

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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Project Number

J0712

Project Title

Soil Saturation

Abstract

Objectives/Goals

My project was to determine which soil samples could hold the largest amount of water. I believe that the fine sand will absorb the most water and take the longest to fill with water.

Methods/Materials

Four measuring cups the (exactly the same) filled with the same amount of each different soil. One measuring cup had coarse sand, another had potting soil, the third had fine sand, and the last had clay. The soils were measured with the same amount of soil in the measuring cup and water was injected in three trials.

Results

The particles in the potting soil were larger and had more space between them, and consistently held the most water while the particles in the clay consistently held the least because the particles are smaller and more compacted.

Conclusions/Discussion

My conclusion is that is that potting soil overall held the most amount water, my hypothesis was wrong. The fine sand did not hold the most water. When you go to build a house you need to make sure you have soil composition tests and also soil compaction results. Land can shift because of soil saturation.

Summary Statement

This project looks at a variety of soil types and the differences in soil saturation.

Help Received

Mother took and printed pictures.