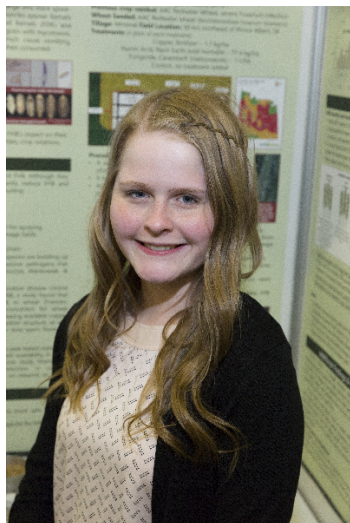


## CWSF 2018 - Ottawa, Ontario



### 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.

#### 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.

#### Awards

#### Value

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

