CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY

Name(s)
Alejandra Quintero

Project Number
J2317

Project Title
Babies in Danger

Abstract

Objectives/Goals
Test the effect of marine paint on the hatching of marine microorganisms surrounding the area where marine paint is found.

Methods/Materials
MATERIALS:
Wooden beads,marine paint (Interlux), brine shrimp eggs, a petri dish, magnifying glass, 100 ml. graduated cylinder, mini scoop to measure eggs, scoop to measure salt, plastic cups with lids, distilled water, Kosher salt, spoon, trays, a permanent marker, and a ruler.

PROCEDURE:
Measure 100 ml. of distilled water in a plastic cup. Then add 3 scoops of Kosher salt. Mix salt with a plastic spoon until salt dissolves. put a mini scoop of brine shrimp eggs. Close cup with the plastic lid. Repeat the proccess until you have 48 cups. Place 6 cups in each tray. At the end there should be 8 trays full. Then paint 24 wooden beads with marine paint (Interlux). Add a painted bead to every cup in 4 trays that means 24 cups will have a painted bead and the other 24 cups wont(Control Variable). After brine shrimp eggs hatch(5th day), mix cup gently with a spoon. Pour 50 ml. of water, with brine shrimp, into the 100 ml. graduated cylinder. Grab a Petri dish, a ruler, and a marker. With the ruler and the marker draw 2 straight lines to make four equal sections(quadrants). Then, place those 50 ml. of water with brine shrimp from the 100 ml. graduated cylinder into the Petri dish. Count how many brine shrimp are there in each quadrant. The total for each cup should be the sum of the four quadrants multiplied by three. Record data for every test in a data table. Repeat this process until all the cups have been observed. (Don't forget to separate the data of the shrimp exposed to marine paint and the ones not exposed to marine paint).

Results
The results after the testing showed that marine paint affects brine shrimp because the cups that had been exposed to marine paint had a smaller amount of living brine shrimp than the ones not exposed. Therefore the hypothesis was supported.

Conclusions/Discussion
In conclusion the final average of living brine shrimp in the cups exposed to marine paint was 106.95. The average of living brine shrimp in the cups not exposed to marine paint was 187.65. Therefore Marine paint does affect brine shrimp.

Summary Statement
I tested the effects of marine paint on brine shrimp, to see if it was toxic enough to kill the brine shrimp.

Help Received
My parents and my teacher helped me get the materials. Teacher helped setting up project at first.