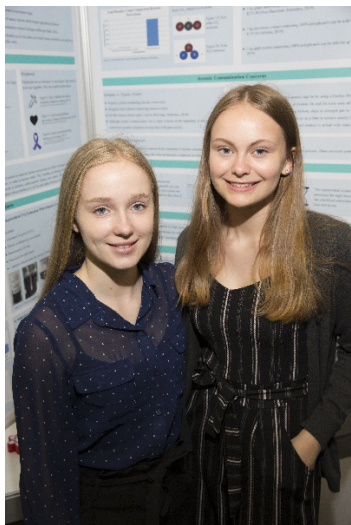


CWSF 2019 - Fredericton, New Brunswick



Megan Downe, Avery Nicholson

Ulva lactuca: Subcritical Water and Supercritical CO₂ Extractions

Challenge: Innovation

Category: Intermediate

Region: 4-H Canada

City: Hunter River, PE, New Glasgow, PE

School: Bluefield High School

Abstract: The objective of this project is to study the macroalgae *Ulva Lactuca* and determine potential human uses for the plant in relation to proteins and polyphenolics. Harvesting this plant would result in more breathable rivers and benefit the economy as well.

Biographies

Megan - My name is Megan Downe and I'm sixteen years old. This is my second time attending CWSF and I'm very excited to be back. At school, I am a member of the student council as well as the travel club. I also dedicate a lot of my time to my 4-H club. In the future, I hope to pursue a career in medicine or another science. My project was inspired when my partner and I began to notice a sulfuric odor coming from the rivers in PEI. This odor came from the decomposition of *Ulva lactuca*, an over-growing species of seaweed that causes problems for the ecosystem. We learned that *Ulva lactuca* contains valuable components such as proteins and polyphenols. ...

Avery - My name is Avery Nicholson and I am 15 years old. I play curling competitively, and am a member of my school's triple A volleyball team. In addition to sports, I am a member of 4-H. The idea of our project came from seeing the effects of an abundance of sea lettuce in the rivers of PEI. We decided to find a use for this plant in order to benefit the environment, but also improve human prosperity. In the future, I aspire to become a psychiatrist. I would advise other students thinking of doing a project to find a topic you are interested in. If you are passionate about your project, then it will not seem like a bunch of work and will be more e...

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000

