Project Title: FY2007: Genetic linkage mapping in Louisiana Iris
Investigator: Nolen Martin
Department: Biology

## **Project Summary:**

The purpose of this project was mainly to fine-tune a genetic linkage map that had previously been developed between Iris fulva and Iris brevicaulis. Due to these funds, my lab was able to pay for a graduate student's (Sunni Taylor's) summer salary and supplies in order to genotype a large number of individuals in previously generated backcross populations and create a dense, linked genetic map. We also used a portion of the funds to purchase field supplies necessary for collecting phenotypic data of those mapping populations previously placed in natural settings in Louisiana. Currently, we are performing Quantitative Trait Locus (QTL) mapping to determine the genetic architecture of speciation in Iris. These funds directly resulted in at least two data-dense papers (in prep), and the preliminary data collected from the project, I believe, set us up for our successful NSF grant that we just received. I appreciate these funds. They are put to good use.

### **Presentations:**

Reproductive Isolation in Louisiana Iris - University of Houston Invited Talk

### **External Grants Applied:**

National Science Foundation: Ecology and Evolutionary Biology Division

### **External Grants Awarded:**

National Science Foundation: Ecology and Evolutionary Biology Division

# Student Number: 1