

CWSF 2018 - Ottawa, Ontario



Sabrina Zaidi, Kamron Zaidi

The Effect of Surface Tension on Plant Growth in Fogponics

Challenge: Resources

Category: Senior

Region: York

City: Richmond Hill, ON

School: Richmond Hill H.S.

Abstract: Our project explores the impact of reducing the surface tension of water growing lettuce in a fogponics unit, where roots are suspended in fog. The experiment shows that reducing the surface tension in fogponics promotes leaf growth, uses less water, and uses less fertilizer than in traditional fogponics. This proves that using surfactant in fogponics can help solve the resource depletion crisis of the future.

Biographies

Sabrina - Hello, I'm Sabrina Zaidi, a 16 year old grade 11 pre-AP student of Richmond Hill High School. I grew up with my twin brother in Richmond Hill. I currently enjoy spending my free time as an avid figure skater and assistant skating coach. I also do ballet, and recently took the 8th grade Royal Academy of Dance ballet exam. I have various other hobbies, including camping, hiking, fishing, skiing, playing ukulele, and listening to rock music. At school, I play the flute in the national-level RHHS Gold Band, I'm the president of Breakfast Program, and founding president of Neuroscience Club. Spending lots of time outdoors made me attached to this w...

Kamron - I'm a Grade 11 student at Richmond Hill High School, and this is my third Canada-Wide Science Fair. I love science, engineering, and mathematics, and I have competed in several competitions pertaining to those subjects. Additionally, I enjoy music, and I play the piano, bass clarinet, and recorder. Our high school senior band, which I am a part of, is competing at the Music Fest Canada ("The Nationals") at the same time as CWSF. Other than academic activities, I am a figure skater, and I also help teach kids how to skate. In the future, I plan on studying nanotechnology engineering at Waterloo or machine learning at University of Toronto. Me ...

Awards

Value

Nutrients for Life Foundation Award - Senior Sponsor: Nutrients for Life Foundation Canada	\$1 000
Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Silver Medallist - \$2,000 Entrance Award Sponsor: Carleton University	\$2 000
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$11 500