

CWSF 2005 - Vancouver, British Columbia



Dara Djafarian

Survivor: Proteins - The Effects of 2,4-D & Glyphosate on Photosynthetic Proteins of Citrus mitis

Division: Life Sciences

Category: Intermediate

Region: Greater Vancouver

City: West Vancouver, BC

School: Collingwood School

Abstract: Will 2,4-D and Glyphosate effect protein levels of Citrus mitis? Herbicides were applied at 0.02% and 0.2% concentrations. Morphological, anatomical, SDS-PAGE, and total protein analyses were conducted. Herbicides caused flowers to fall. 2,4-D caused residue and cellular degradation. ATP synthase rose in affected plants, while other photosynthetic proteins fell.

Awards	Value
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Life Sciences - Intermediate Sponsor: Pfizer Canada	\$700
Total	\$2 200