

Heritability of Seed Size in Different Successions of *Arabidopsis Thaliana*

Emmily Shanks, Gerald Nwanne, Ann L. Carlson, Rob Swanson, Hui Gong

Departmental Affiliation: Biology
College of Arts and Sciences

Seed size is an important aspect in agricultural development, yet the genotypic effects are poorly understood. Populations of seed from recombinant inbred lines from the species *Arabidopsis thaliana* were measured in order to perform an ANOVA and calculate broad sense heritability of seed size. One hundred seeds per plant were scanned and measured using the software Image J. The obtained calculations gave 50.59 percent of broad sense heritability. This data is currently being used to map the genes responsible for the phenotypic output.

Information about the Authors:

Emmily Shanks, Gerald Nwanne, Ann L. Carlson, Hui Gong, and Robert Swanson all contributed equally to this project.

Faculty Sponsor: Dr. Rob Swanson

Student Contact: emmily.shanks@valpo.edu