



THE CANADIAN BOTANICAL ASSOCIATION
BULLETIN
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Patron / Président d'honneur

His Excellency the Right Honourable / Son excellence le très honorable
Roméo Leblanc, P.C., C.C., C.M.M., C.D.

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Editor's comment / Le mot du rédacteur

It is with great pleasure that I take over from Joe Gerrath as editor of the CBA Bulletin. I would like to thank him for his collaboration and helpful suggestions during the transition period. Joe will continue to maintain the annual List of Members. In my new responsibilities as editor, I will be assisted by Stuart Hay. The change of editor will not make for any major changes in the Bulletin, apart from some minor differences in style. The present issue is therefore pretty much that same as the preceding. I strongly encourage all those members who would like to write anything for the Bulletin to submit their texts to me, keeping in mind the suggested technical information on page 2.

It would be interesting if we could continue publishing "The Plant Press" which Joe Gerrath has handled up until now. To do this, however, we need the participation of botanists from coast to coast. I welcome the input of all of you who cull through the newspapers and magazines in your region to send in short resumés of any information that you come across dealing with plants. This exercise will keep us informed of the importance that the written media accord to the realm of plants. It would also be interesting to hear your comments on the news reported in the press clippings.

On a similar note, I would like to start a new column, something like "The Plant Press", but which would highlight the latest major scientific developments in different areas of plant biology. In order to do this, I would ask you to send in a short resumé (with literature references) on any subject that you consider to be an advancement in your field of research and that would be of interest to your colleagues and readers-at-large.

Meeting in Saskatoon

Finally, I would like to take this opportunity to encourage all members to participate in the next CBA Annual Meeting in Saskatoon. The Chair of the organizing committee, Dr. Vipen Sawhney, promises us a very interesting scientific program (see the announcement for the meeting on page 3). In addition, the social venue will give the participants a chance to learn something more about the prairies and the First Nations in Western Canada. Saskatoon has become a major centre for research in plant biotechnology and will be rolling

Editor's comment / Le mot du rédacteur

out the welcome mat for botanists from across the country. The final date for registration and submitting abstracts for papers is March 31, 1998. For further information concerning abstracts, registration, accomodation and the field trips, you should consult the website of the organizing committee (see page 3).

C'est avec grand plaisir que je prends la relève de Joe Gerrath à titre d'éditeur du Bulletin de l'ABC. Je tiens à remercier Joe pour sa précieuse collaboration lors de la passation des pouvoirs.

Joe continuera à produire la liste annuelle des membres de l'ABC. Pour m'assister dans mes nouvelles fonctions de rédacteur, M. Stuart Hay a accepté d'agir come rédacteur-adjoint.

Le changement d'éditeur n'a pas amené de transformations majeures au Bulletin, si ce n'est que de petites modifications de style. Le contenu du présent Bulletin est donc sensiblement le même qu'auparavant. J'encourage fortement tous ceux et celles qui veulent écrire dans le Bulletin à me faire parvenir leurs textes (je vous invite à consulter les quelques informations techniques pour la soumission des textes en page 2).

Il serait intéressant de continuer à publier « La presse botanique », dont Joe Gerrath s'occupait jusqu'à maintenant, en comptant sur la participation de tous les botanistes canadiens. Je fais donc appel aux volontaires qui épluchent déjà les quotidiens et revues de vulgarisation de leur région pour qu'ils me fassent parvenir de courts résumés des articles traitant des végétaux. Cet exercice permettrait de voir l'importance qu'apportent les médias écrits au monde végétal. Il serait cependant intéressant de commenter ou de critiquer l'information qui est véhiculée par ces médias.

De la même façon, j'aimerais créer une nouvelle chronique, semblable à « La presse botanique », qui traiterait des derniers développements scientifiques majeurs dans les différentes disciplines de la biologie végétale. Pour ce faire, il faudrait me faire parvenir de courts résumés (en incluant les références pertinentes) de ce que vous croyez être un pas en avant dans votre domaine de recherche et dont vous voudriez faire part à vos collègues.

Congrès de Saskatoon

En terminant, j'aimerais vous encourager à participer au prochain congrès de l'ABC à Saskatoon. Le Dr. Vipen Sawhney nous promet un programme scientifique très intéressant (voir l'annonce du congrès en page 3). De plus, le volet social du congrès permettra aux congressistes d'en apprendre un peu plus sur les prairies et sur les premières nations. La région de Saskatoon, pôle majeur de la biotechnologie des plantes au Canada, nous attend donc avec impatience. La date limite pour la soumission des résumés et pour l'inscription est le 31 mars 1998. Pour plus d'information sur les résumés, l'inscription, l'hébergement et les sorties, veuillez consulter le site Web du comité d'organisation du congrès (voir page 3). Des formulaires sont aussi disponibles sur demande.

Editors / La rédaction

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Information for submitting texts Soumission des textes

Texts and illustrations for the Bulletin must be sent to the editor preferably via the electronic mail (attached file) or on a disquette. Texts should be saved under "MicrosoftWord" and illustrations under the "TIFF" format.

If you have any question about text submission please contact the editor.

Les textes et les illustrations pour le Bulletin doivent de préférence être envoyés par le courrier électronique (sous forme de fichier attaché) ou encore sur une disquette.

Les textes doivent être enregistrés sous « Microsoft Word » et les illustrations sous le format « TIFF ».

N'hésitez pas à contacter le rédacteur pour toute information sur l'envoi de documents.

CBA Bulletin / Bulletin de l'ABC

The CBA Bulletin is issued quarterly (February, May, August, November) and sent to all CBA members.

Le Bulletin de l'ABC paraît quatre fois par année (février, mai, août, novembre) et est envoyé à tous les membres de l'ABC.

To ensure continuous delivery of the Bulletin please notify the Treasurer promptly of any change of address.

Veuillez communiquer tout changement d'adresse au trésorier afin de recevoir tous les numéros du Bulletin.

If you have any comments or suggestions about the Bulletin, please contact the Editor at the above address.

Si vous avez des commentaires ou suggestions concernant le Bulletin, veuillez s'il-vous-plait contacter le rédacteur à l'adresse mentionnée plus haut.

Texts for the May issue must be received before April 1, 1998.
Les textes pour le Bulletin de mai doivent arriver au plus tard le 1^{er} avril 1998.



"SASKATOON 1998"



CALL FOR PAPERS

Annual Meeting of
The Canadian Botanical Association/L'Association Botanique du Canada
(June 27 to July 1, 1998)

You are invited to contribute papers (oral presentations or posters) to the CBA/ABC annual meeting to be held at the University of Saskatchewan. The theme of the meeting is "Plants and Biotechnology". Papers are accepted in the areas of Plant biotechnology, Plant structure and development, Plant ecology, Plant systematics and phytogeography, Mycology, Phycology, Paleobotany and other plant-related areas.

Abstract Submission and Registration is through the web site:
<http://www.usask.ca/biology/cba.htm>

Please note that you must register for the meeting in order for your paper to be included in the program.

Early Registration Fees:	Regular	\$175
	Student	\$100
	Accompanying person	\$100

Registration fees include: reception on June 27; trip to Wanuskewin Park, lunch and dinner on June 28; banquet on June 30, and refreshments during breaks.

For accommodation and pre-conference field trip bookings, and information on the University of Saskatchewan and City of Saskatoon, please visit the web site.

Deadline for Abstract Submission and Early Registration is: March 31, 1998.

CONTACT PERSONS:

Vipen Sawhney, phone: 306-966-4417, e-mail: sawhney@admin.usask.ca
or Art Davis, phone: 306-966-4732, e-mail: davisa@duke.usask.ca
Department of Biology, University of Saskatchewan,
112 Science Place, Saskatoon, SK. S7N 5E2, CANADA
fax: 306-966-4461

LIONEL CINQ-MARS AWARD

Each year the Canadian Botanical Association gives an award for the best student paper presented at the CBA Annual Meeting. The award is made in memory of Lionel Cinq-Mars, a founding member of the Association and a widely admired teacher.

Any bona fide student enrolled at a Canadian institution of higher learning is eligible, as well as Canadian students at foreign institutions, both undergraduate or graduate. The paper (one only per student) can be given at any session of the Annual Meeting. Every effort will be made to ensure that each student in the competition has a fair evaluation and an equal chance of winning the award.

Papers will be evaluated by a panel of judges (at least one from each of the sections of CBA) which is chaired by the President-Elect, Denis Barabé. The merit of each paper will be judged on the basis of content (60%) (originality, technical expertise, and associated subject knowledge) and presentation (40%) (lucidity, organization, use of visual aids, audibility and "presence"). The Lionel Cinq-Mars Competition is an important part of each Annual Meeting. We hope that there will be many participants in Saskatoon and that the students will benefit, both from the experience of giving an oral presentation and from the comments which they will receive from the panel of judges.

All students who wish to compete for this award must clearly indicate on their abstract form that they wish to enter the Lionel Cinq-Mars Competition. The abstract form should be sent before March 31, 1998 to :

Dr. Vipen Sawhney
Department of Biology
University of Saskatchewan
112 Science Place
Saskatoon, SK
S7N 5E2
Tel. : 306-996-4417
Fax : 306-966-4461
E-mail : sawhney@admin.usask.ca

PRIX LIONEL CINQ-MARS

Chaque année l'Association canadienne de botanique décerne un prix pour la meilleure communication orale présentée par un étudiant lors du congrès annuel de l'ABC. La récompense est remise à la mémoire de Lionel Cinq-Mars, un des membres fondateurs de l'Association et un professeur fort admiré.

Tout étudiant inscrit à une institution canadienne d'études supérieures ou tout étudiant canadien inscrit à une université étrangère, qu'il soit de 1^{er}, 2^e ou 3^e cycle, est éligible à ce prix. La communication (seulement une par étudiant) peut être présentée à n'importe quelle session du congrès. Tout sera mis en oeuvre afin d'assurer que chaque étudiant soit évalué justement et qu'il ait une chance égale de remporter ce prix.

La décision finale sera rendue par un jury comprenant au moins un membre de chaque section de l'ABC. Le jury sera dirigé par le président

désigné, Denis Barabé. La qualité de la communication est jugée selon le contenu (60%) (originalité, techniques, connaissance du sujet) et la présentation (40%) (lucidité, organisation, utilisation de l'audiovisuel, clarté du texte).

La compétition Lionel Cinq-Mars est un événement important de chaque congrès annuel. Nous comptons sur une forte participation à Saskatoon et nous espérons que les étudiants bénéficieront autant de l'expérience acquise à communiquer oralement que des commentaires qu'ils recevront de la part des membres du jury.

Veuillez prendre note que seuls les étudiants qui auront clairement indiqué sur le formulaire de résumé leur intention de participer à la compétition pour le prix Lionel Cinq-Mars seront inscrits sur la liste des participants. Le formulaire de résumé doit être envoyé avant le 31 mars 1998 à :

Dr. Vipen Sawhney
Department of Biology
University of Saskatchewan
112 Science Place
Saskatoon, SK
S7N 5E2
Téléphone : 306-996-4417
Télécopieur : 306-966-4461
Courrier électronique : sawhney@admin.usask.ca

JOHN MACOUN TRAVEL BURSARY

The John Macoun Travel Bursary, named in honour of the man who served as official botanist on five major expeditions throughout Canada during the late 19th and early 20th centuries, is awarded to a graduate student who presents an oral paper in the Lionel Cinq-Mars Competition.

Eligibility

1. Competition for the Bursary is open to Canadian students both within and outside of Canada. Eligible students are encouraged to apply, even if the CBA Meeting is to be held at their own university.
2. Students must present a paper in the Lionel Cinq-Mars Competition at the 1998 CBA Annual Meeting in Saskatoon.
3. No student may receive more than one award from the Macoun Fund while registered for the same degree.

Procedures

1. Students applying for an award must do so no later than March 31, 1998.
2. The application must contain the following documents :
 - a) a copy of the abstract of the paper to be given in the Lionel Cinq-Mars Competition at the CBA Annual Meeting,
 - b) a supporting letter from the student's Supervisor of research that also includes a statement that the student is engaged in a M.Sc. or Ph.D. program,
 - c) a statement from the student outlining the amount of money requested,
 - d) the student's curriculum vitae (one page),

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e) a letter of recommendation from a member of the student's research committee (not the Supervisor).

3. Send the complete set of application documents to :

Dr. Vipen Sawhney
Department of Biology
University of Saskatchewan
112 Science Place
Saskatoon, SK
S7N 5E2
Tel. : 306-996-4417
Fax : 306-966-4461
E-mail : sawhney@admin.usask.ca

4. The CBA President will appoint a committee to screen all applications, to recommend the candidates for the Bursaries and the amount of each bursary. The sole selection criteria shall be those of academic merit.

5. Macoun Bursary winners will be notified before the registration deadline for the annual meeting, if possible, and awards will be paid at that time. During the awards ceremony at the CBA Annual Meeting in Saskatoon, Macoun Bursary winners will be officially announced and presented with an award certificate.

BOURSE DE VOYAGE JOHN MACOUN

La bourse de voyage John Macoun est décernée en l'honneur de John Macoun, qui dans l'exercice de ses fonctions en tant que botaniste a participé à cinq expéditions majeures à travers le Canada de la fin du 19^e siècle au début du 20^e siècle, à un étudiant qui présente une communication orale dans le cadre de la compétition Lionel Cinq-Mars.

Eligibilité

1. La compétition pour la bourse est ouverte aux étudiants canadiens inscrits à une université canadienne ou à l'étranger. Les étudiants éligibles peuvent faire une demande même si le congrès annuel de l'ABC se tient à leur université.
2. Le concurrent doit présenter une communication dans le cadre de la compétition Lionel Cinq-Mars au congrès annuel de Saskatoon.
3. Un étudiant ne peut pas recevoir plus d'une bourse Macoun pour la période durant laquelle il est inscrit à un programme spécifique.

Marche à suivre

1. Les étudiants doivent faire parvenir leur demande pour la bourse de voyage au plus tard le 31 mars 1998.
2. La demande doit contenir les documents suivants :
 - a) une copie du résumé de la communication pour la compétition Lionel Cinq-Mars au congrès annuel de l'ABC,
 - b) une lettre de recommandation de la part du directeur de thèse de l'étudiant et une preuve que l'étudiant en question est inscrit à un programme de maîtrise ou de doctorat,
 - c) un compte rendu des dépenses prévues par l'étudiant,
 - d) le curriculum vitae de l'étudiant (une page seulement),
 - e) une lettre de référence d'un membre du comité de direction de l'étudiant (directeur de thèse exclu).

3. Veuillez faire parvenir la demande complète à :

Dr. Vipen Sawhney
Department of Biology
University of Saskatchewan
112 Science Place
Saskatoon, SK
S7N 5E2
Téléphone : 306-996-4417
Photocopieur : 306-966-4461
Courrier électronique : sawhney@admin.usask.ca

4. Le président de l'ABC mettra sur pied un comité de sélection qui examinera les demandes et recommandera les candidats pour la bourse Macoun et le montant alloué pour chaque bourse. Le seul critère d'évaluation sera celui du mérite académique.

5. Les gagnants de la bourse Macoun seront avisés, si possible, avant la date finale d'inscription pour la rencontre annuelle et les prix leur seront remis à ce moment-là. Durant la remise officielle des prix au congrès annuel de Saskatoon, les gagnants de la bourse Macoun seront présentés et un certificat leur seront décernés.

J.S. ROWE ECOLOGY AWARD

Applications for the J.S. Rowe Award for the best ecology paper published by a graduate or undergraduate student in 1997 are now being accepted. This annual award was established to honour the contributions of Professor J. Stan Rowe who was the first chairman of the Ecological Section of the CBA. Professor Rowe contributed much to the advancement of ecology in Canada through his initiatives to encourage Canadian plant ecologists to join the CBA and to foster communication with their colleagues from around the world. He is well known for his seminal research on the relationship between land form and forest communities and as an enthusiastic and dedicated teacher.

Eligibility

The paper must have been published in 1997 in any recognized refereed journal. The student must be the first or sole author of the paper and must be a Canadian citizen or have conducted the research while a student at a Canadian university. The paper must have been submitted for publication while the applicant was a student or within two years of completing the degree.

Procedures

Applications should include :

- 1) a reprint of the paper (or a proof copy of the paper plus a letter from the editor of the journal stating that this paper is in press with a 1997 publication date),
- 2) evidence confirming date of graduation (or that the applicant is still a registered student) and that the applicant was either an undergraduate or graduate student at the time the research was conducted (a letter from the supervisor would be satisfactory), and

3) letter(s) from any co-author describing the extent of their contributions to the study.

Applications and supporting documents should be sent, before April 30, 1998, to :

Dr. Ed Reekie
Biology Department
Acadia University
Wolfville, Nova Scotia
B0P 1X0
Tel. : 902-542-2201
Fax : 902-542-3466
E-mail : ereekie@ace.acadiau.ca

PRIX J.S. ROWE EN ÉCOLOGIE

Le prix J.S. Rowe récompense l'étudiant de 1^{er}, 2^e ou 3^e cycle qui a publié le meilleur article scientifique dans le domaine de l'écologie en 1997. Ce prix annuel est décerné en l'honneur du professeur J. Stan Rowe qui a été le premier président de la section écologie de l'ABC. Le professeur Rowe a grandement participé au développement de l'écologie au Canada en encourageant les écologistes canadiens à joindre les rangs de l'ABC et à établir des liens avec les écologistes du monde entier. Il est aussi bien connu pour ses travaux de recherche sur la relation entre la forme du paysage et les communautés forestières et comme enseignant passionné et enthousiaste.

Éligibilité

L'article doit avoir été publié en 1997 dans une revue scientifique avec réviseurs. L'étudiant doit être le premier ou l'unique auteur de l'article et doit être citoyen canadien ou avoir mené sa recherche lorsqu'il était étudiant dans une université canadienne. L'article doit avoir été soumis pour publication pendant que le candidat était encore aux études ou au plus tard deux ans après avoir obtenu son diplôme.

Marche à suivre

La demande doit inclure :

- 1) un tiré-à-part de l'article (ou une copie de l'épreuve finale de l'article et une lettre de l'éditeur de la revue certifiant que l'article est sous presse et qu'il sera publié en date de l'année 1997),
- 2) une confirmation de la date d'obtention du diplôme (ou une preuve que le candidat est encore inscrit au programme) et une attestation du cycle (1^{er}, 2^e ou 3^e) auquel le candidat était inscrit au moment de la recherche (une lettre du directeur du projet est suffisante),
- 3) une lettre de chaque co-auteur de l'article expliquant leur degré d'implication dans l'étude.

Les demandes doivent être envoyées avant le 30 avril 1998 à :

Dr. Ed Reekie
Biology Department
Acadia University
Wolfville, Nova Scotia
B0P 1X0
Téléphone : 902-542-2201
Télécopieur : 902-542-3466
Courrier électronique : ereekie@ace.acadiau.ca

TAYLOR A. STEEVES AWARD IN PLANT STRUCTURE AND DEVELOPMENT

Applications for the 1997 Taylor A. Steeves Award are now being accepted. If you are a graduate student involved in Plant Structure and Development, or if you supervise or know someone who may be eligible for the award, please read this announcement carefully.

This annual award was established to honour the many-faceted contributions of Professor Taylor A. Steeves to the advancement of Botany in Canada. Professor Steeves has made significant contributions to our current understanding of plant morphology and development through research papers and textbooks. He was the editor of both the Canadian Journal of Botany and the Botanical Gazette. As a teacher and researcher, he displays an enthusiasm for plants and an ability to make even the most complex concepts seem understandable. The award is intended to symbolize these attributes so aptly displayed by Professor Steeves.

Eligibility

All students who have graduated from or are currently enrolled in a Canadian university, or Canadian students who have studied abroad, in the area of Plant Structure and Development are eligible.

Procedures

The award will be given for the best Plant Structure and Development paper published in 1997 (in French or English). Papers published in late 1996 but not available in reprint form in time for the 1997 deadline (April 30, 1997) will be considered eligible. Papers can only be submitted once.

The judging committee will take into account originality, scientific significance, presentation and the use of language, and its decision will be final. Although it may be preferable that the student be the sole author of the paper, joint papers will be considered, if they are accompanied by a statement on university letterhead, signed by the authors, estimating the percentage responsibility of each author for :

- 1) the ideas that led to the initiation of the project,
- 2) the actual research skill demonstrated,
- 3) the writing of the manuscript.

All applications should be submitted by the student's supervisor, and should include five copies of each of the following:

- a) the actual publication (only one submission per applicant),
- b) the candidate's curriculum vitae, including current address and e-mail information,
- c) a statement indicating that this student is currently enrolled in a degree program, or has completed such a program during the calendar year for which the award is to be made (except for extenuating circumstances with respect to timing of publication as noted above),

d) a statement from the supervisor, the student, and any co-author, establishing responsibility for the paper as outlined above.

Applications and supporting documents should be sent, before April 30, 1998, to :

Dr. James Kemp
Department of Biology
University of P.E.I.
Charlottetown, PEI
C1A 4P3
Tel. :902-628-4343
Fax : 902-566-0740
E-mail : jkemp@upei.ca

PRIX TAYLOR A. STEEVES EN STRUCTURE ET DÉVELOPPEMENT DES PLANTES

Dans le cadre du prix Taylor A. Steeves, il est maintenant temps de penser à la préparation des dossiers pour l'année 1997. Si vous êtes un étudiant travaillant dans le domaine de la structure et du développement des plantes ou si vous encadrez ou connaissez quelqu'un qui pourrait être éligible pour ce prix, nous vous suggérons de lire attentivement cette notice explicative.

Ce prix annuel a été établi pour honorer les divers types de contributions du professeur Taylor A. Steeves à l'avancement de la botanique au Canada. Le Dr. Steeves a apporté une importante contribution à notre connaissance de la morphologie et du développement des végétaux par la publications de livres et d'articles scientifiques originaux. Il a été directeur scientifique des revues scientifiques Canadian Journal of Botany et Botanical Gazette. Comme professeur, il manifeste une abilité exceptionnelle pour rendre intelligible des concepts scientifiques souvent complexes. Ce prix a pour objectif de mettre en valeur les qualités qui font la renommée du Dr. Taylor A. Steeves.

Éligibilité

Les étudiants qui viennent de terminer leur études de 2^e ou de 3^e cycle ou qui sont actuellement inscrits dans une université canadienne, de même que les étudiants canadiens qui étudient à l'étranger, dans le domaine de la structure et du développement des plantes, sont éligibles à ce prix.

Marche à suivre

Le prix sera décerné au meilleur article scientifique portant sur la structure et le développement des plantes publiés en 1997 (en français ou en anglais). Les articles publiés à la fin de 1996, mais pour lesquels les tirés à part n'étaient pas encore disponibles à la date limite du concours de 1996 (30 avril 1997), sont aussi acceptés. Les articles ne peuvent être soumis qu'une seule fois. Les éléments suivants seront pris en considération par le jury: originalité, valeur scientifique, présentation et qualité de la langue. La décision du jury est irrévocable. Bien qu'il soit préférable que l'étudiant soit l'unique auteur de l'article, les articles écrits en collaboration sont aussi acceptés. Dans ce cas, les dossiers doivent être accompagnés d'une lettre signée par tous les auteurs de l'article et indiquant clairement, sous forme de pourcentages, la contribution de chacun des auteurs aux aspects suivants :

- 1) les idées qui ont amené la mise sur pied du projet,
- 2) la réalisation de la recherche,
- 3) la rédaction du manuscrit.

Toutes les candidatures doivent être soumises par le directeur de recherche de l'étudiant. Les dossiers doivent contenir cinq copies des documents suivants:

- a) la publication (seulement une publication par candidat),
- b) le curriculum vitae du candidat, incluant son adresse postale et électronique,
- c) une preuve démontrant que l'étudiant est inscrit dans un programme d'études ou qu'il vient de compléter un tel programme durant l'année pour lequel le prix est offert,
- d) une lettre du directeur de recherche signée par tous les auteurs de l'article indiquant leur contribution respective dans la réalisation de la publication, tel que décrit précédemment.

Le dossier complet doit être envoyé, avant le 30 avril 1998, à :

Dr. James Kemp
Department of Biology
University of P.E.I.
Charlottetown, PEI
C1A 4P3
Téléphone :902-628-4343
Télécopieur : 902-566-0740
Courrier électronique : jkemp@upei.ca

A.E. PORSILD AWARD IN SYSTEMATICS AND PHYTOGEOGRAPHY

The Systematics and Phytogeography Section has established the A.E. Porsild Award to recognize the best paper published by a student (undergraduate or graduate) during the previous calendar year.

The student must be either a Canadian citizen, or must have done the research for the paper at a Canadian institution. The award will be presented at the CBA Annual Meeting which will be held in Saskatoon in July, 1998.

Éligibilité

As noted above, the student must be either a Canadian citizen, or must have done the research for the paper at a Canadian institution. The student must be the sole or first author of the paper. The paper must have been published within the previous calendar year (in this case, during 1997). Papers published in any area of systematics and/or phytogeography are eligible. Only single papers will be considered (i.e., if papers were published as a series, then the nominator should select one for assessment by the judging panel).

Procedures

The nomination should include a reprint of the paper, as well as evidence that the primary author was an undergraduate or

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graduate student at the time the research was done and the paper written (a letter from the supervisor would be appropriate).

Nominations should be send to :

Dr. William J. Crins, Chairman
Systematics & Phytogeography Section, CBA/ABC
Ontario Ministry of Natural Resources
Southcentral Region Science & Technology Unit
R.R. 2, High Falls Rd., at hwy. 11
Bracebridge, ON
P1L 1W9
Tel. : 705-789-9611
Fax : 705-789-3933
E-mail : crinsb2@epo.gov.on.ca

Nominations should be received by May 1, 1997. The winner will be selected by a panel composed of the executive members of the Systematics and Phytogeography Section.

PRIX A.E. PORSILD EN SYSTÉMATIQUE ET PHYTOGÉOGRAPHIE

La section systématique/phytogéographie décerne le prix A.E. Porsild pour la meilleure publication scientifique de l'année par un étudiant dans les domaines de la systématique et/ou de la phytogéographie. Le prix sera remis lors de la rencontre annuelle de l'ABC à Saskatoon.

Éligibilité

L'étudiant doit être citoyen canadien ou avoir fait ses recherches dans une institution canadienne. L'étudiant doit être le seul auteur ou le premier auteur de l'article scientifique en question. L'article doit avoir été publié dans l'année en cours. N'importe quel sujet touchant la systématique ou la phytogéographie est éligible. Seulement une publication sera prise en considération par le jury, même si la recherche a fait l'objet d'une série d'articles.

Marche à suivre

Chaque demande devrait comprendre un tiré-à-part de l'article en question et une preuve attestant que le candidat faisait ses études de 1^{er}, 2^e ou 3^e cycle au moment où la recherche a été effectuée (une lettre d'attestation du directeur serait appropriée).

Les mises en candidature devraient être envoyées à:

Dr. William J. Crins, Chairman
Systematics & Phytogeography Section, CBA/ABC
Ontario Ministry of Natural Resources
Southcentral Region Science & Technology Unit
R.R. 2, High Falls Rd., at hwy. 11
Bracebridge, ON
P1L 1W9
Téléphone : 705-789-9611
Télécopieur : 705-789-3933
Courrier électronique : crinsb2@epo.gov.on.ca

Les demandes doivent arriver avant le 1er mai 1998. Le gagnant sera choisi par un jury composé de membres de l'exécutif de la section systématique et phytogéographie de l'ABC.

Tribute to Gerald Straley

Dr. Gerald Bane Straley (1945-1997) A Tribute

On 11 December 1997, following a long and courageous fight against cancer, we lost a friend and colleague, Dr. Gerald B. Straley. His continual optimism during his illness was inspiration to all who knew him.

Gerald grew up on the family farm in Virginia which undoubtedly initiated his great interest in nature. After completing his B.Sc. degree in Ornamental Horticulture at Virginia Polytechnic Institute, he later went to Ohio University to study for his M.Sc. in Botany. He later came to Vancouver as Education Coordinator at the Van Dusen Botanical Garden during which time he successfully completed his Ph.D. at U.B.C. under the guidance of Dr. Roy Taylor. In 1982, Gerald became the Curator of Collections and Research Scientist at the University of British Columbia Botanical Garden.

He gave so much to the botanical and horticultural world through sharing his enthusiasm and knowledge. His significant accomplishments were many. Besides writing many articles and papers for journals, he wrote the Vascular Plants of B.C. and the Flora of the U.B.C Endowment Lands. Probably the publication he enjoyed writing most was his award-winning book, "The Trees of Vancouver". He used to drive and walk in and around Vancouver taking copious notes on many trees during all seasons. During his illness, he was compiling notes for his second volume. He was renowned as one of North America's most distinguished taxonomists. He is also one of the leading authorities on native B.C. and Canadian plants. This experience led to Gerald being invited to be a major editor and author on the multi-volume publication, "The Flora of North America".

He was a brilliant and respected teacher and had a special way to relate to academics, students and the gardening and nursery communities. Gerald was the honorary Director of the Herbarium in the Department of Botany at U.B.C.

Visitors, staff and the Friends of the Garden learnt so much from his fascinating and authoritative tours of the Garden. He showed us many plants that had so many stories about them.

Undoubtedly his greatest love were perennials and woody plants from Asia. Nothing would make him happier by being the first to tell us that the *Magnolia campbellii* cultivars were in flower! Gerald will be missed by so many who had the privilege to know him. Not only will we miss his extensive knowledge of plants and nature, but his 'special humour' warmth and friendship. Thank you Gerald - we will miss you.

A memorial fund has been set up in Gerald's memory. Donations can be made to the U.B.C Botanical Garden, c/o Bruce Macdonald, Director, U.B.C Botanical Garden, 6804 Southwest Marine Drive, Vancouver, B.C., V6T 1Z4.

Sylvia Taylor,
University of British Columbia Botanical Garden

Poorly Known Economic Plants of Canada

Poorly Known Economic Plants of Canada - 16. Black Cohosh, *Cimicifuga racemosa* (L.) Nutt.

E. Small and P.M. Catling, Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada, Saunders Bldg., Central Experimental Farm, Ottawa K1A 0C6

Common Names: Black Cohosh, Black Snakeroot (less often: Fairy Candles, Rattleweed, Rattleroot, Bugbane, Bugwort, Squaw Root). French: actée à grappes.

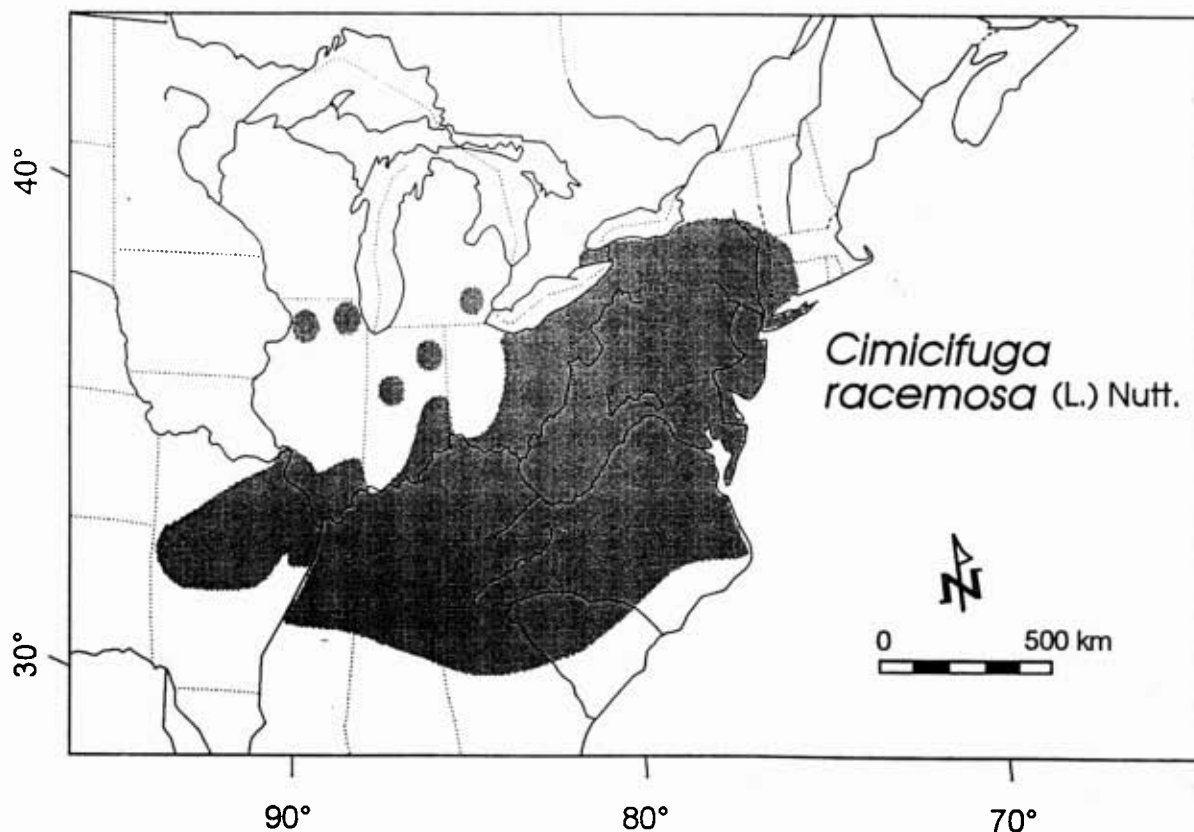
Note: The genus name (from the Latin *cimex*, bug; and *fugere*, to drive away) derives from the European *C. foetida*, whose strong odour proved useful to repel vermin. "Cohosh" is Algonquin for "rough," an allusion to the exterior of the rhizome. Blue Cohosh is *Caulophyllum thalictroides*; it is also used medicinally, almost as widely as Black Cohosh. The name "black snakeroot" originates from the use of the black, knotted rootstocks during pioneer times to treat snakebite. Many other plants are called "snakeroot," usually a consequence of their previous use to treat poisonous snake bite. Members of the genus *Sanicula* in the Apiaceae are more often called "Black Snakeroot" than *Cimicifuga racemosa*. "Seneca Snakeroot," discussed in the first article in this series, is widespread in Canada. "Virginia-snakeroot" or "Common Snakeroot" is *Aristolochia serpentaria* of the Aristolochiaceae, which occurs in the eastern United States

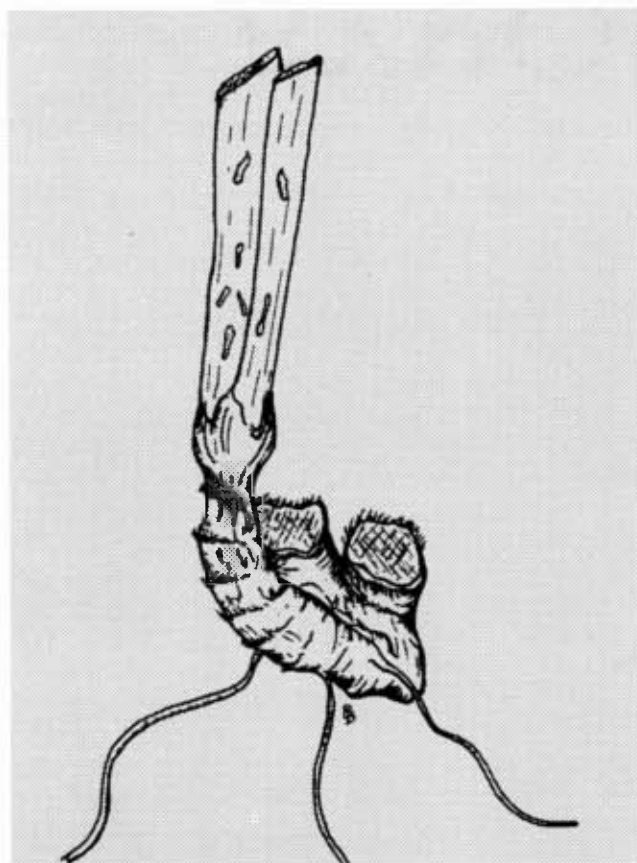
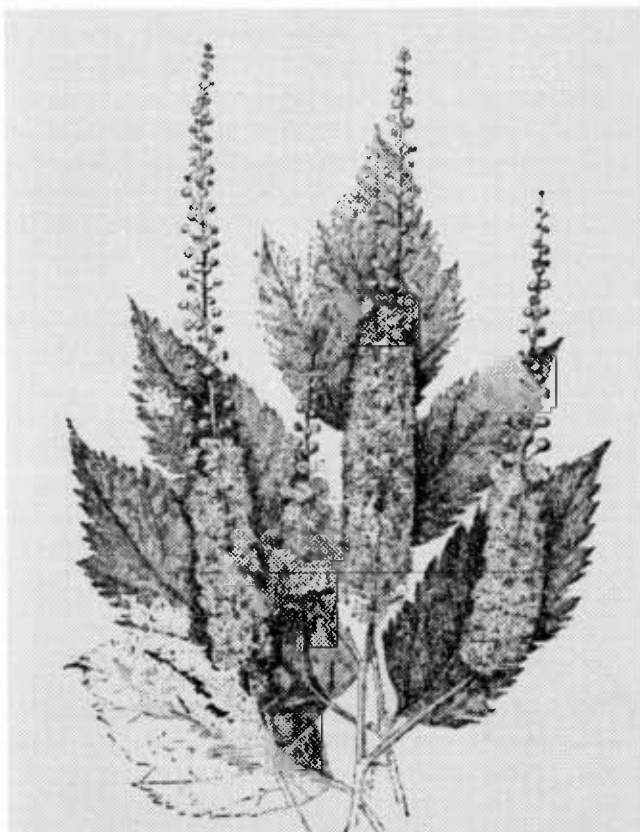
south of Canada. Sampson's snakeroot, *Psoralea psoralioides*, a member of the Fabaceae, also occurs south of Canada.

The genus *Cimicifuga* includes about 15 species of the north temperate zone. *Cimicifuga racemosa* is a native of eastern North America, occurring both in Canada and the U.S. In Canada it is native to a small portion of the Carolinian zone of Ontario, but is cultivated, and occasionally escapes outside of this region. The plant is considered rare in Canada.

Five other species of *Cimicifuga* occur in North America. *Cimicifuga americana*, American Bugbane, is also used medicinally, but to a lesser extent. It occurs in eastern North America south of Canada, mostly in the Appalachians, and differs in having 3-8 stipitate pistils instead of 1-3 sessile pistils. *Cimicifuga elata*, Tall Bugbane, differing from *C. racemosa* in usually having nine leaflets instead of more than nine, occurs in SW British Columbia south through Washington to northwestern Oregon. It is the only other species of *Cimicifuga* found in Canada.

Black Cohosh is an attractive herbaceous perennial, 1-2.6 m tall, with compound sharply toothed leaves. In mid- to late summer, branching feathery tapering racemes (occasionally as long as a meter) appear, with small, white, scented flowers blooming successively from the base upwards. The whiteness of the flowers is produced mainly by the white stamens, as the petals are minute





and the sepals fall away as the bud opens. The stout, blackish rhizome is cylindrical, hard, and knotty, and older specimens have attached remains of numerous branches. The roots arise from the lower surface of the rhizome. The leaves are deeply incised in forma *dissecta* (Gray) Fern. The var. *cordifolia* (Pursh) Gray, with large and often cordate leaflets 1-2.5 dm long, occurs in the mountains of Virginia, North Carolina and Tennessee. The leaves of Black Cohosh resemble those of the more common baneberries (*Actaea* spp.), but are without elongate terminal teeth. The elongate nodding inflorescence (over 10 cm long) and the follicle fruit, rather than a berry, also distinguish Black Cohosh.

A plant of moist or dry deciduous forests, Black Cohosh is found particularly on rich, wooded slopes. It seems adapted to partially shaded woodland openings and rocky thickets. It grows best in partial shade, in a moist soil with considerable organic matter and a pH of 5.0 to 6.0. Plants grown from seed may not flower until the third or fourth year.

Cimicifuga racemosa is one of the more important medicinal plants. The drug-containing roots and rhizomes are collected in the fall after the fruits have matured and the leaves have died. The rhizome has a faintly disagreeable odour and a bitter, acrid taste.

Black Cohosh has been very widely utilized by American Indians, who generally boiled the root in water and drank the resulting infusion. In addition to considerable usage to treat female complaints (hence the name "Squawroot"), native Americans used Black Cohosh for rheumatism, debility, sore throat, and other problems. The whole roots were extracted with whiskey by the early settlers as a cure for rheumatism. Subsequently, Europeans used Black Cohosh to treat numerous ailments including diarrhea, bronchitis, measles, whooping cough, tuberculosis, high blood pressure, migraine headaches, neuralgia, arthritis and rheumatism.

Cimicifuga racemosa contains triterpene glycosides, resin, salicylates, isoferulic acid, sterols, and alkaloids. Salicylates are the forerunner of aspirin, and their presence in Black Cohosh provides a rationale for its early use to treat headache. Black Cohosh is currently recommended for such uses as relieving depression and tinnitus (ringing of the ears), but is best known as a "women's plant" because of its usefulness in relieving menstrual cramps. This herb is a traditional remedy to treat menstrual problems, and facilitate labour and delivery. It is claimed to be effective as an alternative to estrogen replacement therapy for some symptoms of menstrual cessation, especially when estrogen replacement is not possible due to a history of uterine fibroids, fibrocystic breast cancer, etc. Extracts have been shown to suppress hot flashes in menopausal women by reducing the secretion of luteinizing hormone. Black Cohosh was one of the components of "Lydia Pinkham's Vegetable Compound." Lydia's compound is celebrated in verse:

Poorly Known Economic plant of Canada

Widow Brown she had no children,
Though she loved them very dear;
So she took some Vegetable Compound,
Now she has them twice a year.

This mixture was an old-time panacea for what was termed "female weakness" (menstrual discomforts) or "female hysteria" (menstrual complaints). One hesitates to define or question the treatment of "male hysteria."

Research has suggested sedative and anti-inflammatory effects, supporting use in treatment of arthritis and neuralgia. Medical evaluation of other uses of Black Cohosh is somewhat controversial. It has been considered useful for nerve and muscle pain because it lowers blood pressure and dilates blood vessels.

Black Cohosh is currently used in at least 29 Canadian drug products, with the supply coming exclusively from the wild, mostly from the Blue Ridge Mountains in the Appalachian chain of the U.S. It is used extensively in parts of Europe and Australia, where several million doses of Remifemin, a formulation of Black Cohosh, have been employed in recent years.

Overdoses of Black Cohosh can result in intense headaches, nausea, vomiting, slow pulse rate, dizziness, and visual disturbances. Other possible complications that have been mentioned include abnormal blood clotting, liver problems, and the promotion of breast tumors. It is very strongly advised that consumption of Black Cohosh be avoided during pregnancy because it can precipitate a miscarriage (indeed, it has been administered to increase the intensity of uterine contractions during childbirth). It has also been recommended that anyone advised not to take contraceptive pills, or with heart disease should not use Black Cohosh. Treatment with a medicinal plant as potent as Black Cohosh should be of limited duration and monitored by an experienced physician.

Black Cohosh is a striking garden plant for deep shade landscapes, and is often stocked by plant nurseries for this purpose. With tall stature and coarse foliage, it makes an excellent background plant. A variety of ornamental cultivars have been bred.

As a medicinal plant, Black Cohosh can be cultivated like other shade-loving, slow-growing woodland medicinal plants, such as ginseng and goldenseal. Consequently, it is an interesting crop diversification opportunity. The Canadian populations are at the northern limit of the range of the species, and therefore are deserving of protection as germplasm for future development of a cultivated crop.



Book reviews

The "Book reviews" column is always looking for volunteers to review books sent in by the publishers. The following publications have not yet been spoken for. If you are willing to review one of these books please contact the editor at the address indicated at the beginning of the bulletin (page 2). On request we will send you the book you wish to review.

Plant-Microbe Interactions. Vol. 3.

by G. Stacey & N.T. Keen
Chapman & Hall, 1997

New Flora of the British Isles. Second Edition.

by Clive Stace
Cambridge Univ. Press, 1997

Induced Responses to Herbivory

by R. Karban & I.T. Baldwin
Univ. Chicago Press, 1997

The Ferns of Britain and Ireland, Second Edition

by C.N. Page
Cambridge Univ. Press, 1997

Plants and UV-B

by P. Lumsden
Cambridge Univ. Press, 1997

Plant Life Histories

by J. Silvertown et al
Cambridge Univ. Press, 1997

Vegetation of Southern Africa

by R.M. Cowling et al
Cambridge Univ. Press, 1997

Plant Variation and Evolution

by D. Briggs & S.M. Walters
Cambridge Univ. Press, 1997

Plant Responses to Elevated CO₂

by A. Raschi et al
Cambridge Univ. Press, 1997

**A Century of Mycology.
British Mycological Society Centenary
Symposium
Edited by Brian C. Sutton
Cambridge University Press, Cambridge
(US \$ 90,00)**

This book consists of 'how we got here chapter' (the historical perspective) and 'where we are now chapter' chapters (the current perspective). Few books deal with the former approach, which I found made fascinating reading. There were vignettes of the eccentric and distinguished mycologists of the past and their remarkable achievements. Some of the chapters focusing on current perspectives linked in well, and could have been found in any specialist multi-author volume.

The book opens with a chapter by John Webster, which provides a wonderful synopsis of mycology and its scope. This chapter could be given to any amateur or student contemplating a career in mycology. He or she will surely find something to make a contribution. The following chapter by C.T Ingold provides a personal account of his life-long study of the fungi from streams and ponds in Britain. It is clear that with an inquisitive mind, one can move from place to place, and job to job making fascinating discoveries and becoming a world authority. Some people of course are more adventurous geographically speaking. In chapter three D.N. Pegler presents the discoveries that British mycologists made by collaborating with those sent out to the farthest corners of the British Empire (discreetly refereed to as the developing countries). We learn about many famous mycologists in the era from 1850 to 1950 including the Reverend M.J. Berkely. He appears again in the next chapter by Roy Watling on the amateur contribution to Mycology in the UK over the last century. The British tradition of amateur naturalists and their valuable contribution is envied across the world. Here we discover more about the life and times of early and more recent amateur mycologists. We are reminded of the many important mycological discoveries made by those who followed other professions to earn their daily bread. They took mycology very seriously and yet pursued it with a style that allowed them to enjoy the social and fieldwork aspects of their obsession.

The later chapters deal with the current perspective. Of these, I found the ones dealing with mutualistic symbioses the most interesting, often linking historical and current understanding. There is an outstanding and wide-ranging contribution by D.J. Read which should be consulted by anyone teaching or studying the subject of Mycorrhizal symbiosis. This is followed by another well-crafted account of lichens by M.R.D. Seaward. It reminds mycologists and indeed botanists that lichens play an important role in the environment, not just as indicators of air quality. An

earlier chapter by B.C. Sutton discusses the fungi imperfect (No sex please we're British) and details the ways in which mycologists have struggled with developing natural and usable classification systems for these heterogeneous organisms. The chapter emphasizes the increasing focus on spore formation (conidiogenesis) first with the light and later with the electron microscope. We end up with some understanding of the diversity of these organisms and that perfection in what we do, especially in taxonomy and classification is elusive. Between these chapters are others on the hypha (Salomon Bartnicki-Garcia), the flagellated fungal spore (Melvin Fuller), mycelia (Alan Raynor) and secondary metabolism (Arnold Demain); each informative but not, to this reader, a highlight of the book. The long last chapter deals with recording and mapping fungi. I felt this was like the book called 'what a woman of forty-five ought to know', published in 1902, which is full of good advice, but the relevance of the details becomes superseded as social behaviour (or computers) change. I suspect that we shall look back on this chapter as a valuable statement of the 'the art' in the mid-1990's. The year of the centenary 1996 was just about the time that super computers and molecular techniques burst upon the scientific scene. The next centenary volume by the British Mycological Society will be very different. Members will only be able to read it sitting at their internet terminals and experience a very different sort of social and professional interaction from present and past mycologists. The post-foray get together will probably disappear as CCD cameras probably remotely controlled send images of mushrooms direct from the field to watching mycologists around the globe.

This book, resulting from the 1996 Centenary symposium, should surely be read by all mycologists. It is packed with information for historians of science and can be dipped into by the casual biologist who will certainly find one chapter or another to inform or entertain.

David H.S. Richardson, Faculty of Science, Saint-Mary's University, Halifax.

**Flora of North America North of Mexico.
Volume 3. Magnoliophyta: Magnoliidae
and Subclass Hamamelidae**

Edited by F. N. A. Editorial Committee
Oxford Univ. Press, N. Y.
(US \$ 125,95)

This is the third volume of a huge, projected thirty-volume endeavor. This volume covers two of eleven subclasses of the Magnoliophyta: the Magnoliidae and Hamamelidae; it is the first of 24 volumes to deal with the angiosperms. As such, it covers a total of 741 species in 128 genera and 32 families. Of these

families, a few represent a disproportionate fraction of the species; these include the Ranunculaceae (285 spp.), Fagaceae (97 spp.), Papaveraceae (63 spp.), Betulaceae (33 spp.), Berberidaceae (33 spp.), and Aristolochiaceae (28 spp.).

The coverage gives full treatment to all native North American species (including those thought to be recently extinct), hybrids that have become well established, and 'waifs' or cultivated plants that are also found frequently outside cultivation and give the appearance of being naturalized.

A number of useful features have been incorporated into the treatments. All genera, and about a third of the species, are illustrated. (My preference would have been for rather more, and larger illustrations.) Keys have been included for all ranks below families whenever two or more taxa are treated. (A comprehensive key to families of Magnoliophyta is to be published separately.) Generalized range maps are given, and phenological information and established chromosome numbers are also included. A particularly helpful feature to general readers is the way in which taxa that are in some way threatened or "of conservation concern" have been coded and flagged as such; similarly, weediness and endemism have also been coded and flagged. Herbal uses and "big tree" data are included and provide interesting details. A set of selected references is also given, for both families and genera.

From my perspective in southern Ontario, a number of very significant Carolinian taxa are dealt with in this volume: *Magnolia acuminata* (Cucumber-tree) and *Liriodendron tulipifera* (Yellow poplar or Tulip-tree), both in the Magnoliaceae; *Asimina triloba* (Pawpaw) in the Annonaceae; *Lindera benzoin* (Spicebush) and *Sassafras albidum* (Sassafras), both in the Lauraceae; *Platanus occidentalis* (Sycamore) in the Platanaceae; *Hamamelis virginiana* (Witch-hazel) in the Hamamelidaceae; the array of hickories and walnuts (*Carya* spp. and *Juglans* spp.), both in the Juglandaceae; *Castanea dentata* (American chestnut), *Fagus grandifolia* (American beech), and the genus *Quercus* (some ninety species altogether, including at least eight local ones), all in the Fagaceae; plus the birches and alders, in the Betulaceae.

It may be relevant to compare this volume (if only in a cursory manner) with the other standard flora for our area, which it will surely replace: Gleason's "New Britton and Brown Illustrated Flora of the Northeastern U.S. and Adjacent Canada," published in three volumes in 1952 by Hafner Press. The wider geographic remit of the FNA leads to greater taxonomic variety and inclusiveness, and its more recent publication has allowed incorporation of very up-to-date conclusions. Furthermore the use in FNA of specialized authors has led to excellent and authoritative treatments, in particular for large, often difficult taxa. For example, D. E. Stone for *Carya*; K. C. Nixon, R. J. Jensen and C. H. Muller for *Quercus*; M. J. Warnock for *Delphinium*; and A. T. Whittemore for *Ranunculus*: all have

produced excellent summaries of large, difficult groups.

This flora series has been a long time in gestation; I await further volumes with interest. The team responsible for producing this volume is to be congratulated for an excellent book. Of course, the book is not inexpensive. The full series will cost some \$4K, even assuming no inflation for later issues. Realistically, the prices will surely rise. (If they rise for this multi-volume flora as they did for the multi-volume Flora Europaea, then the price of this early issue will be seen with hindsight as a bargain. Perhaps the publisher will allow a purchase plan wherein one invests ahead of time, in anticipation!) This is sure to be the definitive flora for North America, but at 30 volumes and at least \$4K+, it is likely to sit only on a few private shelves and in our few remaining libraries. Pity.

Jon Lovett-Doust, Department of Biological Sciences,
University of Windsor, Windsor.

Plants in changing environments. Linking physiological, population, and community ecology

By F.A. Bazzaz

Cambridge University Press, 1996

Bazzaz is recognized in plant ecology as one of the most prolific researchers of the past decades. He has worked at the population, community and ecosystem levels, integrating fundamental and applied aspects of plant ecology and physiology. His book demonstrates his talent for summarizing and integrating literature on these concepts for a better definition of ecosystem and the effects of the changing environment. The book is mainly based on his view of current ecological knowledge. He reviews the work that has been produced mostly in his lab in the last several years. Although experimental data from his lab supports most of his arguments, the literature includes basic concepts from several hundreds of scientific references. In fact, near 800 scientific manuscripts and books are cited in this work and he is author or co-author in more than 18% of these references. This approach is expressed by the author in the first chapter (on page 7). This represents an impressive record, which is still growing as he pursues his research activities.

The main theme of this book is: What do we know about succession and how does it relate to the application of ecological concepts in environmental science or applied ecology? In the first chapters, Bazzaz explores the different views that have been proposed and experimental works that have been done in community ecology to explain succession processes. Most of the following chapters explore the different aspects of population

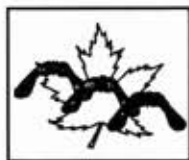
ecology, from individual interactions to habitat selection. A few chapters deal with the ecological physiology of plants and how it pertains to succession and changing environment. Finally, the last chapter is an attempt to integrate all this knowledge to offer different views of predicting changing environments, mainly climate change. In all of these chapters the author tries to relate the data and knowledge to experimental work done in the field in old field ecosystems and forest ecosystems. There is very little mention of aquatic habitat. The main focus of this book remains the terrestrial ecosystem.

Right from the beginning Bazzaz brings a global historical and logical perspective on how we may look at ecological changes. These changes are the basis for succession. And, for the author, this concept of succession has a historical value (understanding the past) as well as an actual value (predicting the future). From Clements and Gleason to the present knowledge of ecology, we have a better understanding of the plant world and this can serve as basis for predictions of our environment in the future.

Knowing that the main work of Bazzaz was oriented towards the ecology of plants in old field habitats, it is not surprising to find that most of the arguments and experimental data to explain changes in the environment and how they relate to succession are based on this ecosystem. On the other hand, in most chapters, once these ideas were exhausted, work done on tree species in forest ecosystems is also used to support similar ideas. I was a little disappointed in not finding very much on ground vegetation in forest ecosystem. I am not completely sure that concepts used in old fields can be used to explain succession and other ecological responses to changing environment in all the other ecosystems. However, since even in the old field several questions remain unanswered, it is expected that it will take several years before we are capable of comparing succession of herbaceous plants in several different ecosystems.

This book represents an excellent review of the literature integrating the ecology of populations, communities and ecosystems in the changing environment. As pointed out in almost all chapters, there is still a need for more research and experimental data to test and better understand our changing environment. The author finds a very good way to motivate researchers in better understanding our ecosystems in this changing environment.

Liette Vasseur, Department of Biology, Saint-Mary's University, Halifax.



Department of Botany University of Manitoba

'Good things come in small packages!'

The Department of Botany may be one of the smaller departments at the University of Manitoba but what it lacks in size, it makes up in the quality of its students. Last year there were 32 graduate students in the department, 2 of whom have now completed the requirements for the Ph.D. and 8 for the M.Sc. degree.

A number of these students had other notable academic achievements during the year. Special congratulations go to Julian Starr for his outstanding success in winning a Commonwealth Fellowship to continue his study toward the Ph.D. degree at Oxford University. From a total of nine NSERC PGSB Scholarships awarded in the biological sciences and agriculture at the U. of M., three went to botany students, Cindy Ross, Julian Starr and Cheryl Jerome. Two others, Rhonda McDougal and David Walker, won U. of M. Fellowships.

Botany students were recognized for their research as well as their academic records. Julian Starr recently received the Lionel CinqMars Award for best student paper at the joint meeting of the Canadian Botanical Association and the Botanical Society of America in Montreal, beating out some 40 competitors. His paper was on "Testing Phylogenetic Hypotheses in *Carex* (Cyperaceae) using Sequences from the Internal Transcribed Spacer (ITS) Region of nrDNA".

Julian also received a Student Research Grant of \$500 from the prestigious American Society of Plant Taxonomists to help with his studies of *Carex* taxonomy being carried out with advisor Dr. Bruce Ford. Sedges may not sound very glamorous to the average person but the 125 or so species that occur in Manitoba are among the most important components of the vegetation of the province, especially in the north where they play a major role in carbon storage and peat formation.

Robin Stewart won the 1996 Best Student Poster Presentation Competition at the 17th Annual Meeting of the Society of Environmental Toxicology and Chemistry in Washington, D.C. last November. There were over 1000 poster presentations most of which were by students. Her poster was entitled "The Effect of a Metal Mixture on Cadmium Bioavailability and Bioaccumulation by the Freshwater Macrophyte, *Eriocaulon septangulare*". The work was carried out under the direction of Dr. Diane Malley as part of an extensive study of heavy metals in aquatic ecosystems.

Dr. David Punter, Head, Department of Botany, University of Manitoba

**UNIVERSITY OF SASKATCHEWAN
Department of Biology**

Plant Systematist

The Department invites applications for a position at the Assistant Professor level for a term of 1 year from July 1, 1998 in the area of plant systematics. Applicants should have a Ph.D. and preferably teaching experience. Teaching will likely include participation in a second-year botany course and a third-year course dealing with the taxonomy of vascular plants. This position involves teaching students in both Agriculture and Arts and Science. Salary ranging from \$37,275 to \$44,303 depending upon qualifications and experience.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of Saskatchewan is committed to the principles of Employment Equity and welcomes applications from all qualified candidates. Women, people of aboriginal descent, members of visible minorities, and people with disabilities are invited to identify themselves as members of these designated groups on their applications.

Send curriculum vitae and the names, addresses, telephone/fax numbers, and e-mail addresses of at least three references to :

Chair, Selection Committee
Department of Biology
University of Saskatchewan
112 Science Place
Saskatoon, SK
S7N 5E2, Canada
Telephone: 306-966-4400
Fax : 306-966-4461
E-mail : sawhney@admin.usask.ca

Review of the applications will begin on April 1, 1998.

Le Jardin botanique de Montréal
après la tempête de verglas.

par **Michel Labrecque**, conservateur

La tempête de verglas qui s'est abattue sur le sud ouest du Québec et en Ontario au début du mois de janvier a laissé beaucoup de désolation derrière elle. Dans la ville de Montréal, les arbres des rues et des parcs n'ont pas été épargnés et c'est par dizaine de milliers que l'on compte ceux qui auront besoin d'être élagués ou abattus.

À l'image de la majorité des parcs de Montréal, le Jardin botanique porte lui aussi les marques de la tempête. Un premier bilan de l'état de la situation a été fait quelques jours après la tempête. Parmi les arbres de collection et ceux des plantations secondaires (qui servent à la décoration) on dénombrait près de 1100 arbres qui avaient subi des dommages majeurs, alors que 700 autres ont été touchés mais moins sévèrement. Ce bilan porte ainsi à 1800 individus le nombre d'arbres atteints sur une collection d'environ 13 000 individus.

Compte tenu de l'importance de chaque arbre dans un jardin botanique, un maximum d'effort sera déployé pour réduire le plus possible le nombre d'arbres qui devra être éliminé. À ce jour, on croit qu'une cinquantaine seulement sont irrécupérables et auront probablement besoin d'être abattus. Heureusement la Nature a ses forces et les arbres, des capacités surprenantes qui leur permettent de se remettre des pires traumatismes.

After the ice storm
at the Montreal Botanical Garden.

by **Michel Labrecque**, curator

The ice storm which fell on southwestern Quebec and eastern Ontario at the beginning of January left behind a sad trail of desolation. In Montreal, the trees in the city's streets and parks didn't get off lightly and the number that will have to be pruned or felled is in the tens of thousands.

The Botanical Garden is in much the same situation as the city parks and the scars left by the storm are very apparent. A preliminary evaluation of the impact on the Garden's trees was made in the days following the storm. Among the collection trees and the secondary plantations (decorative trees) close to 1100 were badly damaged, while about 700 were less severely so. This makes a tally of 1800 trees that were affected out of total of nearly 13 000 individuals.

Considering the importance of each and every tree in a botanical garden, every effort will be made to reduce the number that will have to be eliminated. At this point, we think that only about 50 are so badly damaged that they will have to be replaced. Thankfully, nature is quite resilient and our trees have surprising capacities to recover after the worst sort of calamities.

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