**README**

These are descriptions of raw data file in this Dryad upload:

**Raw data - README - 0914.xlsx** contains following one sheets:

* Column 1: Sample\_ID. Unique code for each measured plant/pot. The prefix denotes the source population (e.g., BH, CX, Delta, EU, FEAU, MED, NAint, NAnat, etc.).
* Column 2: Garden\_ID. Common Garden where plants were grown and measured (values: Qingdao, Shanghai).
* Column 3: Leaf\_thickness. Thickness of a fully expanded leaf lamina (mm).
* Column 4: Leaf\_length. Maximum leaf lamina length (cm).
* Column 5: Leaf\_width. Maximum leaf lamina width (cm).
* Column 6: Leaf\_area. One‑sided leaf area (cm2).
* Column 7: SLA. Specific leaf area (cm2 g-1), calculated as Leaf\_area / Leaf\_dry\_weight.
* Column 8: Leaf\_saturated\_fresh\_weight. Leaf mass after rehydration (g).
* Column 9: Leaf\_dry\_weight. Oven‑dry leaf mass (g).
* Column 10: LDMC. Leaf dry matter content (%), calculated as 100 × Leaf\_dry\_weight / Leaf\_saturated\_fresh\_weight.
* Column 11: Aboveground\_biomass. Dry mass of aboveground tissues per pot at harvest (g).
* Column 12: Belowground\_biomass. Dry mass of belowground tissues (roots/rhizomes) per pot at harvest (g).
* Column 13: Shoot\_height. Height of the tallest shoot per pot (cm).
* Column 14: Plant\_number. Number of live shoots/ramets per pot at harvest (count).
* Column 15: Shoot\_diameter. Basal diameter of the representative shoot (mm).
* Column 16: Leaf\_C. Leaf carbon concentration (% of dry mass).
* Column 17: Leaf\_N. Leaf nitrogen concentration (% of dry mass).
* Column 18: Leaf\_CN. Leaf carbon‑to‑nitrogen ratio (mass basis), calculated as Leaf\_C / Leaf\_N.
* Column 19: Root\_C. Root carbon concentration (% of dry mass).
* Column 20: Root\_N. Root nitrogen concentration (% of dry mass).
* Column 21: Root\_CN. Root carbon‑to‑nitrogen ratio (mass basis), calculated as Root\_C / Root\_N.
* Column 22: SPAD. Chlorophyll meter reading (unitless SPAD value).
* Column 23: Latitude. Latitude of the source population in decimal degrees (negative for southern hemisphere).
* Column 24: Latitude\_ab. Absolute latitude (|Latitude|) in decimal degrees.
* Column 25: Longitude. Longitude of the source population in decimal degrees (negative for west).
* Column 26: Continent. Continent/region of the source population (e.g., Asia, America, Europe, Oceania).
* Column 27: Group. Provenance/lineage code for the source population (e.g., CNCS, CNCN, CNL, Delta, LAND, EU, FEAU, MED, NAint, NAnat).