

## CWSF 2019 - Fredericton, New Brunswick



### Jonathan Goudreault

#### Microwave Manipulation

**Challenge:** Resources

**Category:** Junior

**Region:** Peace Country

**City:** Peace River, AB

**School:** Glenmary School

**Abstract:** In my project, I tested if the radiation from a microwave over different time periods affected the growth and germination of pea seeds. This project is interesting to me cause I'm a farmer who loves to discover new things about crop production. I hope that my Project can make a difference by showing a different way to improve our yields, providing more food to society.

#### Biography

Hello. I'm Jonathan Goudreault and I and I am a grade eight student at Glenmary School in Peace River, Alberta. Whenever I'm not in school, you can find me on my third generation family farm, usually driving some piece of farm machinery, thinking of cool ideas to try on next year's crop production. Last Fall I was on our tractor, harvesting peas, and I got an idea that became the basis of my Science Fair project. I've always been interested in learning ways to improve crop yields rather than using traditional fertilizers. I brainstormed ideas that could change the way the plants will grow, and wondered how exposure to microwave energy would affect seed germination. I chose to use alaskan pea seeds for this experiment because that is one of the crops we produce on our farm. In the future, I would like to test different variables with microwave exposure such as the effects of letting the seeds sit dormant after microwave exposure for various lengths of time, or possibly also exploring how different levels of microwave radiation over an extended period of time affect plant growth.

#### Awards

#### Value

|   |         |
|---|---------|
| Excellence Award - Junior - Bronze Medal<br>Sponsor: Youth Science Canada                                       |         |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University | \$1 000 |
| Total   | \$1 000 |