

President's Message

Zamir K. Punja

Thank you (and how time has flown by!)

It is with honour, amazement and a sense of privilege that I assume the term of President of the Canadian Phytopathological Society for the upcoming year. The honour stems from the confidence that the Board members and over 400 Society members have placed on this position of leadership. The amazement comes from how rapidly 20 years have elapsed since I attended my first CPS meeting in Lethbridge, AB to present my first student paper, and from reflecting on how much progress we have made as a Society since then. I have a sense of privilege in being given the opportunity of working with so many volunteers, on numerous committees, and other CPS members who commit their time and energy to serve the needs of our Society.

What are these Presidential messages all about?

I hope in this next series of presidential messages to be able to outline the issues confronting our Society and how we can and should begin to address them in the new millennium. We are all witnessing times of change in various aspects of our life, including the way we practice our profession of plant pathology. The technical advances, in particular, are ensuring a rapid and eco-

nomical means of communication and dissemination of information, and the research tools that we employ in our profession have changed dramatically since the late 1970s, when I was a graduate student. I believe the next 2-3 years will witness even more dramatic advances. With our continued commitment to the fundamental basis of our profession – to advance the understanding and management of plant diseases – we should capitalize on these advances and further the mandate of our profession nationally and internationally.

Inside this issue:

AGM Minutes	46
Budget 2000	52
Coming Events	55
Cdn. Workshop, Fusarium Head Blight	56
SK Regional CPS and SACC P	55
Western Committee on Plant Diseases	55
Committee Reports	49
Contact the Editor	41
Employment	54
Karnal Bunt	44
New Members	54
Mot du président	38
People	54
President's Message	35
SPPQ : «Ravageurs nouveaux »	58
Strategic Plan for CPS	42

The role of committees (for you!)

Committees have always played a major role in our Society and their success is predicated by the spirit of volunteerism and commitment of its individual members. If you have ever wondered how you could assist the Society, join a Committee! Committee membership can result in long-term friendships and there are some enjoyable social aspects as well. For a listing of the current committees, please refer to the CPS Directory or the June, 1999 issue of the CPS•SCP News.

Our future direction (and health)

The future direction of the Society has to be carefully mapped and a strategic 5-year plan developed to guide the Society along its mapped course. Ron Howard has graciously agreed to chair the Strategic Planning Committee of CPS and provide a progress report by the next annual meeting in June, 2000. Those of you that are also members of APS will note that the August, 1999 issue of *Phytopathology News* contains a Strategic Plan for APS, which took 2 years to develop. Study this plan carefully and let's try and formulate ideas for CPS – please pass these on to Ron Howard and his committee for consideration.

Our objectives (for the next year)

The specific goals that the Board and I want to address in the coming year deal with enhancing visibility of CPS and ensuring our security and success as a Society and a profession.



*Un étudiant diplômé, 21 ans avant la présidence
21 years preceding the presidency - a graduate student*

1) Increasing Membership

I believe there is a very real possibility that the CPS membership can reach 500 in the coming year! With the assistance of Vikram Bisht and with your help, we can achieve this goal. There are several reasons why an increase in membership can directly benefit CPS: it provides revenues from which to operate, it increases the outreach of our profession, and it enhances our potential to recognize Fellows of the Society. With regard to the latter, our Constitution has set a 5% limit on the ratio of Fellows to the total membership, i.e. a limit of 20 Fellows for 400 members. There are several individuals that deserve consideration

for CPS Fellow – by increasing our membership to 500, we can duly recognize an additional 5 individuals. Please make every effort to identify those plant pathologists in Canada and elsewhere and encourage them to join the CPS. Send a letter of invitation and a membership form to one of your colleagues today!

2) Enhancing our journal

With the take-over of the *CJPP* by NRC Press, we have now achieved an on-time publication schedule and continue to produce a high-quality and relevant journal. I remember sending in my first publication to *CJPP* in 1978 and hearing concerns then about whether a small society such as ours could maintain its own journal and whether it would survive. When I approached Dick Stace-Smith about this, his response was:



*Président de la SCP pour 1999,
Zamir K. Punja
The 1999 CPS President*



Beyond the words Au-delà des mots

A translation service for your technical and scientific documents specifically in the field of biological sciences
Un service de traduction pour vos documents techniques et scientifiques dans le domaine des sciences biologiques

Les Traductions scientifiques PaRi

Jean-Guy Parent, Ph.D. Claude Richard, Ph.D.

1906, rue Notre-Dame, L'Ancienne-Lorette (Québec) G2E 3C9
418-656-0050 418-872-6025 Fax : 418-656-6750 Internet : pari@mediom.qc.ca

"If people continue to do what you are doing – submitting their manuscripts to the journal, we will indeed survive and grow". After passing its 20th anniversary, the *CJPP* continues to attract manuscripts of substantial quality. Our goal now should be to increase its impact and rating, and encourage our members to submit their research papers.

We have begun a series of "Special Topics" articles in the journal, and I have invited the Immediate Past-President(s) for the current and all subsequent years to review and reflect on their research programs and prepare a paper for the January-March issue of the journal. The Board and the Journal Improvement Committee are currently also reviewing issues relating to publication of the *CJPP* on-line on the Web. This is an exciting opportunity and could further speed up and enhance the distribution and impact of our journal in the near future.

3) The CPS Website and News

Through the initial efforts of Rick Reeleder, the CPS website is up and running and continues to grow and evolve. I have asked Greg Boland, incoming Vice President, to review how the website could be further enhanced and to consider the types of information packages that could be linked to it. In the coming year, the website will continue to be an important means of dissemination of information, through which the *CPS-SCP News*, the *CJPP*, and other important items can be made available to CPS members.

David Kaminski and Jim Menzies continue to work toward enhancing the newsletter and would welcome input and items for inclusion.

4) Marketing of CPS books

The CPS currently has 2 books – "Diseases of Field Crops in Canada" and "Diseases and Pests of Vegetable Crops in Canada" – available for sale to practitioners of plant health. These books generate revenues for the Society and help disseminate valuable information. The Information Products and Marketing Committee under the guidance of Mary-Ruth MacDonald is investigating ways to promote these books and further enhance their sales. One option may be to provide DPVCC on a CD-ROM. Karen Bailey is preparing for revisions to DFCC in the near future. To promote these CPS books and also to enhance membership in our Society, I have asked each of our regional representatives to take an active role in these matters. With their assistance, we can achieve better outreach to our provincial members.

5) Future training of plant pathologists

A major issue that is rapidly looming on the horizon that we as a Society will have to address is the future prospects for training of plant pathology students in Canada. In a preliminary survey I conducted earlier this year, it was clear that while plant pathology training was taking place at several universities, recent and future faculty positions were not necessarily being replaced in

plant pathology. It was clear, too, that graduate training was not taking place solely in the university environment, and that Agriculture Canada, Forestry Canada, and provincial ministries were playing an increasingly important role in student training. The question on hand is: "What are the future prospects for training of plant pathologists in Canada?" I have asked Roger Rimmer, President-Elect, and Chair of the Science Policy Committee to address this issue and prepare a position paper that the CPS could use to draw attention to an issue that can impinge upon our future.

6) Enhancing interaction and outreach

As a Society comprised of plant pathologists that seek to understand and manage plant diseases, we all recognize the value of partnerships between academic, government, industry and international scientists, as well as the public sector. To further this mandate, George Lazarovits had initiated an effort to enhance industry participation at our regional and national meetings. The resulting Industry Relations Committee, currently chaired by Tony Sturz, will address issues relating to how we can foster stronger relations with the industry sector. The International Co-operation Committee, chaired by Jalpa Tewari, will seek to forge relationships with our international colleagues. The Future Meetings Committee will attempt to select appropriate venues for our annual meetings that allow for joint meetings with other Societies. The Education and Public Awareness Committee has a mandate to provide information of relevance to schools and the public to enhance their appreciation of plant pathology. The CPS meeting next year will be held jointly with the APS - Pacific Division in Victoria in June, 2000. The theme for the meeting is "Working Together - For Healthier Plants", a relevant theme that will become increasingly important in the years ahead.

7) Acknowledging the contributors

The members of the Board, Standing Committees, Subject Matter Committees, *Ad Hoc* Committees, our regional representatives, editors of the *CPS-SCP News* and *CJPP*,

as well as CPDS Co-ordinator, and the Local Arrangements Committee, probably represent a group of close to 100 individuals that make the functioning of CPS what it is today. While each and every one has commitments to research, education, administration and other responsibilities, they find the time to contribute. To all of you - THANK YOU. To our Sustaining Associate members and sponsors of the annual meeting - THANK YOU. And to all of our members for their continued support - THANK YOU. I wish all of you the very best for the year 2000 and beyond and look forward to communicating with you in the next issue of *CPS-SCP News*.

Mot du président

Zamir K. Punja

Merci (comme le temps a passé vite !)

C'est pour moi un honneur, une stupéfaction et un privilège d'assumer les tâches de président de la Société canadienne de phytopathologie pour la prochaine année. L'honneur est dû à la confiance qu'ont les membres du Conseil d'administration et les 400 membres et plus de la Société dans ce poste de leader. La stupéfaction est due à la rapidité avec laquelle le temps s'est écoulé depuis que j'ai assisté à mon premier congrès de la SCP à Lethbridge, AB, il y a 20 ans pour présenter ma première communication étudiante et à l'immense progrès qu'a accompli la Société depuis. Je me sens privilégié d'avoir la possibilité de travailler sur de nombreux comités avec tant de volontaires et avec d'autres membres de la Société qui consacrent temps et énergie pour la servir.

Pourquoi des messages présidentiels ?

J'espère que la prochaine série de Mots du président pourra définir les défis qu'aura à relever notre Société et de quelle façon nous pourrons et nous devrons commencer à nous y attaquer en ce début de nouveau millénaire. Nous sommes tous témoins des changements qui s'opèrent dans différentes facettes de notre vie, y compris dans les façons que nous pratiquons la profession de phytopathologue. En particulier, les progrès techniques permettent de

communiquer et de disséminer l'information rapidement et de façon économique, et les outils de recherche que nous utilisons dans le cadre de notre profession ont changé de façon marquée depuis la fin des années 1970, époque où j'étais étudiant diplômé. Je crois que nous assisterons à des progrès encore plus marqués dans les 2 à 3 ans à venir. Étant donné notre engagement permanent envers les fondements de notre profession – progresser dans la compréhension et la gestion les maladies des plantes – nous devrions bâtir à partir des progrès et étendre le mandat de notre profession aux niveaux national et international.

Le rôle des comités (à votre intention !)

Les comités ont toujours joué un rôle important dans notre Société, et leur succès dépend du volontariat et de l'engagement de chacun de leurs

membres. Si vous vous êtes déjà demandé comment aider la Société, devenez membre d'un comité ! Le fait de siéger à un comité peut déboucher sur des amitiés durables et comporte aussi une certaine part de « social » fort intéressante. La liste des comités actuels a été publiée dans le Bottin de la SCP et dans le numéro de juin 1999 du *CPS•SCP News*.

Notre orientation future (et santé)

L'orientation future de la Société doit être soigneusement planifiée et un plan stratégique quinquennal a été soigneusement développé pour guider la Société et l'aider à garder le cap. Ron Howard a gracieusement accepté de présider le Comité du plan stratégique de la SCP et de rédiger un plan préliminaire en temps pour la prochaine assemblée annuelle de juin 2000. Ceux qui sont aussi membres de l'APS noteront que le numéro d'août 1999 du *Phytopathology News* contient, pour l'APS, un plan stratégique qu'on a mis 2 ans à développer. Examinez attentivement ce plan et essayez de trouver des idées pour la SCP—s'il vous plaît, transmettez-les à Ron Howard et à son comité pour examen.

« Étant donné notre engagement permanent envers les fondements de notre profession – progresser dans la compréhension et la gestion les maladies des plantes – nous devrions bâtir à partir des progrès et étendre le mandat de notre profession . . . »

Nos objectifs (pour la prochaine année)

Pour la prochaine année, le Conseil d'administration et moi avons des buts spécifiques qui visent à améliorer la visibilité de la SCP et assurer notre sécurité et notre réussite en tant que société et en tant que profession.

1) Augmenter le nombre de membres

Je crois très probable que le nombre de membres de la SCP atteigne 500 membres dans l'année qui vient. Avec l'aide de Vikram Bisht et grâce à votre participation, nous pouvons atteindre ce but. Une augmentation du nombre de membres est avantageuse

pour la SCP pour plusieurs raisons: c'est une source de revenus pour le fonctionnement, elle accroît le rayonnement de notre profession, et elle donne la possibilité de

reconnaître un plus grand nombre de membres associés. En ce qui concerne cette dernière catégorie de membres, notre constitution nous permet d'avoir des membres associés jusqu'à un maximum de 5 % du nombre total d'adhérents, i.e. un maximum de 20 membres associés pour 400 membres. Plusieurs individus mériteraient d'être considérés pour une nomination comme membre honoraire — en augmentant à 500 le nombre de membres, nous pourrions dûment en reconnaître 5 de plus. Vous êtes priés de faire tous les efforts nécessaires pour encourager des pathologistes canadiens et étrangers à joindre la SCP. Dès aujourd'hui, envoyez à un de vos collègues une lettre d'invitation et un formulaire de demande d'adhésion !

2) Mettre notre revue en valeur

À la suite du transfert de la production de la revue aux Presses du CNR, nous pouvons respecter notre calendrier de publication et continuer à produire une revue pertinente et de haute qualité. Je me souviens qu'à l'époque où j'ai soumis mon premier manuscrit à la *RCP* en 1978

j'entendais des commentaires concernant des craintes au sujet de la capacité, pour une petite société comme la nôtre, à maintenir sa propre revue, et au sujet de sa survie. Lorsque j'ai discuté de ce sujet avec Dick Stace-Smith, il m'a répondu : « Si les gens continuent à faire ce qu'ils font - soumettre leurs manuscrits à la Revue, nous survivrons sûrement et nous grossirons ». Après 20 ans d'existence, la *RCP* continue à recevoir des manuscrits de grande qualité. Notre but maintenant consiste à augmenter son impact et sa cote, et à encourager nos membres à y soumettre leurs manuscrits de recherche. Nous avons lancé une série d'articles traitant de « Sujets spéciaux » et nous avons invité le président sortant actuel et tous les suivants à faire le point et à commenter leur programme de recherche et à présenter à la revue un manuscrit à paraître dans le numéro de janvier-mars. Le Conseil d'administration et le Comité pour l'amélioration de la revue examinent présentement des scénarios en vue de la publication en ligne de la *RCP* sur le web. C'est une possibilité très excitante qui pourrait accélérer et augmenter la distribution et l'impact de la Revue à court terme.

3) Le site web et le bulletin de la SCP

Grâce aux efforts initiaux de Rick Reeleder, le site web de la SCP a pu voir le jour, être mis sur l'Internet et continuer à grandir et évoluer. J'ai demandé à Greg Boland, le nouveau vice-président, de trouver des moyens pour continuer à améliorer le site web et de déterminer les types de progiciels d'information qui pourraient y être associés. Dans la prochaine année, le site web continuera à être un important moyen de communication de l'information par lequel de *CPS-SCP News*, la *RCP* et d'autres importants éléments peuvent être mis à la disposition des membres de la SCP. David Kaminski et Jim Menzies continuent à travailler à l'amélioration du bulletin et accueilleront avec enthousiasme les commentaires et articles.

4) La commercialisation des livres de la SCP

La SCP vend présentement 2 livres pour les praticiens de la santé des plantes, *Diseases of Field Crops in Canada* et *Maladies et ravageurs des cultures légumières au Canada*. Ces livres génèrent des revenus pour la Société et aident à la dissémination de précieuses informations. Sous la gouverne de Mary-Ruth MacDonald, le Comité d'information sur les produits et de commercialisation examine les façons de promouvoir ces livres et d'en augmenter les ventes. Une possibilité serait d'offrir *Maladies et ravageurs des cultures légumières* sur CD-ROM. Karen Bailey se prépare à faire la prochaine révision de DFCC. J'ai demandé à tous nos représentants régionaux de faire la promotion des livres de la SCP et de tenter d'augmenter le nombre de membres de notre Société. Avec leur aide, nous pouvons mieux rejoindre nos membres provinciaux.

5) La formation des futurs phytopathologistes

Il y a une question importante qui se pointe rapidement à l'horizon pour la Société ; il s'agit des perspectives pour la formation d'étudiants en phytopathologie au Canada. Lors d'un tour d'horizon que j'ai fait plus tôt cette année, il était évident que bien que de la formation en phytopathologie était donnée dans plusieurs universités, les nouveaux et futurs postes n'étaient pas nécessairement comblés par des phytopathologistes. Il était aussi bien évident que la formation de deuxième et troisième cycle ne se faisait pas uniquement dans un environnement universitaire, mais que des rôles importants étaient joués par Agriculture et Agroalimentaire Canada, Forêts Canada et les ministères provinciaux. La question qui vient immédiatement à l'esprit est : « Quelles sont les perspectives pour la formation des phytopathologistes au Canada ? » J'ai demandé à Roger Rimmer, président élu et président du Comité de la politique scientifique de s'occuper de cette question et de préparer un document sur la position de la SCP qui pourrait ensuite servir pour attirer l'attention sur un aspect qui peut influencer notre avenir.

6) Améliorer les interactions et les contacts

En tant que société constituée de phytopathologues voués à la compréhension et à la gestion des maladies des plantes, nous reconnaissons tous la valeur du partenariat entre les universitaires et les scientifiques des gouvernements et des entreprises privées à une échelle nationale aussi bien qu'internationale. Pour assurer la progression de ce partenariat, George Lazarovits a entrepris des actions pour améliorer la participation de l'entreprise privée lors de nos réunions régionales et nationales. Le Comité des relations avec l'industrie qui en a résulté, actuellement présidé par Tony Sturz, s'occupera des moyens nécessaires pour renforcer nos relations avec le secteur privé. Le Comité des relations internationales, présidé par Jalpa Tewari, verra à forger des liens avec nos collègues de par le monde. Le Comité des futurs congrès tentera de sélectionner les sites appropriés pour nos réunions annuelles qui permettraient de faire des réunions conjointes avec d'autres sociétés. Le Comité d'éducation et de sensibilisation du public a le mandat de fournir de l'information pertinente aux écoles et au public pour améliorer leurs connaissances de la phytopathologie. La prochaine réunion annuelle de la SCP se tiendra à Victoria, conjointement avec la division Pacifique de l'APS, en juin de l'an 2000. Le thème de cette réunion est « Travaillons ensemble – Pour des plantes plus saines », un thème approprié dont l'importance s'accentuera avec les années.

7) Remercier les collaborateurs

Les membres du Conseil d'administration, des comités permanents ou ceux qui ont été créés pour des aspects particuliers, des comités ad hoc, nos représentants régionaux, les rédacteurs du *CPS-SCP News* et de la *RCP*, de même que le coordonnateur de l'*Inventaire canadien des maladies des plantes* et les comités locaux d'organisation représentent un groupe de près de 100 personnes qui assure le fonctionnement de la SCP d'aujourd'hui. Bien que chacun

d'entre eux ait des obligations de recherche, d'enseignement ou d'administration, ou encore d'autres responsabilités, ils trouvent le temps de collaborer. À vous tous – MERCI ! À nos membres de soutien et aux commanditaires de nos réunions annuelles – MERCI ! Et à tous nos membres pour leur appui constant – MERCI ! Je vous souhaite tous la meilleure année 2000 et j'ai hâte de communiquer à nouveau avec vous dans le prochain numéro du *CPS-SCP News*.

Contact the Editor

E-mail: **cps-news@home.com**
 phone: (306) 934-1088
 FAX: (306) 652-2708

702 Lansdowne Ave.
 Saskatoon, SK S7N 1E5

This is undoubtedly the fattest issue that I have had to assemble in my tenure as editor. It is sadly lacking in pictures but for the priceless images of our new president. Thanks, Zamir, for agreeing to go along with my idea. You're a good sport.

My sincere apologies to Jean-Guy and Claude for failing to look at a proof of the last issue and missing the screwup in their ad for PaRi. I hope you appreciate that I was the victim of my own neglect since there were diacritical marks in my remarks, too.

Here now for your entertainment, you who read this far, is another rendition of “My Favorite Things” that I heard on CBC radio one day. It’s the brainchild of Brian Baldwin who operates a phone-in Gardenline at the University of Saskatchewan. I wish he could sing it for you.

*Black spots on roses with fungal conditions,
 Trees struck by lightning in need of physicians,
 Lawns full of mushrooms all growing in rings!
 These are a few of my favourite things.*

*Vascular blockages, spores by the oodles,
 Slime flux and slime mould and shits left by poodles,
 Virus-gorged aphids that finally sprout wings!
 These are a few of my favourite things.*

*Borers in birches and frost cracks in ashes,
 Winter-burned cedars and pesticide splashes,
 Silver-leaved apple trees dying in springs!
 These are a few of my favourite things.*

*Irish late blights,
 Frosty June nights,
 Leave you feeling sad.
 Just phone me and ask for some garden advice,
 And soon you won’t feel so bad!*

Towards a Strategic Plan for the Canadian Phytopathological Society

Background

The Canadian Phytopathological Society/La Société Canadienne de Phytopathologie is about to enter a new millennium and with it another challenging and eventful period in its history. Up to now, the CPS/SCP has functioned without a comprehensive long-range plan to guide its future operations. The objectives, structure and operational procedures for the Society are outlined in its constitution and bylaws, and a Five-Year Plan was written in 1994 to guide the Society's administration. In order to continue playing a leadership role on the Canadian plant pathology scene, the CPS/SCP needs to embark on a process of strategic planning to insure that it remains relevant to its members, financially viable, and able to deal with future challenges and opportunities.

Strategic Planning Defined

Strategic planning is a continuous and systematic process where people or organizations make decisions about intended future outcomes, how these outcomes are to be accomplished, and how success is measured and evaluated. Direction is pursued by implementing associated action plans, including multi-level goals, objectives, time lines and responsibilities. Strategic planning is an organization-wide process that depends upon grassroots input and support for its success.

Strategic Planning Overview

Strategic planning consists of a series of steps, which can be summarized as follows:

- Agree on a strategic planning process
- Identify organizational mandates
- Define organizational vision, mission and values
- Assess the external environment (opportunities and risks)
- Assess the internal environment (strengths and weaknesses)
- Identify strategic issues facing the organization
- Formulate goals and strategies to address the issues
- Identify desirable outcomes (benchmarks) and ways to measure them

Un plan stratégique pour La Société Canadienne de Phytopathologie

Préambule

La Société Canadienne de Phytopathologie/The Canadian Phytopathological Society est sur le point d'entrer dans un nouveau millénaire et par le fait même dans une ère nouvelle pleine de défis et d'événements qui forgeront son histoire. Jusqu'à ce jour, la SCP/CPS a opéré sans le concours d'un plan global à long terme. Les objectifs, la structure et les méthodes de fonctionnement de la Société sont contenus dans sa constitution et ses règlements ainsi que dans un plan quinquennal rédigé en 1994 pour faciliter l'administration de la Société. Afin de continuer à exercer son leadership dans le domaine de la phytopathologie au Canada, la SCP/CPS doit amorcer un processus de planification stratégique pour s'assurer qu'elle demeure importante pour ses membres, financièrement viable, capable de relever de nouveaux défis et de saisir les occasions qui se présenteront.

Définition de la planification stratégique

La planification stratégique est un processus continu et systématique par lequel des personnes ou groupe de personnes prennent des décisions sur des résultats à atteindre, les moyens pour les atteindre, et la façon de mesurer et d'évaluer les succès obtenus. La direction établie est suivie en mettant en place des plans d'action qui comprennent des buts, des objectifs, des calendriers, et des responsabilités à plusieurs niveaux. La planification stratégique est un processus qui touche une organisation dans son ensemble et qui demande une implication et un soutien de la base pour réussir.

Vue d'ensemble de la planification stratégique

La planification stratégique est constituée d'une série d'étapes qui peuvent être résumées de la manière suivante :

- S'entendre sur une procédure de planification stratégique
- Identifier les mandats de l'organisation
- Définir une vision, une mission et les valeurs de l'organisation
- Évaluer l'environnement externe (possibilités et menaces)
- Évaluer l'environnement interne (forces et faiblesses)
- Identifier les problèmes stratégiques auxquels doit faire face l'organisation
- Formuler les buts et les stratégies pour résoudre ces problèmes
- Identifier les résultats escomptés (références) et les moyens de les mesurer

The APS Model

The American Phytopathological Society developed its first strategic plan in 1993 (*Phytopathology News* 28:2) and it served as the principal guide for APS growth and development in the years that followed. It consisted of vision and mission statements, some basic assumptions about the future, and three goals, each of which had multiple objectives. The APS undertook to develop a new strategic plan in 1998. President Lee Campbell appointed an *ad hoc* Strategic Planning Committee to draft a new plan for the period 1999-2003. The committee identified core competencies of the Society and developed a plan based on a new vision statement and four goals (*Phytopathology News* 32:10). The draft plan was reviewed by APS Council at its 1998 annual meeting and submitted to the membership for perusal. Based on comments received, a number of changes were made, including the addition of a fifth goal (*Phytopathology News* 33:8). Responsible units and targets were also added to the plan. An implementation plan was approved by APS Council at the 1999 annual meeting.

The Future Course

The CPS/SCP Board endorsed, in principle, the idea of developing a strategic plan during a conference call on June 29, 1999. Previously, the notion of developing a business plan had been considered, but, upon reflection, a strategic plan was deemed more appropriate. A strategic planning proposal was presented at the 1999 CPS/SCP annual general meeting and was endorsed by the majority of members in attendance. The Governing Board appointed Ron Howard to chair a Strategic Plan Steering Committee with the mandate of developing a draft plan in time for presentation at the 2000 annual meeting in Victoria. Roger Rimmer, André Lévesque and Jim Menzies have already agreed to sit on this committee, but two or three more volunteers would be welcome. If you are up to this challenge, please contact Ron Howard, as soon as possible, at 403-362-1328 (phone), 403-362-1306 (fax), or ron.howard@agric.gov.ab.ca (e-mail).

L'exemple de l'APS

L'American Phytopathological Society a développé son premier plan stratégique en 1993 (*Phytopathology News* 28:2), qui a servi de guide principal pour la croissance et le développement de l'APS dans les années suivantes. Le plan était constitué d'énoncés de vision et de mission, de quelques hypothèses de base concernant le futur et de trois buts à objectifs multiples. L'APS a entrepris de développer un nouveau plan stratégique en 1998. Le président Lee Campbell a créé un comité *ad hoc*, le Comité de planification stratégique, dont le mandat était de dresser un nouveau plan pour la période 1999-2003. Le Comité a identifié les compétences majeures de la Société et a développé un plan qui repose sur un nouvel énoncé de vision et sur quatre buts (*Phytopathology News* 32:10). Le projet a été révisé par le Conseil de l'APS lors de l'Assemblée annuelle de 1998 et a été soumis aux membres pour une lecture attentive. À la suite des commentaires reçus, un certain nombre de changements ont été apportés, y compris l'ajout d'un cinquième but (*Phytopathology News* 33:8). De plus on identifia les unités responsables et les objectifs. La mise en place du plan fut approuvée par le Conseil de l'APS lors de l'Assemblée annuelle de 1999.

La route à suivre

Le 29 juin 1999, lors d'un appel conférence, le Conseil de la SCP/CPS a endossé en principe l'idée de développer un plan stratégique. Auparavant, l'idée de développer un plan d'affaires fut considérée, mais, après réflexion, un plan stratégique fut trouvé plus approprié. Un proposition de planification stratégique fut soumise lors de l'Assemblée générale annuelle 1999 de la SCP/CPS et fut adoptée par une majorité des membres présents. Le Conseil d'administration désigna Ron Howard pour présider le Comité directeur du plan stratégique dont le mandat est de rédiger un plan préliminaire en temps pour être présenté à l'Assemblée annuelle de 2000 à Victoria. Roger Rimmer, André Lévesque et Jim Menzies ont déjà accepté de faire partie du comité, mais deux ou trois autres membres volontaires seraient les bienvenus. Si vous vous sentez d'attaque pour relever ce défi, n'hésitez pas à contacter Ron Howard le plus tôt possible au 403-362-1328 (téléphone), au 403-362-1306 (télécopieur), ou à ron.howard@agric.gov.ab.ca (courriel).

Karnal Bunt: A Lesson in Plant Pathology Politics

George Lazarovits

The Plenary Session at this year's APS-CPS meeting successfully conveyed the formidable impact that plant diseases have on peoples' lives. At minimum, plant diseases cause loss of livelihood; at most, they result in loss of life. Neither aspect is trivial. In most instances the impacts of disease can be clearly defined. There are situations however, where pathology problems get complicated. The story of Karnal bunt (*Tilletia indica*) is one of those situations. This disease has become an issue of commercial and political significance and we may need to bring Solomon back to unravel all of its implications.

Norman Borlaugh, Glenn Anderson, and numerous others, set out to increase cereal production in underdeveloped countries such as India and Pakistan. These scientists increased yields of wheat by at least 2-3 fold, primarily through breeding. This global effort at increasing the food supply of undernourished countries came to be called the Green Revolution. A large part of the breeding program became located in Mexico, under the auspices of the International Maize and Wheat Improvement Ctr. (CIMMYT). Breeders from around the world came to CIMMYT to work on improving cereal varieties and this organization became one of the world's great depositories of germplasm for cereal breeding. Many US breeders used CIMMYT to speed up their breeding by taking wheat grown in the summer and planting it in Mexico during the winter. The potential for movement of cereal diseases to the US was always a concern. Since the early 1900's the US had imposed quarantine regulations against importation of cereals from areas where specific smut and bunt diseases occurred (flag smut and dwarf bunt). To avoid introduction of other diseases with breeder seed, Karnal bunt was added to the list in 1981. At the time the regulation was implemented, this disease was present only in India, Iraq, Pakistan, and Afghanistan. However, in 1982 Karnal bunt's presence was

confirmed in Mexico and because of the zero tolerance regulation, Mexican wheat became excluded from the US. US and Mexican scientists however, knew that this disease was present in Mexico since the 1970s and that it likely came in with breeding material from Pakistan or India. A cynic may say that an aspect of the legislation enacted by the US was to keep Mexican wheat out of the US market. Since the US government considered Karnal Bunt a potentially important disease, other wheat producing and importing countries (Russia, China, Canada, etc.) also imposed zero tolerance legislation. In March 1996, Karnal bunt teliospores were confirmed to be present in a sample of wheat from Arizona. Seed from affected lots had already been planted in the previous year on numerous farms in Arizona, as well as a few farms in New Mexico, Texas, and California. The implications were clear; the US was facing a total ban of exports of their wheat to their largest clients, China, and Russia.

Within days after discovery the Secretary of Agriculture, Dan Glickman, declared an extraordinary emergency, the second ever issued. A small army of equipment and staff, many dressed in white contamination suits, invaded the infested sites in Arizona. Over 4,700 fields were tested for the presence of *T. indica* spores. Combines, farm implements, rail cars, and grain storage areas were washed several times with a bleach mixture to prevent any movement of the spores to other locations. This resulted in destruction of millions of dollars of equipment as the bleach ate away at rubber, plastic, and bare metal. Spores were discovered in 229 fields with 70% of positive field having less than 4 spores per 4 lb sample. The eradication effort cost some \$300-600 million, depending on what figures one uses. All wheat from the contaminated areas was quarantined and a compensation package given to affected growers. Growers from the larger wheat producing regions however, wanted government to impose the strictest possible regulations on the production, movement, and marketing of wheat from infested states. The strong emotions brought divisions not seen since

the civil war. At a meeting in 1997 in North Carolina, the US asked the international scientific community to consider removing this pathogen from the zero tolerance list. Countries that have established zero tolerance, based on legislation first initiated by the US, were reluctant to change for fear of loss of markets. Canada was in this boat.

Was a zero tolerance policy to this pathogen ever necessary? Let us consider what is the real impact of this disease on the wheat crop. The disease was first described in 1931 from the Northwest region of Karnal, India. It is found at low elevations where mild winters and low rainfall prevail. The pathogen does not do well outside of this ecological niche. Wheat from infested areas has been shipped all over India and it has not spread to other regions. It has however, spread to other countries with similar climates to the Karnal region. The fungus once introduced can persist in soil, without its host crop, for at least five years. Several monocotyledonous plants are a host for the pathogen. The chance of the organism surviving the cold climates of the major wheat growing areas of US and Canada are considered low. The disease does not appear to impact yield to the scope of importance that it has been raised to. Growing tolerant varieties on over 4 million hectares in India, the disease incidence from 1986-94 was 2.7% or less, depending on cultivar. In most infested areas disease incidence has been declining. The presence of bunted grain does lower overall flour quality and when disease incidence reaches above 3% infection the grain is often rejected for human use. It can be diluted with clean grain or be fed to animals. Infected grain results in reduced germination and plant vigour. Again, the impact is generally marginal. Disease control of the pathogen seem to be promising using resistant lines and systemic fungicides. As of yet it is unclear as to whether Karnal bunt is a new disease in the US or it has been a native parasite of ryegrass. The spores of the bunt species found on wild and cultivated US ryegrass cannot be differentiated from Karnal bunt spores by microscopy or by the use of five gene markers. When the two organisms are

inoculated onto wheat the symptoms induced are identical.

Thus, we appear to have a minor pathogen, one possibly already resident to the US, standing between the livelihood of thousands of growers and the source of food to millions of people. The potential removal of US wheat from the global marketplace could be a windfall for exporting countries, such as Canada, where the disease is not present. Yet, it was pointed out that we are one spore away from being in the same boat as the US. If we take a hardline, we could die by it. Nevertheless, as pathologists we are reluctant to open the doors to the possibility of importing a pathogen that could threaten the future production of our crops. The pathologists that met to decide what action to take on this issue were unable to reach consensus on how to act. Thus, as is the way of scientists, we will collect more data. We will likely not be able to make any hard decisions until modern detection techniques reveal that the bunt organism is present at some insignificant threshold levels in all wheat producing countries in the world.

Malik V.S. and Mathre D.E. 1998. Bunts and Smuts of Wheat: An International Symposium. North American Plant Protection Organization, Ottawa, Ont.

Annual General Meeting of the Canadian Phytopathological Society

Minutes Assemblée Générale Annuelle de la Société Canadienne de Phytopathologie

Montreal, August 10, 1999

There were 63 CPS members in attendance.

1. Welcome and President's opening remarks

George Lazarovits hoped that everybody enjoyed the Annual Meeting. He conveyed that about \$5,000 had been donated by industry to help fund six symposia at this year's meeting. Lazarovits emphasized the importance of contributing and attending the Regional Meetings of the Society, and mentioned that he had made an effort to attend several in the past year. Lazarovits informed members that publication of the *Canadian Journal of Plant Pathology* had been transferred to the National Research Council (NRC). He thanked Lloyd Seaman and Connie Bowerman for many years' service with the journal. Under the new publication arrangement, authors can expect a six months turn-around on publishing in the *CJPP*. This year for instance, the abstracts for the Annual Meeting were published in the *CJPP* June issue, which was two months ahead of the meeting. The Journal Improvement Committee will look into the pros and cons of publishing the *CJPP* on-line. Lazarovits also remarked that some revenue had been generated by selling mailing lists of the Directory of Members to organizations that wish to advertise scientific journals, etc. Each sale is comprised of one set of labels, and misuse has not occurred. Lazarovits described the efforts that Carol Windels (President of the APS) and he had made to create a new fund to support research in areas of plant pathology that affects both Canada and the US. However, the reply from the Canadian Government on the request for funding was negative, while the US had not responded. George Lazarovits then proceeded to introduce the Board Members.

2. Moment of Silence for Deceased Members

The members held a moment of silence to commemorate Eugene E. Saari working with CIMMYT in Nepal and Wilbert E. McKeen from the University of Western Ontario, London, who both died in the past year.

3. Adoption of agenda

Moved by Rick Reeleder. Seconded by Andy Tekauz.
Carried.

4. Adoption of the Minutes from the AGM, Fredericton 1998

(See *CPS News*, September 1998)
Moved by Vikram Bisht. Seconded by Robin Morrall.
Carried.

5. Business arising from the AGM 1998

No business arising.

6. President's Report

Reports by George Lazarovits have been published throughout the year in the *CPS News*, i.e., September 1998, December 1998, March 1999 and June 1999. Tim Paulitz moved to adopt the President's reports. Seconded by Peter Burnett. Carried.

7. Membership Secretary's report

(A report by Vikram Bisht was published in *CPS News*, June 1999)

Bisht reported that there are now 405 CPS members, including sustaining associates, and that 16 countries are represented. The renewal of memberships for 1999 was requested via email. This resulted in a 60% response. Most individuals paid via mail either by check or credit card and not on-line. Those that did not reply were contacted again by fax and/or mail. The Society lost about 40 members in the past year, but 40 new Canadian members signed up plus 4 members abroad including libraries. Bisht asked the audience whether they would prefer to renew their membership by email or mail. All in attendance, except one, indicated that they preferred email. Bisht proceeded to encourage people to contact potential sustaining associates in various industries; George Lazarovits expressed his strong support of this.

Tim Paulitz moved to adopt the Membership Secretary's report. Michèle Heath seconded. Carried.

8. Treasurer's report 1998/99 (Peter Sholberg)

8.1 Auditor's report from KPMG, May 1999

Peter Sholberg presented the central numbers in the KPMG auditor's report, which was handed out to members at the meeting. Sholberg pointed to the fact that there are \$290,448 in term deposits, and that the total assets are \$410,801. Andy Tekauz suggested that it was time that new, innovative ideas for promotion of CPS and plant pathology in general took place, and that some of the surplus should be used for this. Sholberg showed that the revenues in 1998 were \$124,136 and expenses \$103,430. The audit for the book "Diseases and Pests of Vegetable Crops in Canada" was presented separately; the revenue was \$23,738 in 1998, but there are still about \$129,000 worth of printed books in the inventory.

8.2 Appointment of Auditors

Peter Burnett moved to adopt the Treasurer's report, and re-appoint KPMG as auditors for 1999. Seconded by André Lévesque. Carried.

9. Report from the Financial Advisory Committee

Ron Howard, chair of the FAC, presented a budget statement for the year 2000 (*see pp. 52,53*). Revenues: The revenue from memberships is expected to be less than in 1998; Howard reminded everyone that \$25 of all membership dues is used to offset publication of CJPP. Interest from investments is about \$9,000; selection of new investments, *e.g.* including other bonds and conservative mutual funds, to increase the diversification was discussed. The amount of revenue from sale of our membership list is a new, and relatively small, item. About 800 copies of "Diseases of Field Crops in Canada" are sold annually; aggressive sales of DPVCC should bring in \$4,000. The 1999 annual meeting will probably break even. Expenditures: \$2,000 was donated as seed money for the International Conference on Plant Pathogenic Bacteria to be held in Charlottetown in 2000; the FAC and the Board have agreed to budget \$5,000 in support of meetings in 2000, in order to encourage members to bring more conferences to Canada. The following expenditures were also agreed to: a computer and printer for the Membership Secretary (about \$2,000), increased travel costs for Board Members to attend the annual meeting in Victoria (\$9,000 in 1999 to \$12,000 in year 2000), extra funds for award recipients to travel to Victoria (\$3,000), and more funds for Regional Meetings (\$1,500). With these increased expenditures, a deficit of \$20,000 is expected in the year 2000.

The FAC report was moved by Ron Howard. Seconded by Denis Gaudet. Carried.

10. New strategic and/or business plan for the CPS

Ron Howard explained that a new financial plan is needed as defined in the Society's By-Laws. He felt that a strategic plan would be beneficial to the CPS and moved that CPS should strike a steering committee to develop such a plan in time for presentation at the next annual meeting. Seconded by Vikram Bisht. Carried.

11. Reports from Subject Matter and *Ad Hoc* Committees

- 11.1 Journal Improvement Committee. This committee, particularly Zamir Punja, has been instrumental in setting up the agreement with NRC for publication of the *CJPP*. George Lazarovits asked the members to contribute ideas and articles on "hot topics" for the *CJPP*, that would be printed free of charge (a report was not submitted).
- 11.2 Information Products Marketing Committee. See report in *CPS News*, June 1999.
- 11.3 Symposium and Workshop Committee. Symposia topics for the 2000 Annual Meeting in Victoria have already been decided in collaboration with the Local Arrangements Committee (a report was not submitted).
- 11.4 Industry Relations Committee. See report by Zamir Punja in this issue.

- 11.5 Education and Public Awareness Committee. See report by Jeannie Gilbert in this issue.
 - 11.6 International Cooperation Committee. See report in *CPS News*, June 1999.
 - 11.7 *Ad Hoc* committee on Historic Resources. See report by Denis Gaudet in this issue.
The committee on Historic Resources was suggested a year ago by Howard (then President). Gaudet agreed to chair the committee, and he described the objectives. Four or five individuals are still needed, and should be selected to represent the geographic regions. The Regional Representatives could assist in identifying suitable candidates. Archives Canada is already receiving CPS documents, some of which are dating back to 1920-30 and have been located in Lloyd Seaman's office in Ottawa. The President, Past Presidents and Secretary are filing their most important documents for inclusion in the archives.
Roger Rimmer moved to accept the above Subject Matter and *Ad Hoc* committee reports. Seconded by Tim Paulitz. Carried.
- ## 12. Reports from Standing Committees
- 12.1 Journal Editorial Committee. See report by Rudra Singh in *CPS News*, June 1999.
 - 12.2 Science Policy Committee. See report by Zamir Punja in this issue.
 - 12.3 Report from the Future Meetings Committee. The following locations have been used recently:
1996: 62nd Saskatoon, Saskatchewan. LAC Chair Robin Morrall
1997: 63rd Winnipeg, Manitoba. LAC Chair Roger Rimmer
1998: 64th Fredericton, New Brunswick. LAC Chair Rudra Singh
1999: 65th Montreal, Quebec. LAC Chair Tim Paulitz
The following locations are confirmed:
2000: 66th Victoria, B.C. LAC Chair Rich Hunt
2001: 67th London, Ontario. LAC Chair George Lazarovits
2002: 68th Lethbridge, Alberta. LAC Chair Larry Kawchuk
The following locations are not yet confirmed:
2003: 69th annual meeting
2004: 70th annual meeting, maybe Ottawa, Ontario
 - 12.4 Resolutions Committee
In recognition of service to the Canadian Phytopathological Society, be it resolved that the AGM express its sincere thanks and appreciation to:
i) The LAC, and in particular Tim Paulitz, for their organization and gracious hospitality,
ii) The financial sponsors: Ministere de l'Agriculture, des Pecheries et de l'Alimentation (PQ), Philom Bios, Ag-West Biotech, Inc., Agriculture and Agri-Food Canada, Pioneer Hi-Bred Ltd., Canadian Seed Growers Association, Plant Products Co. Ltd., Zeneca Agro, and Novartis Crop Protection Canada, Inc.
iii) The retiring members of the Board, Ron Howard and Ken Mallett, as well as the departing committee chairs and

members, for their efforts on behalf of the Society,
iv) David Kaminski (Editor) and Jim Menzies (Assistant Editor) for making the *CPS-SCP News* a valuable and enjoyable resource for the members of CPS,
v) Rick Reeleder for maintaining and upgrading the web site,
vi) Robin Morrall and section editors for ensuring the continued publication of the *Canadian Plant Disease Survey*,
vii) Rudra Singh (Editor-in-Chief), Lloyd Seaman (Technical Editor), section editors and reviewers for their contributions in the publication of the *Canadian Journal of Plant Pathology*,
viii) George Lazarovits (President), Ron Howard (Past President), Zamir Punja (President Elect), Roger Rimmer (Vice-President), Peter Sholberg (Treasurer), Lone Buchwaldt (Secretary), Vikram Bisht (Membership Secretary), Ken Mallett (Senior Director) and Tim Paulitz (Junior Director) for their dedicated work for the advancement and financial well-being of our Society.

12.5 Awards Committee

This report by Diane Cuppels was deferred to the Banquet.

Tim Paulitz moved to accept the above reports from the Standing Committees. Seconded by Andy Tekauz. Carried.

13. Other Reports

- 13.1 CPS News. See report by David Kaminski in *CPS News*, June 1999.
- 13.2 CPS Web Site. See Report by Rick Reeleder in *CPS News*, June 1999.
- 13.3 Canadian Plant Disease Survey. See report by Robin Morrall in this issue.

Moved Greg Boland. Seconded by David Kaminski. Carried.

14. Report from Local Arrangements Committees

14.1 LAC 1999, Montreal. Tim Paulitz reported that six symposia were taking place at this year's annual meeting. About 650 abstracts were submitted for the joint APS/CPS meeting, \$5,000 was raised from sponsors in Canada, and about 120 will attend the CPS Banquet. Paulitz thanked the people in the LAC, George Lazarovits and Zamir Punja for helping with the many tasks, particularly with the CPS display that was produced with help from the Information Products Marketing Committee. Paulitz also thanked Fay Labatt, the APS meeting manager, for her corporation.

14.2 LAC 2000, Victoria. Rich Hunt, Chair of the LAC, reported that this meeting will be arranged jointly with the APS Pacific Division, and that 200-300 people are expected to attend. He encouraged people to visit the web page about the meeting. There will be an electronic registration and submission of abstracts. Symposia have already been planned. David Kaminski suggested a DeBary Bowl should be organized similar to the one that took place in Montreal.

Ron Howard moved to accept the above LAC reports. Denis Gaudet seconded. Carried.

15. Reports from Regional Representatives

Western Ontario, London, May 1998, report by Diane Cuppels in *CPS News*, September 1998

B.C. Abbotsford, October 1998, report by André Lévesque in *CPS News*, December 1998.

Manitoba, Winnipeg, January 1999, report by Randy Clear in *CPS News*, March, 1999

Saskatchewan and Alberta (PPSA), Lloydminster, November 1998, report by Bruce Gossen in *CPS News*, March 1999

Western Ontario, London May 1999, report by Diane Cuppels in *CPS News*, June 1999.

Peter Burnett moved to accept the regional reports. Seconded by André Lévesque. Carried.

16. Report from the Nominating Committee

Outgoing Board Members are Past President Ron Howard, and Senior Director Ken Mallett. The following individuals had been nominated for Board positions:

Greg Boland	Vice-President
Tony Sturz	Junior Director
Lone Buchwaldt (2 nd term)	Secretary

The following individuals had been nominated for Standing Committees:

Sue Boyetchko	Awards Committee
A.C. Kushalappa	Future Meetings Committee
Penny Pearse	Resolutions Committee
Larry Kawchuk	Financial Advisory Committee

These nominations were published in *CPS News*, March 1999. No other nominations were received. Ron Howard moved that the above individuals be elected. Seconded by Roger Rimmer. Carried.

17. Installation of new Board Members

Zamir Punja thanked Michèle Heath for encouraging him to join the Board as President three years ago. He remembered that it was 20 years ago that he gave his first paper at the Annual Meeting of CPS, and that there were only five graduate students present. Punja felt honored and appreciative of the trust the members put in him. Punja said that he could foresee changes in plant pathology, and was especially sad to see scientific staff leaving universities without being replaced. However, he was encouraged that education and training in plant pathology is still taking place at Agriculture and Agri-Food Canada for instance. Punja expressed the need to look into publishing the *CJPP* online, on disk or CD. Also more aggressive marketing of the two books was high on his list. Involvement of more members in committee work and greater productivity will

be emphasized. He would also like to see an increase in membership. He thanked George Lazarovits for his leadership as President, and presented him with the President's Plaque. Punja conclude his talk by wishing everybody a happy new year, he looked forward to the next annual meeting in the new millennium, and hoped everyone would have a safe Y2K transition.

18. Other business

No other business.

19. Adjournment

Zamir Punja moved to adjourn the meeting. Vikram Bisht seconded. Carried.

Committee Reports

An Ad-hoc Committee for Historical Resources was formed at the recent AGM meeting in Montreal. The CPS Board decided that a more formal means of collecting and archiving materials relevant to the Canadian Phytopathological Society and its members was required. CPS members (active or retired) who are interested in becoming involved in this Committee, should contact Denis Gaudet, Agriculture and Agri-Foods Canada, Box 3000, Lethbridge, AB T1J 4B1.

Em:gaudetd@em.agr.ca

Phone: 403-317-2278.

Terms of Reference

Ad Hoc Committee on Historical Resources
Canadian Phytopathological Society
August 10, 1999

Objectives

The Committee on Historical Resources (CHR) will have the following objectives:

1. To establish criteria and guidelines, in consultation with Archives Canada, for the collection, cataloguing and preservation of important historical resources to the science of plant pathology in Canada.
2. To promote the collection, cataloguing and preservation of important historical resources to the science of plant pathology in Canada.

3. To maintain a central archives to hold important documents and memorabilia associated with the Canadian Phytopathological Society/la Societe Canadienne de Phytopathologie.

4. To encourage universities, research stations and other agencies who have employed plant pathologists as teachers, researchers, extension specialists and regulators to preserve important historical resources related to their work as a permanent record of their achievements and as a legacy for the future.

Activities

Collection of Historical Resources - To collect materials suitable for archiving that reflect the operations and activities of the CPS/SCP (and its members) since its inception and to catalogue and deposit them with Archives Canada in Ottawa.

Cataloguing of Historical Resources - To develop a system of cataloguing official records of the CPS/SCP and putting this information on a computer database that would be accessible to members and others interested in the history of plant pathology and the accomplishments of plant pathologists in Canada.

Preservation of Historical Resources - To develop a central archives to hold and preserve historical records and memorabilia of the CPS/SCP and encourage institutions and agencies which have operated plant pathology programs to do the same at the local level for their own records, collections and memorabilia.

Promoting the Accomplishments of Plant Pathologists - To use the historical resources of the CPS/SCP, universities, research stations and other agencies in ways that will promote the science of plant pathology and draw recognition to the work and accomplishments of plant pathologists in Canada.

Membership

The core membership of the CHR will be 4-5 members who are interested in working with and preserving historical resources pertaining to plant pathology in Canada. They will

be selected to represent the Society's geographical regions, possibly nominated by the regional societies. Members will normally serve a three-year term and be replaced on a rotational basis (3 members per year) to insure continuity of committee activities. New members will be appointed by the CPS Board upon the recommendation of the CHR. Members shall elect a Chairperson from amongst their ranks. The CHR may have ex-officio advisors consisting of current or past CPS members or others with particular skills or knowledge that could help the committee further its objectives. The Vice-President, CPS, shall be an ex-officio member of the CHR.

Responsibilities

The CHR shall endeavour to meet the objectives stated above. The committee will hold an annual meeting, which will normally be in conjunction with the CPS annual meeting. (This will be difficult if the core members are retired CPS. They could have an electronic conference or meeting). The Chairperson shall be responsible for preparing an annual report on committee activities.

Report from the Science Policy Committee, June 1999

"What are the current opportunities for graduate student training in plant pathology in Canada and what does the future hold in store for graduate/undergraduate training in plant pathology?" This issue was selected for study by the SPC. A detailed questionnaire was sent to 10 universities, 14 federal government laboratories and 4 provincial laboratories to assess their role in training of plant pathologists. A general summation of the findings is currently being prepared. Overall, the data show that several universities in Canada still have retained strong plant pathology programs but, at the same time, several others have minimized or lost their strength. Several Agriculture and Agri-Food Canada stations are playing an important role in training plant pathology students, as are some provincial laboratories. Realistically, the concept of graduate student training has gone beyond the

university setting and continues to utilize the expertise that is available from plant pathologists off-campus. This is viewed as an opportunity to continue to provide a breadth of training that is beneficial. Many of these plant pathologists hold adjunct positions at the university to formalize their roles in student training. Additional opportunities were apparent from some industrial partners that also played a role in student training. A three-way collaborative interaction between university-government-private sector appears to be an increasing trend for current graduate student training.

Respectfully submitted,

Zamir Punja

Report from the Industry Relations Committee, June 1999

The Industry Relations Committee (IRC) is an *ad hoc* committee established to identify and address the needs of members and non-members of the Society who are in private industry and to enhance communication and linkages with them. The overall aim of the IRC is to ensure a closer working relationship and an enhanced level of interaction between CPS and industry sectors that are involved with plant protection. The membership of the IRC shall reflect industry representatives that can also address issues at their respective provincial level. Selection of members to serve on the IRC is almost complete and the committee should have begun its task by August.

Respectfully submitted,

Zamir Punja

Report on the Canadian Plant Disease Survey, July 1999

Volume 79 of the *Canadian Plant Disease Survey* (CPDS), the report on disease highlights in 1998, was published in late March, 1999. It contained 38 reports, mostly on cereal diseases, on oilseeds and special crop diseases or from diagnostic laboratories. Thanks to all the contributors as well as the section editors (formerly called collators) for their work. A special mention is due

Stephanie Hilton, Agriculture and Agri-Food Canada (AAFC), London, Ontario for her work as compiler and to Bruce Bowman, the AAFC, London webmaster.

Several changes occurred with the Survey this year. Lorne Stobbs retired as national co-ordinator and this role was taken on by Robin Morrall. Some of the sections were consolidated for efficiency, but unfortunately no submissions were received in the cereals-east and forest trees sections. Further consolidation may be desirable and a greater effort may be necessary to encourage submission of survey reports. This was the third year in which the Survey was published electronically. It was distributed on diskette to authors and subscribers, and is available and can be downloaded from the AAFC London website. This was the first year that it was available in its entirety on the web site; previously only the table of contents was available, with the option of downloading articles.

Before publication of Volume 79 an invitation was extended through *CPS News* and in notices to potential contributors to receive a printed copy of *CPDS* by paying \$5.00. A very poor response was received, suggesting little need for this option. However, a limited number of printed copies will continue to be printed for libraries on the subscriber list, which indicate a preference for hard copy for archival purposes. The subscriber list will be revised in 2000 after receiving responses from subscribers who received diskettes with the 1999 Survey.

Respectfully submitted,

Robin Morrall, CPDS National Co-ordinator,

Report from the Education and Public Awareness Committee, July 1999.

In 1998 several project outlines were prepared (thanks to Steve Haber, Randy Clear and Barbara Otrysko) and sent by Julie Gold to J. and P. Cuthbert for publication in book format or on the web for the use of students at Science Fairs. Unfortunately, they were not published and attempts to regain contact with the Cuthberts failed. A second at-

tempt to get them published was initiated in the spring of 1999 using the web address www.stemnet.nf.ca/~jbarron/scifair.html

Unfortunately, again we have had no reply.

Verna Higgins forwarded information from the APS with suggestions for CPS representation/ collaboration for the Workshop in Plant Pathology for middle and high school biology teachers at the joint CPS/APS meeting in Montreal. Unfortunately, my commitments did not permit me to respond to Claudia Jasalavich, Youth Program Chair for APS in a timely fashion. The workshop was canceled, possibly due to lack of involvement by CPS members. A positive response was obtained from Ron Wall, a retired CPS member. He has been active in weed biocontrol and would be glad to help out in some general subject area as he has not been close to research for some time.

It is with regret that I stand down as chair of this committee, but the time required to do a thorough job far exceeds what I have available to give. I feel it is an important aspect of the society to inform the public about plant pathology issues. My recommendation is to consider hiring a person on a regular basis, even for one day a week, to make contacts and to follow up on ideas and suggestions made by CPS members and others. The projects are available from me if a school board or science fair organizer can be found who is interested in making them available to teachers and students. I also have Ronald Wall's address and e-mail should the next chair wish to follow up on his kind offer.

Respectfully submitted,

Jeannie Gilbert

CPS BUDGET

	REVENUES			
	2000	1999 to May 3	1999 Budget	1998 Actual
General Operations				
Regular/Fellows (x50)	13000	12275	15000	16900
Student/Emeritus	0	0	0	0
Sustaining (x150)	4500	3300	3500	3300
Interest and Foreign Exchange	9000	1346	5000	9900
Returns from Annual/Regional Meetings	2000	1250	2000	21452
Sale of Membership List	1000		0	0
		Third Party Transactions		
Annual Reviews	2000	580	1500	1221
Miscellaneous	500	448	1000	0
SUBTOTAL	32000	19199	28000	52773
CANADIAN JOURNAL OF PLANT PATHOLOGY				
	Membership Dues			
Regular (x25)	7500	7500	7500	7625
Student (x25)	900	750	750	1000
Emeritus +CJPP (x25)	200	200	500	500
Sustaining (x25)	650	550	625	550
	Subscriptions			
Page charges, Reprints & Abstracts	45000	10085	55000	39281
GST	1000		750	559
SUBTOTAL	55250	19085	65125	49515
OTHER PUBLICATIONS				
DFCC Sales	16000	3375	20000	20644
DPVCC/MRCLC	4000	4336	4000	645
GST	1000	0	750	559
SUBTOTAL	21000	7711	24750	21848
GRAND TOTAL REVENUES	108250	45995	117875	124136
AWARDS FUNDS - Excl Anderson Fund				
Interest	1000	1050	900	1050
Donations for awards	250	570	1150	1300

CPS BUDGET**EXPENDITURES**

	2000	1999 to May 3	1999 Budget	1998 Actual
GENERAL OPERATIONS				
ISPP Dues	1500	0	1500	0
CPS NEWS	4000	1911	5000	3510
Service Fee re Credit Cards	500	519	500	326
Office expenses	5000	54	3000	2550
Travel				
Board Members	12000	0	9000	16290
President - Regional Meetings	2000	0	2000	936
Awardees	3000	0	1000	1497
Professional Service	5000	0	5000	4500
Annual Meetings				
Local Arrangements	1000	0	1000	1000
Symposium Publication	2000	0	2000	0
Regional Meetings	1500	1097	500	50
Awards - Minting, Framing	500	113	500	0
Support to Meetings	5000	2000	2000	5000
CPS WebSite	500	0	500	170
CPDS	500	0	500	0
Annual Reviews	2000	0	2000	2173
Committee on International Cooperation	2000	0	2000	0
Miscellaneous	1500	301	1500	3511
SUBTOTAL	49500	5995	39500	41513

CANADIAN JOURNAL OF PLANT PATHOLOGY

Printing, Mailing, Reprints	55000	30293	55000	41553
Salaries, Translation	12000	679	12000	14287
Office Costs	3000	54	2000	1000
Professional Services	4000	0	4000	2600
Marketing	500	0	500	0
GST	1000	0	1000	634
SUBTOTAL	75500	31026	74500	60074

OTHER PUBLICATIONS

	DFCC			
Mailing	2000	481	2000	1843
Marketing	250	0	250	0
GST	1000	0	1500	0
SUBTOTAL	3250	481	3750	1843
GRAND TOTAL	128250	37502	117750	103430

AWARDS FUND - Excl. Anderson Fund

Awards	1500	0	0	1357
SUBTOTAL	1500	0	0	1357

SUMMARY EXCLUDING AWARDS

GRAND TOTAL REVENUE	108250	45995	117875	124136
GRAND TOTAL EXPENDITURES	128250	37502	117750	103430
SURPLUS (DEFICIT)	-20000	8493	125	20706

People

BEST STUDENT PRESENTATION AWARDS FOR 1999

At the recent joint meeting of the Canadian Phytopathological Society and the American Phytopathological Society, held in Montreal, Quebec, the CPS Awards Committee (D. Cuppels, V. Higgins, L. Couture, K. Rashid and, substituting for R. Knox, J. Gracia-Garza) read and rated 13 student posters. The winners of the competition were:

Dr. Siva Sabaratnam (recent Ph.D., University of Western Ontario; supervisor, Dr. James Traquair; address: Agriculture and Agri-Food Canada, 1391 Sandford St, London, ON N5V 4T3). Poster title: Insertion of a luciferase gene cassette into a streptomycetous biocontrol agent.

Shannon J. Deeks (M.Sc. student, Simon Fraser University; supervisors, Dr. Z. K. Punja and Dr. S. Shamoun; address: Canadian Forest Service, Pacific Forestry Centre, 506 W. Burnside Road, Victoria, BC V8Z 1M5). Poster title: Histopathological examination of western hemlock dwarf mistletoe infected with potential biocontrol fungi.

Siva and Shannon will each receive a one-year membership in CPS, a suitably-engraved plaque and one hundred dollars. The monies for these awards come from the legacy of the late Professor T.C. Vanterpool and funds donated in honour of the late Dr. and Mrs. D.L. Bailey.

CONGRATULATIONS SIVA AND SHANNON!

Michèle Heath (University of Toronto) gave an invited talk on "The Cell Biology of Interactions between Plant Cells and Biotrophic Fungal Parasites" at the 9th International Congress of Molecular Plant-Microbe Interactions in Amsterdam at the end of July. At the International Botanical Congress in St. Louis, Missouri, she spoke on "The Hypersensitive Response of Plants to Plant Pathogens" in a session on Programmed Cell Death in Plants.

New Members

Students: Carrie Dooh (ON), Lawrence Osborne (Nebraska, USA), Shaukat Ali (North Dakota, USA) Wajahat Khan (PQ), Martin Filon (PQ)

Regular: Arthur Lamey (North Dakota, USA), Ken K. Ng (BC)

Sustaining Associate: MidWest Food Products Inc.

Shannon Deeks and Siva Sabaratnam won student paper/poster presentation awards at the CPS meeting. They will be given free CPS membership for Y2K.

Employment

I am seeking full-time/term employment as a biologist, extension worker or laboratory technician in plant pathology, plant science, science or biology. I have an M.Sc. in plant pathology. Areas of knowledge, experience and interest include general plant pathology, biological control and environmental studies. Familiar with field and horticultural crops. Extensive work experiences as biologist with Agriculture and Agri-Food Canada, extension plant pathologist with the government of British Columbia and as a laboratory technician. Am enthusiastic, knowledgeable and hard-working. Willing to relocate.

Please contact me at:

Phone: (204) 489-3638

525 Montrose Street,

Winnipeg, MB

Canada, R3M 3M3

Albert Calman

Coming Events

NOTICE OF MEETING

The Saskatchewan Regional Group of the CPS will meet jointly with the Saskatchewan Advisory Council (SAC) Plant Disease Sub-council starting on Monday, November 15th 1999. The meeting will be held in the Atrium Building at Innovation Place (north of the university campus). The meeting is tentatively scheduled to start at 10:00 am, depending on the number of presentations. Lunch is available at Boffins Café in the Atrium Building. All CPS members and other interested persons are invited to attend. The SAC Plant Disease Sub-council will continue to meet Tuesday, November 16th from 9:00 a.m. to 11:00 am to discuss other business. Anyone interested in discussing and making recommendations on plant disease issues that impact Saskatchewan is welcome to attend the SAC meeting.

This year, the meeting will start with the CPS business session and disease reporting. Please give a mini presentation (3-5 min in length) if you have conducted crop disease survey or have reports of disease in 1999. We are also looking forward to people giving a formal presentation. Presentations should be kept to 15-20 minutes in length and abstracts can be published in the *Canadian Journal of Plant Pathology*. Brief, informal talks describing your current and/or potential research projects, disease problems you have been aware of, or novel techniques you are using would also be welcome. If you have an item that you would like to discuss at the meeting, please let us know and we will add it to the agenda.

In the evening, there will be a social at a local restaurant. Spouses and friends are welcome to attend. If a facility is available, there will be an after-dinner speaker. Any volunteers?

Please let us know by October 22nd if you will be attending the meeting and/or the social, and whether or not you are interested in giving a presentation. Further details will be provided in late October regarding the final agenda and location of the social.

Jean Liu
CPS Regional Representative

Ron Knox
Chair SAC Plant Disease Sub-council

AgrEvo Canada Inc.
203-407 Downey road
Saskatoon, Saskatchewan
S7N 4L8
Tel: (306) 477-9446
Fax: (306) 477-9491

AAFC, SPARC
Box 1030
Swift Current, SK
S9H 3X2
Tel: (306) 778-7262
Fax: (306) 773-9123

Western Forum On Pest Management

October 17 - 19, 1999
Conference Center, Penticton Inn
333 Martin Street, Penticton, BC

Tel 250-492-3600 Fax 250-492-3601
Reservations: 1-800-665-2221

Date	Committee	Time	Room
Sunday Oct 17	Western Forum - reception/registration	1900 - 2300	Salon D
Monday Oct 18	Registration - Conference Center Foyer	0700 - 0800	
	Western Committee on Plant Diseases	0800 - 2000	Salon C
	Western Committee on Crop Pests	0800 - 1730	Salon B
Tuesday Oct 19	Western Forum Annual Meeting	0800 - 1200	Salon C

Room Rates: \$54 + tax / night single or double / upgrade \$64 + tax / night

Canadian Workshop on Fusarium Head Blight

Preliminary Agenda

Crowne Plaza - Ballroom November 28-30 1999

Sunday November 28, 1999

12:00	Registration.	
12:00 - 13:15	Set up posters	
13:15	Welcome	CRC, Director Jim Bole CARC, Chair Norris Hoag Kelly Turkington
Emerging Issues:	Chair	André Comeau
13:30 - 13:50	Emerging issues - overview	Tina Kuiper-Goodman
13:50 - 14:10	Food safety	Art Schaafsma
14:10 - 14:30	1996 Ontario epidemic - aftermath	Randy Clear
14:30 - 14:50	Developing threat of FHB to Saskatchewan and Alberta	
14:50 - 15:10	Coffee	Industry / Veldon Sorenson
15:10 - 15:30	Emergency registration: Folicur	PMRA / Kit Nelson Dave Abramson Tim Paulitz
15:30 - 15:50	Mycotoxins and their detection	
15:50 - 16:20	Epidemics - why, when, how	
16:20 - 17:30	View posters	
19:00 - 22:00	Reception	

Monday November 29

07:30 - 12:00	Registration	
Plenary Session:		
08:25	Welcome	Malcolm Morrison
Keynote Address:	Chair	
08:30 - 09:00	Global status of FHB and health issues	David Miller
09:00 - 09:20	Canadian overview	Dilantha Fernando
09:20 - 09:40	United States overview	Bob Stack
09:40 - 10:00	Coffee	
Industry Issues:	Chair	Randy Clear
10:00 - 10:20	Impact of FHB on: 'The bottom line': producer perspective	Cam Henry/Dennis Garlick
10:20 - 10:40	End-use functionality	Jim Dexter
10:40 - 11:00	Commercial milling and baking	Paul Brennan
11:00 - 11:20	Feed contamination	Joe Kendall
11:20 - 11:40	Malting and brewing	
11:40 - 12:00	Marketing	Michael Brophy
12:00 - 13:15	* Lunch. View posters	

Management:

Technical Session A:

1. Breeding for Resistance		
	Chair	Richard Martin
13:15 - 13:35	Wheat (Spring and Winter)	Fred Townley-Smith
13:35 - 13:55	Barley	Bill Legge
13:55 - 14:15	Corn	Lana Reid
14:15 - 14:25	Oats	Brent McCallum
2. Other Measures		
14:25 - 14:45	Chemical Control	Marcia McMullen
14:45 - 15:05	Residue Management	Ruth Dill-Macky
15:05 - 15:25	Seed-borne Fusarium	Jeannie Gilbert
15:30	Pick up Coffee	
15:30 - 16:30	Priorities and Needs: Breakout Groups 1	Chair - Jim Helm
	Breeding and Genetics	Facilitators
	Prevention of Spread	Les Shugar
	Industry issues	Myriam Fernandez
	Biotechnology	Karen Dupchak
16:30 - 17:15	Reports from breakout groups	Thérèse Ouellet
17:15 - 18:30	View Posters	

Tuesday November 30, 1999

Management

Technical Session B:

3. Biotechnology and Genetics of Resistance:		
	Chair	Randy Giroux
08:30 - 08:50	Fusarium pathogens	Bob Bowden
08:50 - 09:10	Advances in biotechnology	Steve Gleddie
09:10 - 09:30	New sources of resistance	George Fedak
09:30 - 09:50	Molecular markers in the host	Doug Procunier
09:50 - 10:30	Discussion with Coffee	
4. Discussion and resolutions:		
10:30 - 11:15	Strategies for Solving FHB Problems: Breakout Groups 2	Chair - Harvey Voldeng
	Wheat	Facilitators
	Barley	Jeannie Gilbert
	Corn/oats	Brian Rossnagel
	Consumer Issues	Art Schaafsma
		Daryl Embury
11:15 - 12:00	Reports from breakout groups	
12:00 - 12:20	General Discussion and resolutions	
12:20 - 12:30	Wrap-up	Andy Tekauz
12:30	Take down posters	
12:30 - 13:30	* Lunch	
13:30 - 17:00	1. Fusarium identification workshop. CGC 2. Use of 'Quick Tests' to measure DON. CGC	

* Monday and Tuesday lunches provided

«Ravageurs nouveaux et en ré-émergence»

Par Odile Carisse

Les 9 et 10 juin 1999 se tenait, au Centre Culturel Fernand-Charest à St-Jean-sur-Richelieu (Québec), la 91^{ème} réunion annuelle de la Société de Protection des Plantes du Québec. Cette société scientifique est l'une des plus anciennes en Amérique du Nord et comme à chaque année, la réunion annuelle a attiré une centaine de personnes œuvrant dans le domaine de la phytoprotection.

Cette année, le thème de la rencontre était «**Ravageurs nouveaux et en ré-émergence**». Au cours des dernières décennies, beaucoup d'efforts ont été déployés pour contrer les ravageurs. Plusieurs techniques de détection et de répression ont été développées, ce qui a permis d'éliminer plusieurs ravageurs bien que pour plusieurs, la lutte reste à finir. Les écosystèmes, qu'ils soient agricoles ou forestiers sont constamment en évolution. Certains ravageurs perdent de leur importance économique alors que d'autres apparaissent ou réapparaissent. De plus, la mise en pratique de nouvelles méthodes de production a, dans certains cas, favorisé le développement de ravageurs déjà présents ou tout bonnement créé de nouveaux problèmes de phytoprotection.

Quatre conférenciers invités sont venus présenter leurs réflexions sur de nouveaux problèmes reliés à la phytoprotection. Le Dr Suzanne Warwick, du CRECO à Ottawa, est venue parler des risques associés à l'utilisation de plantes transgéniques. Elle a brossé un portrait des recherches dans le domaine. Elle nous a également parlé des conséquences de l'utilisation de plantes transformées sur les communautés de mauvaises herbes. Sous ce thème, elle a parlé des problèmes potentiels lorsque les plantes modifiées génétiquement deviennent des plantes nuisibles ou lorsqu'il y a transfert de matériel génétique, incluant la résistance aux herbicides, vers des plantes nuisibles plus ou moins proches génétiquement. Mme Warwick a conclu en soulignant la nécessité de mieux étudier les impacts écologiques de la culture commerciale de plantes transformées génétiquement.

Le Dr Stephen Goodwin, de l'Université Purdue, a présenté ses travaux de recherche sur le suivi moléculaire des nouvelles races de

“New and Re-emerging pests”

By Odile Carisse

The 91st annual congress of the Quebec Society for the Protection of Plants was held at the Centre Fernand Charest, in St-Jean-sur-Richelieu, Quebec on June 9 and 10. This scientific society is one of the oldest in North America devoted to plant protection. Similarly to previous years, the annual congress attracted about a hundred people interested in the protection of plants.

This year, the meeting's theme was “**New and Re-emerging pests**”. In the last few decades, great efforts have been focused on plant pest and disease control. Although the challenge continues for many pests and diseases, numerous detection and control techniques have been developed, permitting the management of a large number of pests. Ecosystems, be they agricultural or forestry, are continually evolving. Certain pests decline in economic importance, whereas others appear where previously unknown or regain their importance. New crop-management practices have, in certain cases, favored minor pests or created new plant protection problems.

It is in this context that four main speakers presented their views on new plant protection problems. Dr. Suzanne Warwick, from the Eastern Cereal and Oilseed Research Centre talked about transgenic crops. She presented a picture of the research done and described the current status of commercial production of transgenic crops in Canada. She explained that transgenic crops have the potential to change weed communities and populations in three principal ways, via the: 1) escape and proliferation of the transgenic plants as 'weedy' volunteers with subsequent displacement of the crop, weed and/or natural vegetation; 2) hybridization with and transgene infiltration into related weedy and/or wild native species, resulting in invigorated weeds and/or alteration of natural gene frequencies in native species; and 3) genetic changes in populations of unrelated species. She also focused on the need to study the ecological impacts of commercial use of transgenic plants.

Dr. Stephen Goodwin from Purdue University presented his work on molecular tracking of new migrations of an old pathogen. He explained that late blight of potato and tomato,

Phytophthora infestans, agent responsable de la brûlure tardive de la pomme de terre et de la tomate (mildiou). Il a expliqué que cette maladie était bien contrôlée par les fongicides jusqu'en 1980 en Europe et jusqu'en 1990 en Amérique. C'est à ce moment que des changements importants dans les populations de *P. infestans* ont été observés. Le Dr Goodwin a expliqué que cette nouvelle population, composée surtout du type A2, est moins sensible aux fongicides et beaucoup plus aggressive. Il a également expliqué comment, à l'aide d'outils de détection moléculaire, il a été possible de retracer la migration de ces nouvelles populations. Selon lui, l'arrivée de la race A2 aux Etats-Unis et au Canada s'est probablement faite en 1989, par l'entremise de plants de tomates contaminés provenant du Mexique. Selon le Dr Goodwin, les outils moléculaires permettront de suivre les changements dans les populations de *P. infestans* et ainsi d'ajuster les stratégies de lutte.

Lorsqu'on parle de nouveaux ravageurs, on ne peut ignorer le longicorne asiatique, un insecte qui fait beaucoup parler de lui. Le Dr James Appleby de l'Université de l'Illinois a présenté les problèmes causés par cet insecte ainsi que par le *Tomicus piniperda*. Il a expliqué que les premières infestations de longicorne ont été observées dans le Long Island et à New York en 1996. En 1998, des infestations importantes ont été rapportées à Chicago. L'insecte provient de la Chine et a probablement été introduit en Amérique par l'intermédiaire de bois infesté. Une particularité de cet insecte est qu'il attaque les arbres en bonne santé. Le Dr Appleby a expliqué les mesures prophylactiques et de quarantaine sévères qui ont été imposées dans les zones infestées afin d'enrayer le problème.

Le Dr Appleby a également parlé d'un autre insecte qui a fait son apparition en 1992 en Ohio : le *Tomicus piniperda*. Cet insecte est maintenant présent dans la région des Grands Lacs. Le *T. piniperda*, natif d'Europe, attaque plusieurs espèces de pins, toutefois il n'est économiquement important que pour l'industrie des sapins de Noël. Des mesures prophylactiques ont permis réduire les dommages et d'éviter la propagation de l'insecte. Dr Appleby a également souligné l'importance de bien informer le public lors de

caused by the oomycete *Phytophthora infestans*, was effectively controlled for decades in most developed countries by careful crop sanitation and judicious use of fungicides. This changed during the mid-1980s in Europe and the early 1990s in the United States and Canada. Disease control failures were accompanied by huge changes in the pathogen populations. New populations of the pathogen composed mainly of A2 mating type showed high levels of fungicide resistance, usually were more virulent, and were much more aggressive than the previous populations. Dr. Goodwin explained how molecular markers revealed that the new populations rapidly replaced the populations that occurred previously and helped to reconstruct the probable paths of migration. Migrations into the United States and Canada probably occurred by movement of infected tomato fruits from coastal production zones in northwestern Mexico. He highlighted the importance of preventing pathogen migrations and of the use of molecular markers for detection and tracking of new genotypes.

One of the most important new pests of forest trees is the Asian longhorned beetle (*Anoplophora glabripennis*). Dr. James E. Appleby, from the University of Illinois presented two new insect pests the Asian longhorned beetle, and the pine shoot beetle. The first established infestation of Asian longhorned beetle in North America was discovered in several areas of Long Island, New York in 1996. In 1998 another infestation was found in parts of Chicago, Illinois. The beetle is native to China, Korea, and Japan. It is suspected to have arrived in North America in infested wood products from Asia. Unlike most native longhorned beetles, which attack dead, dying, or stressed trees, ALB appears to attack healthy trees as well. Dr. Appleby also described the quarantine regulations that were imposed in all infested areas.

Dr Appleby also spoke about another new pest discovered in 1992 in Ohio, the pine shoot beetle (PSB), *Tomicus piniperda*, a black beetle, about 6 mm long. The beetle has now been detected in southeastern Canada and much of the Great Lakes region. PSB is native to Europe and attacks many pine species. It was probably imported from Europe in pine wood. The Christmas tree industry is most concerned about this beetle because infested ar-

campagnes d'éradication.

Le symposium s'est terminé par une présentation sur l'invasion des Caraïbes, par la cochenille de l'hibiscus, faite par le Dr Laurent Sagarra de P.R. Trinidad Ltd. M. Sagarra a expliqué que, suite à l'introduction accidentelle de cette cochenille dans l'île de Grenade en 1994, les infestations se sont répandues sur pratiquement toutes les îles des Caraïbes. La plupart des méthodes de lutte traditionnelle, dont la lutte chimique et physique, se sont avérées inefficaces. C'est dans ce contexte que trois prédateurs naturels ont été sélectionnés, deux coccinelles prédatrices (*Cryptolaemus montrouzieri* Mulsant et *Scymnus coccivora* Ramkrisna [Coleoptera: Coccinellidae]) et un parasitoïde (*Anagyrus kamali* Moursi [Hymenoptera: Encyrtidae]). *A. kamali* et *C. montrouzieri* se sont avérés très efficaces pour maintenir les populations de cochenilles sous le seuil économique.

Dans le cadre du colloque, quatre chercheurs sont venus parler de nouveaux ravageurs ou de nouvelles problématiques en phytoprotection. M. Michel Lacroix, agronomo-phytopathologiste au Laboratoire de Diagnostic en phytoprotection du Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec a parlé des maladies qui semblent prendre de l'importance, soit parce que le problème est nouveau soit parce qu'il est difficile à régler. Depuis sa création, en 1986, le Laboratoire de Diagnostic a traité quelque 25 000 échantillons dont 67% ont été identifiés comme étant des maladies parasitaires et 33% des problèmes non parasitaires. M. Lacroix a aussi souligné quelques problèmes nouveaux dont les maladies virales (*Impatiens necrotic spot virus* (INSV) et *Tomato spotted wilt virus* (TSWV)); les maladies bactériennes en réémergence telles le chancre bactérien de la tomate (*Clavibacter michiganensis* subsp. *Michiganensis*), la brûlure bactérienne du framboisier (*Erwinia amylovora*), la tache bactérienne des crucifères (*Xanthomonas campestris* pv. *armoraciae*) et des géraniums (*Xanthomonas campestris* pv. *pelargonii*) et la nécrose marginale de la laitue (*Xanthomonas campestris* pv. *vitiensis*). De nouvelles maladies fongiques ont également fait leur apparition particulièrement le chancre sec de la tomate (*Acremonium strictum*) et la pourriture du fruit sur melon et poivron (*Phytophthora capsici*).

eas are quarantined and even if allowed to sell trees within the quarantined area, trees with dead twigs remain unsold. Dr Appleby concluded by discussing the importance of public education about the Asian longhorned beetle and the pine shoot beetle through newspaper articles, leaflets, videos, seminars, and the Internet is important. Often an informed public can discover an infestation before it has a chance to spread.

The symposium ended with the presentation of M. Laurent Sagarra from P.R. Trinidad Ltd. on the hibiscus mealybug, *Maconellicoccus hirsutus* Green (Homoptera Pseudococcidae) infestation in the Caribbean. M Sagarra explained that since its accidental introduction into the island of Grenada in 1994, *M. hirsutus*, commonly named the pink or hibiscus mealybug (HMB), has been inexorably spreading through the Caribbean where it has become a major pest on several crops in 24 Caribbean islands. Physical and chemical control methods were ineffective so biological control appeared as the most suitable method to manage the HMB populations. Three natural enemies were selected: the predatory beetles *Cryptolaemus montrouzieri* Mulsant and *Scymnus coccivora* Ramkrisna [Coleoptera: Coccinellidae] and the parasitoid *Anagyrus kamali* Moursi [Hymenoptera: Encyrtidae]. *A. kamali* and *C. montrouzieri* were highly effective in bringing HMB populations under control.

A colloquium on new regional problems followed the symposium. M. Michel Lacroix, from the diagnostic laboratory of the Quebec Ministry of Agriculture made the first presentation. Since 1986, 25 000 samples were received and analyzed. Among these samples 67% were caused by plant pathogens and the remaining ones were non-pathogenic problems.

M. Lacroix described some new and/or reemerging problems among which the necrotic spot virus (INSV), the Tomato spotted wilt virus (TSWV) on ornamentals and vegetables and the Potato virus X (PVX) on greenhouse tomato. He explained that bacterial diseases are gaining in importance among which *Clavibacter michiganensis* subsp. *michiganensis* on tomato, *Erwinia amylovora* on raspberry, *Xanthomonas campestris* pv. *armoraciae* and *campestris* pv. *pelargonii* on cabbage and geranium and *X. campestris* pv.

Mme Vicky Toussaint du CRDH d'Agriculture et Agroalimentaire Canada nous a ensuite parlé d'une nouvelle maladie bactérienne de la laitue causée par *Xanthomonas campestris* pv. *vitiens* : la nécrose marginale. Elle a parlé de la sensibilité différentielle des cultivars de laitue, des traitements de semences et de l'efficacité des bactéricides. Elle a également mis en évidence le caractère épiphyte de cette bactérie qui rend la lutte difficile puisque la bactérie peut contaminer des plants sans toutefois causer de symptômes. En effet, des essais en serres ont démontré que la bactérie est disséminée par l'eau d'irrigation par assension. Mme Toussaint a parlé des projets de recherche en cours sur cette bactérie dont le développement d'outils de détection et la mise en place d'une méthode de lutte biologique basée sur la compétition entre les bactéries colonisatrices des feuilles de laitue.

Le Dr Timothy Paulitz de l'Université McGill a ensuite parlé d'une maladie en ré-émergence : la fusariose du blé (*Fusarium graminearum*). Il a décrit les symptômes et les problèmes reliés à la présence de mycotoxines. Le Dr Paulitz explique la résurgence de la maladie par la présence d'été particulièrement chauds et humides au cours des dernières années et l'adoption, par les producteurs, de techniques de travail minimum du sol. La lutte est problématique du fait qu'il n'y a pas de variétés résistantes et que la lutte chimique n'est pas rentable. Le Dr Paulitz a ensuite présenté ses travaux de recherche sur l'épidémiologie du champignon pathogène et sur la possibilité de développer une approche de lutte biologique.

Finalement, le Dr Daniel Coderre, du Département des Sciences Biologiques de l'Université du Québec à Montréal, a parlé de l'impact de l'introduction de prédateurs exotiques sur les coccinelles indigènes. Selon le Dr Coderre, les invasions biologiques peuvent avoir des conséquences négatives majeures sur les espèces indigènes et possiblement sur la productivité d'un écosystème. Il a expliqué que bien que les conséquences négatives de l'introduction d'espèces exotiques soient le plus souvent attribuées aux espèces phytophages, l'introduction volontaire ou involontaire d'espèces utiles doit également être considérée. Le Dr Coderre a présenté les résultats d'une étude échelonnée sur une période 20 ans qui

vitiens on lettuce. M. Lacroix also presented a few new fungal diseases including *Acremonium strictum* causing dry cankers on greenhouse tomato and *Phytophthora capsici* causing fruit rot on melon and pepper.

Vicky Toussaint from Agriculture and Agri-Food Canada and McGill University presented a new disease of lettuce caused by the bacteria *Xanthomonas campestris* pv. *vitiens*. She presented the results of several experiments on commercial cultivar susceptibility, seed treatments and efficiency of bactericides. She pointed out that one characteristic of this bacterium is it's capacity to survive epiphytically on lettuce leaves without causing symptoms. This characteristic makes the control more difficult as a large number of plants can be contaminated during the greenhouse production period. In conclusion she presented the research being conducted to develop detection tools and integrated control programs that will include biological control based on microbial competition.

Dr. Timothy Paulitz from McGill University spoke on a reemerging disease: Fusarium Head Blight of Wheat. He explained that this disease caused by *Fusarium graminearum* (perfect stage = *Gibberella zae*) is endemic in Eastern Canada and other areas with high summer rainfall. However, since 1993, the disease has become epidemic in the major wheat growing regions of North America, including the upper midwest of the US and the Prairie provinces of Canada. According to Dr. Paulitz this increase may be due to unusually high summer rainfall and reduced tillage. At present, there are no resistant cultivars and chemical control is costly and has not given consistent control. Dr. Paulitz then presented the results of the research done in his laboratory over the last 8 years.

The colloquium ended with the presentation of Dr Daniel Coderre from the University of Québec in Montréal on the impact of exotic predator introductions on indigenous beetles. Dr. Coderre explained that biological invasion may have negative impacts on indigenous species. In general the negative impacts are observed for the introduction of plant pests, however, consequences of the introduction of biological control agents must be considered. Dr. Coderre presented the results of a study carried out over a 20 year period and explained

portait sur l'impact de l'introduction de ces espèces sur l'abondance et la diversité des coccinelles néartiques, ainsi que sur le potentiel prédateur global de cette guilde d'insectes utiles.

Au cours de cette réunion annuelle deux prix ont été remis à des étudiants. La bourse SPPQ a été remise à Mlle Valérie Fournier, de la faculté d'Agriculture de l'Université Laval. Mlle Fournier vient de terminer ses études de maîtrise, sous la supervision du Dr Jacques Brodeur, et qui portait sur la lutte biologique contre les pucerons ravageurs de la laitue en production serricole. Mlle Fournier est boursière du CRSNG et a reçu cette bourse pour la qualité de ses travaux de recherche ainsi que pour son implication en phytoprotection. Le prix W.E. Sackston pour la meilleure présentation étudiante a été remis à Mlle Mélanie Paquet de l'Université de Sherbrooke.

En plus du symposium et du colloque, 27 présentations scientifiques ont été offertes par des chercheurs et des étudiants. Les textes des présentations du symposium et du colloque seront publiés dans un supplément de la revue Phytoprotection, quant aux résumé des conférences scientifiques ils seront publiés dans le prochain numéro de cette même revue.

La prochaine réunion annuelle de la Société de Protection des Plantes du Québec aura lieu les 14 et 15 juin 2000 à St-Félicien au Lac St-Jean et sera organisée par M. Denis Pageau.

Odile Carisse, organisatrice du congrès SPPQ 1999, CRDH, Agriculture et Agroalimentaire Canada. Carisseo@em.agr.ca

that before 1979, two indigenous species of beetle were codominant on corn. He described the effect of the introduction and the migration of new species on the population and predation level of the indigenous species.

During the congress, two prizes were offered to students. The Q.S.P.P. bursary was given to Valérie Fournier from the Faculty of Agriculture of Laval University. Valérie just completed her master studies under the supervision of Dr Jacques Brodeur and her subject was: biological control of aphids on greenhouse produced lettuce. She received this honor for the quality of her research and her involvement in plant protection. The W.E. Sackston prize for the best student presentation was given to Mélanie Paquette from Sherbrooke University.

In addition to the symposium and colloquium research scientists and students gave 27 scientific communications. The complete texts of the symposium and colloquium will be published in a supplement of the journal Phytoprotection and the abstracts of the scientific communications in the next issue of the same journal.

The next annual congress of the Quebec Society for the Protection of Plants will be held in St- St-Félicien, Lac St-Jean on June 14 and 15 and will be organized by Denis Pageau.

Odile Carisse, Horticultural Research and Development Centre, Agriculture and Agri-Food Canada. Carisseo@em.agr.ca