CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY

Name(s)
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Project Number
J1906

Project Title
UV Light and Plants

Abstract

Objectives/Goals
Whenever someone gets a tan or sunburn, regardless of where they are, they are being affected by ultraviolet rays. These rays do much more than color a person#s skin, though. They help the human body produce vitamin D, ant they are used in science. This experiment tested the effects of ultraviolet rays on Mung beans. The hypothesis was that the UVB rays would affect the plants in a negative way.

Methods/Materials
There were four test groups: UVA, UVB, UVC, and control. Each group had fifty plants, making a total of two hundred plants. Each plant was potted and placed under their respective light. Each light was kept on during the day, but turned off during the night, and each group received water daily. The height was recorded daily for twenty-five days.

Results
The experiment results proved the hypothesis correct. UVB had the most negative effect on the plants. The UVB had the lowest growth average of 2.39 cm, and UVA had the second lowest average of 2.6 cm. UVC had the growth average of 4.26 cm, and control had a growth average of 4.15 cm.

Conclusions/Discussion
The types of ultraviolet rays do affect the growth of plants. UVB affects plants in a negative way. Therefore, the hypothesis was proven correct. The UVB group had the least growth. The results of this experiment show that plant growth could be effected if ultraviolet rays become more intense, and other life on earth could also be affected as well.

Summary Statement
My Project was about the effects of different kids of Ultraviolet radiation on the growth of plants.

Help Received
My father helped me gather materials.