CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
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Project Number
J1108

Project Title
Hidden Hazard During the Holidays

Abstract

Objectives/Goals
The question I#m trying to answer is how flammable these five species of trees are if people fail to water their Christmas tree during the holidays. The conclusions I reach will help people to realize the dangers of having a dry Christmas tree in their home.

Methods/Materials
I used the following materials: 1. Leylandii Cypress Tree; 2. Douglas Fir Tree; 3. Noble Fir Tree; 4. Mondell Pine Tree; 5. Italian Stone Pine Tree; 6. Masking Tape; 7. Ruler; 8. Water; 9. Tree Clippers; 10. Measuring Cup; 11. Plastic Ties; 12. Temperature Gauge; 13. Carbon Monoxide Monitor (Gastec GT 402); 14. Scale; 15. Watch; 16. Timer; 17. Sharpie Pen; 18. Five 5 Gallon Buckets; 19. Measuring Tape; 20. Cameras; 21. Paper; 22. Indoor/Outdoor Thermometer; 23. Notebook; 24. Matches; 25. Fireplace; 26. Pen; 27. Candle.

Results
Ranked average outcome in carbon monoxide level.
TREES AVERAGE CO LEVEL
ITALIAN STONE PINE 229 PPM
MONDELL PINE 177 PPM
DOUGLAS FIR 176 PPM
NOBLE FIR 137 PPM
LEYLANDII CYPRESS 131 PPM
Ranked average outcome in temperature.
TREES AVERAGE TEMPERATURE
ITALIAN STONE PINE 582.4°F
DOUGLAS FIR 530°F
NOBLE FIR 460°F
MONDELL PINE 417.5°F
LEYLANDII CYPRESS 414°F
Ranked average outcome in time.
TREES AVERAGE TIME
MONDELL PINE 46 SECONDS
LEYLADNII CYPRESS 39 SECONDS
ITALIAN STONE PINE 37 SECONDS

Summary Statement
My experiment is to test the flammability of different species of trees in various stages of dryness. The question that I am trying to answer is how flammable these five different species of trees are if people fail to water their trees.

Help Received
My parents hepled me buy the trees, provided the transportation to bring the trees home, building to stand to hold the trees, cutting off the branches, burning the trees in the fire place, taking pictures of the burning branches, measuring Carbon Monoxide and Temperature levels. My computer teacher showed me how to