

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

S1418

Project Title

Doped Up Daphnia

Abstract

Objectives/Goals

What is the effect of drugs on the heartrate of daphnia?

Methods/Materials

Daphnia Magna

standard microscope

droppers/ pipettes

5 petri dishes

beakers (to make solutions)

alcohol

instant coffee

cigarettes

cough syrup

warm water

room temp. water

stirring rod

Results

COUGH SYRUP

I observed that the cough syrup drastically decreased the heart rate of the daphnia. It was not hard to see this under the microscope at all.

ALCOHOL

Although not by much, I observed that some daphnia#s increased while others decreased. The alcohol did not seem to change their heart rate as much as I would have like it too.

CIGARETTES

My results for nicotine were somewhat surprising. I was not able too detect any heart beat except for one of my daphnia that beat once and then I was no longer able to detect any other beating.

COFFEE

I observed that each daphnia#s heart rate slightly increased. Although it was a slight increase, I was still able to easily observe the increase under the microscope.

Summary Statement

I observed Daphnia magna under the microscope, drugged and undrugged, and timed their heartrate.

Help Received

Used lab equipment at school under the supervision of Erin Vaccaro and/or Clint Smith; friends helped time