

## CWSF 2008 - Ottawa, Ontario



### Emma McBoyle, Amie MacDonald

#### Biomining

**Division:** Biotechnology / None

**Category:** Intermediate

**Region:** Halifax

**City:** Dartmouth, NS

**School:** Dartmouth High School

**Abstract:** The fungus *Pycnoporus cinnabarinus*, lichens *Cladonia rangiferina* and *Usnea fillipendula*, and the seasonings garlic, turmeric and jalapeño pepper were tested for antimicrobial properties against *Escherichia coli* DH5?, a Level 1 human pathogen. Antibiotics streptomycin and ampicillin were used as positive controls. Negative controls were also run. Of the test species only garlic was found to demonstrate antimicrobial properties. The characteristics of garlic were further investigated.

#### Biographies

Emma - My name is Emma McBoyle; I am 16 years old and am currently attending Dartmouth High School. I am involved in many school activities such as Student Council, Flute Ensemble, grade 10 band and grade 11/12 band. In my spare time, I take many dance classes at Coastal Dance. I enjoy studying a large variety of styles such as Ballet, Modern, Hip Hop and Jazz. I am also a member of the Coastal Dance Theatre Company which is a small group of dancers who perform shows for the public twice a year. I am also a member of the Coastal Dance Hip Hop Team. I have had many accomplishments throughout the years. Some awards include Taking Steps to Fly Young Ch...

Amie - Amie MacDonald is a grade 10 student at Dartmouth High School in Dartmouth, Nova Scotia. She is involved in many extra-curricular activities, playing tuba, double bass, and clarinet in several bands, ensembles and orchestras. She also plays soccer, basketball and tennis. Her interests include: hiking, canoeing, camping, art, horses, piano and guitar.