

## CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Lillian J. Williams

**Project Number** 

**S1826** 

#### **Project Title**

# Effect of Biodegradable and Non-biodegradable Car Wash on Pansy Plants

## Abstract

## Objectives/Goals

The purpose for this experiment was to understand how the chemicals we use to wash our cars effect our environment. Also to see if the eco-friendly car washes actually do what they say they do.

#### Methods/Materials

I used 30 pansy plants which I divided into nine different groups(control,25b,50b,75b,100b,25b,50b,75b,100b). I used four different dilutions of each car wash and sprayed it onto the plants. Everyday all the plants received the same a lot of water(15ml). I set all the plants under a growth light.

#### Results

My results was that the non-biodegradable car wash affected the plants posture and the biodegradable car wash affected the plants coloration.

#### **Conclusions/Discussion**

The biodegradable car wash affected the plants in a negative which lead to the discoloration of the pansy. I think that the results occurred because some of the ingredients in the biodegradable soap are harmful to plants. The ingredient has affected the moisture of the plant also photosynthesis of the pansy. The use of different brands of biodegradable and non-biodegradable would make clearer results of what car wash is better for the environment. The non-biodegradable car wash affected the plants posture. If this experiment was to be repeated, the plants should receive more water. These improvements will make the experiment more detailed and believable.

### **Summary Statement**

My experiment was conducted to see if eco-friendly car washes really does help our enivorment.

#### Help Received

My teacher helped me figure out how i was going to mearsure the plants.