CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)
Dylan D. McMullen

Project Number
36346

Project Title
The Effect of Fertilizers on Mushrooms

Abstract

Objectives/Goals
The objective of this experiment is to determine what benifits the growth of mushrooms the most; water, plant-based fertilizer or animal-based fertilizer.

Methods/Materials
3 Oyster mushroom logs, 3 cardboard boxes, 3 spray bottles, blood meal fertilizer, plant-based compost, 3 gallons of water, a ruler. Three mushrooms logs were used in this experiment, one log was sprayed with water, the second with a plant- based fertilizer the third with a animal-based fertilizer. Over ten days I fertilized and watered each log and I measured the size and the quantity of mushrooms grown. Afterwards, I harvested the mushrooms and recorded size, weight and quantity of mushrooms of each log.

Results
The mushroom log sprayed with the plant-based fertilizer produced the largest and highest quantity of mushrooms.

Conclusions/Discussion
The results of my study show that plant-based fertilizers clearly make a difference in Oyster mushroom growth. Not only was there an increase in the size and weight of the individual mushrooms but in the overall quantity of mushrooms produced from the mushroom log was greater.

Summary Statement
I found that using a plant-based fertilizer on an Oyster mushroom log would produce a greater quantity of larger mushrooms, than if using water or animal-based fertilizer.

Help Received
I conducted my research by myself.