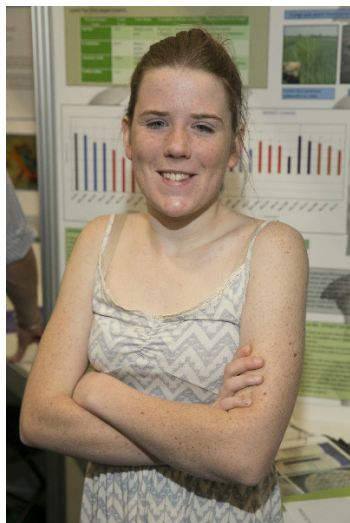


# CWSF 2017 - Regina, Saskatchewan



## Frances Emery

### Do Kingdoms Speak the Same Language; Are Phytohormones Mycohormones?

**Challenge:** Discovery

**Category:** Senior

**Region:** Peterborough

**City:** Peterborough, ON

**School:** Adam Scott C.V.I.

**Abstract:** Fungi make plant hormones but no one has investigated their role in fungi. Phytohormones: (GA3, IAA, BAP and ABA) were used to test the effects on three types of mushroom growth: Cap/stipe cuttings, spores, and complete life cycle. All altered growth and each had a different effect. Some knocked out stipe growth others mycelium growth. Thus plant hormones made by fungi are also fungal hormones.

#### Biography

I am a grade 11 at Adam Scott in Peterborough, Ontario. I have many extracurricular activity interests. I am on the school hockey team and house league. My hobbies include: hockey referee, biology and pet care. I am interested in being someone nobody has seen before. I am very determined and passionate about what I do. I do extreme multi-day canoe and hiking trips with my family. My post secondary plan is to go to Fanshawe College in London for biology because a lot of my achievements have been in biology because I love being outdoors and learning about plants, animals and the human body. Some of my achievements have been getting many awards in my regional science fair, I have been competing since grade one and this is my second trip to Canada Wide. Most of my projects have been environmental and in grade seven I started my cigarette butt project. I saw hundreds of butts discarded near sewage drains and I investigated whether the butts were causing pollution to watersheds. The next year I made three pro-type of filters from: coconut, filamentous algae and banana to clean the water. I hope to go public with my idea.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>