

## CWSF 2010 - Peterborough, Ontario



### Madalyn Light, Emma Walker

#### OLE (Olive Lichen Extraction)

**Division:** Earth & Environmental Sciences

**Category:** Intermediate

**Region:** Central Okanagan

**City:** Kelowna, BC

**School:** Kelowna Senior Secondary

**Abstract:** Usnic acid was extracted from *Usnea hirta*. The extract was transferred into olive oil to create a solution that could be used as sunscreen. The sample was then run through a spectrophotometer to determine UV absorption. These results were used to calculate SPF. The results indicate that a sunscreen is possible, although an increased concentration of usnic acid is required for a reasonable SPF.

#### Biographies

Madalyn - My name is Madalyn Light. This is my 3rd national science fair. I was born in Al-Khobar Saudi Arabia. I participate in activities like dance, air cadets, drawing, hiking and painting. My favorite band is Anberlin. I hope to get the tour that goes to Toronto. For college I want to get RMC. My career goal is to become a pilot.

Emma - Hi, I'm Emma Walker. I am part of team B.C. this year for the third time. I am participating in archery, soccer, air cadets, ballet and choir. I lived in Switzerland for a year when I was younger. I discovered that my favorite food is deep fried haggis with chips, when I visited Scotland this summer. My favorite book genres are fantasy, science fiction and historical fiction. I love medieval, Jacobite and Renaissance history. I am a big fan of Harry Potter and Lord of the Rings. I love art and music. I play the Irish whistle and piano. I recently got a flute and am working on learning it as well. I also want to learn the bagpipes. My favorite...

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040