

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Project Number

Cosette Monson

J1819

Project Title

Water Uptake Rate of Drought Resistant Shrubs

Abstract

Objectives

The objective of this project is to determine which drought resistant shrub has the lowest water uptake rate out of boxwood, Russian sage, and rosemary.

Methods

I tested the water uptake rate of drought resistant shrubs using an H-type (bubble) potometer and a stopwatch. I used clippings from the three types of shrubs: boxwood, rosemary, and Russian sage.

Results

I recorded multiple trials for each type of shrub and found that Russian sage had the lowest water uptake rate. The Russian sage's average rate was 0.62 cm/s, boxwood's was 1.28 cm/s, and rosemary's was 0.49 cm/s.

Conclusions

Russian sage had the lowest average water uptake rate. Based on my results, Russian sage would be the best choice for a consumer as a drought resistant plant that conserves water out of the three shrubs.

Summary Statement

I compared water uptake rates of the drought resisant shrubs, rosemary, boxwood, and Russian sage.

Help Received

I recieved feedback and advice from my science fair mentor and my science teacher guided me through the scientific process.