Purpose

The purpose of this experiment is to address the following research questions:

- 1. Does nutrition have an impact on developmental timing?
- 2. Does nutrition have an impact on sex determination?
- 3. Does nutrition have an impact on viability?

The techniques to measure this include creating two different concentrations of yeast, collecting female virgins, sexing fies, and utilizing mating

Orange indicates the 1% yeast concentration diet condition, and blue indicates the 5% yeast concentration diet conditions. P = 5.42088E-11

High yeast concentration diet condition fies began eclosing ten days post-mating and peaked on day 12; the peak number of fies eclosed was eight (Figure 1). Eclosions declined steeply on day 13 and slowly tapered off until there were zero eclosions from days 16-21 (Figure 1). Low yeast concentration diet condition fies began eclosing eigh-