README for Root traits reveal safety and efficiency differences in grasses and shrubs exposed to different fire regimes (2021-11-17)

This readme file describes the variables within the "Roots2019_anatomy.csv" and ""Roots2019_BiomassSRL.csv" data files accompanying the above publication. The "Roots2019_BiomassSRL.csv" file includes root biomass data for grasses and woody plants and "Roots2019_anatomy.csv" includes anatomical data for roots collected from the same biomass samples. Missing data are indicated by the code "9999." For any queries please contact kokeefe@stedwards.edu.

Roots2019_anatomy.csv

Variable	Description
SampleID	Sample identification number
Plot	Watershed on Konza
Burn_Treatment	Burn treatment ("B20"=20-yearr burn, "B4"=4-yearr burn, "B1"=1-year burn)
Core_rep	Soil core replicate number
Depth	Soil depth (cm)
Root_type	Woody or Grass root type
Endoderm_thickness	Mean endoderm thickness (μm)
Stele_area	Mean stele area (μm^2)
XY_count	Total number of conduits
XY_area_min	Mean minimum conduit area (μm)
XY_area_max	Mean maximum conduit area (μm)
XY_area_median	Median conduit area (μm)
XY_area_mean	Mean conduit area (μm)
XY_diameter	Mean conduit diameter (μm)
XY_wall_thickness	Mean conduit wall thickness (μm)
T_B	Median conduit t/b (conduit wall thickness / diameter)
Stele_endoderm_area	Stele / endoderm area

Roots2019_BiomassSRL.csv

Variable	Description
SampleID	Sample identification number
Watershed	Watershed on Konza
CoverType	Woody or Grass root type
BurnTrt	Burn treatment ("B20"=20-yearr burn, "B4"=4-yearr burn, "B1"=1-year burn)
CoreRep	Soil core replicate number
Depth	Soil depth (cm)
DryMass_g	Root dry mass (g)
DryMass_kg	Root dry mass (kg)
SoilVol	Soil volume (cm^3)
RootMass_SoilVol	Root dry mass / soil volume (mg/cm^3)
TotalLength	Total root length (cm)
SRL	Specific root length (m/g)
Root_AvgDiam	Average root diameter (mm)
L_<0.5	Length of roots under 0.5 mm diameter (cm)
L_0.5-1	Length of roots 0.5 – 1.0 mm diameter (cm)
L_1-1.5	Length of roots 1.0 – 1.5 mm diameter (cm)
L_1.5-2	Length of roots 1.5 – 2.0 mm diameter (cm)
L_2-2.5	Length of roots 2.0 – 2.5 mm diameter (cm)
L_2.5-3	Length of roots 2.5 – 3.0 mm diameter (cm)
L_3-3.5	Length of roots 3.0 – 3.5 mm diameter (cm)
L_3.5-4	Length of roots 3.5 – 4.0 mm diameter (cm)
L_4-4.5	Length of roots 4.0 – 4.5 mm diameter (cm)
L_>4.5	Length of roots >4.5 mm diameter (cm)