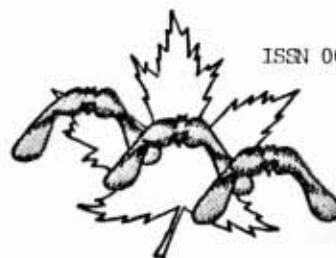


THE CANADIAN BOTANICAL ASSOCIATION

BULLETIN

L'ASSOCIATION BOTANIQUE DU CANADA



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VANCOUVER

PATRON

HER EXCELLENCY THE RIGHT HONOURABLE JEANNE SAUVE,
P.C., C.C., C.M.M., C.D., GOVERNOR GENERAL OF CANADA

PATRON

SON EXCELLENCE LA TRES HONORABLE JEANNE SAUVE,
C.P., C.C., C.M.M., C.D., GOUVERNEUR GENERALE DU CANADA

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PRESIDENT'S MESSAGE

On behalf of your executive, I wish you all well in the new year, the 24th in our Society's existence.

As an organization, we assemble once a year at our National Meeting to discuss, debate and present our ideas, then disperse across this vast country to our home bases. I therefore encourage you all to use the Bulletin as a medium for continuing debate, commentary and communication. Many issues exist of concern to all Botanists, involving the politics of science, environmental issues, funding concerns, teaching issues, job markets and so forth. Bear in mind that many amateur botanists in Canada have enlightened opinions on such matters and would welcome the opportunity to be involved in these debates. We should therefore encourage such intercourse in our national newsletter, and in doing so, increase our membership which is currently 400 strong. At the same time such debate and policy discussions of concern to all would document our ideas and make them available to the Press, as well as our local and national Parliamentary representatives.

As with all organizations, the few serve the many. It is incumbent on our current "senior dons" to encourage undergraduate and graduate students to become involved in matters of concerns to this organization. As I stated in Montreal, the future of the CBA/ABC is in the hands of our younger members. They require encouragement and example set by us all, especially commitment and service.

Your executive is seeking ways in which it may provide increased benefits to the membership at large. Be proactive, become involved in your national organization. As we advance towards our 25th anniversary in Toronto (1989) let's all contribute to the celebration. Your executive is open to suggestions, and welcomes advice and direction for this special event in our history.

K.E. Denford

NEWS FROM THE SECTIONS

Ecology Section

Chairman: Keith Winterhalder
Dept. of Biology
Laurentian Univ., Sudbury,
Ontario P3E 2C6
(705) 675-1151

General Section

Chairman: D. R. Lee, Dept. Biology,
Memorial Univ., St. Johns,
Newfoundland,
A1B 3X9
(709) 737-4339

Mycology Section

Chairman: James A. Traquair
Agricul. Can., Research Stat.
Harrow, Ontario NOR 1G0
(519) 738-2251

Phycology Section

Chairman: Lewis M. Brown, Dept. Plant
Sci., Univ. Western Ontario,
London, Ontario N6A 5B7
(519) 679-2838

Structure & Development Section

Chairman: R.T. Riding, Dept. of Botany,
Univ. of New Brunswick,
Fredericton, N.B. E3B 6E1
(506) 453-4582

Systematics & Phytogeography Section

Chairman: Paul Catling, Agricul. Can.
Biosystematics Res. Centre,
Saunders Bldg. C.E.F.,
Ottawa, Ontario K1A 0C6

NOMENCLATURE AT BERLIN

Report of the Nomenclature Section
of the XIV International Botanical
Congress, Berlin - July 20-24 1987

The meetings of the Nomenclature Section of the XIV International Botanical Congress (IBC) were held in the Dachgarten (a room by the roof garden) of the International Congress Centrum (ICC) in Berlin (West), for the 4.5 days immediately preceding the scientific sessions of the Congress. One hundred and fifty seven Congress members registered for the Nomenclature Section; they also carried 286 institutional votes as delegates, giving a total of 443 possible votes. The Section had a new Rapporteur-general in Werner Greuter (Berlin), the Vice-rapporteur at Sydney, and a new Vice-rapporteur, John McNeil, currently in Ottawa, Canada, but moving in September to Edinburgh, Scotland. The deliberations of the Section were presided over by Frans Stafleu, Vice-rapporteur from 1954-64 and Rapporteur-general from 1964 until forced to withdraw on medical advice prior to the Sydney Congress. Unlike

most recent presidents of the Section, he chaired the 4.5 days of sessions, almost without a break, calling only once on one of the Vice-presidents.

The Section had to consider 336 proposals to amend the Code as revised at the XIII IBC in Sydney, Australia in 1981. This was a substantially larger number than at any recent Congress and almost matches the record 387 proposals to the Paris Congress of 1954. There were 100 proposals which received more than 75% "No" votes in the preliminary mail ballot; these were not discussed by the Section, except when specifically raised from the floor. Despite the large number of proposals, the Section did succeed in completing its business within its allotted time, in large measure due to Frans Stafleu's very effective chairmanship.

One of the major issues before the Section was that of the registration of plant names and associated proposals such as the preparation of lists of "registered" serials, to which effective publication under the Code might eventually be restricted. Registration of new names differs from indexing, in that only names that meet all the requirements of legitimacy under the Code would be registered; moreover the data of registration might replace that of effective publication for purposes of priority. The proposals of the Committee on Registration to endorse the principle of registration while leaving detailed implementation to the next Congress were not accepted. Instead, these proposals and others to standardize media of effective publication, were referred to a new Special Committee on Registration to report to the XV IBC in 1983.

The advantage of registration is, first of all, to ensure that all new names are listed promptly in a single publication and no name is overlooked. The longer term benefits are much more significant however. Once an internationally recognized and accepted registration system has been put in place for new names, it should be possible to tackle the task of preparing a list of all names in current use (i.e. including those used by competing taxonomic treatments). After a suitable time (e.g. 6 years) for additions to the list, only names on the Register would be eligible as correct names for organisms coming under the Botanical Code. Other names could be added at any time as required, but they would take their priority from the date of addition to the Register and so could not affect existing names nomenclaturally. The establishment of internationally acceptable registration procedures is thus an essential first step to ending the time-wasting process of searching old literature for old names that may need to be resurrected. The report of the Special Committee on Registration will clearly be a major issue for the

Nomenclature Section of the 1993 Congress.

One of the most intensely debated sets of proposals was that designed to permit conservation (Art. 14) instead of rejection under Art. 69, in cases in which a name has been widely and persistently used in a sense (or senses) not including its type. Opposition was primarily on the grounds that this was extending the provision for *nomina specifica conservanda* beyond species of major economic importance, but others, notably some mycologists, believed it desirable to retain provision for rejection of names. The eventual outcome provided for both conservation and rejection of such names, because, although the principle was accepted without discussion - some potential opponents admitted to being asleep (!) - the detailed implementation (Art. 69, Prop. B) obtained only a 241:163 card vote in favour, 0.3% short of the 60% majority required to make changes in the Code. When a revised version of Art. 69 Prop. C, that permitted both conservation and rejection in these cases, was presented, the Section accepted it by a 63.4% majority, influenced in part, no doubt, by the argument that the change would involve no extra work for nomenclatural committees over that currently involved in proposals under Art. 69.

It was also a *nomina specifica conservanda* proposal that passed by the narrowest of all margins in the Section meetings - 220:146, 60.1%. It arose from that old nomenclatural problem, the application of the name *Amaryllis*, that was supposedly solved at the Paris Congress of 1954. The difficulty arises because some workers including many associated with the American *Amaryllis* Society will not accept the typification of *A. belladonna* by the South African, rather than the New World element. The proposal (Art. 14, Prop. C) permits species names that indicate the types of conserved generic names to have their types conserved also. As the type of a generic name is nowadays the type of the name of what used to be called its "type species", this seems a sensible simplifying solution. Yes, it will confirm that the common Christmas amaryllis is *Hippeastrum puniceum*, something most botanists have considered to be the case for the past 50 years.

Three Special Committees, in addition to the Committee on Registration, reported to the XIV IBC. These were on Lectotypification, Valid Publication, and Orthography. A minority of proposals from all three committees was accepted, but the general effect was more of clarification than of fundamental change. For example, the proposal to establish 1935 as the starting date for priority of Lectotypification was not accepted. Instead a new Special Committee on Lectotypification was set

up to report to the XV IBC.

Other Special Committees established to report to the next Nomenclature section were on Retroactivity, Superfluity and Illegitimacy, on what constitutes a Binary Combination under Art. 23, on the effect of Bibliographic Errors on Valid Publication, and on the use of "in" and "ex" in author citation. Anyone who feels that he or she can make a useful contribution to any of these committees should contact Dr. D.H. Nicolson, Secretary to the General Committee on Botanical Nomenclature, Department of Botany NHB166, Smithsonian Institution, Washington, D.C. 20560, U.S.A.

Other decisions of general interest include the recommendation that the next edition of the International Code of Botanical Nomenclature (the "Berlin Code") be published in English only, but with provision for translations into other languages to be authorized. The proposal (Art. 36, Prop. A) to permit English as an alternative to Latin for the validation of names of new taxa was however roundly defeated, as was the perennial proposal to replace division (divisio) by phylum.

The Section appointed Frans Stafleu as Chairman and Dan Nicolson as Secretary of the General Committee, re-elected Werner Greuter as Rapporteur-general, and appointed the various Permanent Nomenclature Committees for the period until the next Congress in 1993. Canadian representation on these Committees includes B.R. Baum (BRC, Ottawa) and F. Vrugtman (RBG, Hamilton) on the Committee for Hybrids, and Dr. J. Jansonius (Esso, Calgary) on the Committee for Fossil Plants. In addition, J. McNeill, moving, as noted above, from Ottawa to Edinburgh, Scotland, is a member of the General Committee and the Committee for Spermatophyta, and, as Vice-rapporteur of the Nomenclature Section at the Berlin Congress, is Secretary of the Editorial Committee.

The sexennial General Meeting of the International Association for Plant Taxonomy (IAPT) was held during the week of the Nomenclature Section meetings. This is a period of change in IAPT, in that, with the retirement of Frans Stafleu, the secretariat is moving from Utrecht, where it was established by Lanjouw in 1951, to Berlin. Professor Greuter will be the new Secretary-Treasurer. Frans Stafleu continues to have a major role in IAPT as President; Stanley Greene becomes Past-president, Dan Nicolson continues as Vice-president, and John McNeill becomes Administrator of Finances.

The final Plenary session of the whole Congress accepted an invitation from Japan for the XV IBC to be held in

Tokyo in 1993.

John McNeill
Royal Botanic Garden
Edinburgh EH3 5LR
Scotland, UK.

CALL FOR RESOLUTIONS OF POLICY TO BE PRESENTED TO THE ANNUAL MEETING

Resolutions for presentation to the Annual Meeting of CBA/ABC to be held in Victoria, B.C., in June 1988 MUST BE DELIVERED TO THE SECRETARY OF THE ASSOCIATION NO LATER THAN THURSDAY, MAY 1, 1988.

Members are referred to the Association's By-laws 68-77 for details of the nature and preparation of such resolutions.

All resolutions for presentation:

- a) should declare the policy of the Association on matter(s) that shall be forwarded outside the Association,
- b) should be carefully worded,
- c) require a mover and 4 seconders, all of whom must be members in good standing,
- d) must be accompanied by a supporting brief,
- e) must be accepted by the Board of Directors before presentation to the Annual Meeting,
- f) must be presented in person by one of its sponsors,
- g) require the approval of two-thirds of the members present and voting at the Annual Meeting.

Send resolutions and accompanying material to: Dr. A. Gordon Thomas, Secretary, CBA/ABC, Regina Research Station, Agriculture Canada, Box 440, Regina, Sask., S4P 3A2.

A. Gordon Thomas

LIONEL CINQ-MARS AWARD

The following regulations will apply to the judging for the Award:

1. The Lionel Cinq-Mars Award shall be given for the best student paper presented at the Annual Meeting of the CBA/ABC.
2. Any boda fide student enrolled at any Canadian institution of higher learning is eligible.
3. Guidelines to competitors:
 - a) The paper will be presented orally during the appropriate session as determined by the program committee.

b) Adjudication will be on the basis of: Content, 60% (originality, technical expertise, and associated subject knowledge), and Presentation, 40% (lucidity and logical flow, value of visual aids if appropriate, audibility and 'presence').

The Lionel Cinq-Mars Award is presented at the Annual Meeting Banquet of the CBA/ABC based on a decision made by a judging panel chaired by the President-Elect. The award is \$200 and the winner will also become an honorary member of the Association for the next year. The panel is composed of one member from each of the Sections of the Association, and one member must be francophone.

A student member wishing to compete and be considered for the Award must so indicate on the Abstract Form when submitting it to the organising committee for inclusion in the program of contributed papers. Failure to indicate the decision to enter the competition by checking the appropriate box on the Abstract Form, even though unintentional, cannot be corrected later
Dr. B.L. Peterson, Chairman
Judging Panel, Lionel Cinq-Mars Award

BIOLOGICAL COUNCIL OF CANADA

October 1-2, 1987, University of Ottawa

Brief summary:

1. Drs. Irwin Brodo and Luc Brouillet represented CBA at this meeting.

2. President John McNeill has accepted a position in Scotland and M. Shaw (UBC) was elected in his stead.

3. 1990 Congress: BCC abandoned the idea of a CCB Congress in Laval, due to a lack of participation by member societies and to the state of BCC finances. However, this does not imply that such congresses will never be held again in the future.

4. G. Merriam reported on the Science Policy Committee of the National Consortium. A letter will be sent to Minister Oberle regarding the increased support of university research that is needed.

5. The National Consortium has set the 1988 Lobby of Parliamentarians for January 24 to 29. This lobby is crucial to raise the MP's level of understanding of the problems confronting science and higher education in Canada.

6. BCC will sign a letter of the Consortium expressing concern about the

removal of the word evolution during the revisions of the Ontario Science Curriculum.

7. Council agreed that Societies should encourage the use of various mechanisms to get high school students into research labs and increase their level of education in science. Society Presidents should be responsible for this, notably through their education committee.

Major Issues:

Future of BCC. During a long discussion, it was felt that a strong and unified voice on science policy was needed, operated by someone knowing the appropriate channels, and that action should address general science policy, not just biology. Nevertheless, Biology should speak with one voice and some felt that individual societies are too small to be effective. Thus, BCC does play an important role for our members, and it must be initiate the science policy and education issues to be addressed. Biologists must develop a political will, and this will must express itself in budgets sufficient to allow BCC to fully play its role. Two important suggestions were made: 1) science policy should be the focus for BCC over the near future; Societies should appoint their science policy chairperson as representative to BCC meetings; and 2) BCC must develop fiscal and strategic plans to be presented to constituent Societies for their approval. A committee was appointed to fulfill this task.

NSERC: Mrs. Janet Halliwell reported on concerns within NSERC. The matching grant program is going well, but there is extreme pressures on the university-industrial programs for support, as well as from universities, and little money is left for general NSERC programs. NSERC is undergoing a strategic planning exercise to identify areas in greatest need of money, if any became available. Equipment and operating grants have been identified. The grant selection committees, especially in biology, are being examined to re-define areas. The Strategic Grants program is being evaluated. NSERC is open to direct discussion with societies. Also, if Societies want to have input into the selection of Grant Selection Committee members, recommendations must be sent to NSERC before February.

BCC has set up an Education Committee (chair: J. Fregeau, CSPP), whose mandate is to develop lines of communication with Societies with regards to educational matters.

MOSST - Allan Cobb discussed several issues concerning this department. The Innovation program is the federal government contribution to a national

science policy for Canada, with the aim of rendering the country more competitive in science and technology.

He also mentioned the reorganisation of MOSST and DRIEE to form the Department of Industry, Science, and Technology. The government is emphasizing application of science. Cobb felt that scientists are not getting their message (about the importance of basic research) across to the general public. They could use the Public Awareness program of MOSST to do so.

Next meeting will be held April 14-15, 1988 in Ottawa.

Luc Brouillet.

NEARLY 25 YEARS OLD... WHERE TO NEXT?

Part of the November 9, 1987 CBA executive conference call included discussions concerning increasing BCA membership and in general developing new directions. Should we aim for a broader membership base? Should we take on a higher profile in Canada? What about being more active in Botanical education? Maybe the CBA bulletin could have a more popular format and broader circulation?

I have volunteered to collect and summarize any and all new ideas to shape the future of the CBA. After review by the executive, these will be presented as a discussion paper for the Victoria meetings. So send your comments both covering the general objectives and directions of the CBA and concerning specific projects such as ways to increase membership etc. to:

Richard Hebda
Head, Botany
Royal British Columbia Museum
Victoria, B.C.
V8V 1X4

Deadline date for comments is January 8, 1987

INCREASE IN ANNUAL FEES

Polling bulletins mailed to you with the October issue should be returned as soon as possible and not later than Feb. 29, to the secretary of the Association:

Dr. A. Gordon Thomas
Regina Research Station
Agriculture Canada
Box 440, Regina
Sask., S4P 3A2

REQUEST FOR ARCHIVAL PHOTOGRAPHS

This is a follow-up on my note in the Oct. 1987 Bulletin asking for a spare photograph of yourself that I could put into an archives file on past executives and officers of the Association. Such a photographic record of individuals whose names appear in the minutes and Bulletin would complement and add to the historical value of our archival files.

A photograph of yourself from the period that you served on the executive would be most desirable, however, a current likeness would suffice. If you do not have a spare photo, send one that I could copy; the original would be returned to you.

The following information would be of historical interest and should be included with the photo:

- _ Full name (i.e., spell out every name)
- _ Degrees, institution, year obtained
- _ Offices held in CBA/ABC, years in which you served.

I know that requests such as this take a bit of time to fill. A well-documented photographic file would indicate, however, that we valued the contributions made by botanists in promoting their discipline in Canada. Don't be modest. Send me a photo as soon as you can.

Erich Haber
Archivist CBA/ABC
Botany Division
National Museum of Natural Sciences
Ottawa K1A 0M8

MANITOBA MUSEUM OF MAN & NATURE

190 Rupert avenue - Winnipeg, Manitoba
Canada R3B 0N2
Telephone (204) 956-2830

MANITOBA MUSEUM OF MAN AND NATURE
RECEIVES HERBARIUM DONATION FROM
WHITESHELL NUCLEAR RESEARCH
ESTABLISHMENT

"Because of the retirement of Dr. Janet Dugle and cost-cutting measures at the Whiteshell Nuclear Research Establishment (WNRE), Pinawa, Manitoba, WNRE is donating their herbarium to the Manitoba Museum of Man and Nature. Anyone wishing information on, or specimens from, this collection (Index Herbariorum code WNRE), should contact The Herbarium, Manitoba Museum of Man and Nature, 190 Rupert Avenue, Winnipeg, Manitoba R3B 0N2, after November 15, 1987. The WNRE Herbarium comprises some 15,000 specimens of vascular plants, mostly from the Whiteshell and other

regions of Manitoba and its addition to the Museum Herbarium (Index Herbariorum code MMMN) brings the total vascular plant collection at the Museum to approximately 32,000 specimens.

Karen L. Johnson
Curator of Botany

COENOS - an IBM PC program for the Braun-Blanquet table technique of vegetation classification.

The Braun-Blanquet table technique, in its original form¹, consists of repeated intuitive rewriting of vegetation tables. Vegetation samples (relevés) and the species are grouped in such a way that similar relevés and the species which characterize them form distinctive blocks in the table. A computer program based on a simple, but powerful iterative algorithm was published in 1971². COENOS is a microcomputer version of this program and utilizes all the advantages of microcomputers in an interactive, user-friendly operation.

COENOS program has the following steps:

1. Reading the data. The input is a sequential file of relevés.
 2. Extraction of releve/species groups. Blocks of relevés and the species which characterize them are extracted from the data. Three different percentage combinations allow the user to select from three parallel species/releve groups.
 3. Ordination of species/releve groups. Reciprocal averaging is performed on the set of releve groups vs. the corresponding species groups and a simplified table displays the result. The user can reorder this table manually to correct the so-called horseshoe effect of reciprocal averaging. He can also mask certain species groups and repeat reciprocal averaging in order to achieve better ordination along a major ecological gradient.
 4. Manual rearranging of the final vegetation table. A final, full table of relevés and species is displayed on the screen. At this stage relevés, species, or species groups can be moved and rearranged directly on the screen.
 5. Printing of the table. The final table can be printed or saved as a text file for use with a word processor. The user can adjust and save printing parameters for any printer.
- The full vegetation table provides an excellent insight into the structure of vegetation data and can be used before more complex multivariate techniques are applied.

COENOS runs on an IBM PC and compatible microcomputers (IBM-DOS or MS-DOS 2.0 or higher) and supports all IBM compatible printers. It requires at least 256K RAM (512K for more than about 200 relevés). It can handle 520 relevés and 450 species.

Cost: CDN \$85.00 (in Canada) or US \$85.00 (outside Canada). DEMO version (50 relevés, 200 species, no printing) CDN \$10.00 (in Canada) or US \$10.00 (outside Canada). In British Columbia add 6% sales tax. The price of the DEMO will be deducted from a later purchase of the full version.

COENOS is distributed by Dr. Adolf Ceska, P.O. Box 1761, Victoria, B.C., V8W 2Y1, Canada. - Phone (604) 477-1211 or (604) 387-2423.

¹See Chapter 9 in Mueller-Dombois, D. & H. Ellenberg. 1974. Aims and methods of vegetation ecology. John Wiley & Sons, New York.

²Ceska, A. & H. Roemer. 1971. A computer program for identifying species-releve groups in vegetation studies. Vegetatio 23: 255-277.

CBA / AIBS MEETING - TORONTO 89

The joint CBA - AIBS meeting in Toronto in 1989 will also be our 25th anniversary. May I ask you to send me (in my capacity as programme chairman for the meeting) suggestions and interesting ideas for symposia, special sessions or other such events. We should try to arrange joint events with AIBS member societies as well as one or two of our own.

J.C. Ritchie,
Scarborough College,
University of Toronto,
1265 Military Trail,
Scarborough Ont. M1C 1A4

Bitnet^ RICHIE AT UTORONTO

Fax - 284 3371

SUMMARY OF THE EXECUTIVE CONFERENCE CALL

Minutes of the Executive Conference Call meeting held on Friday 6 November 1987 at 2:00 CST. The President K. Denford chaired the meeting and the following members of the Executive participated: L. Brouillette, L. Peterson, R. Hebda, G. Thomas, K. Winterhalter, and L. Oliveira.

1. Minutes of the Wednesday 17 June 1987 Board of Directors meeting at Montreal were adopted as circulated.

2. Business arising

- Ballot for fee increase has been included with the October Bulletin. However no date for return of the ballot or no return address were indicated. The Secretary agreed to tally any returns received by members of the Executive and report the outcome to the President by December 1. Membership renewal notices will not be sent out until the results of the poll are known.

- President reported that he had sent thank you letters to all the people who had helped with the Montreal meeting.

- President reported that he had written to the Deans and/or Chairmans of the Departments of all the members of the Conservation Committee indicating the valuable and excellent work done by the respective members of their department on a voluntary basis.

- A formal name is still required for the travel bursary. A request for suggestions should appear in the next Bulletin.

3. Reports of Officers

(a) Editor (Oliveira)

The budget for the Bulletin is \$3000.00. Although only \$1740.00 has been spent so far this fiscal year, more than the budgeted amount may be needed.

L. Oliveira recommended that when the new Bulletin editor is appointed that consideration be given to the appointment of an associate editor as well to help share the work load. Also there may be financial and distribution advantages to having the new editor in central Canada.

Denford suggested that telephone numbers of the officers be included in subsequent issues of the Bulletin.

(b) President (Denford) - There are currently nine nominees for the George Lawson Medals on file. It was agreed that the nomination for A. E. Roland should be dropped from the file. The call for new nominations appeared in the October Bulletin.

The annual lobby of federal parliamentarians will take place between January 24 and 29. Any suggestions of people to represent the CBA during this 1988 lobby should be given to K. Denford who will forward the names to Dr. Tom Moon or Dr. Gray Meriam.

The BCC is forming an Education Committee and it is recommended that member societies also have a similar committee. Formation of such a CBA committee will be discussed during the Annual General Meeting in Victoria.

Our representative to the BCC

Science Policy Committee changes every year because it is the President. BCC would like to have our representative stay on the committee for two or three years.

(d) President-Elect (Peterson) - Judges for the Lionel Cinq-Mars Award have been found to represent each section, except for phycology. K. Denford will send the form used last year and any other pertinent information to L. Peterson.

(e) Vice-President (Hebda) - The local organizing committee for the joint CBA-CSPP meeting consists of the following people:

Richard Hebda and Adolf Ceska representing CBA

David Ballantyne and Eleanor White representing CSPP

Tom Liether from the University of Victoria Conference Centre

As approved at the June 17 Board of Directors meeting, seed money for the meeting is available from the Treasurer on written request.

(f) Secretary (Thomas) - The Executive and all members of the Board of Directors are reminded that a curriculum vitae has been requested. The CV should be sent to the Secretary by December 1.

(g) Treasurer (Winterhalder) - Present membership is 372.

The financial status is normal for this time of the year.

Fund	Current Account	Term Deposits
CBA	\$ 11,000.00	\$ 10,000.00
Weresub	1,500.00	12,000.00
Endowment	500.00	1,000.00

The Montreal meeting realized a profit and approximately \$ 2,000.00 will be returned to the Treasurer.

The collection of a \$ 7.00 fee for BCC and reduced rate journal subscriptions may endanger our status as a charitable organization. Legal advisors indicate that we should not be collecting fees for any other organization. Also by collecting money for journal subscriptions we are selling services to our members. Both of these activities should not be carried out by a charitable organization. Until the matter is completely resolved, the Executive has suggested the following changes be made to protect our designation as a charitable organization.

(i) The membership renewal notices should be separated into three separate parts: a BCC fee form
a journal subscription
a CBA membership form

qualifications. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Application deadline is February 15, 1988 or until a suitable candidate is selected. Send applications, which should include a curriculum vitae, statement of future research interests, and names and addresses of three referees to: Dr. D.T. Dennis, Head, Department of Biology, Queen's University, Kingston, Ontario, Canada, K7L 3N6.

FOREST BIOTECHNOLOGY CENTRE GETS FEDERAL-PROVINCIAL FUNDING

A three-party agreement to fund the establishment and development of a \$4.8 million Forest Biotechnology Centre in Vancouver was announced today by Dr. Lorne Greenaway, MP for Cariboo Chilcotin and Parliamentary Secretary, on behalf of federal Minister of State (Forestry and Mines) Gerald S. Merrithew, provincial Forests and Lands Minister Dave Parker, and Dr. Terry Howard, president, B.C. Research Council.

Over the next three years the centre will receive \$874,000 from the federal government and \$1,474,000 from the province.

B.C. Research is expecting to raise the balance from contracts to meet the centre's total operating budget.

The centre, located at B.C. Research's facilities near the University of B.C. campus, will develop and improve seedlings and processes -- for bigger and hardier trees -- through genetic engineering and tissue culture. These seedlings and processes, when incorporated into traditional forestry operations, will enhance reforestation and forest productivity across the country.

"Some 15 individuals with expertise in molecular biology, tissue culture, biochemistry, tree physiology, microbiology, plant pathology and ecophysiology will be employed by the centre. The centre will market its services to government, forest companies, biotechnology firms, international development agencies and organizations funding basic and applied research".

For further information, contact:
Doug Ausman
Assistant Deputy Minister
Management Services Division
Phone: 387-1300

OR

Elaine Teske, Chief
Information Services
Canadian Forestry Service
Phone: 388-0600

BOOK REVIEWS

Atlas of North European Vascular Plants North of the Tropic of Cancer, by Eric Hulten and Magnus Fries. 1986. Sven Koeltz, Konigstein, West Germany. 1172 p. in three volumes.

In this book Dr. Hulten's monumental works, Amphi-Atlantic Plants, Circumpolar Plants, and Atlas of the Distribution of Vascular Plants in NW Europe, are combined in a single collection of distribution maps. The format of the maps is similar to that found in Hulten's works on amphi-atlantic or circumpolar plants. There are 996 maps in the first volume, 840 in the second. The third volume contains commentaries on the maps. Taxonomical treatments of the species are similar to those in Hulten's Flora of Alaska, i.e., a broad species concept with geographically defined subspecies.

Recent records, especially those published in floras of larger areas, were considered in the preparation of the maps. Unfortunately, local monographic treatments (such as D.H. Wagner's [1979] "Systematics of Polystichum in western North America north of Mexico," Pteridologia 1: 1-64) were ignored. Russian literature up until about 1976 was incorporated but the results of more recent phytogeographic studies in eastern Asia could not be included. Scoggan's Flora of Canada and Porsild's and Cody's Vascular Plants of Continental Northwest Territories were sources of distributional data for North America.

The compendium is a welcome addition to the phytogeography of circumpolar plants. It complements Hulten's atlases of plant distribution of amphi-atlantic and circumpolar plants, although only rarely does it add any new information from our continent. The books are leather bound and the cost prohibitive at DM 630, which is now to about \$ 490 CDN.

Adolf Ceska, Royal British Columbia Museum, Victoria, B.C.

Colorado Flora: Western Slope, by W.A. Weber, 1987. Colorado Associated University Press, Boulder, CO, 530 p.

This book is not only a flora of an interesting region of North America's Rocky Mountains, but also an important work that presents an alternate view on the classification of North American vascular plants. The author rebelled against the traditionally broad generic concept of North American botanists and came up with a treatment which uses much more narrowly defined genera. He explains the basis of this treatment in

the introduction and urges the reader to keep an open mind.

A narrow generic concept has many inherent problems. One of them is an unstable nomenclature. It is not easy to establish who first described a certain generic segregate; to do so one must sift through piles of dusty literature. The narrow concept is difficult to sell to non-academic users such as foresters, agronomists, or amateur botanists. A broader generic concept, with the full use of infrageneric categories such as subgenera and sections, can express the phylogenetic relationships better than a narrower concept.

The Flora provides keys for the families, genera and species of vascular plants found in Colorado on or west of the Continental Divide. The keys are lucid and easy to work with. Information on habitat and distribution data are given for each species. The order of families, genera and species is strictly alphabetical. The book is beautifully illustrated with 115 excellent line drawings by Carolyn Ensle, and 64 color photographs by the author. The Flora like European excursion-floras, has an excellent format. It is not too big to take along on field trips, and it is very well produced. The price of a linen-bound book is a bargain at about \$20.00 US.

Adolf Ceska, Royal British Columbia Museum, Victoria, B.C.

CANADIAN BOTANICAL ASSOCIATION/
L'ASSOCIATION BOTANIQUE DU CANADA
ENDOWMENT FUND

PURPOSE.

1. The fund shall be established and managed to provide financial assistance for meritorious graduate students to attend the Annual Meeting of CBA/ABC.

2. At the discretion of the Board of Directors, some of the money available may be used to assist a limited number of graduate students attending the International Botanical Congress.

3. The value of an award should be at a level that makes a sizeable contribution towards defraying costs incurred in attending and travelling to the annual meeting. The awards are not intended to cover all costs.

ELIGIBILITY.

1. Competition for awards from the Fund is open to student members of CBA/ABC. Eligible students are encouraged to apply even if the meeting is to be held at their own university.

2. Competitors must present a paper in the Lionel Cinq-Mars Competition.

3. No student may receive more than one award from the Fund to attend the annual meeting while registered for the

same degree.

COMPETITION.

1. The president shall appoint a Student Awards Committee to screen the applications and to recommend the candidates for awards and the amount of each award.

2. The sole selection criteria shall be those of academic merit.

3. Students applying for an award must do so NO LATER THAN January 31st of the year in which they expect to attend the CBA/ABC meeting. The application must contain:

a. A copy of the Abstract that is to be submitted for the Cinq-Mars Competition.

b. a supporting letter from the supervisor that also includes a statement that the student is engaged in an M.Sc. or Ph.D. programme.

c. a statement from the student outlining the amount of money requested.

d. A curriculum vitae (no more than 1 page long).

e. a letter of recommendation from a member of the student's research committee (not the Research Supervisor). (supporting letters should accompany the application. They may be open or sealed).

THESE DOCUMENTS ALONE WILL FORM THE APPLICATION.

NOTIFICATION OF WINNERS.

1. Successful competitors will be notified before the registration deadline for the annual meeting. Awards will be paid at that time.

2. Names of the winners will be announced and the certificates presented at the annual banquet.

3. All winners will receive a certificate in recognition of their award.

TENTATIVE PROGRAM OF CSPP - CBA MEETINGS

JUNE 5 - JUNE 12, 1988

VICTORIA

Submitted by R. Hebda and A. Ceska,

Royal British Columbia Museum,

Victoria, B.C. V8V 1X4

PROGRAMME PROVISOIRE POUR LA REUNION
SCPV - ABC

Du 5 Juin au 12 Juin, 1988

VICTORIA

Présenté par R. Hebda et A. Ceska,

Royal British Columbia Museum,

Victoria, C.B. V8V 1X4

Sunday, June 5, 1988

Field trip: Victoria - Duncan -
Saltspring Island - Victoria

Description: The field trip will
demonstrate Douglas-fir forests and open
Garry oak forests which host large
number of plants unique to Canada in a
spectacular landscape setting.

Cost: \$20.00 (includes a box lunch).

Sunday, June 5, 1988 (evening)
Registration and Opening Reception

Monday, June 6, 1988 (morning)

Symposium: The Biology of Trees.

Organizer: Dr. Eleanor White, Pacific
Forestry Centre, Victoria, B.C.

Program:

1. Dr. H. Kimmins, Faculty of Forestry,
University of British Columbia,
Vancouver, B.C.

"Forest Ecology and Management: What we
need, what we get."

2. Dr. R.P. Pharis, Department of
Biology, University of Calgary, Calgary,
Alberta

"Physiology of Reproduction, Apical Form
and Inherently Superior Growth."

3. Dr. D. Fowler, Maritime Forestry
Centre, Fredericton, NB

"Taxonomic and Phylogenetic Implications
of Crossability Data in Conifers."

Monday, June 6, 1988 (afternoon)
Contributed papers and posters.

Monday, June 6, 1988 (evening)

Weresub Memorial Lecture

Dr. D. Parkinson, University of Calgary,
Calgary, Alberta

"Fungi and forest ecosystems."

Tuesday, June 7, 1988 (morning)

Symposium: Recent advances in studies of
North American aquatic plants.

Organizers: Dr. P.M. Catling,
Biosystematics Research Institute,
Ottawa, Ont.

Dr. A. Ceska, Royal British Columbia
Museum, Victoria, B.C.

Description: The symposium will deal
with recent advances of systematics,
ecology, phytogeography and physiology
of aquatic vascular plants. It will also
summarize the phytogeography and
management and control of invasive
aquatic weeds in North America.

Dimanche, 5 juin, 1988

Excursion: Victoria - Duncan -
Saltspring Island - Victoria

Description: Durant cette excursion,
nous visiterons des forêts de sapins de
Douglas et des forêts de chênes de Garry
où se trouvent, dans un décor
spectaculaire, un grand nombre de
plantes uniques au Canada.

Coût: \$ 20.00 (déjeuner inclus).

Dimanche, 5 juin, 1988 (soir).
Enregistrement et réception-ouverture.

Lundi, 6 juin, 1988 (matin).

Symposium: Biologie des Arbres.

Organisatrice: Dr. Eleanor White, Centre
de foresterie Pacifique, Victoria, C.B.

Au programme:

1. Dr. H. Kimmins, Faculty of
Forestry, University of British
Columbia, Vancouver, C.B.

"Ecologie et Gestion des Forêts: ce donc
nous avons besoin, ce que nous
obtenons."

2. Dr. R.P. Pharis, Department of
Biology, University of Calgary, Calgary,
Alberta

"Physiologie de reproduction, forme
apicale et croissance inheremment
supérieure."

3. Dr. D. Fowler, Maritime Forestry
Centre, Fredericton, NB

"Implications taxonomiques et
phylogéniques des données de croisement
chez les conifères."

Lundi, 6 juin, 1988 (après-midi).
Articles contribues et affiches.

Lundi, 6 juin, 1988 (soir).

Conference commémorative Weresub.

Dr. D. Parkinson, University of Calgary,
Calgary, Alberta.

"Les champignons et les écosystèmes des
forêts."

Mardi, 7 juin, 1988 (matin)

Symposium: Progrès récents dans l'étude

Program:

1. Dr. P.M. Catling, Biosystematics Research Institute, Ottawa, Ont.
"Introduction to Canadian aquatic plants: classification, growth forms, habitats, and phytogeography."

2. Dr. R.L. Stuckey, Ohio State University, Columbus, OH 43210
"Distribution patterns of invading aquatic and wetland vascular plants in North America."

3. Dr. C.T. Philbrick, University of Connecticut, Storrs, CT 06268
"Reproductive biology of aquatic angiosperms."

4. Dr. J.E. Keeley, Occidental College, Los Angeles, CA 91208
"Photosynthetic pathways in aquatic vascular plants."

5. Dr. P.R. Newroth, British Columbia Ministry of Environments & Parks, Victoria, B.C.
"Management and control of aquatic weeds."

Tuesday, June 7, 1988 (morning)
Contributed papers and posters.

Tuesday, June 7, 1988 (afternoon)
Symposium: Contemporary issues in fungal physiology.

Organizer: Dr. C.E. Dorworth, Pacific Forestry Centre, Victoria, B.C.

Description: The symposium deals with recent advances in fungal physiology and concentrates on topics of molecular biology as well as on mycorrhizal relationships of fungi.

Program:

1. Dr. R. Hall, Department of Environmental Biology, University of Guelph, Guelph, Ont.
"Physiology and control of Sclerotinia sclerotiorum."

2. Dr. M. Shaw, University of British Columbia, Vancouver, B.C.
"Melampsora lini (flax rust) in culture - its potential use in molecular genetic study of host/pathogen interactions."

3. Dr. N. Benhamou, Laval Univ., Quebec City, Quebec
"Use of cyto- and immunocytochemical probes for the characterization of some aspects of host/pathogen interactions in Dutch elm disease."

4. Dr. R. Miller, University of British Columbia, Vancouver, B.C.
"Gene cloning and cellulase production."

5. Dr. D. Gwynn, Allelix Inc., Mississauga, Ontario.
"Genetic engineering of Aspergillus nidulans toward production of a compound identified as human interferon."

6. Dr. P.M. Townsley, Department of Food Science, University of British Columbia,

des plantes aquatiques de l'Amérique du Nord.

Organiseurs: Dr. P.M. Catling, Institut de recherches biosystématiques, Ottawa, Ontario, et Dr. A. Ceska, Royal British Columbia Museum, Victoria, C.B.

Description: Le sujet du symposium sera la progrès récent dans la systématique, l'écologie, la phytogéographie et la physiologie des plantes aquatiques vasculaires. La phytogéographie, la gestion et la contrôle des mauvaises herbes aquatiques envahissantes en Amérique du Nord y seront aussi résumés.

Au programme:

1. Dr. P.M. Catling, Institut de recherches biosystématiques, Ottawa, Ontario.

"Une introduction aux plantes aquatiques du Canada: classification, formes de croissance, habitats et phytogéographie."

2. Dr. R.L. Stuckey, Ohio State University, Columbus, OH 43210.

"Modes de distribution de plantes vasculaire aquatiques et de marécages, envahissantes en Amérique du Nord."

3. Dr. C.T. Philbrick, University of Connecticut, Storrs, CT 06268

"Biologie de reproduction des plantes angiospermes aquatiques."

4. Dr. J.E. Keeley, Occidental College, Los Angeles, CA 91208

"Voies de photosynthèse chez les plantes vasculaire aquatiques."

5. Dr. P.R. Newroth, British Columbia Ministry of Environments & Parks, Victoria, C.B.

"Gestion et contrôle des mauvaises herbes aquatiques."

Mardi, 7 juin, 1988 (matin). Articles contribues et affiches.

Mardi, 7 juin, 1988 (apres-midi).

Symposium: Questions contemporaines sur la physiologie des champignons.

Organisateur: Dr. C.E. Dorworth, Centre de foresterie Pacifique, Victoria, C.B.

Description: Le sujet de ce symposium sera le progrès récent sur la physiologie des champignons. Des sujets en biologie moleculaire ainsi que les relations en mycorhize des champignons y seront accentués.

Au programme:

1. Dr. R. Hall, Department of Environmental Biology, University of Guelph, Guelph, Ontario.

"La physiologie et le contrôle du Sclerotinia sclerotiorum."

2. Dr. M. Shaw, University of British Columbia, Vancouver, C.B.

"Melampsora lini (charbon du lin) en culture - son potentiel pour les études sur le génétique moleculaire des interactions hôte/pathogène."

Vancouver, B.C.
"Dipol electrofusion of fungal protoplasts."

7. Dr. G. Hunt, Balco Canfor Reforestation Centre Ltd., Kamloops, B.C.
"Fungal physiology and practical application of ectomycorrhizal fungi: limitations and opportunities."

Tuesday, June 7, 1988 (afternoon)
Contributed papers and Posters.

Tuesday, June 7, 1988 (evening) Banquet (cost included in registration fee)
Speaker: Dr. Nancy Turner, Royal B.C. Museum, Victoria, B.C.
"The original free trade; early exchange of plant products by native people of B.C."

Wednesday, June 8, 1988 (morning) Gold medal address - Canadian Society of Plant Physiologists
Speaker: Dr. Paul Gorham, Department of Botany, University of Alberta, Edmonton, Alberta.
"Don't drink the water, don't take the pills."

Wednesday, June 8, 1988 (late morning)
Contributed papers

Wednesday, June 8, 1988 (afternoon)
Contributed papers

Wednesday, June 8, 1988 (evening) Sooke Logging Show and Barbecue (probable cost - \$25.00 not included in the registration fee)

Thursday, June 9, 1988 (morning)
Contributed papers (optional)

Thursday, June 9, 1988 (afternoon trip)
Field trip: Gardens of Victoria.
Description: The field trip will go through several private gardens, Museum's Native Plants Garden, and the famous Butchart Gardens.
Cost included in the registration fee.

Friday, June 10 to Sunday, June 12, 1988
Field trip: Victoria - Bamfield - Victoria
Description: The destination of this trip will be a small fishing village on the open Pacific Coast of Vancouver Island adjacent to Pacific Rim National Park. Participants will examine temperate rain forest, beach communities, bogs and salt marshes.
Cost: \$ 80.00 (includes meals, transportation and accommodation).
Note: The number of participants is limited.

Friday, June 10 to Sunday, June 12, 1988
Field trip: Victoria - Ososyoos - Kamloops - Victoria
Description: This field trip will demonstrate a vegetation transect from wet coastal forests to the driest parts of British Columbia with sage brush

3. Dr. N. Benhamou, Université Laval, Québec, Québec.
"Utilisation de sondes cyto- et immunocytochimiques pour la caractérisation des certains aspects des interactions entre hôte et pathogène dans la maladie des ormes."

4. Dr. R. Miller, University of British Columbia, Vancouver, C.B.
"Les clones de gènes et la production de la cellulase."

5. Dr. D. Gwynn, Allelix Inc., Mississauga, Ontario.
"Génie génétique chez Aspergillus nidulans pour l'obtention de l'interferon humain."

6. Dr. P.M. Townsley, Department of Food Science, University of British Columbia, Vancouver, C.B.
"Electrofusion à dipôle de protoplastes de champignons."

7. Dr. G. Hunt, Balco Canfor Reforestation Centre Ltd., Kamloops, C.B.
"Physiologie du champignon et application pratique avec les champignons ectomycorhizes: limitation et occasions."

Mardi, 7 juin, 1988 (après-midi).
Articles contribués et affiches.
Mardi, 7 juin, 1988 (soir).
Banquet (coût inclus dans les frais d'enregistrement). Adresse par Dr. Nancy Turner, Royal B.C. Museum, Victoria, C.B.
"Le libre-échange original: anciens échanges de produits végétaux entre les peuples indigènes de la Colombie britannique." native people of B.C."

Mercredi, 8 juin, 1988 (matin). Discours médaille d'or - Société canadienne de physiologie végétale.

Dr. Paul Gorham, Department of Botany, University of Alberta, Edmonton, Alberta.
"Ne buvez pas l'eau - n'avez pas les pilules."

Mercredi, 8 juin, 1988 (plus tard le même matin). Articles contribués et affiches.

Mercredi, 8 juin, 1988 (après-midi). Articles contribués et affiches.

Mercredi, 8 juin, 1988 (soir). Sooke Logging Show et Barbecue. (Coût probable \$ 25,00 non - inclus dans les frais d'enregistrement.)

Jeudi, 9 juin, 1988 (matin). Articles contribués (facultatif)

Jeudi, 9 juin, 1988 (après-midi).
Excursion: Les jardins de Victoria.
Description: Plusieurs jardins privés, le Native Plant Garden du musée et le

grasslands. Stops will include areas with mountain scenery and spectacular spring flora. Participants will be able to catch their return planes in Vancouver.

Cost: \$ 180.00 (includes meals, transportation and accommodation).

Note: UVIC dormitories will be open from Friday, June 3, 1988.

Cost: 18.50 per night including breakfast (estimated). We must vacate dormitories by noon, Friday, June 10, 1988. Dormitories will be available to the participants of the field trips returning to Victoria on Sunday, June 12, 1988.

Registration fee: \$ 100.00 (regular), \$ 50.00 (students).

CALL FOR PAPERS

This announcement constitutes the first call for papers and posters for the Annual Meeting 1988. Members are urged to submit abstracts for oral presentations or posters using the abstract form provided. Contributed papers are allowed a total of 15 minutes (presentation and discussion). Additional copies of the abstract form will be mailed on request.

STUDENTS WISHING TO PARTICIPATE IN THE LIONEL CINQ-MARS AWARD COMPETITION MUST INDICATE THIS ON THE ABSTRACT FORM. THEY MUST PRESENT THEMSELVES THE ORAL PAPER.

DEADLINE DATE FOR SUBMISSION OF ABSTRACTS: MARCH 31, 1988.

fameux Butchart Gardens seront inclus dans cette excursion.

Coût: inclus dans les frais d'enregistrement.

Vendredi, 10 juin, a dimanche, 12 juin, 1988.

Excursion: Victoria - Bamfield - Victoria.

Description: Cette excursion aura comme camp de base un petit village de pêcheurs sur la côte du pacifique de l'île de Vancouver et voisin du parc national Pacific Rim. Les membres de l'excursion pourront examiner une forêt à pluie tempérée, des communautés de grève, des marécages et des marais salants.

Coût: \$ 80,00 (repas, transport, logement inclus).

Note: Le nombre des participants limité.

Vendredi, 10 juin, a dimanche, 12 juin, 1988.

Excursion: Victoria - Osoyoos - Kamloops - Victoria.

Description: Le but de cette excursion sera de présenter une coupe transversale de la végétation de la Colombie britannique, y compris les forêts humides sur la côte et les parties les plus sèches avec leur sauge. Les pauses tiendront place dans les montagnes scéniques et permettront d'observer une flore spectaculaire. Les membres de l'excursion auront le temps de se rendre à Vancouver pour leur vol de retour.

Coût: \$180,00 (repas, transport, logement inclus).

Note: les dormoires de l'université de Victoria seront ouverts à partir de vendredi, 3 juin, 1988.

Coût: \$ 18,50 par jour, y compris le petit déjeuner (coût provisoire).

Il nous sera absolument nécessaire de partir des dormoires avant midi le vendredi, 10 juin, 1988.

Les participants retournants des excursions pourraient réoccuper les dormoires le dimanche 12 juin.

Frais d'enregistrement: \$ 100,00 (régulière), \$ 50,00 (étudiantes).

COMMUNICATIONS

Cet avis constitue la première invitation à soumettre des communications et affiches pour le congrès annuel de 1988. Les membres sont encouragés à utiliser les formulaires fournis pour leurs résumés de communications orales ou d'affiches. On alloue une durée de 15 minutes pour chaque communication (présentation et discussion). Des formulaires supplémentaires peuvent être envoyés sur demande.

LES ETUDIANTS QUI DESIRENT CONCOURIR POUR LE PRIX LIONEL-CINQ-MARS DOIVENT LE MENTIONNER SUR LE FORMULAIRE DU RÉSUMÉ. ILS DOIVENT EUX-MÊMES PRÉSENTER LA COMMUNICATION ORALE.

DATE LIMITÉ DE SOUMISSION DES RÉSUMÉS: 31 MARS 1988.

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(403) 432-3247

Editor Bulletin: Dr. Luis Oliveira
(ex off.) Univ. British Columbia
(604) 228-6897

Archivist: Dr. Erich Haber
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CBA/ABC REPRESENTATIVES TO BCC

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The bulletin of the Canadian Botanical Association

Editor:-Dr. Luis Oliveira
Department of Botany
The University of Br. Columbia
3529-6270 University Blvd
VANCOUVER, B.C., V6T 2B1

Issued quartely in January, April, July and October, and sent to all members of the Association. Non-members may subscribe at a price of \$20.00 p.a. (\$5.00 per issue) post free. Cheques or money orders (in Canadian funds ONLY) should be made payable to "The Canadian Botanical Association" and addressed to the Editor.

Advertisements for Positions Open and Classified categories may be placed at a cost of \$10.00 Can. per published column inch. Advertisements by individual members for post-doctoral opportunities and Positions Wanted are carried free.

Material for inclusion in the Bulletin should reach the Editor at least one month prior to the date of publication of that issue.

To ensure prompt delivery of the Bulletin please notify the Treasurer (Prof. Keith Winterhalder, Dept. Biology, Laurentian Univ., Sudbury, Ontario P3E 2C6) of any change of address as soon as possible.

Inquiries about membership of the CBA/ABC should be addressed to the Secretary of the Association: - Dr. A. Gordon Thomas, Regina Research Station, Agriculture Canada, Box 440, Regina, Sask., S4P 3A2, (306) 585-0255.

BEST WISHES IN THE NEW YEAR TO ALL OUR MEMBERS , SUBSCRIBERS AND READERS.