** | **Flowering time/Month** | **Life forms** | **Wood Density** |
| *Quercus fabri* Hance | Fagaceae | 2500 | 7.6 | 11.2 | Medium | April | Deciduous | High |
| *Platycarya strobilacea* Sieb. et Zucc. | Juglandaceae | 2375 | 7.5 | 11.2 | Small | May | Deciduous | Medium |
| Albizia kalkora (Roxb.) Prain | Leguminosae | 1250 | 8.4 | 12.1 | Medium | May | Deciduous | Medium |
| *Celtis sinensis* Pers. | Ulmaceae | 1000 | 12.4 | 14.0 | Small | March | Deciduous | Medium |
| *Castanea mollissima* Blume | Fagaceae | 950 | 8.1 | 11.9 | Large | April | Deciduous | Medium |
| *Liquidambar formosana* Hance | Hamamelidaceae | 775 | 7.6 | 11.1 | Small | March | Deciduous | Medium |
| *Quercus acutissima* Carr. | Fagaceae | 750 | 9.9 | 13.1 | Medium | March | Evergreen | High |
| *Choerospondias axillaris* (Roxb.) B. L. Burtt & A. W. Hill | Anacardiaceae | 700 | 21.6 | 19.8 | Medium | March | Deciduous | Medium |
| *Elaeocarpus decipiens* Hemsl. | Elaeocarpaceae | 650 | 12.9 | 15.3 | Medium | June | Evergreen | Medium |
| *Populus simonii* Carr. | Salicaceae | 375 | 11.6 | 14.8 | Medium | March | Deciduous | Low |
| *Carpinus turczaninowii* Hance | Betulaceae | 350 | 7.7 | 11.5 | Medium | March | Evergreen | Medium |
| *Cinnamomum wilsonii* Gamble | Lauraceae | 325 | 7.2 | 10.7 | Small | April | Evergreen | Medium |
| *Lindera pulcherrima var. hemsleyana* (Diels) H.P.Tsui | Lauraceae | 325 | 8.5 | 11.9 | Small | February | Evergreen | Medium |
| *Rhus chinensis* Mill. | Anacardiaceae | 275 | 6.6 | 10.3 | Small | August | Deciduous | Low |
| *Cyclobalanopsis glauca* (Thunberg) Oersted | Fagaceae | 250 | 7.5 | 11.2 | Medium | April | Evergreen | High |
| *Castanea henryi* (Skan) Rehd. et Wils. | Fagaceae | 225 | 6.0 | 9.2 | Medium | May | Deciduous | Medium |
| *Lindera communis* Hemsl. | Lauraceae | 175 | 7.3 | 11.1 | Medium | March | Evergreen | Low |
| *Populus davidiana* Dode | Salicaceae | 150 | 11.2 | 14.1 | Small | March | Deciduous | Low |
| *Prunus pseudocerasus* (Lindl.) G. Don | Rosaceae | 150 | 5.2 | 8.4 | Medium | March | Deciduous | High |
| *Cinnamomum glanduliferum* (Wall.) Nees | Lauraceae | 125 | 6.1 | 9.7 | Medium | March | Evergreen | Medium |