**Introduction**

The bean beetle ( ) is native to regions of Africa and Asia (Barbosa, 2022). Inseminated female bean beetles oviposit (lay) their eggs on beans, and their larvae must feed, grow, and mature in the selected bean. Her larvae's success is based on the bean's quality. The bean's quality is measured by size and nutritious value. In previous research, these beetles have been known to be selective in the type and size of bean they choose to oviposit on (Cope and Fox, 2003). Bean beetles are an excellent organism of study in determining oviposition behavior. All feeding is done in the larval stage of development, and adults do not require food or water (Mitchell, 1975). Due to the known selective behavior of bean beetles in previous research, we decided to run an experiment to determine if the moisture of beans affected the oviposition behavior of the bean beetle.

This experiment used sedentary (flightless) female bean beetles to determine oviposition

beans. These findings can be used to further investigate the reproductive decisions that female bean beetles make and if these decisions can affect the fitness of their offspring. Two broad decisions are typically made by female insects when it comes to egg laying which may impact the fitness of her offspring: to lay single or in clusters and to select the laying substrate (Paukku and Kotiaho, 2008). Our research can be further investigated by performing a longer study that examines if the fitness of offspring of female bean beetles is impacted by laying eggs on wet beans providing the larvae with a greater water supply instead of dry beans.

**References**

Barbosa, Flavia. Animal Behavior Assignment Guidelines and Laboratory Handouts. 2022. Pgs 32-35.