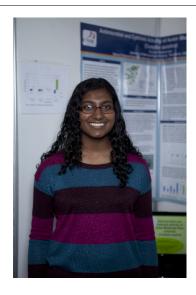




CWSF 2013 - Lethbridge, Alberta



Dimalka Ranasinghe

Antimicrobial and Cytotoxicity Activity of Centella asiatica

Challenge: Health
Category: Senior
Region: River Valley
City: Miramichi, NB

School: James M. Hill Memorial High School

Abstract: An experiment was performed to evaluate the antimicrobial and cytotoxic

activity in extracts of Centella asiatica. The tested pathogens were Staphylococcus aureus, Pseudomonas aeruginosa, Mycobacterium tuberculosis and Candida albicans. The methanol extract inhibited the M. tuberculosis growth by 73.63%. A bioassay was performed for anti-cancer effects against MB 231 human breast cancer cells. The aqueous extract induced apoptosis approximately 60% of the PAC-1 positive control.

Biography

My name is Dimalka Ranasinghe. I'm currently in grade 11 attending James M. Hill Memorial High School, Miramichi, New Brunswick. My favourite subject is Biology, which has always been my fascination. I love to study living things. Volunteering is probably one of my favourite past times. I volunteer at the Miramichi Regional Hospital. Talking and interacting with patients is something I find enjoyable. I love reading and playing sports. I play field hockey and track and field. I'm also the President of the Sierra Club of our school. The environmental club attempts to make our school more eco-friendly and raise eco-awareness in the community. I'm also a member of our school's Interact Club and Student Council. I work as a cashier at the Miramichi Supervalu. My project is on the health benefits of Centella asiatica, an herbal plant. I conducted my project with mentoring from UNB Saint John. This is my first year in the CWSF.

Awards	Value
Excellence Award - Senior - Bronze Medal	\$100
Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$2 100



