*Supporting Information S2 – Trait dataset attributes*

Table 1. Data density information for trait dataset. Coverage describes the total proportional coverage at a site for which species were included in the analysis. Density values for each trait describe the proportional coverage at a site for which data for that trait were included in the analysis. N.B. leaf narrowness and wood density were not available for grasses or ferns; seed mass and flowering period were also not available for ferns.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **site #** | **coverage** | **wood density** | **max. height** | **seed mass** | **SLA** | **flowering period** | **leaf narrowness** |
| 1 | 0.98 | 0.615 | 1 | 0.846 | 1 | 0.923 | 0.692 |
| 2 | 0.959 | 0.333 | 1 | 0.667 | 1 | 0.667 | 0.333 |
| 3 | 0.949 | 0.455 | 1 | 0.727 | 1 | 0.727 | 0.545 |
| 4 | 0.903 | 0.4 | 1 | 0.867 | 1 | 0.867 | 0.6 |
| 5 | 0.968 | 0.455 | 1 | 1 | 1 | 1 | 0.545 |
| 6 | 0.964 | 0.7 | 1 | 1 | 1 | 1 | 0.7 |
| 7 | 1 | 0.5 | 1 | 1 | 0.9 | 1 | 0.7 |
| 8 | 1 | 0.529 | 1 | 0.882 | 1 | 0.882 | 0.765 |
| 9 | 0.988 | 0.474 | 1 | 0.842 | 1 | 0.842 | 0.737 |
| 10 | 0.976 | 0.583 | 1 | 0.917 | 1 | 0.917 | 0.667 |
| 11 | 0.96 | 0.188 | 1 | 1 | 0.938 | 1 | 0.688 |
| 12 | 0.992 | 0.381 | 1 | 0.952 | 0.952 | 0.952 | 0.714 |
| 13 | 0.935 | 0.55 | 0.95 | 0.9 | 1 | 0.9 | 0.7 |
| 14 | 1 | 0.636 | 1 | 1 | 1 | 1 | 1 |
| 15 | 0.963 | 0.455 | 1 | 0.909 | 0.909 | 0.909 | 0.727 |

Table 2. Summary statistics for trait dataset. From left: minimum, maximum, mean and standard deviation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **trait** | **min** | **max** | **mean** | **sd** |
| *Max. height (m)* | 0.2 | 50 | 10.47 | 13.18 |
| *Seed mass (mg)* | 0.04 | 323.99 | 16.55 | 45.06 |
| *SLA (m2 / kg)* | 1.41 | 63.27 | 17.93 | 14 |
| *Flowering period length (proportion of year)* | 0.17 | 1 | 0.45 | 0.24 |
| *Leaf narrowness (unitless ratio)* | 0.59 | 233.33 | 9.86 | 32.53 |
| *Wood density (g / cm3)* | 0.33 | 0.95 | 0.61 | 0.13 |

Table 3. Importance of principal components PC1 – PC5 from Principal Components Analysis of trait dataset, using species with data available for all traits (55 species).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **PC1** | **PC2** | **PC3** | **PC4** | **PC5** | **PC6** |
| *Standard deviation* | 1.3938 | 1.0962 | 1.0827 | 0.9247 | 0.7438 | 0.52457 |
| *Proportion of variance* | 0.3238 | 0.2003 | 0.1954 | 0.1425 | 0.0922 | 0.04586 |
| *Cumulative proportion* | 0.3238 | 0.5240 | 0.7194 | 0.8619 | 0.9541 | 1 |

Table 4. Importance of principal components PC1 – PC5 from Principal Components Analysis of trait dataset, using species with data available for SLA, maximum height, seed mass and flowering period length (97 species).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **PC1** | **PC2** | **PC3** | **PC4** |
| *Standard deviation* | 1.4160 | 1.0016 | 0.8326 | 0.54649 |
| *Proportion of variance* | 0.5012 | 0.2508 | 0.1733 | 0.07466 |
| *Cumulative proportion* | 0.5012 | 0.7520 | 0.9253 | 1 |