

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

Andrew S. Luksik

Project Number

J1618

Project Title

Worms in Your Future?

Abstract

Objectives/Goals

I will see if vermicompost helps the growth of plants.

Methods/Materials

This project will look at different amounts of vermicompost in a poor soil mix (soil) to see what benefit, if any, vermicompost as a soil additive can be. I used sand as a base and then 10%, 25%, 50%, 75%, and 100% vermicompost. For plants, I chose to use radishes, beans, and primroses and I will follow their growth and make observations to see which combinations of vermicompost and sand are best.

Results

I found out that beans grew best in 100% vermicompost, radishes did best in 100% vermicompost, and primroses did best in 0% and 100% vermicompost.

Conclusions/Discussion

My hypothesis, plants will grow best in vermicompost, was proven to be correct. All the plants are doing well in 100% vermicompost.

Vermicompost contains nutrients which benefit plant growth. Therefore, the plants growing in the higher concentrations of vermicompost have more nutrients available for growth. This was evident in all the plants. In the future it would be interesting to perform this experiment with different kinds of plants and in different growing seasons.

Summary Statement

My project will test different ratios of vermicompost to discover what benefit vermicompost is to plant growth.

Help Received

I used a commercial greenhouse to grow my plants and protect them from freezing temperatures.