**README**

**Dataset title:** Ecophysiology and morphological traits of geophytic *Pelargonium* seedlings grown under control and drought conditions

**Description:** Data for seedlings of *Pelargonium* (Geraniaceae) species collected under greenhouse conditions at the University of Connecticut during the 2014 growing season. Research funded by NSF DEB-1046328.

**Files:** The ecophys\_data.csv file contains data for the ecophysiological measurements on two- and three-month-old seedlings. The morph\_traits.csv file contains data for the morphological measurements on two-month-old seedlings. The harvest\_6mo.csv file contains data for biomass measurements of seedlings harvested at dormancy at six mo.

**Column header explanation for ecophys\_data.csv:**

dayDay of measurement

species Specific epithet

plantA unique identifier for each plant

treatmentWatering treatment, C=control, D=dry-down, LW=low water

Asat Rate of photosynthesis

gs Rate of stomatal conductance

WUE Water use efficiency

lf\_nmbr Total number of leaves per plant

axis\_1\_length Total canopy length (cm)

axis\_2\_length Total canopy width (cm)

leaf\_1\_area Leaf area (cm2) of leaf 1

leaf\_2\_area Leaf area (cm2) of leaf 2

leaf\_3\_area Leaf area (cm2) of leaf 3

avg\_lf\_area Average leaf area (cm2)

canopy\_m2 Total canopy area (m2)

daylight\_sec Estimated length of daily photosynthetic period (sec)

umol\_Carbon Total daily carbon assimilated (umol)

Chl Leaf chlorophyll (SPAD value), mean of three leaves per plant

**Column header explanation for morph\_traits.csv:**

species *Pelargonium* species name

plant A unique identifier for each plant

treatment Watering treatment

soil\_wet\_wt Fresh weight (g) of soil at harvest

soil\_dry\_wt Dry weight (g) of soil

MRFE\_leaf\_area Leaf area (cm2) of most recently fully expanded leaf

MRFE\_leaf\_FW Fresh weight (g) of most recently fully expanded leaf

MRFE\_leaf\_area Dry weight (g) of most recently fully expanded leaf

canopy\_lf\_nmbr Total number of leaves per plant

canopy\_FW Fresh weight (g) of canopy

canopy\_DW Dry weight (g) of canopy

tuber\_FW Fresh weight (g) of tuber

tuber\_DW Dry weight (g) of tuber

root\_DW Dry weight (g) of roots

LMA Leaf Mass per Area (g cm-2)

total\_biomass Total dried per plant biomass (g)

Abground\_ratio Ratio of above-ground biomass:below-ground biomass

change\_lf\_nmbr change in leaf number over the 10-day dry-down period

**Column header explanation for harvest\_6mo.csv:**

speciesSpecific epithet

treatment Watering treatment

plant A unique identifier for each plant

inflor\_DW Dry weight (g) of inflorescence

lvs Number of leaves remaining per plant

tuber\_FW Fresh weight (g) of tuber

tuber\_DW Dry weight (g) of tuber

block Location on greenhouse benchtop, trays 1-20