

CWSF 2014 - Windsor, Ontario



Rebecca Baron

Household Plants, the New Air Purifiers

Challenge: Environment

Category: Junior

Region: Greater Vancouver

City: Vancouver, BC

School: Prince of Wales Secondary

Abstract: This experiment compares how two household plants use phytoremediation to improve indoor air quality. *Selaginella kraussiana* (moss) and *Crassula atropurpurea* (succulent) reduced volatile organic compounds emitted from paint fumes at an accelerated rate yet the *Selaginella Kraussiana* was more effective.

Biography

I am a grade 8 student at Prince of Wales Mini School in Vancouver, B.C. I have been a competitive rhythmic gymnast since I was eight years old and I competed in the 2013 Western Regional Rhythmic Championships last year. At numerous gymnastic competitions, I have received 6 gold medals, 2 silver medals and 19 bronze medals. I am also an avid skier and I travel to Whistler every weekend to ski. During my spare time I enjoy reading books written by some of my favourite authors, such as Charles Dickens, Shakespeare and J.R.R. Tolkien. My mother's health concerns inspired me to conduct this project. She is an asthmatic and air pollutants, such as paint, affect her health negatively. Next year, I would like to pursue this project further by developing a better understanding of the different ways arid and tropical plants use their root and leaf systems for phytoremediation. I would advise other students find a topic that is both compelling and scientific. ?

Awards

Value

Renewable Energy Award - Junior Sponsor: Ontario Power Generation	\$500
Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 600