

# **President's Message**

Karen Bailey

The Canadian Phytopathological Society is a thriving, vibrant organization, because of its enthusiastic and dedicated membership. I am honored to assume the office of President for 2002-03 and would like to thank the membership for entrusting me with the responsibility to carry forward the vision and the spirit of our Society.

Over the years, I have had the good fortune to meet many members of the Society. I have been a member of CPS for more than 20 years and lived in both eastern and western regions of Canada. But for those of you who I have

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not yet met, I would like to tell you a little about myself.

Originally from Toronto (with no farming background), I enrolled in the College of Agriculture at the University of Guelph, much to the puzzlement of friends and family. By the end of four years, I was hooked on applied science and started a Master's degree in plant pathology at the same university. My long term association with CPS also began at that time, starting in the "CPS Mail Room" by collating, stuffing envelopes, and licking stamps to get out the *CPS News*, which was produced at that time by my supervisor, Dr. Blair MacNeil. My next move was to "go west, young woman" to

work for Agriculture and Agri-Food Canada in Saskatoon. I completed a PhD at the University of Saskatchewan. My colleagues and mentors in Saskatoon were also active CPS members, and soon had me involved in many aspects of the Society, which has been and continues to be fun and rewarding.

### **CPS Annual Meeting of 2002**

The Annual meeting was held in the beautiful setting of Waterton Lakes National Park, Alberta. It was a well-attended meeting with about 140 registrants and 40 accompanying people. There was something for everyone: interpretive hikes and talks by the park ranger; scientific programs covering subjects such as the molecular genetics of pathogens and hosts, biological control, disease control and epide-

miology, and disease resistance; graduate student social at the Thirsty Bear complete with a hypnotist and CPS volunteers! At the banquet we were entertained by the prairie phenomenon Bryn Thiessen and his cowboy poetry.

"My colleagues and mentors were active CPS members, and soon had me involved in many aspects of the Society, which has been and continues to be fun and rewarding."

At the Awards Ceremony we gave tribute to three highly deserving scientists who have made important contributions to plant pathology in Canada. The award for Outstanding Research was received by Dr. Jalpa P. Tewari of the University of Alberta, Edmonton. Dr. Rudra Singh of Agriculture & Agri-Food Canada in Fredericton, New Brunswick received the award of Fellow. Dr. Louis Bernier of University of Laval, Sainte Foy, Quebec received the Gordon Green Outstanding Young Scientist Award. We also presented awards to several graduate students of plant pathology. Student Travel Awards were received by Syma Chatterton of the University of Guelph and Amelia Dauch of McGill University. Amelia Dauch also won the Best Student Oral presentation. The Best Student Poster Presentation was awarded to Robert Duncan of the University of Winnipeg, and an Honorable Mention given to Quinn Holslag from the University of Manitoba. Congratulations to all!

There were a number of changes to the CPS Board this year. On behalf of the membership

I thank those who have completed their term: Roger Rimmer as Past-President, Peter Sholberg as Treasurer, and Simon Shamoun as Senior Director. These individuals have made significant contributions to our Society. I also welcome and look forward to working with those who have assumed new positions on Board, namely Greg Boland as Past-President, Richard Martin as President-Elect, Richard Hamelin as Vice-President, Dilantha Fernando as Treasurer, Odile Carisse as Senior Director, and Jim Menzies as Junior Director. Ken Mallett continues with his position as Secretary.

What's Happening in 2002-03

**Publication of the 3<sup>rd</sup> edition of Diseases of Field Crops in Canada.** Based on insider

information from the Revisions Committee, they are hiring professional services to copy edit the final manuscript and to complete the photo layouts. It is estimated that the book will be pub-

lished by late 2002, with sales starting in 2003.

**CJPP On-Line.** Soon it will be a year since our journal appeared in electronic format with free public access to its contents. We are now investigating options to limit access to only members and subscribers of the journal. The Journal Editor, Zamir Punja, and Greg Boland will meet with NRC Press this fall.

**CPS Website.** Greg Boland is continuing as Website Editor and will continue to improve the content of the website. This year he will be posting information on the committees and their mandates, so members wishing to get involved can be more informed.

CPS-SCP News. After five years as Editor of the newsletter, David Kaminski will be stepping down from this position in June 2003. David and Jim Menzies (who is the Associate Editor) have done a great job to give our newsletter a new appearance and revitalize the content. Jim will remain as associate editor, but we need to search our membership for a new Editor. Also, we would like to increase the bilingual content of articles in the newsletter, so we are looking for a second associate editor

who can help us to achieve this goal. Any volunteers?

Implementation of Strategic Plan. Many ideas from the strategic plan have been implemented and we are currently working on the medium and low priority goals. Some goals being tackled this year are to review the number and value of the student awards, survey the membership on their satisfaction with services that are or could be provided, increase the Society's participation in Science Fairs, and distribute CPS promotional kits in French and English to regional reps.

**CPS Microbial Genetic Resources and Culture Collections Committee.** Under the guidance of Tom Fetch, this committee is planning a special workshop to address issues related to the depletion of microbial resources in Canada. It will be held in association with the CPS Annual meeting in Montreal in 2003 and will be co-sponsored by the Canadian Agri-Food Research Council. Further details will be announced later.

**CPS 75<sup>th</sup> Anniversary Special Events Committee.** The year 2004 marks the 75<sup>th</sup> year that plant pathologists in Canada have been organized as a Society. Ron Howard has agreed to chair this new *ad hoc* committee, which will organize special events for this auspicious occasion that includes participation from both regular and emeritus members. Ideas for events are coming forward, but more are needed. Please consider adding your participation to this committee and contact Ron (Email: <a href="mailto:ron.howard@gov.ab.ca">ron.howard@gov.ab.ca</a>).

As you can see, we have a number of exciting goals on the agenda for 2002-03. It should be a busy and productive year for CPS, and it is by working with you, the membership, that the Board and Committees can accomplish these goals.

## Mot de la présidente

Karen Bailey

La Société canadienne de phytopathologie est une organisation prospère et active grâce à l'enthousiasme et au dévouement de ses membres. C'est un honneur pour moi d'assumer la présidence pour 2002-2003 et je remercie les membres de me confier la responsabilité de transmettre la vision et l'esprit de notre Société.

Au cours des années, j'ai eu la chance de rencontrer beaucoup de membres de la Société. J'ai été membre de la SCP durant plus de 20 ans et j'ai vécu dans l'Est et l'Ouest du Canada. Mais pour ceux d'entre vous que je n'ai pas encore rencontrés, je voudrais vous parler un peu de moi.

Originaire de Toronto (sans antécédents en agriculture), je me suis inscrite à l'École d'agriculture de l'Université de Guelph, à la surprise de mes amis et de la famille. À la fin de mes quatre années d'étude, j'étais passionnée de science appliquée et j'ai commencé une maîtrise en phytopathologie à la même université. Mon implication à long terme avec la SCP a également commencé à ce moment-là, dans la « salle de courrier de la SCP », par l'assemblage du bulletin d'information de la SCP, en le plaçant dans des enveloppes et en léchant des timbres pour sortir le bulletin qui était produit à ce momentlà par mon directeur de thèse, le Dr Blair MacNeil. Par la suite, la jeune femme que j'étais a migré à l'Ouest pour travailler pour Agriculture et Agroalimentaire Canada à J'ai obtenu un doctorat de Saskatoon. l'Université de la Saskatchewan. Mes collègues et mentors à Saskatoon étaient également des membres actifs de la SCP et m'ont rapidement impliquée dans plusieurs activités de la Société, ce qui a été et continue d'être plaisant et gratifiant.

### La réunion annuelle de 2002

La réunion annuelle a eu lieu dans la belle région du parc national des Lacs-Waterton en Alberta. Ce fut une réunion très populaire avec environ 140 inscrits accompagnés de 40 autres personnes. Il y en avait pour tous les goûts : sentiers d'interprétation et entretiens avec un garde du parc; des programmes scientifiques touchant des sujets tels que la génétique moléculaire des organismes phytopathogènes et des hôtes, la lutte biologique, la lutte contre les maladies et l'épidémiologie, et la résistance à la maladie; jusqu'à une rencontre des étudiants diplômés au Thirsty Bear avec un hypnotiseur et des volontaires de la SCP! Au banquet, nous avons été divertis par le phénomène des Prairies, Bryn Thiessen, et sa poésie de cow-boy.

Lors de la cérémonie de remise des prix, nous avons rendu hommage à trois scientifiques très

méritants qui ont apporté contributions des importantes à la phytopathologie au Canada. La récompense Recherche pour exceptionnelle a été remise au Dr Jalpa P. Tewari de l'Université d'Alberta à Edmonton. Le Dr Rudra Singh d'Agriculture et Agroalimentaire Canada à Fredericton, Nouveau Brunswick, a été nommé membre associé. Le Dr

<< Mes collègues et mentors étaient également des membres actifs de la SCP et m'ont rapidement impliquée dans plusieurs activités de la Société, ce qui a été et continue d'être plaisant et gratifiant. >>

Louis Bernier de l'Université Laval, Sainte-Foy, Québec, a reçu le Prix Gordon J. Green de remarquable jeune chercheur. Plusieurs récompenses furent également présentées à des étudiants diplômés en phytopathologie. Des prix pour les déplacements à la réunion ont été décernés à Syma Chatterton de l'Université de Guelph et à Amelia Dauch de l'Université McGill. Amelia Dauch a également gagné le Prix de la meilleure présentation étudiante. Le Prix de la meilleure affiche étudiante a été attribué à Robert Duncan de l'Université de Winnipeg et une mention honorable donnée à Quinn Holslag de l'Université du Manitoba. Félicitations à tous.

Plusieurs changements ont eu lieu au sein du Conseil d'administration de la SCP cette année. Au nom des membres, je remercie ceux qui ont terminé leur mandat : Roger Rimmer comme président sortant, Peter Sholberg comme trésorier et Simon Shamoun come directeur senior. Ces personnes ont contribué de façon importante à notre Société. Je

souhaite aussi la bienvenue aux autres qui ont accepté de nouveaux mandats au C.A. et avec qui j'ai hâte de travailler, notamment Greg Boland comme président sortant, Richard Martin comme président élu, Richard Hamelin comme vice-président, Dilantha Fernando comme trésorière, Odile Carisse comme directrice senior et Jim Menzies comme directeur junior. Ken Mallett continuera d'occuper le poste de secrétaire.

À quoi s'attendre en 2002-2003

Publication de la 3º édition de Diseases of Field Crops in Canada. Sur la foi

d'informations internes en provenance du Comité de révision, ils en sont à l'étape de contracter des services professionnels pour faire la révision de la copie finale du manuscrit et pour le montage des photos. On pense que le bouquin sera publié à la fin de 2002 et que les ventes débuteront en 2003.

Le *CJPP* en ligne. Cela fera bientôt un an que notre revue est disponible sous forme électronique et que son contenu est accessible au public. Nous étudions présentement des façons d'en limiter l'accès aux membres et aux abonnés de la re-

vue. Le directeur scientifique, Zamir Punja, et Greg Boland rencontreront les Presses du CNRC cet automne.

Le site Web de la S

Le site Web de la SCP. Comme webmestre, Greg Boland continuera à améliorer le contenu du site Web. Cette année, il ajoutera de l'information sur les comités et leurs mandats; ainsi, les membres qui désirent s'impliquer seront mieux informés.

Le bulletin d'information CPS-SCP News.

Après cinq ans en tant que directeur du bulletin d'information, David Kaminski cèdera sa place en juin 2003. David et Jim Menzies (le directeur associé) ont fait un travail superbe pour donner une nouvelle présentation au bulletin d'information et pour en revivifier le contenu. Jim demeurera directeur associé, mais nous cherchons un nouveau directeur parmi nos membres. Nous aimerions aussi augmenter le contenu bilingue du bulletin d'information; nous cherchons donc un second directeur associé qui pourrait aider à atteindre cet objectif. Des volontaires?

Mise en oeuvre du plan stratégique. Plusieurs des idées du plan stratégique ont été mises en application et nous travaillons actuellement sur les objectifs ayant une priorité basse ou moyenne. Certains des objectifs abordés cette année sont de réévaluer le nombre et la valeur des prix étudiants, sonder les membres sur leur degré de satisfaction vis-à-vis les services offerts ou que pourrait offrir la Société, augmenter la participation de la SCP aux rencontres scientifiques et distribuer des trousses promotionnelles en français et en anglais aux représentants régionaux.

Le Comité de la SCP sur les ressources génétiques et les collections de microorganismes. Sous la direction de Tom Fetch, ce comité planifie un atelier de travail spécial pour aborder les questions relatives à la perte de ressources microbiennes au Canada. Il sera organisé en association avec la réunion annuelle de la SCP à Montréal en 2003 et sera co-commandité par le Conseil de recherches agro-alimentaires du Canada. Les détails seront connus plus tard.

Le Comité des évènements spéciaux du 75° anniversaire de la SCP. L'année 2004 marquera la 75° année d'organisation en société des phytopathologistes au Canada. Ron Howard a accepté de présider ce nouveau comité *ad hoc* qui organisera des évènements spéciaux pour cette occasion particulière et qui fera appel à la participation des membres réguliers et des membres émérites. Des idées sont déjà avancées, mais de nouvelles idées seront bienvenues. Envisagez la possibilité de participer aux travaux de ce comité et contactez Ron

(courriel: ron.howard@gov.ab.ca).

Comme vous pouvez le constater, nous avons plusieurs objectifs excitants au programme pour 2002-2003. Ça devrait être une année occupée et productive pour la SCP et c'est en travaillant avec vous, les membres, que le Conseil et les Comités pourront atteindre ces objectifs.

### **Contact the Editor**

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David Kaminski Box 1041 Carman, MB ROG 0J0

Depending on whether you started reading at the back or the front, you might not have heard that I am working towards giving over the reigns of *CPS-SCP News*. In 1996, I picked up where Roger Rimmer left off and from reading Karen's message I realized that Blair MacNeil was his predecessor. Who will be the next Editor? Could it be you?

Have you noticed the disappearance of the ad for PaRi, our translators for the President's Message and the odd special item? Claude and Jean-Guy continue to do an excellent job and with a most accommodating turnaround time. The reason for the ad no longer appearing is that they have decided to cease looking for *new* clients.

The report on the AGM was written by Jim Menzies with a little help from Larry Kawchuk. I believe the pictures were contributed by one of the Society's new members, Xianzhou Nie. We like to give credit where credit is due, which leads me to my first apology of this note - the fine caricature of Greg Boland that appeared in the June issue was the handiwork of Doug Schaefer.

My second apology is to Greg himself and to Zamir for omitting their respective reports (CPS website and *CJPP*) from the June issue. Part of my reason for giving up this assignment (one I've enjoyed very much) is frustration with myself for what seems to be an increasing number of slip-ups and omissions.

As Karen Bailey said, I shall stick with it for one more cycle, ending with the June issue in 2003. I hope this allows adequate time to recruit a replacement. If it's any incentive, the job comes with some still spiffy peripherals a Hewlett Packard LaserJet printer, a 17" monitor, an Iomega external zip drive and a flatbed scanner, as well as the desktop publishing software - PageMaker 6.5. Don't be shy. - Ed.

### 2002 Meeting at Waterton Lakes, AB

The 2002 Annual General Meeting of the Canadian Phytopathological Society took place from June 16th to 19th at Waterton Lakes Lodge in beautiful Waterton Lakes National Park, Alberta. The park was established in 1895 and in 1932 was joined with Montana's Glacier National Park to form the Waterton-Glacier International Peace Park - a world first. The park represents the southern Rocky Mountains natural region where some of the most ancient mountains in the Rockies abruptly meet the prairie. It is a spectacular landscape shaped by wind, fire and flooding with a rich variety of plants and wildlife. The park is also home to Upper Waterton Lake, the deepest lake in the Canadian Rockies. Many attendees took advantage of the park during periods of free time to hike its many trails and to enjoy the fresh air and wildlife. Many were fortunate enough to see and get close to grizzly bears, moose, sheep, elk, deer, bison and other wildlife. It was indeed a beautiful setting for the 2002 AGM.

The theme of the meeting was 'Phytopathological Challenges/Défis en phytopathologie' and attracted 151 registrants, of which 23 were students. The meeting was opened with welcoming remarks from the 2001-2002 CPS/SCP president Dr. Greg Boland, followed by a presentation on Waterton National Park by a park representative. During the course of the meetings, there were 99 presentations including a



Outgoing President Greg Boland (right) visits with Scott Chapman (left) of BASF at the poster session

symposium on 'Phytopathological Challenges' and an industry colloquium sponsored by BASF on "Novel Disease Control Strategies". The symposium was very interesting and thought provoking with presentations by Dr. V. Higgins on 'Making Plant Pathology Training Relevant in the 21st Century', Dr. A.E. Desjardins on 'Diverse Traits for Pathogen Fitness in *Giberella zeae*' and Dr. S.H. DeBoer on 'Perspective on Genetic Engineering of Agricultural Crops for Disease Resistance.'

A graduate student social was one of the highlights of the meeting and was held on Monday night at The Thirsty Bear pub. A hypnotist



was the main entertainment at the social, and the crowd was not disappointed. Even some die-hard skeptics had to admit to enjoying themselves. It was a highly enjoyable evening and demonstrated that we should all attend the graduate student social in the future.

The banquet and awards ceremony was held on Tuesday night at the Bayshore Inn banquet room. Close to 200 delegates and guests were entertained by cowboy poet Bryn Theissen while dining on Alberta prime rib and huckleberry pie.

The meeting wrapped up on Wednesday morning with the annual business meeting at the Waterton Lakes Lodge conference room. During the course of the meeting, Dr. Greg Boland passed the office of president over to the 2002-2003 president, Dr. Karen Bailey. The Canadian Phytopathological Society wishes to thank the many sponsors for their support and generosity.

## **Committee (and other) Reports**

### **CPS Awards**

The following awards were announced and presented at the CPS Annual meeting in Waterton Lakes, Alberta, June 18, 2002. Citations for the Fellow, Gordon Green and the Award for Outstanding Research will appear soon in *CJPP*.

#### **Student Travel Awards:**

Syama Chatterton, Department of Environmental Biology, University of Guelph

Amelia Dauch, Department of Plant Science, McGill University

This competition requires that applications (with abstracts) be submitted in early March so that the successful applicants can be informed of the award well in advance of the meeting.

#### **Best Student Oral Presentation:**

Amelia Dauch, Department of Plant Science, McGill University, for her presentation "Detection of the mycoherbicide Velgo© in velvetleaf field soil using strain specific markers."

### **Best Student Poster Presentation:**

Robert W. Duncan, Department of Plant Science, University of Manitoba, for his poster "Isolation and assessment of potential biological control agents from sclerotia of *Sclerotinia sclerotiorum*."

Honourable mention: Quinn A. Holslag, Department of Plant Science, University of Manitoba, for his poster "Assessing Entomosporium mespili inoculum potential on infected Amelanchier alnifolia leaves."

# Fellow of the Canadian Phytopathological Society;

Dr. Rudra P. Singh, Agriculture and Agri-Food Canada, Potato Research Centre, Fredericton, NB

# Gordon Green Outstanding Young Scientist Award:

Professor Louis Bernier, Centre de Recherche en Biologie Forestiere, Universite Laval, Sainte-Foy, Quebec

### **Award for Outstanding Research**:

Professor Jalpa P. Tewari, Department of Agriculture, Food and Nutritional Science, University of Alberta, Edmonton, Alberta

Congratulations to all award recipients and thanks to all who took the time to prepare and submit nominations. Thanks also for the year round efforts of members of the Awards Committee, Sue Boyetchko, Suha Jabaji-Hare, Khalid Rashid, and Brent McCallum, and to Gary Peng for assisting with the judging of the student awards.

Verna J. Higgins Chair, CPS Awards Committee

# **Other Reports**

### Report from the Editor-in-Chief

# of the Canadian Journal of Plant Pathology (CJPP)

Vol. 23 (1-4) for 2001 consisted of 410 printed pages inclusive of 4 review/invited papers, 30 full papers, 5 Symposium articles, 9 notes, 2 Fungi Canadenses, Annual and regional meeting abstracts, an Index of Authors and Instructions to Authors. Noteworthy is that there were 9 colour plates published. The journal made a transition in Editor-in-Chief from Rudra P. Singh to Zamir K. Punja beginning July 1, 2002. Following the transition, 3 new categories - Research News Highlights, Emerging Technologies, and Mini-reviews were added to the journal. The journal also was made available on-line beginning with the 23 (4) issue. The Editorial Board, consisting of 11 Section Editors, was revised with the appointment of 5 new individuals and the creation of a new category - Abstracts and Symposium papers. Through the efforts of these Section Editors and NRC Research Press, the journal continues to publish articles rapidly. I would like to thank all of the individuals who have committed their time and effort to making the CJPP what it is today.

Zamir K. Punja Editor-in-Chief, *CJPP* 

## **CPS-SCP Website**

The CPS-SCP Website (www.cps-scp.ca) was redesigned in July 2001 and continued to grow during 2001-02, in both size and usage. Our website is now considered an intermediate-sized internet site with more than 170 html pages and 100 images and downloadable files. The new design includes several new features, with emphasis on a new graphical presentation and improved access to frequently used

pages. In addition, the Resources section of our website was expanded this year with the inclusion of more teaching-related materials for public schools provided by the Education and Public Awareness Committee, chaired by Jeannie Gilbert.

Usage of the CPS-SCP Website increased significantly during 2001-02. For example, from January to April 2002, there was a range of 131,556 to 160,052 hits/month (hit = any connection to the site, including inline image requests and errors); 9,480 to 10,683 views/month (view = a hit that successfully retrieves content); and 4,581 to 5,534 user sessions/month (user session = a session completed by an individual user of the website during one visit). The most frequently requested pages in the site included:

journals.htm, watertonlakes.htm, positionspage.htm, cjppeng.htm, meetings.htm, suddenoakdeath.htm, cpds.htm, publications.htm, journal2001.htm, sustainingassociates.htm, resources.htm, and weblinks.htm.

The site search engine was also used frequently. The CPS-SCP website was visited by internet users from up to 40 countries in 2001-02

These summary figures indicate that usage of our website increased by 400 to 500 % in the past year. This increased activity indicates that the CPS-SCP website is filling a need for faster and easier access to information on plant pathology and Society activities. A more detailed summary of user activity during the past year was posted on the homepage of the website in early July. Members of CPS-SCP are encouraged to submit suggestions for content that they would like added to the site, particularly for announcements of available positions in plant pathology. The positionspage.htm receives considerable user activity despite an often small number of positions that are advertised. The site was successful several times in 2001-02 in connecting potential employers with prospective employees and/or graduate students.

In 2002-03, emphasis will be placed on increasing the content of our website, and using the information gained from previous user

patterns to identify areas that require more refinement and/or content. Additional content on the structure, membership and mandate of CPS-SCP Committees will be added in the near future. CPS members are encouraged to submit suggestions for additional information they would like included in our Society website.

Technical and graphical design assistance for the CPS website is provided by Judy Prange, Vancouver, BC, and the site is hosted by Bennett Arts Ltd., Vancouver, BC.

Greg J. Boland, CPS-SCP Website Editor

## Membership - 2002

### **2002 Membership Totals** (as of June 12):

Regular Members: 305

**Emeritus Members: 56** 

Student Members: 29

Sustaining Associates: 17

**Total Members: 407** 

In comparison to 2001, we are ahead in memberships. At the same time last year, we had 394 members. The final total for 2001 was 405 members. There has been a slight increase in membership over the last 2 years.

New Members: 32 (Regular - 21; Sustaining: -

1: Student: - 10)

Members from 2001, Not Renewed: 49

Members by Geographic Region

Canada: 329; US: 52; International: 26

Canada by province:

ON - 83; BC - 61; AB - 45; MB - 46; SK - 37; QC - 32; PEI - 10; NB - 9; NS - 5; NF - 1

189 Western Canada members (BC-MB); 140 Eastern Canada Members (ON-NF)

**New Members:** 

Hafiz Uddin AHMED, Muhammad AYOUB, Eugenia BANKS, David CURREY, Khaled A. EL-TARABILY, Francois EUDES, Thomas FETCH, Claudia GOYER, Tajinder GREWAL, Linda M. KOHN, Scott MACDONALD, Dora Elizabeth MANZANO-FLORES, Al MCFADDEN, Xianzhou NIE, M. Soledade C. PEDRAS, Jodi SADLEIR, Norbert M. SATCHIVI, Russell TWEDDELL, Baziel VRIENT, Tim XING, Brian WOOLLEY - Aventis, Solveig ADAIR, Ruth Linda BENCHIMOL, Michelle CLEARY, Robert W. DUNCAN, Amy GEMMELL, Colin HIEBERT, Charlotte S. HOORNE, Aaron MILLS, Keith PARDEE, Nitin VERMA

The following **Sustaining Associates** have generously supported the CPS for 2002:

Advanta Seeds Canada Inc

Ag-Quest Inc.

Agricultural Certification Services Inc.

**Aventis Crop Science Canada** 

**BASF Canada** 

BC Hot House Growers' Assoc.

Busch Agricultural Resources Inc.

Dow Agrosciences Canada Inc.

Monsanto Canada Inc.

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Phyto Diagnostics Co. Ltd.

Pioneer Hi-Bred Production Limited

Plant Products Co. Ltd.

Saskatchewan Pulse Growers

Syngenta Crop Protection Canada Inc.

**United Agri Products** 

Vikram Bisht

Gayle Jesperson, Membership Secretary

## **People and Travel**

Dr. Vikram Bisht writes from China:

I am presently working for TECHNICO, an Australian company, which has developed a special technology for rapid multiplication of potatoes; more details seed www.technituber.com.au. The company's technology is being used in the USA, Mexico, China, India and of course in Australia. I manage the Seed Potato Production facility in Kunming, China. Kunming, the capital city of Yunnan province in south China, is a very beautiful city, with a population of 3.5 to 4 million. It is called the eternal spring city. It has beautiful golf courses, but they cater to mainly the golf tour groups coming from Singapore, Japan, and Hong Kong. Walk-ins would lighten your pockets by about 1000 Yuan (about 200 Cdn \$) for an 18-hole round!

Food variety is quite diverse; the price could range from 3 Yuan for a quick meal of noodles to whatever you'd like to spend (200-2000 Yuan). It is quite interesting to have a huge variety of dishes when having formal official banquets. "Gambei" or Bottoms-up is quite common while drinking. In a round-table for the banquets, the chief guest or the senior official always sits facing the entrance or the door.

I find it heartening to see the use of bicycles by a lot of people, and the roads have separate bike lanes. In general the Chinese appear quite healthy and there are not many obese people around.

The Chinese government appears to be managing well the change to a market economy – there are a lot of foreign companies interested in "taking advantage" of this. The people too have learned the capitalist ways - the going rate to go to the "loo" is anywhere from 2 to 5 Jiao (0.2 to 0.5 Yuan; 1Cdn \$ = 5 Yuan, also called Renmimbi).

As with many other countries, China is also greatly influenced by things "American" – the NBA on TV, MTV, shoes with 'Pepsi' labels, American movies (dubbed into Chinese).

### **Details about Chinese Potato Production**

China is the largest potato producer in the

world, with an annual production of over 60 million metric Tonnes, averaging 13.8 MT/hectare. Over 65% of production is for fresh market.

This southern part of China, Yunnan, is the 9<sup>th</sup> largest potato producing province of the country. Tobacco, vegetables and ornamentals are the other major crops of this province. With entry into WTO, the tobacco industry in this region is expected to have a slowdown. Local governments hope to take advantage of the potential for the potato industry.

There is a wide range of productivity in China: from 800 kg to 3000 kg per mu (1hectare = 15 mu). There is no potato seed certification system as far as I know. In this region, I know of some small scale chips manufacturers who procure their raw material needs from growers who have been saving and using the same seed for about 30 seasons or more.

Chinese growers are very meticulous in maintaining their small fields; with good seed and some agronomic guidance they could certainly improve their productivity. An increase of 10-15% in the productivity would translate into huge tonnage. It is quite possible in a few years. There is a huge potential for the potato industry in China. Rice and wheat are still the main competing staple foods.

The major diseases of potato in this region are late blight, soft rot, bacterial wilt, PV-Y, PV-X, and PLRV. Nematodes and stem borers could be problems in certain areas. Since many of the potatoes being used for seed have been grown for many generations, the incidence of seed-borne diseases is often quite high. Many old Dutch varieties, and varieties developed by the CIP are the major varieties being grown. Atlantic is now a favourite variety for the chipping industry.

In April 2003, the World Potato Congress will be held in Kunming. It would be great to meet with CPS friends here in Kunming. You are all invited.

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Zlatko Popovic recently completed the requirements for the M.Sc. degree in the Department of Botany, University of Manitoba. His supervisory committee included Dr. Chris Rampitsch and Dr. James Menzies of

the Cereal Research Centre, Agriculture and Agri-Food Canada and Dr. Lakhdar Lamari of the Department of Plant Science, University of Manitoba. Mr. Popovic's thesis was entitled "The Use of Virulence and Amplified Fragment Length Polymorphism (AFLP) to Study the Genetic Diversity of Field Isolates of *Ustilago tritici*."

**Jean Bérubé**, a forest pathologist at the Canadian Forest Service in Ste-Foy, Québec, recently became Papa. His wife, Elizabeth, gave birth to their first daughter, Agathe. Jean is planning a paternity leave to take his daughter across the ocean to visit Elizabeth's relatives in the Loire Valley in France. He will also try to travel south to Italy to start tasting wines for his next book on Italian Wines.

Richard Hamelin resumed his activities at the Canadian Forest Service in Québec after a 2 year secondment in a biotech company in the Montreal area. Although he found the experience interesting, he was happy to go back to his main interests in forest pathology. There will need to be, however, some readjustments: the pace in industry is quite different from the pace in a federal lab, so he will have to learn how to walk slowly again and do only one thing at a time...

### DID YOU KNOW . . . ???

This subject - proposed last issue as a column to stimulate reader participation - has accomplished just that. This might be the first time in my six-year stint as Editor that I've had four responses to one item in the newsletter. The first is an answer to the challenge, "Where did the name of the flax disease, pasmo, originate?" (submitted by Robin Morrall). Sorry, Robin, no prizes awarded. In fact, since your answer is speculative, we might have further submissions on pasmo.

The other three are contributions that your colleagues imagined might pique your interest.

Ed.

I am hoping to get a prize for the fastest response to your question in the latest *CPS News.* **Pasmo** was first described in 1911 in Argentina by Spegazzini. The name probably comes from the Spanish word "espasmo", which means "suffocation". However, it is possible that "pasmo" itself is a word in Argentinean Spanish. My Mexican Spanish source will check this in a dictionary he has at home tonight (perhaps). In another old publication (in English) from Northern Ireland, I have seen the disease described as "Pasmo" or "Spasm". It goes all right with foot root, neck rot, sore shin and gangrene, then, doesn't it?

### Did you know . . .

Subtitle - Why you should capitalize "Petri" in Petri plate?

The Petri plate was invented by **Richard Julius Petri**, a German army physician who worked in the lab of Robert Koch from 1877 to 1879. Petri later moved on to administrative positions, first in a tuberculosis sanatorium and then a museum. He contributed about 146 papers/reports to the literature on hygiene and bacteriology. For more see: <a href="http://www.whonamedit.com/doctor.cfm/1079.html">http://www.whonamedit.com/doctor.cfm/1079.html</a>

### Did you know . . .

Some rust fungi ensure insect-mediated fertilization by causing infected host leaves to resemble flowers (Roy 1993 Nature 362:56) or encourage insect-mediated spore dispersal by producing huge compound teliospores that mimic the pollen grains of their host (Savile 1989 Can. J. Bot. 67:2983).

The coffee rust epidemic in Ceylon (now Sri Lanka) in the 1870-80s, and the resulting replacement of the coffee plants with tea, was instrumental in turning the British into a nation of tea drinkers.

from Dr. Michéle C. Heath



### Did you know . . .

While not a plant pathogen, *Neurospora crassa*, the red (or pink or orange) bread mould, can cause a non-health-risk moulding of baked goods. More importantly, however, *N. crassa*, was used to understand how genes were responsible for traits or qualities expressed in the fungus. In the late 1930's George Beadle and Edward Tatum at the University of California created nutritional mutants of *N. crassa* and devised the One Gene – One Enzyme Theory, and along with Joshua Lederberg were awarded the Nobel Prize in 1958 for their work on the science of haploid genetics.

The theory established the crucial link between genes and their tangible effects. It showed that every gene specifies the production of one particular protein (or, as we now know, part of a protein). By revealing the link between genes and the processes they control, *N. crassa* played a key role in the emergence not only of the molecular biology of Watson and Crick, but also the genetic engineering used today in plants, animals and microbes. By understanding which genes are involved in traits and qualities the area of plant pathology and genetics for plant protection could occur.

from Dr. Harry H. Kope

For Plant Pathology News from further afield:

Dear ISPP Colleague,

I am pleased to tell you that the latest issue of the newsletter, that for August 2002, is on the web at <a href="http://www.isppweb.org/nlaug02.htm">http://www.isppweb.org/nlaug02.htm</a>. Please let others know.

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Associate Editor Jim Menzies had this intriguing question, "Does the organic food production industry feel a need for plant pathologists?' In order to delve into that question, Jim approached Blaine Recksiedler for his perspective. The following is Blaine's contribution which, we hope, will generate interest and discussion among pathologists who have worked in the organic sector.

Ed.

# Organic Crop Production in Saskatchewan

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### Size and Scope

The 2001 Census of Agriculture included a question on certified organic farms. Nationally, 2230 farms reported as producers of certified organic products, with 1442 and 614 farms reporting field crop and fruit/vegetable/greenhouse production, respectively. Saskatchewan has 773 organic farms that mostly produce field crops.

Saskatchewan Agriculture, Food and Rural Revitalization (SAFRR) commissioned a survey in 2000 to determine the number of producers, acres and crop types. Including producers in transition to organic production, the survey showed approximately 1000 producers with 700,000 cultivated acres. The major crop types were cereals (wheat, barley and oats), followed by flax and lentils.

### **Industry Needs Survey**

In 2001, SAFRR conducted an organic industry needs survey covering five areas: production research, marketing, extension, risk management, and industry barriers to growth. In excess of 400 organic producers and processors participated in the survey through questionnaires and workshops. Results were combined to identify priorities in each area.

Disease management, as a standalone category, ranked 11 out of 14 in relative importance. Soil fertility and weed management ranked as the highest concerns. When asked about the relationship between crop rotations and diseases, weeds, and insect pests, respondents also gave priority to this relationship. Successful organic production is a holistic methodology incorporating variability through crop rotation as its cornerstone strategy.

# Agronomy and Disease Management Strategies

Organic producers use many of the same disease management strategies as conventional producers. However, without the benefit of pesticides, organic producers place more importance on cultural, agronomic and genetic strategies. Disease management is based on incorporating these strategies into longer rotations.

A typical organic rotation may include clover under-sown to barley, green manure, wheat, pulse and flax. Changing the crop type also allows producers to vary seeding date (including fall seeding). That, in turn, provides opportunities for weed management.

I spoke with an organic producer who farms in southeast Saskatchewan. Although he includes one cereal crop in a four-year rotation, and uses buffer strips of different crops and tillage for weed control, he still finds fusarium, tan spot and septoria to be notable cereal diseases on his farm. This tells us just how prevalent these diseases can be. It would be interesting to compare the severity of these diseases in organic and conventional production in that region. He also informed me that leaf rust can be a problem, in part because of delayed seeding, and that varieties with the very best resistance are especially important on his farm.

Genetic resistance is the purest and most reliable form of disease management. Its effectiveness can be prolonged by incorporating agronomic and cultural techniques commonly used in organic systems – rotations, spring and fall crops, buffer strips, mixed grains, timing of seeding, *etc.* 

### **Research and Extension Challenges**

Our research institutions formulate best management practices. Because of the structure of research funding, a natural tendency towards reductionist research, and possibly other reasons, we frequently explain crop production through piecemeal and interdisciplinary research. There are situations where this applies perfectly well, but there are also situations where this does not apply since it does not describe the intricate complexities of crop production.

The management of weeds, diseases, insects, soil fertility, etc. is interrelated. The Alternative Cropping Study at the Scott AAFC Research Station is a great example of scientists from different disciplines studying multiple variables through long-term rotations. The research and extension communities understand that the holistic approach to crop management has merit and that multidisciplinary research is very well suited to organic production. Unfortunately, this type of research is long term, expensive, and not very conducive to absolute recommendations for specific problems, something to which we have become accustomed.

For both the scientist and farmer, it may be beneficial to consider chemical application as a last resort. In other words, priority could be placed on cultural and agronomic strategies. Research of preference could revolve around cultural rather than chemical control, and preventative rather than emergency crop care. Instead of hurriedly dealing with problems when they are upon us (dealing with emergency registrations, fungicide efficacies, application timing and method), we need to understand cultural and agronomic strategies. What could be done today that might help mitigate a problem one and two years from now? Length and type of rotation, disease persistence, distance and prevalence of sporulation, effects of tillage, seed source, seeding dates, size of buffer strips, moving ditches, etc. are all areas in which cultural and agronomic strategies could be implemented.

The SAFRR organic team hosted a research and extension meeting and workshop on October 29, 2001. Participants included scientists and extension personnel from across the Prairie region. Twenty-eight people (15 scientists and 13 extension personnel) shared information on current research and extension activities, and discussed ways in which research and extension could work together to better serve the information needs of organic producers. It was very encouraging to see such willingness to take time and budget to participate in this discussion. There appears to be very strong interest in integrated, organic, and reduced input research - great signs for the organic industry.