

Codes for column headers in data files for 2022 strawberry hydromulch data

FILE = 2022_fruit_quality.csv

Column headers:

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: fq (fruit quality)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

ph: pH

ta: titratable acids, units = %

brix: total soluble solids, units = %

FILE = 2022_percentage_mulch_deterioration.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

EXPO: Soil exposed or Mulch degradation on 1-meter-long subplot, units = %

FILE = 2022_strawberry_nutrient_content.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: sta (strawberry leaf tissue analysis, 20-25 leaves/plot were sampled)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

N: nitrogen, units = %

P: phosphorous, units = %

Mg: magnesium, units = %

K: potassium, units = %

Ca: calcium, units = %

S: sulfur, units = %

B: boron, units = ppm

Fe: iron, units = ppm

Mn: manganese, units = ppm

Cu: copper, units = ppm

Zn: zinc, units = ppm

Al: aluminum, units = ppm

Na: sodium, units = ppm

FILE = 2022_strawberry_plant_dry_biomass.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: sdw (strawberry plant dry weight)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

leavesR: dry weight of 2 strawberry plants (leaves only), units = g

crownR: dry weight of 2 strawberry plants (crown only), units = g

rootR: dry weight of 2 strawberry plants (roots only), units = g

totalR: total dry weight of 2 strawberry plants (leaves + crown + roots), units = g

leaves: dry weight (leaves)/plant, units = g

crown: dry weight (crown)/plant, units = g

root: dry weight (roots)/plant, units = g

total: total dry weight (leaves+ crown + roots)/plant, units = g

FILE = 2022_Teros_Sensor_Data.csv

site: WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

trt: hydromulch treatments, PH2 = hydromulch with 2% psyllium husk tackifier, PH6 = hydromulch with 6% psyllium husk tackifier, GG2 = hydromulch with 2% guar gum tackifier, GG6 = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

H2O_ave: daily average soil moisture content, units = m^3/m^3

AveT: daily average soil temperature, Units = C

MaxT: daily maximum soil temperature, Units = C

MinT: daily minimum soil temperature, Units = C

site: ND = Absaraka ND

date: format = mm/dd/year

trt: hydromulch treatments, PH2 = hydromulch with 2% psyllium husk tackifier, PH6 = hydromulch with 6% psyllium husk tackifier, GG2 = hydromulch with 2% guar gum tackifier, GG6 = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

H2O_ave: daily average soil moisture content, units = m^3/m^3

AveT: daily average soil temperature, Units = C

MaxT: daily maximum soil temperature, Units = C

MinT: daily minimum soil temperature, Units = C

FILE = 2022_weed_biomass.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: wpvg (weeds at peak vegetative growth, dry biomass)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier

bio_total1: total weeds dry biomass per square meter, units = g

bio_brdl1: broadleaf weeds dry biomass per square meter, units = g

bio_grass1: grass weeds dry biomass per square meter, units = g

FILE = 2022_weed_density_peak_emergence.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: wpe (weeds at peak emergence)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

total1: number of total weeds per square meter

brdl1: number of broadleaf weeds per square meter

grass1: number of grass weeds per square meter

ratio B/T: ratio of broadleaf to total weeds

FILE = 2022_weed_density_peak_vegetative_growth.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: wpvg (weeds at peak vegetative growth)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

total1: number of total weeds per square meter

brdl1: number of broadleaf weeds per square meter

grass1: number of grass weeds per square meter

FILE = 2022_yield_weed_free.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: sywf (strawberry yield from weed-free subplot)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

plants: number of strawberry plants per weed-free subplot

mypp: marketable yield per strawberry plant, units = g

typp: total yield per strawberry plant, units = g

ambs: average marketable berry size, units = g

FILE = 2022_yield_weedy.csv

site: ND = Absaraka ND, WA = Mount Vernon WA

date: format = mm/dd/year

plot: plot number

stage: syww (strawberry yield from weedy subplot)

rep: replication or block number

trt: hydromulch treatments, 2PH = hydromulch with 2% psyllium husk tackifier, 6PH = hydromulch with 6% psyllium husk tackifier, 2GG = hydromulch with 2% guar gum tackifier, 6GG = hydromulch with 6% guar gum tackifier, NP = newsprint paper-only hydromulch with no tackifier, PE = polyethylene film mulch

plants: number of strawberry plants per weedy subplot

mypp: marketable yield per strawberry plant, units = g

typp: total yield per strawberry plant, units = g

ambs: average marketable berry size, units = g