Pest Management Centre
Agriculture and Agri-Food Canada

Pesticide Risk Reduction and Minor Use Programs

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Global Minor Use Summit
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Responding to Grower Need

• Access to new minor use pest management tools

• Improved grower competitiveness and environmental sustainability

• Addressing public concerns over human and environmental health
**AAFC Pest Management Centre**

**Risk Reduction**
- Grower led strategies
- Lower risk products, practices
- Integrated pest management

**Minor Use**
- Submission Preparation
- AAFC Sites
- Data Generation
  - Field Trials
  - Lab Analysis

**Applied Research**
- Biopesticides initiative
- Screening Initiative
- Implementing new technologies
Program Features

• Modeled after the U.S. IR-4 Program
• Integration with U.S. minor use pesticide programming
• High degree of grower focus with transparent processes to select priorities
• Collaboration with a broad range of stakeholders
• Focus on priority pest management problems
• Grower group focus for risk reduction strategy development
• Research support for technology development and implementation to reduce risk in pest management
Intended Outcome of Programs

**Short term:**
- registration of reduced risk and minor use pesticides
- improved access by growers to safer pest management products and practices

**Long term:**
- Growers using improved pest management tools and practices
- Contributing to the economic and environmental sustainability of Canadian agriculture
Canadian Minor Use Pesticides Priority Setting Workshop

- Growers work with Provinces to determine a National List of priorities on a crop-specific basis, determine key pest problems for insects, diseases, weeds.

- Provincial Minor Use Coordinators, Grower Groups, PMRA, IR-4, Pesticide Industry, Specialists meet annually. (April 1-3, 2008, Ottawa, Ontario)

- Through consensus, determine national priorities for the following year:
  - 10 weed science, 10 entomology, 10 pathology, 1 organic and 5 regional projects (any discipline).
Joint Projects with IR-4

- Using the grower identified priority needs, we attempt to match with the US, and an additional 10-15 joint projects per year with the U.S. are chosen for joint submission and review
- Similar process, and Canadian timelines for joint projects
- AAFC coordinates value trials
- IR-4 usually coordinates residue studies with AAFC site participation in trials
- IR-4 laboratories conduct analyses
- AAFC is the lead on two projects in 2008.
Minor Use Pesticides Process

Input from:
- Growers
- Industry
- Provinces
- Stakeholders
- Others

AAFC
- Identification of needs
- Prioritization – registrant support
- Pre-Submission Request
- Data Collection
- Data Generation
  - Field Trials
  - Lab Analysis
- Submission Packages To PMRA, Registrants

PMRA
- Identification of data Requirements (DACO)
- Review
- Regulatory decision
- Registration
- Product availability
Since startup in 2003, there has been much progress:
- 2400 field trials
- 104 submission packages forwarded to the PMRA
- 52 registrations – many new uses
- 464 projects initiated
- 110 of these are joint projects with IR-4
- 31 have been completed without submission
- field sites organized
- GLP accreditation obtained
Goals

• Promote use of reduced risk and low risk pesticides
• Support development and adoption of integrated pest management (IPM)
• Provide pest management solutions to support farm profitability, public safety and agro-industry competitiveness
• Support transition from pesticides under re-evaluation
Pesticide Risk Reduction Program

- Priority crops have been selected for risk reduction work based on a number of criteria:
  - Grower needs, gaps in pest management
  - Grower interest
  - Production factors such as distribution, value, area
  - Environmental or health risks

- List reviewed annually with PRR program technical working group for opportunity to prioritize more crops
Information gathering

- CROP PROFILE
- ISSUE DOCUMENT
- IDENTIFY STAKEHOLDERS
- STAKEHOLDER CONSULTATION

Prioritization / Action

- STEERING COMMITTEE MEETINGS
- IMPLEMENTATION
- STRATEGY DOCUMENT
- ACTION ITEMS

Outcome

- ENHANCED SUSTAINABILITY
- RISK REDUCTION

Assessment

- PERFORMANCE INDICATORS
- MEASUREMENT OF GROWER ADOPTION

ESTABLISH GROWER INTEREST

Outcome gathering

- Information gathering
- Prioritization / Action
- Outcome
- Assessment
Implementation of Risk Reduction Strategies

• Through project support for applied research and implementation (annual call for proposals and short term project funding).

• Through the biopecticides initiative.

• Through communications activities.
Applied Research Initiatives

- 100 Projects addressing high priority issues identified in commodity-specific pesticide risk reduction strategies.

- Regulatory work with biopesticide registrants to encourage registrations of these low-risk solutions.

- Screening trials to identify reduced-risk pest control solutions for high priority issues identified in commodity-specific risk reduction strategies or through the minor use priority-setting process are supported by the fund.
Example of Strategy Development and Implementation

- **Apple – Fire Blight Management**
  - Funding provided to review available fire blight management practices
  - Formation of a steering committee to develop a long-term management plan for fire blight.
  - Joint EPA/PMRA review of **two biopesticides, which have now been registered in Canada**
  - Management guidelines, brochures and CD published, and workshops held to promote adoption of integrated pest management tools (forecasting models, pruning, alternative products)
  - Registration of Streptomycin granted for 2 years (due to strategy for replacement)
Strategy Case Study:
Fire blight of apple and pear
Some examples of successful projects to-date include:

- New applications approaches and formulations of RR greenhouse pest control products and technologies
- Work with biopesticide registrants resulting in new submissions
- Potato stem crusher for control of European corn borer in potato crops and carrot trimmer to reduce sclerotinia pressure
- Carrot trimmer
- Canola Disease Identification Card
- Grasshopper identification booklet
- BMP package for management of root weevils in strawberry
- New dry bean breeding lines with multiple pest resistance
Regulatory Support for Biopesticides

- 3 new biopesticide product registrations (*BlightBan C9-1, Bloomtime and Serenade/Rhapsody*)
- 7 submissions to the regulator (*Prestop, Rootshield, Rootshield HC Drench, Botanigard, Met 52, Blightban 506 and Contans*, plus 1 submission to the registrant -Surround)
- Work underway on a number of other submissions for product registrations including Biosave, Facin and Agriphage.
International Cooperation

- PMC – IR-4 – PMRA – EPA Minor Use joint projects
- NAFTA Minor Use joint review
- OECD joint project on new active ingredient
- Participate in the NAFTA Technical Working Group on Pesticides
- Participation on OECD Registration Steering Group (RSG) – on Minor Uses.
- Technology Gap
THANK YOU!

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