

# CWSF 2010 - Peterborough, Ontario



## Sarah Hyslop

### Antibacterial Properties of Plant Oils

**Division:** Earth & Environmental Sciences

**Category:** Intermediate

**Region:** Calgary Youth

**City:** Calgary, AB

**School:**

**Abstract:** My project determined whether reputed antibacterial properties of plant oils are true. Using the disc diffusion method, I tested eight plant oils against three bacterial strains. Based on these results, I tested combinations of five oils to determine whether synergy exists. Results showed that some plant oils have the ability to restrict bacterial growth and that antibacterial activity increases when oils are used in combination.

#### Biography

My name is Sarah Hyslop and I am in grade 9. This is my second year at the Canada Wide Science Fair, and fifth year in the Calgary Youth Science Fair. I have been working at the University of Calgary on my project: "Antibacterial Properties of Plant Oils". At the Calgary Youth Science Fair this project won the Biochemistry and Experimental Biology Award and the Government of Alberta Travel Scholarship. At the Sanofi-Aventis Biotalent Challenge, I placed third and won the elevator pitch with this project. My previous years projects were "Horseshoe Crabs: Beneficial Blue Bloods", receiving a bronze medal at the CWSF and the Biochemistry and Experimental Biology Award at the CYSF, "Bats and their Benefits", winning the Professional Biologists of Alberta Award, "Can Cats See in Color?", receiving the Alberta Teachers Award, and "Spectacular Spider Silk", receiving the Genome Alberta Award. Besides science and animals, I enjoy scuba diving, and have been a junior open water diver for three years. My most exciting dive so far has been seeing a five foot Nurse Shark. Trampoline and tumbling, squash, skiing, playing Wii, travelling and reading keep me busy. I am looking forward to travelling to Italy after the CWSF.

#### 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
<b>Total</b>	<b>\$1 300</b>