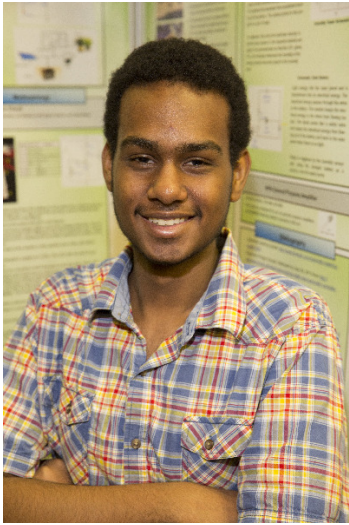


## CWSF 2014 - Windsor, Ontario



### Matthew Condappa

#### Watered by the Sun

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Manitoba First Nations

**City:** Nelson house , MB

**School:** Nisichawayasihk Neyo Ohtinwak Collegiate

**Abstract:** "Watered by the Sun" is a solar powered electronic system that waters plants by using probes to sense the moisture content in the soil. The high resistance in the dry soil is detected by the probe and a relay turns on a solar powered pump. When the plant is watered, the wet soil which has a lower resistance, automatically switches off the pump.

#### Biography

My name is Matthew Condappa and I am a 14-year-old year grade nine student at Nisichawayasihk Neyo Ohtinwak Collegiate (NNOC). I love to play video games and read. I am a member of the school's Cadet Corps, the Duke of Edinburgh Awards and the school's volleyball team. I love to play volleyball because I am good at it and I get the opportunity to represent my school and tour different parts of Manitoba. My parents are teachers at NNOC and they encouraged me to enter the science fair. The inspiration for my project came from the need to make watering my mom's potted plants easier for me. She keeps reminding me to water the plants so I decided to invent a watering system that will do the job even when I forget. This is a very enjoyable project to work on so I would like to expand the project on a larger scale for farmers to use to grow vegetables in greenhouses. I am glad that the science fair gave me an opportunity to show my project. If you have a project, enter it in a science fair and see where it will take you.

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