

## CWSF 2007 - Truro, Nova Scotia



### Cayley Linehan

#### Taxe\$ a Pain! Taxus a Cure! Genetic Variation & Propagation of *Taxus canadensis*

**Division:** Biotechnology / None

**Category:** Intermediate

**Region:** Central Newfoundland

**City:** Grand Falls-Windsor, NL

**School:** Exploits Valley High

**Abstract:** Domestication of *Taxus canadensis* commenced in Newfoundland for the purpose of supplying a chemical, paclitaxel, used in cancer treatments. The experiment included developing an effective winter propagation system using shoot cuttings and analyzing the genetic variation found in wild clones. Considerable variation exists in traits critical to agronomic performance (rooting success, shoot growth, bud flush) and suggests genetic differences may exist in clonal paclitaxel concentrations.

#### Biography

In my spare time I enjoy reading, horseback riding and spending time with my friends. I also spend lots of time playing sports, my preference being softball, karate, badminton and swimming. In school my favorite subjects are chemistry and healthy living. I am also active in my school's choir and band in which I play flute. Having always been fascinated by animals I am considering pursuing a career in veterinary medicine.

#### Awards

#### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Biotechnology & Pharmaceutical Sciences Intermediate Sponsor: Rx&D Health Research Foundation	\$300
<b>Total</b>	<b>\$1 300</b>