

Title

BIOS15 Exam 2025-26

Oliver E. Todreas

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Introduction

Methods

Results

Conclusions

Appendix

Code is available at

TODO: insert github link

```
# This script fits a GLM to the dataset provided. The goal of the analysis is
# to determine how total floral scent emission effects the number of fruits
# produced

# Clear variables
rm(list = ls())

# Load packages
library(here, quietly = TRUE)
library(tidyverse, quietly = TRUE)
library(glmmTMB, quietly = TRUE)

# Load data
df <- as_tibble(
  read.table(
    here("Report", "Data", "penstemon_copy.txt"), header = TRUE, sep = "\t"
  )
)

# Make grouping variables factors
df <- mutate(df, across(c(Pop, Block), as.factor))

# Create metadata list
mdata <- list(
  "population of origin",
  "experimental block",
  "flower size in mm",
  "flowering date (days since 1 january)",
  "plant height (cm)",
```

```

"inflorescence lenght (cm)",
"number of flowers",
"number of aborted flowers",
"number of fruits produced",
"fitness (reproductive success) (based on fruit number and weight)",
"number of simultaneous open flowers",
"total floral scent emission (ng/l/h)"
)

names(mdata) <- colnames(df)

plot(df$height, df$fruits, col = (df$Pop))

```

