

## CWSF 2009 - Winnipeg, Manitoba



### Emma Walker, Madalyn Light

#### UV Radiation-Free, Naturally

**Division:** Biotechnology / None

**Category:** Intermediate

**Region:** Central Okanagan

**City:** Kelowna, BC

**School:** Dr. Knox Middle School

**Abstract:** For our experiment we extracted pigments out of lichens with hexane. We tested six different species of lichen by running their extractions through a spectrophotometer and analyzing the amount of UV light absorbed. We decided to find out what compounds were being extracted and possibly doing the absorbing by using FTIR. We were trying to find out if lichen extracts could be used in sunscreen.

#### Biographies

Emma - I am 14 and in grade 9 at Dr. Knox School. My mom, dad and I lived in Switzerland for a year when I was two years old while my dad was on sabbatical. Some activities I enjoy are swimming, skiing, pond hockey, kayaking, hiking and soccer. I love drawing and reading novels such as the Harry Potter series and the Redwall series, as well as science fiction books such as, A Wrinkle in Time and On Thin Ice (which is about how Global Warming might affect the Arctic). At the moment, I play piano and soccer but in the past I have done choir, windsurfing, sailing, gymnastics, ballet, Irish dance, horseback riding, volleyball, pottery and field hockey. ...

Madalyn - My name is Madalyn Lorraine Light. I was born in Al-Khobar Saudi Arabia on September 23 1994. I'm in grade 8 and I am 13 years old. I go to Dr.Knox Middle School. I live in Kelowna, British Columbia. When I was little I traveled to several places like Greece, London, Bahrain and France. I love doing crafts, swimming, hiking, sewing and drawing. Ice hockey is my favorite sport. My favorite animal is the elephant and I love the colour purple. My hobbies are collecting miscellaneous items like jewelry, pennies, stuffed animals and rocks. Another hobby is photography. I love taking pictures of random stuff and pictures of the outdoors. After I...

#### Awards

#### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Biotechnology & Pharmaceutical Sciences Intermediate Sponsor: Youth Science Canada	\$300
Total	\$1 300

