

CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

Maximilien Moreno

Project Number

J1115

Project Title

Earth, the Great Decomposer

Abstract

Objectives/Goals

My goal was to prove that Holtville's soil will decompose oranges at a faster rate than Calexcio's or Niland's soil. I predict this because Calexico's soil is a mix between silt and clay. Niland's soil is clayish, and Holtville's soil is sandy, therefore it allows more air to move through the dirt along with bugs that eat move through the sandy soil which makes a quicker decomposition on the oranges.

Methods/Materials

I used three different landfill soil, placed in five, one gallon plastic containers that had holes in the bottom for drainage. I also placed an eighth piece of an orange in each landfill container covered with the different soils. I had a scale to weigh each piece of orange before I placed it in the dirt and after I removed it from the dirt, water to wet soils, labels to identify all containers.

Results

The result was obvious because of the air and bugs that move through the sandy soil in Holtville's landfill made the oranges break down faster for a quicker decompostion.

Conclusions/Discussion

My conclusion was correct, Holtville's landfill decomposed the oranges at a faster rate than Calexico and Niland because the sandy soil in Holtville's landfill makes it possible for air and bugs to speed the decomposition process.

Summary Statement

My project is about the type of soil needed to cause a quicker decompotion in the Imperial Valley landfills.

Help Received

Mother and father drove, with art work, and proof read for grammerical error.