

CWSF 2016 - Montreal, Quebec





Aiding Biodegration by Limiting Carbon

Challenge: Environment Category: Intermediate Region: City: , School: Abstract: Plastic resistant

Abstract: Plastic resistant to biodegrading poses a major environmental threat. With easily digestible biopolymers available in nature, few microorganisms developed weak abilities to disintegrate plastic. The study aims to accelerate bacterial biodegradation activity by limiting carbon source to plastic therefore forcing microorganisms to adapt and upregulate necessary metabolic pathways. Pseudomonas demonstrated biodegradation activity acceleration from 1.39% in carbon-saturated to 21.335% in carbon-restricted mediums in three months.

Awards	Value
The Society of Toxicology Award - Intermediate	\$750
Sponsor: The Society of Toxicology	
Excellence Award - Intermediate - Bronze Medal	
Sponsor: Youth Science Canada	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$1 750



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