CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
J0621

Project Title
Determining Which Soils Best Stabilize Buildings During an Earthquake

Abstract

Objectives/Goals
My objective was to see what potting soil mixture would have the greatest amount of fish weights standing up after five seconds, ten seconds, and fifteen seconds. My hypothesis was that the potting soil with landscape stone would work work best for all of the intervals.

Methods/Materials
I used fou intervals to see what would work ther best. They were potting soil plus pumice, pottring plus walk-on mulch, potting soil plus landscape stone, and potting soil by itself. Then I simulated an earthquake by using a massager to shake a storage box. I used fish weights in place of buildings.

Results
Potting by itself would best for five seconds and ten seconds.The walk-[on mulch plus potting soil was the worst for the five and ten second intervals. The lqndscape stone worked best for the fifteen second interval.

Conclusions/Discussion
The results did not support my hypothesis for the five and ten second intervals. It did support my hypothesis for the fifteen second interval. My project us a better understanding of what we could use as base soils to stop the damage of earthquakes.

Summary Statement
In my project I wanted to see what soil mixture would hold the most buildings.

Help Received
Mother helped put boarsd together