



## CWSF 2019 - Fredericton, New Brunswick



## Raphael Xu, Mohammed Torkmani

Plastic Delicacies: The Consumption and Biodegradation of Polystyrene by Mealworms

Challenge: Environment

Category: Junior
Region: Bay Area
City: Oakville, ON

School: Maple Grove Public School

**Abstract:** We tested what types of polystyrene, a type of plastic, that mealworms can

eat and also how much they consume of each. It's interesting because when we did the experiment you could hear the munching sounds coming from the mealworms. This is important because this is a great first step for

trying to stop/slow down the global plastic pollution crisis

## **Biographies**

Raphael - My name is Raphael, I'm in grade eight and I am 14 years old. I go to Maple Grove public school in Oakville Ontario. My school does a science fair for grade eights each year and for my topic I chose to test how mealworms eat polystyrene a type of plastic, a topic read on an article because of my love of science and reading. I then participate in BASEF 2019 where I got a gold medal and made it to the CWSF. In the future want to do further research on how polystyrene eat plastic to see if they can eat other plastics too. If anyone else is going to do a science project, my advise is to not freak out about all the work and stress before the fair ... Mohammed - Hi, my name is Mohammed Torkmani. I am currently in grade 8, and I attend Maple Grove PS. Some of my favorite activities are hanging out with my friends and family, running/walking, listening to music, gardening and just, in general, being outside in nature. Some of my favorite sports are volleyball, soccer and running. I would like to be an ophthalmologist when I grow up. My partner and I got the inspiration for our project after we came across an article stating a new study that shows that mealworms are capable of eating plastic and polystyrene. Therefore, we decided to take it a step further and find out what types of polystyrene can mealw...

Awards	Value
Excellence Award - Junior - Silver Medal	
Sponsor: Youth Science Canada	
Western University Scholarship	\$2 000
Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: Western University	
Total	\$2 000





