

CWSF 2016 - Montreal, Quebec



Sophie Hoyer Pacholek

The Genius Genus: Aspen Adaptations

Challenge: Discovery

Category: Junior

Region: Calgary Youth

City: Calgary, AB

School: Louis Riel Elementary Junior High School

Abstract: This project investigated if genetically identical clonal groups of naturally occurring aspen trees grew in a spatial pattern. When no definable pattern was observed in two mapped areas, an attempt to determine genetic relationships was initiated. DNA was extracted from catkin buds, PCR analysis was performed, and the results showed that a subset of trees were not genetically related.

Biography

Hi, I'm Sophie Hoyer Pacholek, currently a grade 7 student at Louis Riel School in Calgary. Ever since I was 9 I've wanted to work as an aeronautics engineer for NASA, and science fairs have been about expanding my learning in a variety of fields. In addition to science, I love classical and jazz music and burying my nose in a good book. I'm inspired by the natural world, and enjoy hiking in the summer and cross - country skiing in the winter. Science fairs have always been the highlight of my school year, and in the past I've won two mathematics awards and the top elementary award at the Calgary Youth Science Fair. I believe that it is important to engage in science, and I'm looking forward to my first Canada Wide Science Fair.

Awards

Value

Challenge Award - Discovery - Junior Sponsor: Youth Science Canada	
Excellence Award - Junior - Gold Medal Sponsor: Youth Science Canada	\$250
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
McGill University Entrance Scholarship An Entrance Scholarship of \$2,500 is offered to each recipient of a platinum award. Sponsor: McGill University	\$2 500
Platinum Award - Best Junior Project Sponsor: Youth Science Canada	\$1 000
Total	\$7 750