



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Adam R. Bess	Project Number J1902
Project Title Light Preferences among Crickets	
Objectives/Goals The purpose of this experiment was to see which colored light (purple, green, red or white) crickets are attracted to. By understanding what light crickets are attracted to, we will be able to create traps that will more efficiently catch crickets either for research purposes or extermination purposes.	
Abstract	
Methods/Materials 150 Crickets; Scissors; Tape; 4 small boxes; 1 large box; Purple, green, red, and white cellophane; White paper; Journal; Stop Watch; 4 pieces of heavy paper.	
Results The following data was collected from my three controlled experiments: Color Experiment #1 Experiment #2 Experiment #3 Average White: 1 1 4 2 Purple: 4 3 1 2.66667 Red: 3 2 8 4.33333 Green: 3 7 3 4.33333 Dark: 36 35 31 34 Deceased: 3 2 3 2.66667 Total: 50 50 50 50 Based on the data above, I created two graphs. Graph 1 represents the exact number of crickets in each of the four colored boxes in addition to the number of crickets in the dark. This graph also includes the incidental deaths of some of the crickets. Graph 2 represents the average light preferences from all of the experiments. In my experiment, the crickets more or less stayed in the dark area. Therefore, my hypothesis was incorrect when I predicted that the crickets would move towards the white light.	
Conclusions/Discussion The experiment accomplished what it set out to do. I believe that it was important to understand what light crickets are attracted to in order to be able to create traps that would more efficiently catch crickets either for research purposes or extermination purposes. My prediction that crickets would generally gravitate towards the white light was completely incorrect. I believed that the crickets would travel to the white box; yet, they decided to stay in the dark. The significance of the result of this experiment is great because this information would be helpful to use in catching crickets. This experiment was a valid experiment because it showed that crickets# preference is to stay in darkness. For me this experiment was	
Summary Statement My experiment is about what colored light crickets are attracted to.	
Help Received Mom helped purchase supplies.	