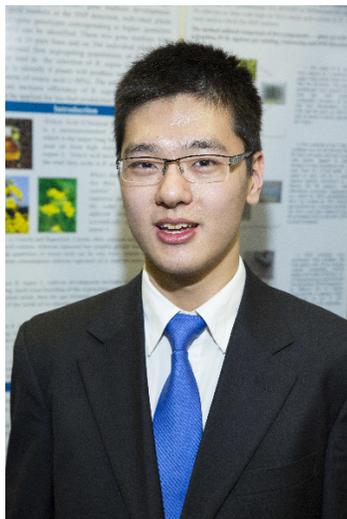


CWSF 2014 - Windsor, Ontario



Benjamin Liu

FAE1 gene markers for identification of high erucic acid Brassica napus plants

Challenge: Resources

Category: Intermediate

Region: Manitoba Schools Science Symposium

City: Winnipeg, MB

School: St. John's Ravenscourt School

Abstract: This experiment's purpose is developing FAE1 gene markers to identify high erucic acid B. napus plants. Procedures include sequencing 64 plant DNA samples for sequences of FAE1 markers. These gene markers were tested on 16 pure lines and then on 384 individual plants from segregating populations of B. napus. These gene markers can identify high erucic acid content plants and are usable for bio-fuel techniques.

Biography

Hi. I'm Benjamin Liu. I go to St. John's Ravenscourt in Winnipeg, Manitoba. I like science, math, music, debating and sports. In recent years, I have begun to do well on math contests, such that I ranked first on the Cayley Contest at my school. In addition, my studies in classical saxophone have brought me success in regional music festivals, and in the near future, I will compete at the Associated Manitoba Arts Festival (Provincials). In the past, I have been heavily involved in volleyball, such that I received the "Coach's Award" for being one of the best players on the team. In addition, I have done exceptionally well in science fairs, which has helped bring me here to Windsor for my first CWSF. For my project this year, I got my inspiration from my last year's project when I asked myself, "How could I go further?" I intend to incorporate some engineering aspects into my project in future years for further investigations, such that I could test bio-fuels and do comparisons between different fuels. Some advice that I would give students that are thinking of doing a project is that: Be patient and persevere; sometimes Science isn't easy.

Awards

Value

Challenge Award - Resources - Intermediate Sponsor: Youth Science Canada	\$750
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$5 450