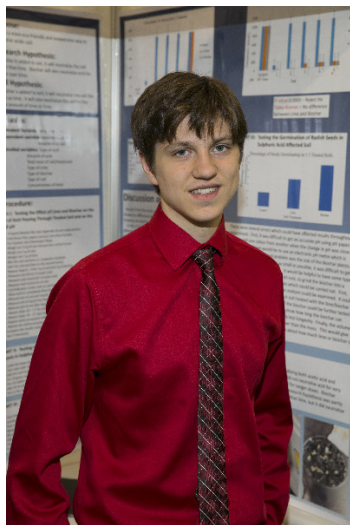


## CWSF 2017 - Regina, Saskatchewan



### Jacob Galema

#### An Antacid for the Soil?

**Challenge:** Environment

**Category:** Intermediate

**Region:** North Bay

**City:** North Bay, ON

**School:** Widdifield Secondary

**Abstract:** Biochar was compared to lime for neutralizing ability and longevity. Acetic acid and sulphuric acid were added to soil samples and the pH of both the soil and filtrate were compared in terms of H<sup>+</sup> concentration. Overall, biochar and lime have similar neutralizing abilities but biochar has more longevity.

#### Biography

My name is Jacob Peterson-Galema, I'm a grade 10 student at Widdifield Secondary School in North Bay, Ontario. I'm involved with many sports such as soccer and AAA hockey, also I like to run and go nordic skiing. My experiences with these sports have been great, I've made OFSAA in nordic skiing, and for hockey, I've played in Detroit, Boston, the Ontario winter games, and have gotten a gold medal and a bronze medal in the All Ontario Hockey Championships which I've been to four times. After high school, I want to go to university for science or engineering. I got the inspiration for my project from derailed trains up north and near my house. A further investigation could be to see if a combination of both lime and biochar could work even better together than they do separately. My advice to people wanting to do a project, or even being forced to do one, is to start early and make sure you're not scrambling to get work done right before it's due, give yourself time.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040