

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J1917

Project Title

Comparing Different Fish Species as Natural Predators in Controlling Mosquito Larvae Population

Objectives/Goals

Abstract

The purpose of my project is to determine which type of fish will eat the most mosquito larvae in a five minute time period. I have chosen fish that can live in different temperatures and can live in rivers, ponds, lakes and standing water. The reason I'm doing this experiment is because I'm concerned about the West Nile Virus which is spread by mosquitoes. My hypothesis is that the mosquito fish will eat the most mosquito larvae and they will eat the first mosquito larvae in the quickest amount of time.

Methods/Materials

I purchased three Minnows, Goldfish, Mosquito Fish, Koi and Guppies. I gathered five pickle jars and placed three spieces of each fish in the same pickle jar. I put ten mosquito larvae on a screen and dropped them in the jar. I used a stopwatch and timed how quickly the fish ate the larvae in a five minute time period. I repeated this procedure with each spieces of fish. Two different times will be recorded. The first time is how quickly the fish ate the larvae and the second time is how many mosquito larvae the fish ate in a five minute time period.

Results

My hypothesis was not correct. The Guppies ate the most mosquito larvae at an average of 9.9. The Koi fish ate the least amount of mosquito larvae at an average of 7.7. The second part of my experiment timed how quickly the fish ate the first mosquito larvae. My hypothesis was not correct. The Goldfish ate the first mosquito larvae the quickest on a average of 6.2 seconds. The Koi Fish took the longest amount of time at a average of ten seconds.

Conclusions/Discussion

I learned from doing this experiment that the fish I selected will eat mosquito larvae just as well as mosquito fish and can be used to control mosquito larvae population.

Summary Statement

My project is to determine which type of fish will eat the most mosquito larvae.

Help Received

Mother helped time the fish as I observed and wrote times down.