CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
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Project Number
J2012

Project Title
Salty Solutions

Abstract

Objectives/Goals
The reason I did this experiment is to see if plants would grow in saltwater. If not saltwater, different salt solutions. Specifically, I tested the different salt solutions on mung beans, and their ability to germinate with different amounts of salt.

Methods/Materials
I had three trials to my experiment for each different solution. I used petri dishes and each petri dish held ten mung beans. My control was water and as you would think, by the end of the three-day experiment, all of the sprouts in the three petri dishes had germinated.

Results
The 100% salt solution had a few sproutings but the mung beans were unhealthy. The in-between solutions varied. The ones closest to the saltwater solution had less growth but gradually, when the solution goes to become closer to the control, the number of mung beans germinated became greater.

Conclusions/Discussion
My experiment lead to the conclusion that plants can be grown with saltwater, but grew more efficiently as the salt levels in the solution decreased. As land and water become less available, we should consider saltwater for growing food.

Summary Statement
My project is about the possibility of growing plants in saltwater.

Help Received
I used lab equipment at school under the supervision of my teacher, and her help also with the graph.