

# CWSF 2011 - Toronto, Ontario



## Ellen Song

### Apple Aroma: Enhancement of Apple Volatile Production Using Precursor Treatments

**Challenge:** Innovation

**Category:** Senior

**Region:** Annapolis Valley

**City:** Wolfville, NS

**School:** Horton High School

**Abstract:** The production and characterization of apple volatiles were investigated by chemical and sensory studies. Apples were exposed to specific precursor solutions and it was found that treated apples had greater levels of aroma volatile production compared to the control. This shows that apple aroma can be enhanced and improved. Unique volatile profiles can be generated by apples, which has potential for commercial applications.

#### Biography

I am a grade 11 student at Horton High School, where I am part of the Students Council Executive, and participate in many other school groups and activities, such as peer tutoring. I also ran on the cross country team and went to provincials. The fine arts are also a very important part of my life, I am currently enrolled in the advanced art program at school, and I am a member of the choir, Concert band, jazz band in which I play trombone. I was also a member of the Acadia University Symphonic band, in which I played flute. I also play piano, I have done so for 11 years and last year, I placed first in the junior piano category at the Provincial Music Festival. I have completed all RCM requirements for grade 10 piano, and am currently working on my ARCT in piano performance. I have done science fair projects for as long as I can remember, but this is my first year going to the CWSF, and I am really looking forward to it. In the future, I want to major in chemical or biochemical engineering.

#### Awards

#### Value

International Year of Chemistry (MILSET ESI) Award Sponsor: Canadian Commission for UNESCO	\$5 000
Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	\$700
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
<b>Total</b>	<b>\$14 200</b>