

## CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s) Laura D. Jennings Project Number J2015

### **Project Title**

# **Aquatic Plants and Their Different pH Levels**

## **Objectives/Goals**

My project was preformed to see which of 11 different aquatic plants would have the highest pH level when submersed in distilled water and a BTB solution (Bromothymol blue) is added. I believe that the Elodea plant will have the highest pH level.

Abstract

#### Methods/Materials

Eleven different aquatic plants were tested in 100ml. of distilled water and 1.25ml. of BTB. I tested the pH levels and color of the water after both 12 and 24 hours. The different aquatic plants were: Elodea, Anubias, Aquatic Combo, Amazon Sword, Aqua Fern, White Ribbon, Argentine Sword, Umbrella Plant, Peacock Fern, Water Wisteria, and Kyoto Grass. In my research I found that when more CO2 is absorbed then a higher pH is present. If a large amount of CO2 is present in the water then a lower pH value is present.

#### Results

The Water Wisteria had the highest pH level after both 12 and 24 hours, where the Kyoto Grass had the lowest pH level.

#### Conclusions/Discussion

My conclusion is that the Water Wisteria had the highest pH level after 12 and 24 hours. Also plants are Very important to our environment because they help eliminate green house gasses, which destroy our ozone.

I am in the process of conducting more trials using Dry Ice replacing, exhaling thhrough the frosting bag into the distilled water and BTB solution.

#### **Summary Statement**

My project is about the pH levels of 11 different aquatic plantsin water tested in a pH level indicator test kit.Mrs.Bloom

#### **Help Received**

Mrs.Bloom helped me prepare for experiment and encouraged me; Brother helped purchase BTB; Mom helped purchase materials.