waseca_variety_5Jun2024.R

jpuka

2024-06-05

```
# 5Jun2024
# Jesse assessed stands in Waseca
# 0=no plants, 10=perfect stand

# anything below a stand rating = 9 should not be combine harvested due to
# insufficient population in the plot

# data
# https://docs.google.com/spreadsheets/d/1ZmKH_3KzYk3fSEiAouU_yP-atyNOwzYZn9rYUPajzfU/edit#gid=75810074


library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.3     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.0
## v ggplot2   3.4.4     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.0
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
read.csv("MASTER Variety Trial 2023 Plant - plant_counts.csv") -> dat

dat %>%
  filter(year=="2024") %>%
  select(-c(count_0.5m_1,count_0.5m_2,notes)) -> dat2

dat2 %>%
  summarise(mean=round(mean(stand_rating),1),
            sd = round(sd(stand_rating),1))
```

```
##   mean  sd
## 1  5.9 2.5
```

```
dat2 %>%
  group_by(program) %>%
  summarise(mean=round(mean(stand_rating),1),
            sd = round(sd(stand_rating),1)) %>%
  arrange(mean)
```

```
## # A tibble: 2 x 3
```

```
##   program  mean    sd
##   <chr>   <dbl> <dbl>
## 1 MN        5.9   2.5
## 2 TLI       5.9   2.7
```

```
dat2 %>%
  group_by(variety) %>%
  summarise(mean=round(mean(stand_rating),1),
            sd = round(sd(stand_rating),1)) %>%
  arrange(mean)
```

```
## # A tibble: 20 x 3
##    variety  mean    sd
##      <int> <dbl> <dbl>
##  1     701   3.5   1.3
##  2    1803   4.5   3.1
##  3    1902   4.5   3.9
##  4    1904   4.5   2.4
##  5    1504   4.8   2.9
##  6    1603   4.8   1.5
##  7    1901   4.8   1.5
##  8    1905   5     3.2
##  9    2205   5     2.2
## 10    1001   6.2   3.3
## 11    1903   6.2   1.5
## 12    2203   6.2   3.6
## 13     801   6.5   2.4
## 14    2206   6.8   1.7
## 15    2204   7     1.8
## 16    1802   7.2   1.5
## 17    2202   7.2   3.6
## 18     704   7.5   2.5
## 19    1605   7.8   2.1
## 20    2201   7.8   1.7
```

```
dat2 %>%
  mutate(variety = as.factor(variety)) %>%
  mutate(variety = fct_reorder(variety,stand_rating)) %>%
  ggplot(aes(variety,stand_rating)) +
  stat_summary() +
  theme(axis.text.x = element_text(angle = 90))
```

```
## No summary function supplied, defaulting to `mean_se()`
```


stand_rating
8
6
4
701
1803
1902
1901
1904
1504
1603
801
1905
2205
1001
2206
1802
1903
2204
2201
2203
704
1605
2202
variety