

## CWSF 2016 - Montreal, Quebec



### Kileigh Harrington

#### RuBisCO and RuBP: The Answer Behind the Enzymes

**Challenge:** Environment

**Category:** Junior

**Region:** Simcoe County

**City:** Barrie, ON

**School:** St. Monica's E.S.

**Abstract:** The purpose of this experiment was to determine if the carbon fixation stage of the photosynthetic cycle could be efficiently isolated. Tests were conducted to compare photosynthesis to carbon fixation by comparing the carbon dioxide absorbency of plants versus their leaves. The results could be applied with a Compost-based Carbon Fixator that uses carbon-fixating leaves from landfill as a filter for carbon dioxide emitters.

#### Biography

My name is Kileigh Harrington, and I am in Grade 8 at St. Monica's School in Barrie, Ontario. This is my fifth year competing in the Science Fair, and my second time at Nationals! My extra-curricular activities include piano, basketball, hockey and soccer. I love running, and am part of my school cross-country team. My favourite subject is science, especially when I get to figure out the answers myself. I also enjoy Math and English. The inspiration for my project began when I was reading an article in National Geographic about the amount of carbon dioxide in the atmosphere. I wanted to put an end to dangerous levels of carbon dioxide in the atmosphere while still being eco-friendly. So I modeled my solution after plants. My advice to kids thinking about undertaking a project is to go for it. You never know how your ideas will blossom! You always walk away with something more than you expected. You always learn something new, and you build confidence to speak in front of people. You may even discover a love for science. Whatever it is, you won't regret it. The Science Fair is one of the greatest experiences in my life!

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