

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

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Project Title

Less Is More

Abstract

Objectives/Goals

My objective was to find out if motor oil slows the evaporation of water in order to conserve water in field agricultural operations.

Methods/Materials

Fill 6 cups of water 6cm (120mL of water) in height. Add 1 cm of oil (20mL) to three of the cups of water. Each set of cups will consist of one cup of water and one cup of water with oil. There will be 3 sets total (cup of water and a cup of oil/water). Monitor the evaporation daily for one week. Analyze and graph the results.

Results

The motor oil did slow the evaporation of water. Day one: no change in water height or oil/water height. Day two: cups of water only down to 5.5 cm, whereas oil/water down to 5.3 cm. Day three: cups of water only down to 5.25 cm, whereas oil/water down to 4.75 cm.

Conclusions/Discussion

In my conclusion since the motor oil slows the evaporation it should help people buy less water. Water conservation in agriculture operations is very important. It is essential to find effective ways to conserve water. Even though this experiment used motor oil, using biodegradable oils maybe a safe, efficient and effective water conservation tool.

Summary Statement

My objective was to find out if motor oil slows the evaporation of water in order to conserve water in field agricultural operations.

Help Received