

CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s)

Rebecca E. Starr

Project Number

J1031

Project Title

During Drought Mulch Matters

Abstract

Objectives/Goals

The object of this study was to determine which mulch, black plastic, hay, bark nuggets or plain soil retained more water over a six day period.

Methods/Materials

4 ceramic stakes, 4 wine bottles, black plastic, hay, bark nuggets, plain soil, 2 garden beds. Wine bottles filled with 800ml of water, marked with 50ml increments, over six days measurements were taken of how much water was used by each mulch.

Results

The bark nuggets used the least amount of water, after the six day test period, also showing it had the lowest evaporation rate.

Conclusions/Discussion

The best mulch to use in a garden to prevent water waste is bark nuggets. Landscape owners and farmers will be able to save water by using the mulch that retains the largest amount of moisture.

Summary Statement

I tested black plastic, hay, bark nuggets and plain soil to see which one would retain the most water.

Help Received

I set up and gathered results for this experiment myself. My science teacher, Mr Semple reviewed my procedure and results.