



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Allison J. Piper	Project Number J2418
Project Title Roses Are Red, Violets Are Blue: Hummingbirds and Flower Preference	
Abstract	
Objectives/Goals My project was to determine how the color of flower affects how much sugar water has been consumed by hummingbirds.	
Methods/Materials 1.Red, Pink, and Yellow Surveyor's tape 2.Dowel (thin wood cylinder) 3.Centrifuge tubes 4.Sugar 5.Water	
Results In the first experiment, the red flowers had more sugar water consumed than the yellow flowers. In the second experiment, the red flowers did the same as the pink flowers. The results from the pink flowers suggested part of my hypothesis was incorrect. The surprising part of the results came from comparing the two graphs, red vs. yellow flowers (experiment 1) and red vs. pink flowers (experiment 2). When both graphs had the same scale, I realized the yellow flower had more consumed than the pink flower or red flower in the competition between the pink and the red flowers. So, the yellow flower was not completely avoided, but just not popular versus the red.	
Conclusions/Discussion I predicted that the red flowers would do better than the yellow flowers, and that part of my hypothesis was correct, according to this experiment. The red flowers tied with the pink flowers which suggests my hypothesis was incorrect. The pink flower brought the red flowers down on the popularity scale. I don't know why the hummingbirds liked the yellow vs. red competition better than red vs. pink. In future research, I will surely study how hummingbirds react to pink flowers.	
Summary Statement My project is about which colors of flowers hummingbirds pick to feed from because of coevolution.	
Help Received Dad introduced me to the idea of this project; Mom encouraged me; Mr. Nelson taught me what made up a good report.	