

# CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

John C. Howell

**Project Number** 

J2012

**Project Title** 

Is Green as Clean?

### **Abstract**

# **Objectives/Goals**

The objective of my project is to find out if green disinfectants are as effective at killing bacteria as regular disinfectants.

## Methods/Materials

Five different disinfectants were used in this experiment, three green and three non-green. The green included Clorox Green Works, Vinegar and water, and Clean Well. the non-green included Lysol, Formula 409, and Windex. Each disinfectant was sprayed on a counter top with raw chicken on it then swabbed and put in an incubator. This was repeated five times and then the average area of bacteria was calculated and analyzed.

#### **Results**

I found that out of my six disinfectants, Formula 409 worked the best, but overall, green disinfectants were more effective than non-green disinfectants.

### **Conclusions/Discussion**

My hypothesis had two parts to it. It said that Formula 409 would work the best and that chemical disinfectants would be more effective than green disinfectants. However, I found that even though Formula 409 worked the best, green disinfectants were more effective, so my hypothesis was partly correct. Information from this project informs us that we don't have to use harsh chemicals to get rid of bacteria, we can use healthier, safer products to get the job done.

## **Summary Statement**

My project is about the effectiveness of "green" disinfectants versus regular disinfectants

### Help Received

Mom helped with display board, Dad assisted with collecting samples