CWSF 2012 - Charlottetown, Prince Edward Island

Peter Issekutz

Finding Natural Fire Retardant Solutions

Challenge: Environment
Category: Intermediate
Region: Halifax
City: Halifax, NS
School: Fountain Academy of the Sacred Heart
Abstract: Potential natural alternatives to harmful chemical fire retardants were examined. Cotton squares were soaked in test solutions and exposed to a flame The amount burned after 15 secs was evaluated. Grape juice and lime juice, especially in combination, were potent fire retardants. Lanolin and horseradish were less effective.This project demonstrated that fruit juices, or their components, are potential alternatives to chemical fire retardants!

Biography

I live off the east coast of Canada in Halifax, Nova Scotia. In my spare time, I sail and do underwater photography in the summer, and compete in fencing in the winter where I have won several medals. My backyard continues into the park and I have gone on many hiking trips. Most of these forests have stood for at least 100 years, and their beauty still awes many today. That is why when a man made forest fire ravaged the forests in my district, turning them into mounds of ash and branches. I was determined to find a solution to this problem and others linked to the destructive forces of fire, while avoiding the larger threats of pollution and global warming. I read about the harm that some chemical fire retardants do to the environment, so I chose to find more natural fire retardant solutions. In further studies I would locate the components of grape and lime juice which slow down the burning process. I also do lots of performing arts such as singing and acting in my free time which helps which helps boost confidence and eliminate nervousness when presenting to the judges!

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	$300
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 300