



## CWSF 2012 - Charlottetown, Prince Edward Island



## **Mackenzie Willis**

## Effect of Cold Infared Lasers on Tree Seed Germination

Challenge: Environment
Category: Intermediate
Region: North Bay
City: North Bay, ON

**School:** Widdifield Secondary

Abstract: This study was done to see if there was any effect when you irradiate tree

seeds with infrared lasers. Before seeds germinate, they are very fragile and need constant climate control. The faster they germinate, the more money was being saved by nurseries. The seeds were exposed to a 785nm wavelength, and observed to see which groups germinated the fastest.

## **Biography**

Mackenzie Willis is a grade 9 student enrolled at Widdifield Secondary School, in North Bay Ontario. He has received academic and environmental awards, such as the Ward Smith Youth Environmental Award (2010). . Mackenzie is the Youth Advisor for ForestNation, a social enterprise dedicated to cleaning the air and improving the environment through local and global tree planting initiatives featuring the clean air tree kit. He obtained his pilot's license to pursue his love of planes and flying, and wishes to work in Aerospace Engineering in the future. He was top scoring in his school in the Waterloo Gauss and Pascal contests from grades 7-9, enjoying the challenge and striving to do the same in future years. Mackenzie has been a member of First Robotics for 5 years participating in FLL (Lego), and FRC. He enjoys volunteering within his community on various projects such as interpretive walks through the forest; restoration of Atlantic salmon spawning bed; various tree plants; neighbourhood clean ups and is active in Me to We. His love of the environment, volunteering and travel will see him travel to Nicaragua this summer.





