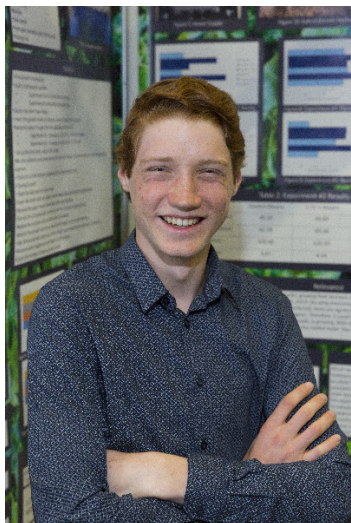


## CWSF 2018 - Ottawa, Ontario



### Jonathon Macmillan

#### Supercharged Salad

**Challenge:** Resources

**Category:** Intermediate

**Region:** Chignecto West

**City:** Brookfield, NS

**School:** South Colchester Academy

**Abstract:** In this project electricity was applied to a hydroponics system to determine if it would increase the growth of kale, a common salad green. The electrified plants were shown to have a statistically significant increase in plant height at 2 and 3 weeks and in the number of leaves over the non-electrified plants. This new technology could help meet the worlds growing food demand.

#### Biography

My name is Jonathon Macmillan and I attend school at South Colchester Academy in Brookfield Nova Scotia. I play lots of sports such as hockey, soccer and track and field. I also participate in 4-H, where I am taking dairy and woodworking for projects. I came up with my project idea through my extensive research on topics that intrigued me. In the future I would like to apply electro-culture technology to a commercial hydroponics setup to determine a cost to benefit ratio. I would also like to experiment with different voltage levels to see which level has the greatest positive impact on plant growth. If you were thinking about doing a science fair project I would advise you to start early and pick a topic that you really enjoy.

#### 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