

# CWSF 2012 - Charlottetown, Prince Edward Island



## Helping the Grain Industry: Developing a RT-PCR based purity test for Durum

**Challenge:** Innovation

**Category:** Senior

**Region:**

**City:** ,

**School:**

**Abstract:** Purity is a crucial component of the seed grading system; purity determines a crop's value. The total number of 25 Canadian west durum varieties adds great difficulty to the conventional approach to seed purity determination. The current methodology to determine the purity, protein analysis, is labour intensive and time consuming. In this project, a real-time polymerase chain reaction (RT-PCR) was explored as an alternative method.

Awards	Value
The Canadian Society for the Weizmann Institute of Science Scholarships Joseph W. and Joel Anthony Leon Kerbel Scholarship Sponsor: The Canadian Society for the Weizmann Institute of Science (Weizmann Canada)	\$9 400
Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	\$700
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$18 600</b>