

CWSF 2008 - Ottawa, Ontario



Fiona Emdin

Priming and exogenous treatments for salt stress in *Phaseolus vulgaris*.

Division: Engineering & Computing Sciences / Environmental Innovation

Category: Intermediate

Region: Quinte

City: Picton, ON

School: Nicholson Catholic College

Abstract: Saline soil has become an increasing problem globally. The effects of priming with NaCl, glycine betaine and H₂O₂, and of exogenous applications of inoculant, salicylic acid, glycine betaine, silicon, CaSO₄ and KH₂PO₄ on *Phaseolus vulgaris* grown under salt stress, were compared in two greenhouse trials. Exogenous applications of inoculant and silicon produced significant ameliorative treatment effects on mean shoot length; inoculant on fresh weight.

Biography

I am a grade nine student at Nicholson Catholic College in Belleville, Ontario, with an interest in science, writing and fine arts. I have received several awards at previous science fairs at a regional level and a silver medal with my partner when we attended the 2006 CWSF for our project on surface changes and the migratory paths of leopard frogs. I enjoy soccer, badminton and running and do volunteer tutoring at a local elementary school. I received the award for the top academic standing in my pre IB junior high school program last year. I am attending a French language program in Quebec City this summer.

Awards

Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Honourable Mention - Environmental Innovation - Intermediate Sponsor: EnviroExpo, Presented by VIA Rail Canada	\$100
Silver Medal - Earth & Environmental Sciences - Intermediate Sponsor: Petro-Canada	\$700
Total	\$2 300