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# Pest Management Centre Newsletter

*Winter 2008*

Canada 

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## Introduction

Welcome to the first issue of our information update. This bulletin will update stakeholders bi-annually on the Minor Use Pesticides and Pesticide Risk Reduction Programs of Agriculture and Agri-Food Canada's (AAFC) Pest Management Centre (PMC). In the PMC's fifth year of operation, there is a lot of success to look back on and some exciting changes. Our new Web site at [www.agr.gc.ca/prrmup](http://www.agr.gc.ca/prrmup) provides stakeholders with timely information on projects conducted or supported by the Centre. Last fall, the Minister of Agriculture announced funding of 39 new projects for 2007 through the Pesticide Risk Reduction Program. The Centre has been busy preparing minor use submissions for the Pest Management Regulatory Agency (PMRA). Success on the Centre's biopesticide work will soon see new reduced risk products available for Canadian growers.

## Pesticide Risk Reduction Program Updates

The Pest Management Regulatory Agency (PMRA) and Agriculture and Agri-Food Canada (AAFC) have been working with industry to develop pesticide risk reduction strategies. To address issues brought forward through consultation, the program has funded research and implementation projects and has provided regulatory support for reduced risk pesticide registrations. Results not only reduce pesticide risk, but also provide new pest control options for growers. Much has been learned about the process of developing risk reduction strategies and we are considering changes to the process to better meet program objectives. These changes will result in more targeted efforts to reduce pesticide risks while at the same time responding to grower identified priority pest management issues. Further details will be made available this winter 2008.

## Funding Awarded to 39 Projects under the PMC Call for Proposals

AAFC's Pest Management Centre (PMC) awarded \$2.7 M in funding over three years to thirty-nine new pesticide risk reduction projects selected through a competitive process initiated in October 2006. Approximately \$1.6M will be spent in the first year. These projects involve collaboration from AAFC, provincial, and university researchers, private consultants and grower groups. Work will be conducted across the country on projects addressing issues identified through stakeholder consultations to develop, enhance and implement innovative, reduced-risk pest management tools and practices. With this funding initiative, the Pesticide Risk Reduction Program continues its work to improve growers' access to innovative pest management tools and practices, enhancing the overall competitiveness and sustainability of the sector. More details on these projects can be found at the [implementation page](#) of the Web site.

## Minor Use Priority Setting Meeting, April 1-3, 2008

The 2008 Canadian Minor Use Pesticide Priority Setting Workshop will be held in Ottawa, April 1-3<sup>rd</sup> at the Hampton Inn Ottawa & Conference Centre. As in past years, each of the three days will focus on setting priorities for each of the three disciplines: April 1 – Weeds, April 2 – Entomology, April 3 – Pathology. Attendance is by invitation-only, and details on room reservations for the Workshop will be posted on our Web site early in the new year. The Pesticide Risk Reduction Program will hold its annual meeting with its Technical Working Group on April 4<sup>th</sup>.

## 2007 Minor Use Pesticide Priorities

Each year the Minor Use Pesticide Program (MUPP) holds a priority setting workshop. During these workshops AAFC agrees to conduct the required efficacy, crop tolerance, and crop residue research necessary to support submissions and registration of the pest control products and uses selected by the grower representatives as their primary solutions. During the last workshop (March 2007) AAFC agreed to 38 priorities (11 entomology, 11 weed/growth regulators, 10 pathology, 5 regional and 1 organic). Details are these priorities are found on the Web site. Some of the priorities / projects have changed.

- Originally, AAFC08-004 - propyzamide (Kerb) for the control of broadleaf weeds in Rhubarb was selected. After the meeting, the growers requested that this project be terminated and replaced with the second ranked solution (AAFC08-039 - mesotrione (Callisto) for the control of broadleaf weeds on Rhubarb). It was

determined that Kerb is not an appropriate solution for the broadleaf weed problem that the growers are facing (common lamb's quarters).

- AAFC08-006 - s-metolachlor (Dual Magnum) for the control of labelled weeds in Pearl Millet was changed to Dual II Magnum.
- Originally, AAFC08-023 - fluazinam (Allegro) for the control of downy mildew in Caneberry was selected as the regional priority for BC. After the meeting, BC requested that this project be terminated and the BC growers would work provincially on a label expansion for Tanos to control downy mildew. The BC growers requested that AAFC work towards the registration of flumioxazin (Chateau) for the control of broadleaf weeds in highbush blueberries (project number AAFC08-040).

In addition to planning for the 2008 projects (collaborating with registrants, determining appropriate use patterns, data mining, and preparing PreSubmission Consultation Requests), AAFC has continued working on projects from previous years. This year we worked on 110 studies (efficacy, tolerance, or residue) involving 367 field trials. Progress reports indicate a successful trial season with less than 10% of the trials being terminated due to lack of pest pressure or extreme weather conditions (e.g. drought, hail, flooding, etc.).

## 2007 Regulatory Submissions

Since the 2007 Priority Setting Workshop, twenty-five projects have been submitted to either PMRA or the registrant for submission to the PMRA with their Category A submissions.

### To the PMRA:

- a) **AAFC06-012** oxyflufen (Goal 2XL) for the control of broadleaf weeds in ornamentals (poplar) – April 2007
- b) **AAFC04-084** acetamiprid (Assail) for the control of aphids, tarnished plant bug, potato leafhopper and strawberry clipper weevil on strawberries – April 2007
- c) **AAFC04-047** spinosad (Success) for the control of flea beetles on lowbush blueberry – April 2007
- d) **AAFC07-035** thiamethoxam (Actara) for the control of weevils on highbush blueberries – May 2007
- e) **AAFC05-005** metalaxyl-m (Apron XL LS) for the control of damping off on radish – May 2007



- f) **AAFC05-010** metalaxyl-m (Ridomil Gold 1 G) for the control of downy mildew on spinach – June 2007
  - g) **AAFC05-067** metalaxyl-m (Ridomil Gold 480SL) for the control of downy mildew on spinach – June 2007
  - h) **AAFC04-080** cyazofamid (Ranman 400SC) for the control of *Pythium* root dieback, forking and cavity spot on carrots – August 2007
  - i) **AAFC03-013** cyromazine (Citation 75WP) for the control of fungus gnats on lettuce greenhouse – September 2007
  - j) **AAFC03-071** boscalid + pyraclostrobin (Pristine WG) for the control of Botrytis on greenhouse tomatoes – October 2007
  - k) **AAFC04-032** boscalid + pyraclostrobin (Pristine WG) for the control of Botrytis grey mold and Powdery mildews on greenhouse tomatoes – October 2007
  - l) **AAFC05-049** boscalid + pyraclostrobin (Pristine WG) for the control of gymnosporangium rusts on Outdoor ornamentals – October 2007
  - m) **AAFC05-017** copper (Kocide 2000) for the control of seed-borne bacterial diseases on dry beans – November 2007
  - n) **AAFC05-018** copper (Kocide 2000) for the control of seed-borne bacterial diseases on succulent beans – November 2007
  - o) **AAFC04-014** boscalid + pyraclostrobin (Pristine WG) for the control of Septoria late blight on celery – November 2007
  - p) **AAFC04-015** boscalid + pyraclostrobin (Pristine WG) for the control of blossom blight (*Sclerotinia* spp) on head lettuce – November 2007
  - q) **AAFC04-016** boscalid + pyraclostrobin (Pristine WG) for the control of blossom blight (*Sclerotinia* spp) on leaf lettuce – November 2007
  - r) **AAFC04-017** boscalid + pyraclostrobin (Pristine WG) for the control of blossom blight (*Sclerotinia* spp) on spinach – November 2007
  - s) **AAFC06-013** fosetyl-al (Aliette WDG) for the control of downy mildew on rutabaga – November 2007
- To the Registrant:**
- a) **AAFC05-006** flumioxazin (Chateau) for the control of labelled weeds in dry bulb onions – May 2007
  - b) **AAFC06-011** flumioxazin (SureGuard) for the control of labelled weeds in outdoor ornamentals – May 2007
  - c) **AAFC02-003** rynaxypyr (Altacor) for the control of aphids on greenhouse tomatoes – July 2007
  - d) **AAFC04-074** clothianidin (Clothianidin WDG) for the control of plum curculio, tarnished plant bug and oriental fruit moth on peaches – August 2007

- e) **AAFC04-075** clothianidin (Clothianidin WDG) for the control of plum curculio, tarnished plant bug and oriental fruit moth on plums – August 2007
- f) **AAFC04-076** clothianidin (Clothianidin WDG) for the control of plum curculio, tarnished plant bug and oriental fruit moth on cherries – August 2007

AAFC is also working with Valent to submit all required efficacy and residue data required to complete the fast-track registration of flumioxazin (Chateau, and SureGuard). This will affect the status of the following six projects:

- A. **AAFC07-002** flumioxazin (Chateau) for the control of labelled weeds in potatoes
- B. **AAFC07-006** flumioxazin (Chateau) for the control of labelled weeds in apples
- C. **AAFC07-007** flumioxazin (Chateau) for the control of labelled weeds in strawberries
- D. **AAFC07-008** flumioxazin (Chateau) for the control of labelled weeds in grapes
- E. **AAFC08-010** flumioxazin (SureGuard) for the control of labelled weeds in poplar
- F. **AAFC08-040** flumioxazin (Chateau) for the control of labelled weeds in highbush blueberries

This summer, we continued efficacy trials for AAFC07-002 flumioxazin on potato for the control of nightshade. We are also planning efficacy / crop tolerance trials for projects AAFC08-010 flumioxazin on ornamental (poplar) and AAFC08-044 flumioxazin on lowbush blueberries. However, all other efficacy, crop tolerance, and residue trials for the above flumioxazin projects have been terminated. It is believed that sufficient data has been generated to successfully obtain registration on those crops.

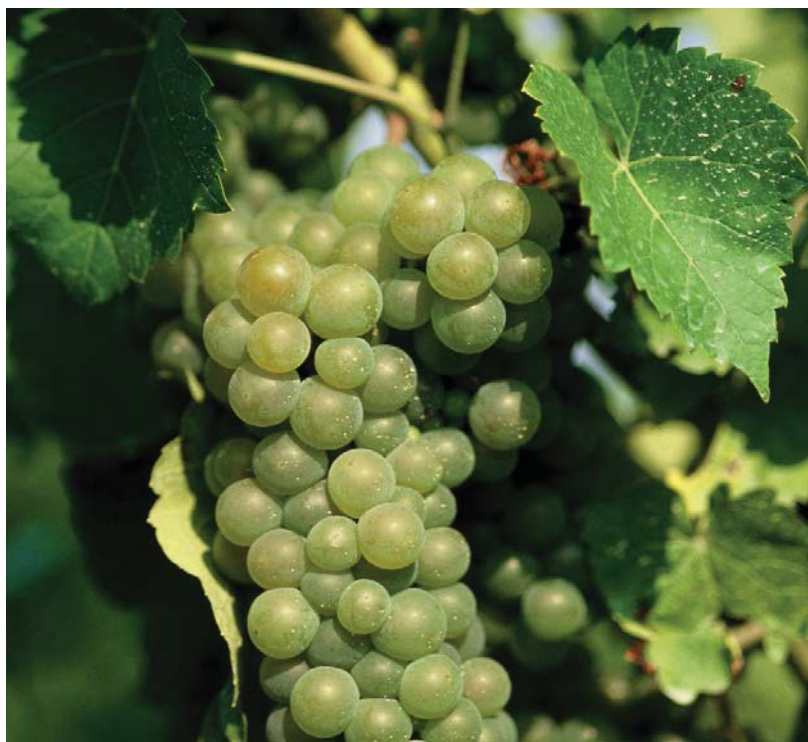
## Report on Biopesticides

The need to increase registration and adoption of biopesticides in Canada was identified in consultations with the research community, regulators, IR-4, and the industry during the winter of 2004/05. The PMC responded with a significant effort into **Regulatory support** with registrants, with the goal of increasing the availability of biopesticides for use by Canadian growers.

Initial work focused on fifteen key products developed in consultation with provincial experts, minor use coordinators, grower organizations, and researchers. Most

products were already available in other jurisdictions and had the potential to provide needed tools for risk reduction strategies. Key considerations included utility to the agricultural industry, potential to contribute to reduction in specific pesticide risks (for example, as OP replacements), and potential for registration and commercial deployment in Canada. Cooperation with companies resulted in a number of registration submissions. Among the success stories are: the registration of Blightbar® C9-1, Bloomtime®, Rhapsody® and Serenade®, and the registration submissions of Botanigard® 22WP and ES, Blightbar® A506, Biosave® 10LP (anticipated shortly), Contans® WG, Met52™, Prestop® and Rootshield®.

The PMC is frequently contacted with requests for regulatory assistance for biocontrol products. New products may receive regulatory support by the PMC if they have the potential to successfully reduce pesticide risk as part of a pesticide risk reduction strategy. These strategies are being developed for a number of priority commodities through the Pesticide Risk Reduction Program. As well, biopesticides selected at the National Minor Use Priority Setting Workshop may require additional regulatory support work, and this is another mechanism by which new products or product uses are pursued.



## Study on the organization of the Canadian Biopesticides Industry

In January 2007 the PMC commissioned a study to contact the Canadian biopesticide industry to evaluate options and gauge interest in collaborating to address common interests and improve access to the Canadian marketplace. The study also evaluated interest in industry representation and where the Canadian biopesticides industry would benefit from a concerted voice.

Enhancing the Canadian biopesticide industry coordination was well received by the 27 industry participants who included developers, manufacturers, registrants and distributors of biopesticides. A strong majority of the respondents (24) expressed interest in joining an industry association and half indicated a strong interest and willingness to help establish it (13 respondents). Opinions on the specific structure of this industry association and its priorities differed somewhat, with many respondents indicating that it should be determined through discussion among the group to be represented.

Results of the study have been relayed to the biopesticide companies along with a contact list of interested respondents. We hope that this information will stimulate follow-up discussions among biopesticide industry representatives in Canada.

## National Crop Profiles

Since the spring, we have been incorporating the changes recommended by the [Crop Profile Working Group](#) into crop profiles. Both the wild blueberry and cranberry crop profiles have been converted to the new format and will soon be posted to the AAFC PMC Web site.

The crop profiles for the pulse crops (chick pea, lentil, field pea and dry bean) will be updated this fall/winter. These crops are among the few of our priority crops for which the [Canadian Expert Poll on Crop Protection](#) had not been completed, despite having strategy work underway. Focus groups have been held in the Prairie Provinces and Ontario (dry bean) this fall to complete the *Expert Poll* for these crops.



## Foliage Trimmer cuts disease in carrots

One of many projects funded by the Pesticide Risk Reduction Program to provide alternative pest control options is a carrot foliage trimmer. This equipment, developed by research staff at Agriculture and Agri-Food Canada's Harrington Farm, north of Charlottetown, P.E.I., removes a portion of the canopy of carrot tops between rows. Trimming at the time of row closure opens up the canopy: it reduces humidity and increases air flow within the carrot canopy, which in turn removes the ideal conditions for diseases such as Sclerotinia Rot to develop.

Each year, producers across Canada can potentially lose a substantial amount of their harvest to Sclerotinia Rot. The disease manifests itself in storage and renders the infected carrots useless. There are no known effective controls for this serious disease yet. However, by developing a mechanical device to help limit the disease, researchers have found a simple way to reduce pesticide use in carrot production.

This prototype was constructed to be versatile and adaptable to conventional and organic growing systems across Canada and the results have been demonstrated

to growers. As a result, Oxford Frozen Foods, the largest carrot producer and processor in Nova Scotia, built a commercial trimmer based on this prototype which was adopted to trim about 1,000 acres of the company's carrot fields in 2007.

## New Web site with expanded information

Highlights of the new PMC site include a stronger presence through improved access points from the AAFC homepage and updated information on the PMC and

our programs. A new [biopesticides section](#) is accessible from the PMC homepage by clicking on the minor use research program. Note that the links to this section are found on the left hand menu bar called Programs and Services (this feature also applies to our other web pages). Also included is the status of all [minor use pesticide projects](#) sorted by crop, implementation project summaries (found in the pesticide risk reduction program's [implementation project section](#)), and a [publications and document archive](#) for quick access to PMC's published information.

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