

## CWSF 2005 - Vancouver, British Columbia



### Kate Holden-Boyd

#### **Biodiesel: The Boater's Choice? The Effects of Biodiesel and Diesel in a Lettuce Seed Bioassay**

**Division:** Earth & Environmental Sciences

**Category:** Junior

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Crofton House School

**Abstract:** Biodiesel is a cleaner-burning renewable alternative to petroleum-based diesel fuel. Lettuce seeds were incubated with various concentrations of biodiesel and diesel to compare their effects on lettuce seed germination and root elongation. Results showed that biodiesel was as toxic and perhaps slightly more toxic to lettuce seeds than diesel.

Awards	Value
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Earth & Environmental Sciences - Junior Sponsor: Petro-Canada	\$700
Total	\$2 200