

## CWSF 2011 - Toronto, Ontario



### Matthew Podolak

#### Compost Bio-Ethanol

**Challenge:** Energy

**Category:** Intermediate

**Region:** Simcoe County

**City:** Barrie, ON

**School:** Bear Creek S.S.

**Abstract:** Kitchen compost of fruit and vegetable scraps was used to create an alternative, renewable fuel source. This was done by allowing the kitchen scraps to decompose naturally, then they were fermented with yeast and distilled. This process can yield 490mL of 100% ethanol from 2.2kg of compost. If mixed with gasoline, this has the potential to reduce greenhouse gas emissions by 35%.

#### Biography

Some of the activities that I enjoy at school include chess club, the joy of reading club and patrolling. I assist in a Sunday school class at my church where I help the teacher of a class of children in jk/sk. Some of my hobbies are building characters out of clay, drawing and reading. Every summer I participate in a science camp where I explore many fascinating areas of science and technology. My favourite activity during the summer is soccer, which I have played since I was 4 years old. In the future, I would like to be an engineer, because I would like to apply my creativity and my knowledge to create, design and explore new and innovative technology.