



# The Pest Management *Newsletter*

*News from the Agriculture and Agri-Food Canada Pest Management Centre  
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## They Came as Observers, They Left as Friends

The Pest Management Centre (PMC) played host to visitors from around the world at its annual priority setting workshop for minor uses and biopesticides in 2013. The visitors, who hailed from as far away as China, New Zealand and Brazil, dropped in on the workshop with a single purpose—to watch and learn.

Over the past 10 years, while sharing knowledge and working on pesticide assessments at the international level, PMC has earned a reputation for its unique partnership model. Its annual workshop offered the foreign guests a rare opportunity to see how all the players with a stake in specialty crops and minor uses of pesticides—from growers and grower associations to federal and provincial governments and crop protection businesses—work together to find better ways of keeping pests at bay.



Qing Zhao, Deputy Director and Senior agronomist, National Agro-Technical Extension and Service Centre (NATESC), China; Xu Wang, Director and Professor, Institute of Agricultural Resources and Regional Planning (CAAS), China; Dr. Baogen Gu, Deputy Director General at the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA), China; Gilles Saindon, Associate Assistant Deputy Minister, Agriculture and AgriFood Canada; Manjeet Sethi, Pest Management Centre; Jun Yang, Director and Senior agronomist, ICAMA, China; Shuai Zhang, Agronomist, NATESC, China

## A Model for Letting Growers Drive Decisions

The annual Minor Use Pesticide Priority Setting Workshop has been taking place for 11 years now. The United States Department of Agriculture's Interregional Research

Project No. 4 (IR-4), on which PMC is modeled, is using a similar process. However, Canadian growers are more involved as they participate in on-the-floor debates that determine the top national priorities for battling pests.

When the first workshop was held in 2002, no one was sure if a consensus-based decision-making model would work. But PMC's made-in-Canada process did work. The proof is in the more than 1,200 new minor uses of pesticides and more than 220 uses of biopesticides that have been registered for conventional and organic growers in Canada since that first workshop.

One of the visitors to the 2013 Priority Setting Workshop, Nikki Johnson, was impressed by what she observed.

Ms. Johnson manages a three-year, government-funded project to find easier and less costly ways of registering pesticides for minor uses in New Zealand. For the past several years, she has been flying to the United States to

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attend IR-4's annual food and non-food priority setting workshops. It was while there that she met some Canadian growers who told her about PMC's process for selecting pesticide projects for field trials. She was curious and decided to see for herself what made Canada's selection process different from the one in the United States.

The workshop proved that consensus can work. The reasons are many: not only the strong relationships between the growers and the chemical companies, but also the growers have genuine clarity about their regional or crop objectives. That they were able to work together to narrow down the long list of priorities to a final few projects was a real feat.

Ms. Johnson also appreciated the flexibility of the process, saying she liked that growers had the chance to pick not just their top-ranked solutions but also their second.



Marcos Alvarez, Pest Management Centre (PMC); Álvaro Ávila do Nascimento Inácio, National Agency of Sanitary Surveillance, Brazil; Manjeet Sethi, PMC; Carlos Alexandre Oliveira Gomes, Ministry of Agriculture, Brazil; Shirley Archambault, PMC

## An International Leader in the Minor Use World

The fact is Canadian growers need the helping hand that PMC provides through its two signature programs—the Minor Use Pesticides Program and the Pesticide Risk Reduction Program. They are called minor use pesticides because they are for lower volume crops like horticultural and specialty-crops than, for example, major crops such as wheat, soybeans and barley. The sales are too low to provide incentive for pesticide manufacturers to invest time and money to generate the data required to obtain and maintain pesticide registrations for minor uses of pesticides.

It is a problem shared by other countries, although few have dedicated minor use programs to generate the

residue data on behalf of growers. PMC was modeled after its American counterpart, IR-4, which started in 1963 and is considered the pioneer of all minor use pesticide programs. Both the United States and Canada's programs are unique and it explains why other countries are paying attention.

Dr. Baogen Gu, Deputy Director General at the Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA) in China, led a small delegation to Canada to see PMC's priority setting process in action. As part of the Memorandum of Understanding established between Canada and China, a work plan has been developed. The goal is to share the management approaches and experiences of both countries in minor use pesticides and pesticide risk reduction and to work toward the creation of a minor use pesticide program in China.

Brazil also wants to increase access to minor uses of pesticides for growers. So when PMC's Executive Director, Dr. Manjeet Sethi, extended an open invitation to attend the 2013 Priority Setting Workshop, Carlos Gomes and Álvaro Ávila do N. Inácio, of Brazil's National Health Surveillance Agency, took him up on it.

## Helping Others Helps Canada's Growers

By hosting representatives from other countries to see how a successful minor use pesticide program works, PMC helps to put Canadian producers at centre stage and at the same time helps countries that want to set up their own programs. But it is not only pride in what PMC has achieved that explains the willingness to share knowledge and experience. Strengthened cooperation will eventually lead to harmonization of pesticide regulations and maximum residue levels (MRLs) between countries and thus prevent trade barriers for Canadian produce.

Increased cooperation just makes economic sense. If a pesticide in a major market is not registered for use on a given crop, as is often the case in countries without a minor use pesticide program, it is likely that there will be no established MRLs and the crop cannot be traded. In other words, if Canadian growers are using a new pesticide product and the receiving country does not use the product (i.e., it has no established MRLs), then commodities could get held up at the border. Similarly, if an importing country establishes an MRL at a lower level than set in Canada, trade is once again impeded.

Helping other countries set up minor use pesticide programs makes it possible to work together on projects, avoiding duplication of efforts and minimizing discrepancies between established MRLs of pesticides when there is no public health need for such differences. It is just one

more way PMC can help make the work of growing and trading minor crops grown in Canada easier.

Indeed, the benefits of mutual aid were immediately grasped by the workshop visitors. Though they came to see what they could learn and apply in their own country, at the end of the four-day workshop, all the visitors expressed an interest in working with PMC in the future.

As Ms. Johnson said, “Some of the problems faced by Canadian growers, particularly those in the West, are similar to those faced by New Zealand growers.” So she looks forward to the day the two countries can work together.

Ms. Jun Yang, Director of the Pesticide Efficacy Evaluation Division at ICAMA in China, put it more simply: “We believe we can work closer to benefit growers in both our countries.”

In the meantime, PMC’s visitors left Ottawa having seen first-hand just how much a strong partnership between government and diverse stakeholders means to find solutions to persistent and emerging pest problems.

## New Interest in a Vanished Crop Pulls in the Pest Experts for Help

*It is a perfect marriage. Small-scale growers in British Columbia, Nova Scotia, Ontario and Quebec are returning to a forgotten crop to meet the demands of a burgeoning local industry. In battling the natural enemies that are as much a part of farming life as the weather, these new growers have already learned one important lesson: whenever they do not have a weapon for controlling the seasonal invasion of pests that threaten their crops, they can count on the science and resources of the Pest Management Centre’s (PMC) Minor Use Pesticides Program (MUPP).*

Across Canada, a resurgence of independent microbreweries and brew pubs has opened up a niche market for a new generation of hop growers. Inspired by the popularity of the 100-mile diet, microbrewers looking to make quality beer want to buy fresh, local hops.

But almost all hops used to make Canadian beer are imported, primarily from the United States and Germany. For a number of reasons, Canada’s hop industry had long since died out—by the 1930s in Ontario and 1950 in Quebec. Even in British Columbia’s Fraser Valley, where hop production continued, the industry had

perished by the 1990s. It was not until 2007 when a global shortage in hop supplies sent the price of hops skyrocketing that hop production became viable again.

Interest has picked up among younger, small-scale growers, who have had to relearn how to grow hops. When Rebecca Kneen, one of the first in the country to start farming hops again, started her 10-acre farm in Sorrento, British Columbia, she had to figure things out on her own, mostly through trial and error.



But it is not just information about cultivation that the new hop growers need.

In a presentation to the Standing Committee on Agriculture and Agri-Food, the President of the Brewers' Association of Canada said that, because there are no serious commercial hop growers in Canada, “the pest management tools approved for use on hops have not kept pace with innovations and technological advancements made in the hop-producing countries.”

So while the tools have become outdated, the pests have not. The same pests and diseases that impacted hop growers decades ago remain a threat today. For the past three years, growers at the Minor Use Priority Setting Workshop have identified seven pesticide products for testing against powdery and downy mildews, mites (including two-spotted spider mites) and broadleaf weeds, to name a few of the usual suspects.

### Work Begins on Finding New Pest Control Tools

Now that growers have identified the pests that pose the biggest threat it falls to PMC to help resolve the problem. Field staff in Vineland, Ontario, and Saint-

Jean-sur-Richelieu, Quebec, two of MUPP's research sites, have already begun laying the groundwork for planting hops this year. The two sites were chosen because Health Canada's Pest Management Regulatory Agency (PMRA) requires at least three residue trials on more than one site before it will approve a pest control product. By spreading the trials out across different types of soil and using different hop varieties, PMRA will get more robust data.

At the Vineland site (located north of Lake Erie and south of Lake Ontario on the Niagara Peninsula), Agriculture and Agri-Food Canada's (AAFC's) Rob Wismer has staked out two small plots for growing the hops. One of the plots will host a treated crop sample and the other an untreated or control crop. These plots are planted at a far enough distance apart to avoid contamination from the treated crop yet close enough to share the same climate and growing conditions.

Mr. Wismer has determined which variety of hops will be planted based on extensive research and consultation with growers and experts. Meanwhile, work has been done in the plots to prepare the soil for spring planting.

At the Saint-Jean-sur-Richelieu site (about 40 km southeast of Montreal), researchers plan on planting at least two and possibly three varieties of hops on about an acre of land managed by the L'Acadie Experimental Farm, which is a satellite of AAFC's main facility there. The decision will follow discussions with a number of stakeholders, especially in the United States. Just as at Vineland, the plots have been prepared for planting in the spring.

## Local Hop Enthusiasts Jump on Board

Hops can take two to three years to give a commercial yield so the actual trials through which the pesticide will be applied might not take place until 2016. Consequently, researchers at the Saint-Jean-sur-Richelieu site have reached out to local growers to conduct trials on their farms.

One of those farms is Houblons de Dunham in Dunham, Quebec.

In a region mostly known for its vineyards, the owners of Houblons de Dunham, Julie Corry and Deric Hamelin, are actively promoting the return of hops as a commercial crop and helping new growers discover everything there is to know about this plant. Thanks to their efforts, hop cultivation, which has been dormant in Quebec for more than 60 years, could see a revival.

Their one-acre plantation is being used by AAFC's Saint-Jean-sur-Richelieu research site for trials. With the help of two other hop growers, Julie and Deric recently

formed Houblon Québec, a cooperative that aims to support and build the hop industry by promoting hop-growing fundamentals through education, research, promotion and marketing.

Houblon Québec is working to develop hops in Quebec with the Centre de Recherche et de Développement technologique Agricole de l'Outaouais (CREDETAO), which conducts projects in applied research and technology transfer adapted to the needs and realities of agricultural businesses in the region. In 2010, for example, CREDETAO was given government money to launch a research project in Pontiac County, near the Ontario border, on growing hops under local climate conditions.

Like the PMC field trials that are getting started at Vineland and St-Jean-sur-Richelieu, the CREDETAO research project aims to help growers diversify and develop hops in Canada. These efforts demonstrate just how much today's farmer relies on science. If hops are to become a comeback story for Canada, growers like Julie Corry and Deric Hamelin in Quebec and Rebecca Kneen in British Columbia need the support that local, national and international research programs provide.

## The Hop Plant

The hop plant (*Humulus lupulus*) is a high-climbing member of the *Cannabaceae* family and a close relative to hemp and cannabis. Although used primarily for brewing beer, it has also been used as a medicinal herb to reduce tension and improve digestion and stuffed into pillows as a sleep aid. Some varieties are also used as ornamental garden plants or dried for use in decorative garlands or floral arrangements.

### Growth Habits

The hop plant has a perennial rootstock called the crown that sends roots as much as 12 feet deep into the soil. In good conditions, the crown can live for over 25 years. Each spring, several shoots develop vertically from the crown and can grow more than 30 feet in a single season. Although often referred to as a vine, this part of the hop plant is technically a bine, which has stout stems with stiff hairs that climb by wrapping clockwise around anything within reach. These annual, above-ground parts of the plant are killed by frost each year.

The bine develops rapidly in early spring, growing by as much as 12 inches a day. Usually only after it completes its vertical rise does it extend branches, or side arms, that provide support for the flowers. Around mid-summer,

each branch will sprout clusters of little burrs. The styles eventually fall off as the florets grow into petals and form cones. Each branch supports several clusters of hop cones, usually in groups of threes. The cones mature for picking between August and September, and the bines are usually cut back to the ground at or shortly after harvest. After harvest, the hop plant continues to put out rhizomes until the ground freezes.



Mid-season hop from a St-Jean-sur-Richelieu grower site in Dunham, Quebec

## Commercial Value

Hops are *dioecious*, meaning that the male and female flowers develop on separate plants. Only female plants are cultivated for their flowers or cones for use in brewing and natural health products. Male plants have no commercial value, but are sometimes used to pollinate females. Pollination stimulates higher yields by increasing cone size and seed set, but because brewers prefer seedless hops, males are only grown with poor-yielding female varieties.

The female pinecone-like flower is supported by a central stem, called a strig. Bracteoles, little petal-like structures which are attached to this central stem, bear glands that are filled with a yellow, resinous substance known as lupulin. The resin contains the alpha and beta acids and hop oils that determine how much bitterness, aroma and flavour are available to the brewer.

## Distribution

Hops are native to the temperate zones of the northern hemisphere. They are found wild in western Europe, Asia and certain parts of North America. Commercial hops are generally grown between the 30th and 50th parallel north or south latitude and at various altitudes.

# An Oasis in the Middle of Canada's Pocket Desert

The Pacific Agri-Food Research Centre (PARC), as it is known today, has two independent research sites: Agassiz and Summerland that have been helping growers flourish in the dry interior of British Columbia since 1914. First established as the Dominion Experimental Farm in Summerland, it became the Summerland Research Station in 1959 and PARC in 1996. PARC is part of Agriculture and Agri-Food Canada's network of research centres strategically placed in various ecozones, as well as a research site for the Pest Management Centre (PMC). Although its name has changed over the years, PARC continues to conduct research to support the agricultural industry of the Okanagan Valley, a semiarid desert region that extends north from the state of Washington into the central southern interior of British Columbia.

## A Unique Climate

The dry, sunny climate and long growing season of the Okanagan Valley make Summerland an ideal location for PARC's research facility. In the southernmost corner of the Valley lies the northern end of the Sonoran Desert, which extends all the way south to Mexico. Known as Canada's "pocket desert," the landscape is dry and the temperatures are hot.

The climate is further defined by the Valley's location in the rain shadow of the Coast Mountain Range. With peaks of over 2,450 metres (8,000 feet), these mountains act as effective weather blocks. While the weather west of the Coast Range in Vancouver is wet, precipitation east of this range in the Valley varies from an annual average of between 250 mm (9 inches) in the south to 400 mm (15 inches) in the north. The dry, sunny climate combined with the moderating effects of Okanagan Lake, which minimizes the incidence of frost and cold winter temperatures, makes the Okanagan Valley an ideal growing region. However, with low rainfall, the availability of irrigation water to meet crop requirements is crucial to agricultural success.

## Early Days of Helping Okanagan Growers

Fruit production is a hallmark of the Okanagan Valley today, but the industry began with difficulty. The Dominion Experimental Farm was established to assist the fledgling agricultural industry. Researchers at "The Farm," as it was known to the locals, initially sought to identify

which crops, crop varieties and breeds of livestock were best suited to the area and to find solutions to production problems. The ornamental gardens and first orchards were planted in 1916, and a tree fruit breeding program was established in 1924. Over the years, tree fruit breeders produced several tree fruit varieties, including Spartan, Summer Red and Sunrise apples, as well as Van, Lapins and Sweetheart cherries.



Pacific Agri-Food Research Centre in Summerland, British Columbia

## PARC Today

Today, PARC's research professionals and staff focus their energy in three broad areas of expertise: horticulture and environment, food science and biotechnology. Horticulture and environment research includes the tree fruit breeding programs, viticulture program, production systems, and entomology. The food science group brings added value to agricultural products through research on post-harvest physiology, modified atmosphere packaging, sensory evaluation and the new area of functional foods. The biotechnology scientists provide national leadership in research at the molecular level on plant/pathogen interactions and plant virology.

## A New Partner

In 2003, PMC's Minor Use Pesticides Program (MUPP) was established at Summerland to carry out the field and greenhouse trials needed to generate data on pesticide residue, efficacy and crop tolerance in support of registering new pest control products. Most of the MUPP work is done at PARC under the direction of a principal investigator with the assistance of field support staff. Occasionally, a crop cannot be grown at the research centre so the trial is conducted at the site of a local grower who is willing to collaborate.

To date, trials on all aspects of disease, weed or insect control have been conducted on a variety of crops such as tree fruits (apples, cherries and peaches), vines (wine grapes and table grapes), vegetable crops (carrots, tomatoes and peppers), greenhouse crops (lettuce, cucumber and ornamentals) and ginseng.

More recently, MUPP conducted screening trials in collaboration with Agriculture and Agri-Food Canada scientists to identify potential control products for new and invasive pests. In 2008 and 2009, trials were conducted for apple clearwing moth, which was first confirmed in British Columbia's southern interior in 2005 and subsequently identified in orchards in Ontario. With industry support, MUPP has submitted detailed information and data from these trials to the Pest Management Regulatory Agency (PMRA) for new pesticide registrations.

As growers know only too well, the battle against pests never ends and attention has been placed on another new invasive species. The spotted-wing drosophila (SWD) is a serious fruit fly pest that targets many stone fruit and berry crops. It was first identified in the Fraser Valley in 2008, followed by the Okanagan Valley in 2009. Although researchers have carried out screening trials and fruit bioassays to test insecticide products, growth of the SWD population continues to threaten many of British Columbia's fruit crops. For MUPP staff in Summerland, this means more laboratory and field work, as well as more collaboration with industry groups, until a solution is found.



Newly planted peach and plum orchard, Summerland, British Columbia

# Program Update: Minor Use Pesticides

The [Minor Use Pesticides Program \(MUPP\)](#) continues to be busy and productive. As of November 2013, 54 projects have been completed and submitted to either Health Canada's Pest Management Regulatory Agency or directly to the registrants to be used in future submissions. This work covers pest issues in all three disciplines (insecticides, fungicides and herbicides) in 24 different crop sectors. For a complete list of submissions and registrations by year, see the Program's [Submissions](#) web page. MUPP reports are updated approximately every two months and more recent versions are available by contacting [pmc.cla.info@agr.gc.ca](mailto:pmc.cla.info@agr.gc.ca).

Representatives from the Pest Management Centre (PMC) attended the United States Department of Agriculture's Interregional Research Project No. 4 (IR-4) National Research Planning Meeting in early November. Fifteen Canadian and American joint priorities were selected which translate to 16 Agriculture and Agri-Food Canada projects with 10 focusing on insecticides, two on fungicides and four on herbicides. Canada is leading two insecticide projects on greenhouse tomato and cucumber, one fungicide project on dry bulb onion and another on green onion and one herbicide project on celery.

## March 2013 Priority Setting Workshop

Over 200 participants representing growers, manufacturers, provincial and federal government departments and IR-4 attended the March 2013 MUPP Priority Setting Workshop, marking another successful year. At this workshop, grower representatives selected [42 new research priorities](#). These priorities included aphids on greenhouse lettuce, redroot pigweed on flax and white mold on beans, to name just a few.

## Looking Ahead: March 2014 Priority Setting Workshop

The format for the priority setting workshop scheduled for March 2014 will undergo some changes.

Since its beginning in March 2003, the MUPP Priority Setting Workshop has been held over three days, one day for each of the three disciplines. In 2010, however, this workshop was expanded into a four-day meeting to accommodate the selection of biopesticide priorities under the Pesticide Risk Reduction Program (PRRP).

To further streamline the process, we are moving the selection of biopesticide priorities under PRRP to the mornings of the respective days for setting MUPP's insecticide, fungicide and herbicide priorities. In addition, only new active ingredient registration (Cat A.1) or major new use site category (Cat A.2) submission to Pest Management Regulatory Agency will be selected as priorities under PRRP.

These changes mean that we will once again return to a three-day meeting, one for each discipline. Otherwise, priority selection for MUPP will continue as normal. Specifically, label expansions (i.e., crop/pest/solution approach) will continue under MUPP.

# Program Update: Pesticide Risk Reduction

During the same week as the Minor Use Pesticides Program (MUPP) Priority Setting Workshop, the Pesticide Risk Reduction Program (PRRP) held its [4th annual Biopesticide Priority Setting Workshop](#) on March 18, 2013. More than 120 stakeholders attended. Following lively consultations, the stakeholders selected a new group of [eight priorities](#) for biopesticide projects. Work is currently under way to prepare for establishing eight new projects starting in 2014 to address these priorities. Meanwhile, efforts continue on processing the efficacy data generated from 18 field trials conducted in the summer of 2012. These field trials addressed previously selected biopesticide priorities and the data are being utilized to prepare registration submissions to the Pest Management Regulatory Agency (PMRA) for the new uses. In spring 2013, 10 new trials were established to address priorities selected at the 2012 Biopesticide Workshop.

PRRP is also actively working on nine ongoing [strategies](#) to reduce the risk to human health and the environment associated with pesticide use in agricultural crops. Three of the pesticide risk reduction strategies are in the early development stages since they represent new priority pest issues chosen in the 2012–2013 fiscal year. The three selected issues topped a list of 56 that had been identified in 2011 through a joint Pest Management Centre–PMRA project designed to set criteria for selection of priorities to be addressed by PRRP. Interested stakeholders can find strategy action plans, project outputs and information for growers on the Program's web pages as these become available.

## Tools and Information

Recent accomplishments include a number of new tools and information for growers, as well as new research and development projects:

- New smart phone application on a web-based [weed identification and management tool](#) ([www.weedinfo.ca](http://www.weedinfo.ca))
- Results from a national survey documenting [apple scab resistance to systemic fungicides in apple orchards across Canada](#)
- New information on the [efficacy of row covers for cabbage maggot management in Brassica crops](#)
- 10 new biopesticide uses registered for Met52 Bioinsecticide
- Value data submitted (as part of a larger Cat A submission by registrant) for a new use of bioinsecticide Xen Tari for diamondback moth control in canola
- Three technical fact sheets on [decision support for onion leaf blight](#), herbicide [banding for weed management in carrots](#) and [a new biofungicide to manage fusarium head blight of wheat](#)
- Seven [new projects](#) established in spring 2013 to support priority solutions identified through two risk reduction strategies, including Insect Pests of Field Crops and [Greenhouse Floriculture](#), and the 2012 Biopesticide Workshop.

# What's New on the Pest Management Centre Website?

Here are the new items that have been added to our website since our last newsletter:

## Minor Use Pesticides Program

The [Submissions](#) and the [Project Status by Crop](#) reports have been updated. New information is added on an ongoing basis so be sure to check these pages regularly.

## Pesticide Risk Reduction Program (PRRP) Projects

The list of [pesticide risk reduction projects implemented in 2013](#) has been published. The list includes brief descriptions of each project.

New project summaries are added on an ongoing basis to the list of [projects funded through PRRP](#) since 2003.

## Factsheets

New titles continue to be added to PRRP's [Sustainable Crop Protection Factsheet Series](#) under the [Publications and Document archive](#).

## Crop Profiles

[National Crop Profiles](#) developed by PRRP are available for downloading at no charge from the [Government of Canada Publications](#) website. You can also contact the Pest Management Centre at [pmc.cla.info@agr.gc.ca](mailto:pmc.cla.info@agr.gc.ca) or [Canadian Agriculture Library](#) to ask for a copy.

To stay informed of updates on our website, be sure to subscribe to our [email notification service](#). These notifications will provide you with links to any new material published on the website.



# Message from Executive Director of the Pest Management Centre

I take this opportunity on behalf of the Pest Management Centre (PMC) to congratulate the United States Department of Agriculture's Interregional Research Project No. 4 (IR-4) on its 50th anniversary. IR-4 has provided invaluable service to growers in North America and is a beacon for minor use pesticide programs worldwide.

When PMC was formed a decade ago, Agriculture and Agri-Food Canada consulted closely with grower groups to ensure that the program's design would best suit their very real need for increased access to minor use and reduced risk crop protection tools and technologies. Growers continually pointed to IR-4's success as an example of a program meeting the needs of minor use growers. Growers on both sides of the border often face the same dilemma; they repeatedly end up with few pest control tools despite the high value and importance of small acreage crops, because of the relatively small market size for these tools. In Canada, before PMC was launched, the technology gap was growing and grower competitiveness was shrinking. Something had to be done.

IR-4 was gracious in providing time and expertise in the development of PMC. The regulatory systems for crop protection in Canada and the United States are similar, and the majority of registrants market their products on both sides of the border. PMC has now matured to the point where joint projects with IR-4 are common, and desirable. When Canadian and American growers see simultaneous registration of new products and/or uses, the technology gap shrinks and competitiveness increases. Harmonization of regulations and maximum residue levels (MRLs) has become the new way of doing business, and IR-4 and PMC along with regulators in both countries are leaders in bringing about greater international harmonization.

Once the student, PMC has now evolved to become a potential mentor to countries facing the same situation Canada was in a decade ago. Our program has hosted delegations from Chile, China, New Zealand and Brazil who are seeking to establish their own minor use and/or reduced risk offices. Three of these countries sent observers to our annual priority setting workshop to get a close look at the process of selecting projects and a



Dr. Manjeet Sethi

better understanding of the unique dynamic that federal and provincial minor use experts have with growers, regulators, pesticide companies and international partners. While their regulatory regimes are different, as well as their types of minor use commodities, growing conditions and pest problems, these countries envision a program based on PMC's model that could respond to the needs of their respective growers.

PMC's success can be defined in one word: collaboration. Our experience has proven if you have cooperation between government, growers and industry, success can be achieved. In PMC's case, Canadian grower groups, the provinces, our national regulator—the Pest Management Regulatory Agency, chemical manufacturers and IR-4 have joined with PMC in providing leadership and expertise in their respective fields. It is a close partnership, with all working toward the same goal of helping Canadian growers increase their competitiveness through provision of crop protection tools. In the case of countries who have visited PMC, the nuances of their eventual program formulae may end up being different, but the heart of their programs will be cooperation.

There have been advancements on the international front. One relates to the Codex Alimentarius Commission, which develops harmonized international food standards, guidelines and codes of practice to protect the health of consumers and ensure fair practices in the food trade. PMC is now a member of the Canadian delegation to the Codex Committee on Pesticide Residues (CCPR) and is involved in the Codex Classification of Crops and the Codex Electronic Working Group (EWG) on Minor Uses and Specialty Crops. EWG provides guidance to facilitate the establishment of the Codex MRLs for minor uses and specialty crops. PMC also participates in the data submission to the Joint Meeting

on Pesticide Residues and those uses are discussed when CCPR meets.

PMC is also a member of the Organization for Economic Co-operation and Development's Expert Group on Minor Uses (EGMU). This group examines mechanisms associated with minor uses, specifically in the areas of policy and technical cooperation. EGMU looks at processes to address and solve minor use issues as well as at maximizing outcomes and opportunities for Global Joint Reviews and finding ways to use international data for efficacy and crop safety.

PMC is bringing Canada's position to the forefront by taking into account growers' needs and AAFC's mandate and objectives. The above-mentioned activities will benefit Canadian growers by providing access to new pest management tools developed at the international level.

PMC's mentorship of countries developing minor use systems will also benefit Canadian growers by expanding their access to new pest management tools and markets.

*Until next time....Manjeet Sethi*

## About the Pest Management Centre

In 2003, Agriculture and Agri-Food Canada (AAFC) established the Pest Management Centre (PMC) as a unique partnership between growers, grower associations, federal and provincial governments and the crop protection industry to deliver two national programs:

- Pesticide Risk Reduction Program (PRRP), a joint initiative of AAFC and Health Canada's Pest Management Regulatory Agency, which focuses on the development of risk reduction strategies for the Canadian agriculture and agri-food sector; and
- Minor Use Pesticides Program (MUPP), a joint initiative of AAFC and Health Canada's Pest Management Regulatory Agency, which responds to the needs of Canadian growers for increased access to new minor uses of pesticides.

PMC operates from its headquarters in Ottawa and conducts field, greenhouse and growth chamber trials at seven research sites located in Kentville, Nova Scotia; Saint-Jean-sur-Richelieu, Quebec; Vineland, Ontario; Harrow, Ontario; Scott, Saskatchewan; and Summerland and Agassiz, British Columbia.

For additional information about PMC, please visit our website at [www.agr.gc.ca/pmc](http://www.agr.gc.ca/pmc).

### Contact Information

For more information about any of the items in this issue of the newsletter, please contact PMC via email at [pmc.cla.info@agr.gc.ca](mailto:pmc.cla.info@agr.gc.ca) or call 613-694-2457.

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For more information, reach us at [www.agr.gc.ca](http://www.agr.gc.ca) or call us toll-free at 1-855-773-0241.