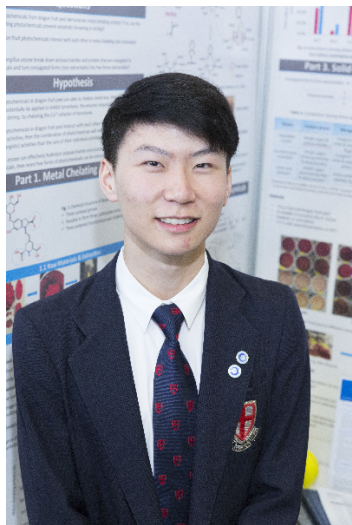


CWSF 2018 - Ottawa, Ontario



Jason Chen

Value-added Phytochemical Cocktail from Inedible Dragon Fruit Peel

Challenge: Resources

Category: Senior

Region: Greater Vancouver

City: Vancouver, BC

School: St George's School

Abstract: Dragon fruits are structurally unique plants indigenous to the Americas. The objectives of this project were to extract chemically active compounds from dragon fruit peels, test the various properties of the peel chemicals, and propose an alternative method of extracting chemicals using microorganisms. The results showed that dragon fruit chemicals have many unexplored merits and can potentially be used as a food preservative.

Biography

Jason Chen, currently attending the 11th grade at St. George's School, is thrilled to attend the Canada Wide Science Fair. In school, Jason is part of the STEM club, which hosts weekly meetings and presentations for young, passionate scientific minds. Jason's passion for molecular biology and organic chemistry also compelled him to participate in a variety of science competitions: he competed in the Greater Vancouver Regional Science Fair for the past four years, and ranked 14th in the national Canadian Biology Olympiad. Jason is very grateful for this opportunity, and looks forward to sharing his project with the future young generation of scientists. Jason Chen's project focuses on dragon fruit peel extracts. Dragon fruits are structurally unique, savory plants indigenous to the Americas. The objectives of this project were to extract chemically active compounds from dragon fruit peels, test the various properties of the peel chemicals, and propose an alternative method of extracting chemicals using microorganisms. The results showed that dragon fruit chemicals have many unexplored merits and can potentially be used as a food preservative.

Awards

Value

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| Excellence Award - Senior - Gold Medal Sponsor: Youth Science Canada | |
| Challenge Award - Resources - Senior Sponsor: Youth Science Canada | |
| Carleton University Entrance Award Senior Gold Medallist - \$4,000 Entrance Award Sponsor: Carleton University | \$4 000 |
| Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science | \$5 000 |
| UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver) | \$4 000 |
| University of Manitoba Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of Manitoba | \$5 000 |
| University of Ottawa Entrance Scholarship Senior Gold Medallist - \$4,000 Entrance Scholarship Sponsor: University of Ottawa | \$4 000 |
| Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University | \$4 000 |
| Total | \$26 000 |