



## CWSF 2018 - Ottawa, Ontario



## **Emily Zbaraschuk**

## The Effects of Copper, Humic Acid and Fungicide on Fusarium Head Blight in Wheat

Challenge: Environment Category: Intermediate

Region: Prince Albert & Northeast Saskatchewan

City: Prince Albert, SK School: Meath Park School

Abstract: Fusarium head blight (FHB) is a serious disease that damages wheat

kernels and contaminates them with dangerous toxins. This experiment investigated whether copper, humic acid, or fungicide would most effectively prevent FHB under field conditions. While fungicide increased yield the most, copper reduced vomitoxin levels and Fusarium damaged kernels moderately more than fungicide. Humic acid was ineffective at

increasing yield or reducing FHB damage.

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

## **Biography**

My name is Emily Zbaraschuk, and I am a grade nine student from Meath Park Public School, located 30 minutes east of Prince Albert, Saskatchewan. My hobbies include writing, reading, drawing and painting, playing piano (I'm taking my RCM Grade 7 this year!), strumming my guitar, and learning about anything. I have lived on a grain farm all my life, so when I heard my dad mention a disease called Fusarium Head Blight (FHB) that caused huge economic losses for farmers in 2016, I was inspired to help. I spent many hours growing wheat plots last summer to investigate if adding copper or humic acid to soil are practical ways to control FHB, as they are environmentally safer than fungicide. My findings can potentially help farmers like my dad manage the disease better. In the future, I would like to see if using copper and fungicide together can reduce disease more effectively. To any student thinking about science fair, all you need is curiosity and hard work; identify a problem you are interested in and work towards finding a solution. I am excited to travel to Ottawa. present my findings, and meet Canadian youth who share my love for learning.





