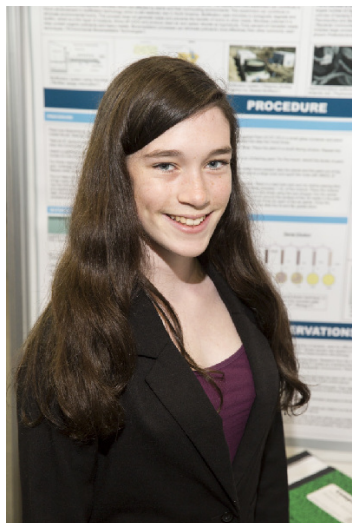


CWSF 2015 - Fredericton, New Brunswick



Rebecca Baron

Root Microbiomics: The Next Big Thing?

Challenge: Environment

Category: Intermediate

Region: Greater Vancouver

City: Vancouver, BC

School: Prince of Wales Secondary

Abstract: This experiment was conducted to identify which rhizosphere bacteria thrive in an indoor plant's root system when exposed to high concentrations of airborne formaldehyde (CH₂O). *Pseudomonas putida* (from the phylum Proteobacteria) was the most prominent colony in the rhizosphere microbiome.

Biography

Rebecca Baron is a grade 9 student currently attending Prince of Wales Mini School in Vancouver, B.C. This is her second consecutive year attending CWSF. Last year, she acquired a gold medal at the Greater Vancouver Regional Science Fair (GVRSF), the Vancouver School Board Award, BC Science Teacher's Award, UBC Life Sciences Award, a bronze medal at CWSF and the Renewable Energy Award, with her project Household Plants, The New Air Purifiers. In her spare time she enjoys reading, dancing, biking and skiing in Whistler, B.C. Rebecca was a competitive rhythmic gymnast since she was eight years old. Over the course of five years, she received 6 gold medals, 2 silver medals and 19 bronze medals in gymnastics. When she learned that high concentrations of volatile organic compounds (VOCs) contribute to 1.6 million deaths annually (as recorded by the World Health Organization), Rebecca was inspired to find a solution. Next year, she will continue to study root microbial colonies. Rebecca would advise other students to work on a project they are passionate about.

Awards

Value

Challenge Award - Environment - Intermediate Sponsor: Youth Science Canada	
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$250
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Platinum Award - Best Intermediate Project Sponsor: Youth Science Canada	\$1 000
Total	\$5 250