

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

Andrew Shimshock; Philip Zehnder

Project Number

J1934

Project Title

Evapo-licious: An Investigation into Evapotranspiration

Abstract

Objectives/Goals

To determine if the number of stomata and surface area have any correlation to the evapotranspiration(ET) rate.

Methods/Materials

The set-up used included 3 types of plants, USB humidity sensor, dirt, cups and zip-lock bags. Plants were planted in dirt, they were placed in a zip-lock bag with the sensor and it took readings which were graphed on Excel

Results

The blue fescue had the highest ET rate but the mint had the most surface area. It is believe that fescue would not be the ideal roofing material do to its low surface area. Mint would be the most ideal because of its high surface area and number of stomata.

Conclusions/Discussion

At first it was thought that the mint was going to transpire the most due to its high surface area and dense leaf structure. After tests we found that the fescue had the highest rate of transpiration.

Summary Statement

An investigation into evapotranspiration

Help Received

A college professor helped with experimental set up; Dad helped us use an electron microscope. Mom helped with editing.