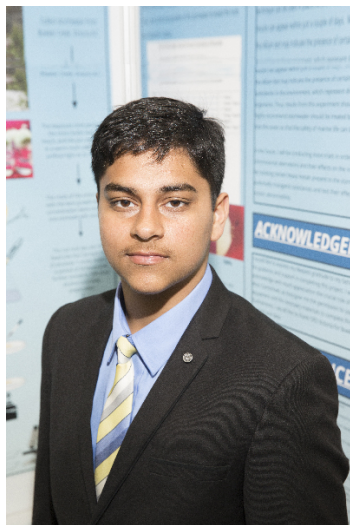


CWSF 2019 - Fredericton, New Brunswick



Rohan Gupta

Cytogenotoxic Effects of Local Stormwater on *Allium cepa* L.

Challenge: Environment

Category: Senior

Region: Vancouver Island

City: Victoria, BC

School: Oak Bay Secondary

Abstract: My project focuses on the effects of stormwater on onions root growth, and I used onions because they have a conserved genetic structure and their roots get exposed to the pollutants very easily. Currently, many places in Canada do not have a fundamental treatment plan for stormwater, so the pollutants present in the water enter the ocean having a direct effect on marine life.

Biography

My name is Rohan Gupta and I am a grade 11 student at Oak Bay Secondary. My inspiration for my project came from my passion for environmental sciences as I have been working immensely with my surrounding ecosystems including Bowker Creek. Presently, I am the Co-Leader of the Environmental Club, in which I actively lead in environmental activities such as Bowker Creek cleanups, invasive species pulling, and restoration projects. Therefore, doing this project I was able to further work with the effects of pollutants in stormwater on the environment, as it is not currently treated in the City of Victoria. Moreover, in the future I would like to isolate certain heavy metal ions present in the stormwater and test their effects on surrounding ecosystems. The advice I would give other students about doing science fair is that to never give up and to always stay passionate about your project. You will always face adversities while working on a project, however the sooner you can realize that it will be easier for you to overcome them. Overall, besides from science fair I am the founder of the STEM club in my school, and I love volunteering at hospitals, connecting with patients.

Awards

Value

Canadian Stockholm Junior Water Prize - Senior Sponsor: Canadian WEF Member Associations, the Canadian Water and Wastewater Association, and Jacobs	\$300
Excellence Award - Senior - Gold Medal Sponsor: Youth Science Canada	
Challenge Award - Environment - Senior Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$5 000
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
University of Manitoba Entrance Scholarship Senior Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of Manitoba	\$5 000
University of New Brunswick Canada-Wide Science Fair Scholarship Gold Medallist - \$5000 Entrance Scholarship Sponsor: University of New Brunswick	\$5 000
University of Ottawa Entrance Scholarship Senior Gold Medallist - \$4,000 Entrance Scholarship Sponsor: University of Ottawa	\$4 000
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$27 300