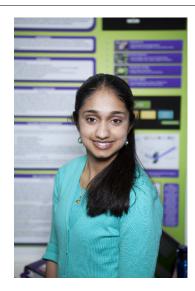




CWSF 2013 - Lethbridge, Alberta



Varsha Jayasankar

Identification of Novel Anti-Microbial Compounds in Curcuma amada

Challenge: Discovery
Category: Senior
Region: Niagara

City: St. Catharines, ON School: Sir Winston Churchill

Abstract: Due to recent outbreaks of antibiotic resistant bacteria, new alternative

drugs are being researched. This project researches an extract created from mango ginger, titled "CACE" (Curcuma Amada Chloroform Extract), and its use against plant and human pathogenic bacteria. CACE is extremely effective in inhibiting the growth of two plant and two human pathogens. Chromatography and Mass Spectrometry was used to identify

antimicrobial compound(s).

Awards	Value
The Manning Innovation Achievement Award	\$500
Sponsor: Ernest C. Manning Awards Foundation	
Challenge Award - Discovery - Senior	\$1 000
Sponsor: Youth Science Canada	
Excellence Award - Senior - Gold Medal	\$700
Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: Dalhousie University, Faculty of Science	
UBC Science (Vancouver) Entrance Award	\$4 000
Senior Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
University of Manitoba Entrance Scholarship	\$5 000
Senior Gold Medallist - \$5000 Entrance Scholarship	
Sponsor: University of Manitoba	
University of Ottawa Entrance Scholarship	\$4 000
Senior Gold Medallist - \$4,000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
Total	\$24 200

Biography

Varsha Jayasankar is a junior at Sir Winston Churchill Secondary School in St. Catharines. She was born in the United States, before moving to Canada in 2002. Her major interest is our environment, the central theme of her science fair projects since grade 6. She has won many accolades and awards in science fairs, including silver at the 2012 CWSF, Best Commercialization Potential at the Sanofi BioGENEius Challenge 2012 and a gold medal at the 2013 NRSEF. Varsha's efforts helped her win the Elementary Age Environmentalist award in the Niagara region in 2009. She is in numerous philanthropic activities such as fundraising to facilitate eye surgeries to the less-fortunate in India and donating to orphanages. Music is also one of Varsha's interests, as she is in Grade 8 piano and is a member of her high school's orchestra, playing the violin. She also is a member of her school's Reach team, qualifying for the Ontario Provincial Championships. Varsha is also a member of her school's gymnastics team, specializing on the balance beam and vault. Varsha's other interests include drama and dance. With a 96% average, Varsha plans to attend University, pursuing a degree in biological science.





