CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY

Name(s)
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Project Number
J1929

Project Title
Forever Green? Keeping Christmas Trees Fresh

Abstract

Objectives/Goals
The purpose of my project is to see what will help fresh cut Christmas trees stay fresh longest.

Methods/Materials
I did an experiment and conducted a web survey. In the experiment I cut 16 Douglas fir branches and put four each in either plain water, vinegar water, sugar water, or bleach water. Two of each four I sprayed with anti-transpirant Cloud Cover. I weighed them on the first day and then twice a week for four weeks. I also conducted a survey where I sent out questions about how people who bought trees at a tree farm kept their trees at home and how fresh the trees were on Christmas Day.

Results
Branches in plain water stayed freshest, keeping an average of 87% of their original weight. Branches in sugar water or bleach water kept about 60% of their weight. Branches in vinegar water did the worst, losing their needles and keeping only 29% of their weight. Branches with Cloud Cover kept 7% more of their weight than branches without Cloud Cover. The survey showed that people who re-cut their tree at home did not have fresher trees but people who let the water run out had less fresh trees in the end.

Conclusions/Discussion
There are many ideas about how to keep trees fresh. My project suggests that adding things to the water may not help. Spraying on Cloud Cover and making sure the tree does not run out of water may give the best results.

Summary Statement
My project explored through an experiment and survey how to keep Christmas trees fresh after they are cut.

Help Received
My Dad helped me analyze my data.