**Preliminary Data Analysis**

**(Entomological** **Techniques)**

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**Description of Data:**

Provide a description of the data (Shane)

* Note: data is taken **per microcolony** (ie: number of offspring per microcolony / Average male fat content for the microcolony)
* Also note: How Data was measured/collected
  + Total number of offspring = Number of emerged males + Number enclosed larvae
  + Total number of males = # emerged males
  + Average male body size (cm) = E (size of marginal cell on each male's right forewing)/#males in microcolony
  + Average Worker size (cm) = E (size of marginal cell on each worker's right forewing)/# (surviving) workers in microcolony
  + Average male fat content (mg lipids)
    - Quantified via Vanillin lipid quantification method
    - E (Fat content of male (mg)) /# males in microcolony
  + Larval ejection = # larvae ejected prematurely from brood cells

Include any data wrangling undertaken to prepare the data for analysis (Shane)

* Need to fix date formats (make them YYYY-MM-DD)
* Need to fill in blank cells with ‘na’

**Variable Information:**

|  |  |  |
| --- | --- | --- |
| **Variable:** | **Variable Type:** | **Summary statistic:** |
| Total number offspring (count) | Categorical |  |
| Number of emerged males (count) | Categorical |  |
| Average male body size (cm) | Continuous | x̄ |
| Average worker body size (cm) | Continuous | x̄ |
| Average male fat content (mg) | Continuous | x̄ |
| Larval ejection (count) | Categorical |  |

**Potential Challenges in Analysis:**

Potential challenges in analysis (e.g., violations of normality; pseudoreplication) (Amber)

* Idk about challenges but maybe pseudoreplication with microcolonies???? I hope not
* Possibly violations of normality but I'm not sure

**Graphical Depictions:**

Pertinent graphical depictions. (Amber)

* I can totally share my code for graphs when you need it!!