CWSF 2018 - Ottawa, Ontario

Owen Gariepy

Fish, Feces and Flora: Aquaponics vs. Hydroponics vs. Agriculture

Challenge: Resources
Category: Junior
Region: Simcoe County
City: Barrie, ON
School: Cookstown P.S.

Abstract: In this experiment, two aquaponic systems, two hydroponic systems, and two agricultural systems were managed for five weeks to compare the growth of lettuce plants. The experiment was repeated for another five weeks with minor changes to accommodate a few of the limitations. It was interesting to discover how fish can help grow plants bigger and faster in comparison to growing plants in soil.

Biography

Owen Gariepy is a grade eight student at Cookstown Central Public School in Ontario. At the Simcoe County Regional Science and Technology Fair he has won bronze (2016), outstanding project display (2017), and silver (2018). This is his first time participating in the Canada-Wide Science Fair. Owen's project, "Fish, Feces and Flora", was inspired by a brochure about "AquaGrow Farms" at the Mississauga Food Bank, which is the first aquaponics food bank in Canada. The idea of aquaponics interested him, and he wondered how it compared to other methods of growing plants. For future investigations, he would use a larger growing area and sample size and test additional plant growing methods such as aeroponics. Owen's hobbies include drawing, reading, curling, and playing various musical instruments. He is also a Corporal in the 102 (Barrie Silver Fox) Royal Canadian Air Cadets Squadron. Owen is interested in the science fair because he likes to conduct research and learn new things. His advice to other students who are thinking about doing a science fair project is that it is a lot of work, but if you pick a topic that interests you, it is both rewarding and a lot of fun.

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