Herbicide Selector for Cereal Crops

Purpose:
To consolidate results from publicly funded weed research trials and provide a tool that allows growers and agronomists to select the most economical management option for weeds in cereals.

Development of a Public Trials Database:
An online data entry tool was developed to provide an easy way of centralizing all weed efficacy research conducted in Ontario Cereal Crops. Public research trials have been entered into the database. This database allows a user to query information on any number of fields located in the database. For example, a user could view a data on all weed efficacy trial ratings associated with Buctril M, or they could search for all herbicide ratings on prostrate knotweed.

A herbicide comparison tool is also being developed for this database whereby a user could compare two herbicides that competed “head to head” in public research trials. Figure 1, is an example of the data entry screen of the Public Trials Database.

Herbicide Selection Tool: The main frame for an online herbicide selection tool in cereal crops has been developed. This herbicide selection tool uses data from the Public Trials Database, along with variable costs such as herbicide and application costs to provide cost effective herbicide options based on the spectrum of weeds selected. Figure 2 shows the recommendation page of this herbicide selector. Herbicides will be ranked on their ability to best control the spectrum of weeds selected, however the user can also rank herbicide recommendations based on price or impact to the environment. A print friendly summary of rates, precautionary statements and product needed to purchase is also provided.

Figure 1. An image of the results page for the proposed herbicide selector whereby herbicide recommendations are given based on the weed spectrum identified.

Launch Date:
At the corn, soy and wheat annual meeting in March of 2008.

Communication:
This tool will be communicated through print media (i.e. Crop Pest Ontario, Ontario Farmer, Top Crop Manager) and numerous presentations being made by OMAFRA staff to retail and grower groups.
Figure 1. An image of the data entry system for the newly developed Ontario Public Weed Trial Database.

Acknowledgements:
This project is funded in part through contributions by Canada and the Province of Ontario under the Canada-Ontario Research and Development (CORD) Program, an initiative of the federal-provincial-territorial Agricultural Policy Framework designed to position Canada’s agri-food sector as a world leader. The Agricultural Adaptation Council administers the CORD Program on behalf of the province.

Project Contacts:
Mike Cowbrough, OMAFRA, mike.cowbrough@ontario.ca, 519-824-4120 ext. 52580
Figure 2. An image of the results page for the proposed herbicide selector whereby herbicide recommendations are given based on the weed spectrum identified.