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# “Col/Ler Number of Fruits per Main Stem” QTL Mapping

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## **“Col/Ler Number of Fruits per Main Stem” QTL Mapping**

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Understanding fruit yield is important to the agricultural economy. The genetics of fruit production have not been fully defined for any plant. In order to identify the gene responsible for fruit production, we used a recombinant inbred line (RIL) population of plants from the species *Arabidopsis thaliana*. We counted the number of fruit on each line and an ANOVA was performed in order to calculate the heritability for fruit production. We will report on our composite interval mapping experiment using this data.

### *Information about the Authors:*

This project was initially started by senior biology student Jasmyn Madden. Elias Argueta decided to do research with Dr. Swanson because he knew that Dr. Swanson’s main research field is plant biology. Understanding fruit production can be such a great discovery since it could improve agriculture. This research also can be used to help underprivileged countries have a better food source. Ann L. Carlson helped with planting the seeds, and Dr. Hui Gong helped by doing an analysis and performing the ANOVA.

*Faculty Sponsor:* Dr. Rob Swanson

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