International Organization of Plant Biosystematists

Newsletter
No. 18/19

Edited by K. M. Urbanska and C. A. Stace

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Newsletter No. 18/19

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Dear IOPB Members,

This fat double issue of the Newsletter should reach you hopefully still before Christmas. There are several items pertinent to IOPB structure so please pay attention. Thanks.

An important item on p. 4 is a note from Mrs. Honegger who prepares the final MS of the Newsletter before it is sent for printing. Lately there were some difficulties and several items had to be reprocessed because neither the layout nor some other details were seen to by the respective contributors. Since the reprocessing is an unnecessary and time-consuming work, and has to be done only after the principal duties of Mrs. Honegger have been fulfilled, it delays the Newsletter printing. Please read carefully the Instructions included in her note and send us, if only possible, a printout AS WELL AS the disc compatible with our system. Thank you very much.

Only a few individual Research Reports have been contributed this time (p. 5). Please send me some more, I'm positive that all Members would like to know what current research is going on in various countries. Some short articles and notes would be appreciated, too. If necessary, please send them first to Peter Raven for linguistic consultation.

Chromosome Data column, as always carefully prepared by Clive Stace, includes numerous data (p. 5).

There also is an interesting report on the Panarctic Flora Project; you may remember that it was announced in the Newsletter No. 14 and now field work started. Thank you, Dave for this news (p. 10).

IOPB Symposium 1992 went very well. During the Closing Session a resolution concerning the support of the UNCED Biodiversity Treaty was accepted by acclamation (p. 11). On June 13, 1992 we had a Business Meeting of the Executive and Council and several important decisions were made. For your information, Minutes of this meeting are included (p. 11). Please note that membership fees are changed and consider the various possibilities of payment (p. 21). Our Secretary/Treasurer made a good job of all these notes. There also is a note on a possible sponsoring of new IOPB Members by the colleagues from countries with no hard currency problems (p. 12). It would be nice if you 'adopt' fellow botanists in this way.

Proceedings of the 1992 IOPB Symposium are being prepared for printing (p. 16). The planned price looks rather affordable, and there even might be a discount for IOPB Members! Good news, that.

The IOPB Award goes this time to Askell and Doris Löve in recognition of their work in plant biosystematics (p. 15). All the good wishes to the couple. Should the Members have any suggestions concerning the next IOPB Award, please contact our President or any Executive/Council Member.

The IOPB Elections have been completed by last June. I'm pleased to announce that the ballot was returned by ca. 58% of the IOPB Membership. Heartful thanks to all the colleagues who agreed to run for office. To give you more information on the current Executive and Council, a small "Who is Who" column with supplementary personal data and some photographs is given in this issue (p. 17). We promise to provide more information on the candidates when the next elections come up in 1995.

The updated IOPB Directory is presented on p. 23. Well done, Hans. We deleted all scientific titles to provide more space for addresses. Please check up carefully your entry; should any changes be necessary, please contact our Secretary/Treasurer.

The planning work on IOPB Symposium 1995 started already (p. 22). Thank you Bengt for this short note. It is good to know that the good IOPB tradition is being continued. It is still a long time to go, but perhaps it should be reasonable to think slowly about warm outfit for field trips in North Scandinavia, before or after the Symposium ...

Data for Newsletter No. 20 should arrive here before May 31, 1993.

All the best wishes for 1993

The Editor
2. From the Editorial Office

NOTE: Please write in capital letters or use typewriter while preparing your 'Research News' sheet for the Newsletter. You don't want to have some words misspelled in print, do you? Please only use the new form.

It would be a great help if contributions could be sent both on RPS Microdisc (MC2HD 3.5 inch hard disc) as well as a printed copy.

The above note is published on the first page of each IOPB Newsletter. However, only very few people send in typewritten 'Requests for Material and Information' or disc with their contribution. We have now increasing difficulties with the items contributed to the IOPB Newsletter. With the actual techniques a secretary should not anymore have to re-process a text written on disc.

As our Institute has its own publication series we are able to convert all the contributions we receive in an ASCI text file on 3.5 and 5.25 disc.

Another great problem are the different addresses given on the 'Research Report Form'. They do not always correspond with the 'Directory' carefully elaborated by Prof. J.C.M. Den Nijs. If there are mistakes or changes, please let him know, you would facilitate our task enormously.

Contributions to the 'Chromosome Data' column offer the same problems. If only possible they should be sent to Prof. C.A. Stace both as disc and printouts. Reprocessing chromosome data is a very time-consuming work. I think the secretary of Prof. Stace will agree with me.

If there are any problems concerning data processing, please let me know. A Fax-message would be the quickest way of mutual and efficient collaboration.

I am looking forward to receiving the contributions for the next IOPB Newsletter.

Thanks for your cooperation

Mrs. Anny Honegger
Editorial Secretary
Geobotanical Institute
SFIT Zürich
Zürichbergstr. 38
CH-8044 Zürich
Fax 41-1-2523404
3. Research News

HE Jingbiao, Dept. of Biology, Wuhan Univ., Wuchang 430072, Hubei, P.R. China
Recent publications:
Projects completed: Studies on the aquatic vegetation of the lakes in the middle an lower reaches of Yangtze River and their exploitation. Supported by Nec Ph.D Station Foundation of China.

PLITMANN Uzi, Dept. of Botany, The Hebrew Univ., Jerusalem 91904, Israel
Recent publications:
Current projects: Phenetic, genetic and phylogenetic relationships among species of *Lathyrus*. Microgametophyte populations and breeding systems in *Polemoniaceae* and *Brassicaceae*.
Projects completed: Studies on *Cuscuta*: population, ecology, reproductive biology, cytogenetics.
Projects started: Cleistogamy in *Salvia* (*Lamiaceae*).

WINGE Helga, Dep. Genetica, IB-UFRGS, c.p. 15053, Campus do Vale, 91501-Porto Alegre, Brazil
Current projects: Isoenzymatic variability in natural populations of *maté* (*Ilex paraguariensis*, *Aquifoliaceae*). Isoenzymatic variability in natural populations of *Hordeum stenostachys*, *Graminaceae*.
Projects completed: Phylogenetic analysis of the genus *Relbunium* (*Rubiaceae*) based on chromatographic, electrophoretic and morphological data.
Projects started: Tissue culture in barley (*Hordeum vulgare*): Brazilian cultivars.

4. IOPB Chromosome Data 4

edited by Clive A. Stace, Department of Botany, University of Leicester, Leicester LE1 7RH, England.

Please send contributions to Professor Stace at the above address (on RPS Microdisc with text in ASCII-file and a printed copy) using the exact layout of the present list and stating whether or not you are a Member of IOPB. Neither proofs nor reprints will be made avail-
able, but the editor will acknowledge receipt of contributions and raise queries with authors if necessary.

* * *

Reports by C. BENEDI and C. BLANCHE, Laboratori de Botànica, Facultat de Farmàcia, Universitat de Barcelona, Avgda. Diagonal 643, Barcelona, E-08028, Catalonia (Spain). Vouchers in BCF (Grant PB. 87-1008). Collectors are C. Benedi (CBG), C. Blanche (CBV), J. Molero (MO), J.J. Orell (OR) and J. Vicens (PV).

**EUPHORBIACEAE**


_Euphorbia broteri_ Daveau 2n=32. Spain: Salamanca, Béjar towards Barco de Avila, 1100 m, sandy slope, PV 51.

_Euphorbia characias_ L. ssp. _characias_. 2n=20. Spain, Catalonia: Baix Ebre, Ports de Tortosa, El Portell, 950 m, calcareous slopes, CBV 222.

_Euphorbia fontqueriana_ Greuter 2n=20. Spain: Balearic Islands, Majorca, Puig de Massanella, 1100 m, OR s.n.

_Euphorbia isalidifolia_ Lam. 2n=18. Spain: Huesca, Serreta Negra de Fraga, 250 m, limestone rocky places, CBG 320.

_Euphorbia lagascae_ Sprengler 2n=18. Spain: Murcia, between Mazarron and Puerto Mazarron, 50 m, abandoned fields, CBG 321.

_Euphorbia platyphyllos_ L. 2n=30. Spain, Catalonia: Pallars Jussa, Cellers, margins of No-guera Pallaresa river, CBV 467. 2n=30. France: Drôme, 3 km S. of Bordeaux, disturbed soils, MO s.n.

_Euphorbia villosa_ Willd. 2n=32. Spain, Catalonia: La Selva, near Hostalric, 120 m, popular-grove, CBG 322.

* * *

Reports by W. HUBER and M. BALTISBERGER, Geobotanisches Institut ETH, Zollikerstrasse 107, CH-8008 Zürich, Switzerland. Vouchers in Z-ZT. Authors’ names abbreviated to WH and MB.

**ASTERACEAE**


_Achillea millefolium_ L. 2n=54. Switzerland: ct. Wallis, Val de Zinal, L’Ar Pitetta, 2050 m, WH cult. 12357.


_Achillea nobilis_ L. 2n=18. Switzerland: ct. Wallis, Lötschbergsüdrampe, between Ausserberg and Eggen, below Geissbalma, 1000 m, MB & WH 11453, cult. 12356.


_Adenosyles alliariae_ (Gouan) A. Kerner 2n=38. Switzerland: ct. Wallis, Val d’Anniviers, N. of Zinal, 1820 m, MB & N. Tonascia 12574.


_Arnica montana_ L. 2n=38. Switzerland: ct. Wallis, S.E. of Simplonpass near Brig, 2000-2100 m, MB & WH 12559.

Artemisia umbelliformis Lam. 2n=34. Switzerland: ct. Wallis, 2 km N.E. of Simplonpass, Tschyfe, 2380 m, MB & WH 13370.


Centaurea unijlora Turra ssp. nervosa (Willd.) Bonnier & Layens 2n=22. Switzerland: ct. Wallis, 1 km N.E. of Simplonpass, Tschyfe, 2150 m, WH 12213.

Centaurea cyanus (L.) Cronq. 2n=24. Switzerland: ct. Wallis, City of Zurich, Hönggerberg, 520 m, WH 13314.


Crepis sancta (L.) Babcock 2n=10. Armenia: basin of lake Sevan, near village Dzhal, cult. from seeds, N.S. Chanjian 12533.

Dichrocephala bicolor (Roth) Schltdl. 2n=18. Papua New Guinea: Southern Highlands Province, 60 km S.S.W. of Mt. Hagen, N.E. of Ialibu, Tobobugu, 2050 m, cult. from seeds, MB & al. 12073.

Doronicum austriacum Jacq. 2n=60. Austria: Kärnten, Koralpe, W. side of Grosses Kar, 1880 m, WH & M. Fotsch 12419, cult. 13426.

Doronicum cataractarum Widder 2n=60. Austria: Kärnten, Koralpe, W. side of Grosses Kar, 1880 m, WH & M. Fotsch 12417, cult. 13425.

Doronicum clusii (All.) Tausch 2n=60. Switzerland: ct. Wallis, S. of Gamsen near Brig, left side of Nantzaal, 2300-2350 m, MB & WH 12552.


Country, Vagan, Gufnörfjord, J. Reiersen 12950, cult. 13330; Norway: Nordland Country, Vagan, Gullvik, 100 m, cult. from seeds, J. Reiersen 12949.


*Senecio abrotilium* L. 2n=32. Spain: Tenerife, San Juan, Gomez-Campo 335-3123.


*Senecio incanus* L. 2n=40. Switzerland: ct. Wallis, Val d'Anniviers, 2.5 km N.N.E. of Zinal, La Noua, 2550 m, MB cult. 12342; Switzerland: ct. Wallis, S. of Gamsen near Brig, left side of Nanztal, 2300-2350 m, MB & WH 12550.


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**BRASSICACEAE**


*Lepidium bonariense* L. 2n=32. Spain: Tenerife, San Juan, Gomez-Campo 335-3123.


*Lepidium fasciculatum* Thell. 2n=32. Australia: Victoria, river road near Lake Walla Walla, Browne s.n.; 2n=32. Australia: Victoria, 18 km S.W. of Carwarp, Scarlett 84112.


*Lepidium hyssopifolium* Desv. 2n=32. Australia: Victoria, Beveridge, Scarlett 84268.

*Lepidium leptopetalum* F. Muell. 2n=24, n=ca. 12. Australia: Victoria, 18 km S.W. of Carwarp, Browne s.n.

*Lepidium linifolium* (Desv.) Steud. 2n=32. Australia: Western Australia, Carnavon, Demarz, 271078.

*Lepidium monoplocoides* F. Muell. 2n=32. Australia: Victoria, Gunbower Island, Scarlett 84646.
**Lepidium Muelleriferdinandi** Thell. 2n=48. Australia: New South Wales, Menindee Lakes. Browne s.n.

**Lepidium nitidum** Nutt. 2n=32, n=16. USA: California, Table Mountains, Hurka s.n.


**Lepidium pseudololystopseudolystop** Hewson 2n=32. Australia: Victoria, Mitre Rock, Scarlett 84106.


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**APIACEAE**

**Pimpinella lutea** Desf. 2n=20. S.-E. Corsica: Conca, Oglistreichione, 30 m, RV 91-519; Conca, Favone, 20 m, AA 91-05.

**Rouya polygama** (Desf.) Coincy 2n=20. S.-E. Corsica: Lecci, N. of Porto-Veccchio, Cala Rosa, 5 m, AA 91-04.

**Seselij dianae** Gamisans 2n=20. N.-W. Corsica: Monte Cinto, Val Giargia Minuta, 1400 m, AA 91-06.

**ASTERACEAE**

**Ptilostemon casabonae** (L.) Greuter 2n=32. S. Corsica: SOlla, before Usciolu tunnel, JC 91-509.

**BRASSICACEAE**


**Cardamine chelidonion** (L.), Medicus 2n=64. N. Corsica: N. of Bastia, Sisco, Cipriaca brook, AA 91-01.


**CARYOPHYLLACEAE**


**Spergularia macrorhiza** (Loisel.) Heynh. 2n=54. S.-W. Corsica: Valinco golf, Serra-di-Ferro, Pointe de Porto-Pollio, 5 m, AA 91-02.

**CHENOPODIACEAE**

**Atriplex tormaei** Tineo 2n=54. S. Corsica: Bonifacio, Piantarella, RV 91-01, 92-02.

**FABACEAE**

**Argyrolobium zanonii** (Turra) P.W. Ball 2n=48. N. Corsica: W. of Bastia, Farinole roadside, RV 91-518.

**Genista aetnensis** (Biv.) DC. 2n=54. S.-E. Corsica: Solaro beach, RV 91-517. n=25, 26, 27. AA 87-10.

**LAMIACEAE**

**Mentha requienii** Bentham var. **obovata** (Gandoger) Litard. 2n=18. C. Corsica: Palneco, Col de Verde, Taravo bank, 1100 m, AA 91-07.

**Stachys corsica** Pers. 2n=18. C. Corsica: Vivario, Porcareccio, 700 m, AA 91-08.

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Reports by R. Verlaque, J. Contandriopoulos and A. Aboucaya, Laboratoire de Biotémia et d’Ecologie méditérranéenne, Univ. de Provence, Centre de St.-Charles, Place Victor Hugo, F-13331 Marseille Cedex 3, France. Vouchers in MARS. All locations in Corsica, France. Collectors indicated by author's initials.
5. Panarctic Flora research in Alaska

Writes David F. Murray, Dept. of Botany, Univ. of Alaska, Fairbanks, AK, USA:

The proposal for the Panarctic Flora Project (IOPB Newsletter 14, 1990) led to workshops and agreements for joint undertakings between botanists at the Herbarium of the University of Alaska Museum, Fairbanks (ALA), and the Komarov Botanical Institute, St. Petersburg (LE). Although our first priority is to develop an inventory of arctic plants in a computer environment from specimens already at hand, field work is also important in a region where basic exploration is still very much needed. The compilation of a checklist for the Arctic provides us with one of our most interesting challenges - how to reconcile the different taxonomies derived from the Russian and Western traditions.

The Panarctic Flora Project had a very successful expedition in Alaska during the summer of 1992. It grew from an agreement made with the National Park Service (NPS) in Alaska. Dale Taylor, Special Project Leader at the NPS regional office in Anchorage, was expedition leader. This expedition was the first concrete step toward a bi-national scientific dialogue about the plants of the proposed Beringian Heritage International Park, which includes parts of both Alaska and Chukotka. A team of phanerogamic and cryptogamic botanists from U.S. and Russia spent a month collecting plants in the Bering Land Bridge National Preserve on the Seward Peninsula of western Alaska. This was followed by a month of work in the Herbarium of the University of Alaska Museum to work up the specimens and begin entering the label data for all specimens into the database of the Northern Plant Documentation Center at ALA. Participants were: from LE, Boris Yurtsev (vascular plants), Olga Afonina (mosses), Mikhail Andreev (lichens), and Alexy Potemkin (hepatics); from ALA, David Murray (vascular plants), Barbara Murray (cryptograms), Alan Batten (database), and Carolyn Parker (herbarium assistant); from Colorado College, Tass Kelso (vascular plants).

Through many years of work on the Seward Peninsula in connection with her treatment of boreal and arctic Primula, Tass Kelso has brought together numerous scattered records and compiled a checklist to the vascular plant flora. Although preliminary, it was the yardstick against which to measure the effectiveness of our work, and we were pleased by the
new vascular plant records: about 30 Asiatic taxa new to Alaska and even some taxa (at infra-specific rank) new to science. Notable was the emphasis we placed in cryptogamic plants. These plants are extremely diverse in the far north and are of tremendous importance to tundra plant communities, but being difficult to identify, they are often ignored or dealt with only superficially. Integration of work on both vascular plants and cryptogams is essential for studies of plant diversity. Since cryptogamic botanists like William C. Steere, John Thomson, and Barbara Murray concentrated their research in the subarctic interior of Alaska on the Arctic Slope, the Seward Peninsula was essentially terra incognita with respect to bryophytes and lichens. Not surprisingly, we also turned up numerous new records for North America and Alaska and at least one species now new to science.

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6. IOPB Symposium 1992: Resolution

Knowing the rate of species extinctions and habitat destruction in so many parts of the world,
Realizing that the mechanisms generating and maintaining this diversity are still poorly understood, and badly neglected,
Agreeing that the complete and integral functioning of the earth's ecosystem and the adhering diversity is an absolute prerequisite for the future of the human species and the planet Earth as such,
the General Assembly of the International Organization of Plant Biosystematists, at the occasion of its 5th International Symposium in St. Louis, Missouri, USA, urges all relevant organizations and states to give full priority to the implementation of the UNCED Biodiversity Treaty.

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7. IOPB Business Meeting June 13, 1992 - Minutes

by Hans C.M. den Nijs, Hugo de Vries Laboratory, University of Amsterdam, Kruislaan 318, 1098 SM Amsterdam, The Netherlands

1. Opening by IOPB President Shoichi Kawano
Dr. Kawano welcomes all Members (and not Members) to the meeting, and he explicitly thanks the organizing committee for having done their job so good. Before moving over to the agenda, he gives the floor to the President of the Organizing Committee Peter Raven,
who commemorates the decease of two former IOPB Members: Arthur Cronquist, and Larry Heckard, who both were of great importance for modern taxonomy. The assembled Members keep some moments of silence to honour their memory.

2. Report by Secretary/Treasurer Hans C.M. den Nijs

On the Membership
At the last symposium, IOPB had about 180 Members who had paid their fees, and 6 who had the status of non-paying Member, originating from Poland, Peoples Republic of China, Czechoslovakia, Argentina, and the former Soviet Union (Russia). By that time, a certain number of former Members had just been deleted of the list because they neglected to pay their dues. During this three year period, a gradual increase of the Membership took place so that in the beginning of this year the number was about 240. Among these, some 20 are institutional Members. The publication of the Chromosome Data certainly influences this increase positively.

At the occasion of the current symposium some 45 new personal Members were registered. This brings the total Membership to about 285. A new directory will be published in the forthcoming Newsletter (see p. 23).

Regrettably until now about 40 personal Members neglect to pay their fees over the past period, in spite of several reminders. The Executive and Council meeting decided that those Members will explicitly be asked once more to reconfirm their Membership by paying their dues, November 1st being the ultimate date. No appropriate response will automatically mean - in accordance with the IOPS regulations - withdrawal from the directory. Regrettable, but necessary.

The Assembly agrees with this decision.

On Public Relations
IOPS is becoming increasingly known in the world: the number of subscribing institutes is rising, and in several worldwide editions compiling all kinds of organizations IOPB and its aims are mentioned.

On the financial position of IOPB:
- Banking transfer charges have been seriously increased in the past period. US dollar cheques are now charged with $10.-, irrespective of the amount of the cheque. Institutes paying their contribution annually (which used to be US$ 10.-) would bring nothing at all. Fortunately enough, after some negotiations the bank officer has been so kind as to give IOPB some special treatment, so that for the past period the charge was limited to about US$ 5.-. This special position has now come to an end.

Last year the Executive decided to install a regional, US dollar collecting Treasurer. This proved to be successful: by sending only accumulated amounts to the central treasurer, we succeeded in avoiding the high charges. Those Members who payed their dues in connection with their registration for the symposium also avoided charges for IOPB.
Actual financial status:
December 1989, I received from the former treasurer the amount of US$ 4,371.-
The accounts per 06/06/92 show amounts as follows (1 US$ - DFL 1.85):
Postal Giro Account DFL 198.- US$ 107.-
ABN/AMRO DFL-Account DFL 6,545.- US$ 3,538.-
ABN/AMRO US$-Account US$ 426.-
Cash US$ 175.-
Total assets US$ 4,246.-
The period deficit therefore is about US$ 125.-

- The Newsletter produced at the actual number of copies costs per issue about US$ 1,000.-. The price per issue and per Member is expected to rise in near future, due to inflation and the increase of the number of pages.
- Fees for the past period were US$ 25.- (personal). This was not enough to cover the expenses. Due to the expected increase of the costs, the fee should increase, too.
During a Business Meeting last year in Washington, the Executive Committee discussed this problem (see minutes in Newsletter 16: 8-10), and provisionally set the amount at US$ 33.- (personal) for the triennial period. Meanwhile, Executive and Council confirmed this proposal: the new fees are therefore fixed at the above mentioned US$ 33.- for the period 1992-1995.
The Assembly agrees with this decision.
- To reduce difficulties in transferring, Executive and Council herewith open the possibility to pay the fees for two Membership periods at once: from '92 through 1998! For the time being, the fee for the second period is set at the same amount: US$ 33.-.
Members who pay the second term now will be kept free from an eventual rise of the fee for the second period to be decided on by the end of 1994.

** Please, see the instructions for the payments in this issue (p. 21).**

3. Report on the Newsletter by the Editor Krystyna M. Urbanska
- The Editor explains that some delay in the edition of issue No. 18 will occur, due to the planned inclusion of reports from the St. Louis symposium.
- Because there is a certain decline in the number of contributions, she stimulates the Members to prepare manuscripts with (preliminary) scientific results, including DNA based results. Peter Raven promised to improve the English drafts if necessary. Members who did not so before are requested to prepare their Profile of a Lab. This series of items is of great value for IOPB because it precisely acts as a way of exchanging relevant information on who does what, where, why, and how.
- To assure a better information flow within IOPB, the Editor proposes to publish in the Newsletter some personal information on the newly elected Council and Executive. Therefore, all Council and Executive Members will be requested to provide Krystyna with such information. A relevant form will be sent, all Council and Executive mem-
bers are requested to fill in this form, and to return it as soon as possible to the Editor, so as to give her the possibility to include this information in the coming issue. The Assembly expresses its warm thanks by giving the Editor a big applause. The continued and very generous support of the Newsletter by the Geobotanical Institute, SFIT Zürich, was mentioned, and again a big applause rises from the floor.

The results of the Elections are presented in this issue (p. 17) together with more data on the Officers. To acquaint the Members with future Council and Executive candidates, it is decided to include in the Newsletter issue published before the 1995 elections some personal information on the candidates who will run for office. The Assembly addresses again many thanks to Krystyna for her work.

5. Report concerning non-paying Membership by Krystyna M. Urbanska, Mary Kalin de Arroyo, and Ping-sheng Hsu
The Executive and Council discussed and agreed upon the desirability of the Membership of more colleagues from developing countries. Some suggestions in this matter are included in the note about sponsoring (p. 21).

6. IOPB's relation to the Society for Study of Species Biology
To strengthen this relation, it has been decided that on behalf of IOPB a number of specialists will join the Editorial board of the Society's "Journal for Species Biology. However, this does not imply that IOPB is somehow taking over responsibility for the edition of the journal. President Shoichi Kawano expressed the opinion that the relationship between both organizations may stimulate Members of the Society for Study of Plant Species Biology to join the IOPB. The Assembly agreed to propose the following Members for this task: Konrad Bachmann, Amsterdam, The Netherlands, Paul Gadek, Kensington, Australia, Mary Kalin de Arroyo, Santiago de Chile, Chile, and Colin J. Webb, New Zealand.

7. Resolution concerning the UNCED Treaty on Biodiversity
As the symposium coincided partly with the UN world conference on the future of earth's environment and biodiversity, the Executive proposed to put forward from the symposium a Resolution, expressing IOPB's concern with the biodiversity in particular. The Assembly agrees with the idea, and with the Resolution, urging all relevant organizations and states to give the highest priority to the implementation of the Treaty on the Biodiversity, as signed on June 13, 1992 in Rio de Janeiro. You will find the text of the Resolution elsewhere in this issue (p. 11).

8. Closing Remarks
President Kawano addresses thanks to all who contributed to the meeting, and finally in-
troduces Peter Raven as the new President by handing over the IOPB Presidency to him. Peter Raven then memorizes the explicit benefits IOPB had from Kawano's presidency: the strong effort to broaden the impact of biosystematics in Japan, the excellent symposium he organized in Kyoto, his strongly internationally orientated general activities, and last but not least, his humanity, cordiality, and hospitality.

The Assembly thanks Shoichi Kawano with a long and warm applause.

Peter Raven finally stresses the point that it is still difficult to give a short and accurate description of Biosystematics, but expresses the opinion that there yet are a lot of good reasons to organize symposia. This holds the more as the enormous threat for biodiversity has the risk that many species, and evolutionary perspectives may have got lost before we have recognized and understood them.

At the very end of the meeting, the Assembly gives a long applause for Gloria and Peter Hoch for their perfect organization of the current symposium.

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8. The Second IOPB Award

by Shoichi Kawano, Dept. of Biology, Faculty of Science, Kyoto Univ., Kyoto 606, Japan
Past President IOPB, a former student of the Löves

During the 5th IOPB Symposium held on June 11-15, 1992, in St. Louis, USA, IOPB has decided to give the Second IOPB Award to Drs. Askell and Doris Löve in recognition of their contribution to IOPB.
It is difficult to separate for purpose of honours, the man and the wife, Askell and Doris.

Doris and Askell Löve at the Bot. Institute, Univ. of Montreal.
(Photographed by S. Kawano in 1961).
Either of them is responsible in so large measure for the success of the other. In Lund they called then 'ler and långel'm, meaning 'clay and straw' a typical Scandinavian expression for things inseparable when one makes 'klinehus', i.e. a house built of adobe-type bricks. Askell was chairman of the committee that organized the IOPB in 1961, and served as its President in 1964. Together with Doris, he was a prime mover in the organization of the Flora Europaea project. Their 766 publications appeared steadily from 1935 through 1988. Askell edited one hundred Chromosome Number Reports published in Taxon from 1964 through 1988. His books include a popular handbook of the Iceland Flora; Cytology, a handbook of techniques; Cytotaxonomic Atlas of the Arctic Flora; Cytotaxonomic Atlas of the Slovenian Flora; Cytotaxonomic Atlas of the Pteridophyta (with Doris L. and Pichi Sermolli).

Askell and Doris worked long time on cytotaxonomy of Rumex and its allied genera, phytogeography of the Amphi-Atlantic Flora, the cytotaxonomy of the floras of the White Mountains and the Rocky Mountains, and the role of polyploidy in plant speciation. At present, Askell is confined to his home in San José, California; he suffers from Parkinson Syndrome. Doris continues her career currently translating the classic works of Vavilov from Russian to English.

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Writes Dr. Peter C. Hoch. Missouri Botanical Garden, P.O.B. 299, St. Louis, MO 63166-0299, USA:

Proceedings of the IOPB Symposium 1992 held last June in St. Louis, Missouri, will be published as a book in series 'Monographs in Systematic Botany' from the Missouri Botanical Garden. This will give us a considerable editorial control. The recent numbers of the series, which use the same printer that we will use for our volume, have excellent printing and figures with good hard-cover bindings. We also will be able to sell the book for c. US$ 25.-. There probably will be a discount for IOPB Members. Well over 100 libraries have standing orders for the series.

Editorial work is proceeding well, with most of the manuscripts in hand and being reviewed. I hope to return manuscripts to the authors for final changes soon. The book will possibly be published around June 1993. The title of the volume will be the same as that of the meeting viz. 'Experimental and Molecular Approaches to Plant Biosystematics'.

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10. IOPB Elections 1992
Who is who in Executive and Council of IOPB 1992-1995

Note: Family names are printed in capitals. Since botany and work are the first and foremost hobbies for all of us, other hobbies only are listed below...

Executive

President:
Peter H. RAVEN, 56, married, father of four.
Director, Missouri Bot. Garden and Engelmann
Professor of Botany at Washington Univ.
Main research interests: Systematics and evolution of Onagraceae; preservation of biodiversity.
Current project: Systematics and evolution of Epilobium.
Missouri Bot. Garden, P.O.B. 229, St. Louis, MO 63166-0299, USA.
Phone: 1-314-577-5110; Fax: 1-314-577-9595

Vice-President and President-Elect:
Bengt E. JONSELL, 56, married, father of four.
Professor Bergianus
Director, Botanic Garden and the Bergius Foundation, Royal
Swedish Academy of Sciences.
Main research interests: Plant evolution in the Baltic landlift area; systematics of Cruciferae.
Current project: Flora Nordica (project leader).
Hobbies: Nordic music and history.
Phone: 46-8-156 896; Fax: 46-8-612 9005

Past President:
Shoichi KAWANO, 56, married, father of two.
Professor at Section of Systematic Botany, Kyoto Univ. and Institute of Genetic Ecology, Sendai Univ.
Main research interests: Plant population biology and life history evolution in plants; molecular population genetics.
Current project: Phenotypic plasticity in plants and evolution of adaptive systems.
Hobbies: Singing.
Department of Biology, Faculty of Science, Kyoto Univ., Kyoto 606, Japan
Phone: 075-753-4133; Fax: 075-753-4122
Editor Newsletter:
**Krystyna M. Urbanśka**, 57, divorced, mother of one.
Professor of Biology, Geobot. Institute SPIT Zürich.
Main research interests: Biosystematics and population biology of *Antennaria carpatica* s.l.; biology of asexually reproducing plants.
Current project: Pollen and male function in agamospermous plants.
Hobbies: Interior design, quilting (traditional and self-designed tops).
Geobotanisches Institut ETH, Stiftung Rübel, Zürichbergstr. 38, CH-8044 Zürich, Switzerland
Phone: 41-1-256 3877 (direct line: -256 4308)
Fax: 41-1-252 340

Co-editor Newsletter:
**Clive A. Stace**, 54, married, father of two.
Professor of Plant Taxonomy, Univ. of Leicester.
Main research interests: Hybridization; molecular systematics.
Current project: Cytological and molecular characterization of *Hieracium* agamospecies.
Hobbies: Gardening, photography.
Dept. of Botany, Univ. of Leicester, Leicester LE1 7RH, England
Phone: 0533-523381 (direct line); Fax: 0533-471001

Secretary/Treasurer:
**Joannes C.M. Der Nus**, 46, married, father of two.
Professor at Hugo de Vries Lab., Univ. of Amsterdam.
Main research interests: Evolution in *Taraxacum*; conservation biology.
Current project: Genetics and population biology in small populations of threatened Dutch *Gentiana* sp.
Hobbies: Organic vegetable growing, house refitting.
Hugo de Vries Laboratory, Univ. of Amsterdam, Kruislaan 318, NL-1098 SM Amsterdam, The Netherlands
Phone: 31-20-525 7660; Fax: 31-20-525 7715

Regional Treasurer (US currency):
**W. Hardy Eshbaugh**, 56, married, father of four.
Professor at Dept. of Botany, Miami Univ., Ohio.
Main research interests: Evolution of *Solanaceae*; ethnobotany; Bahamas floristics and phytogeography.
Current project: Evolution of the *Capsicum pubescens* complex.
Hobbies: Sailing, skiing, fly-fishing, photography.
Dept. of Botany, Miami Univ., 316 Biological Sciences Bldg., Oxford, Ohio 45056, USA
Phone: 1-513-529 4212; Fax: 1-513-529 4243
Member ex officio for 1995 Symposium: 
**Liv BORGEN**, 49, married, mother of two. 
Professor at Bot. Garden and Museum, Univ. of Oslo. 
Main research interests: biosystematics esp. chromosome and molecular differentiation. 
Current project: Genetic variation and reproductive strategies in *Minuartia* from Svalbard. 
Hobbies: House redecoration, gardening. 
Botanical Garden and Museum, Univ. of Oslo, 
Trondheimsveien 23B, N-0562 Oslo 5, Norway. 
Phone: 47-2-686 960; Fax: 47-2-19-75-75

Council

**Delphine CARTIER**, 57, single. Maître de Conférences, Lab. of Plant Biology, Univ. of Paris XI, Center of Orsay. 
Main research interests: population biology; cyanogenesis in *Lotus corniculatus*/*L. alpinus*; cytogenetics of *Crepis praemorsa* s.l. Current project: C- and fluorochrome banding in *Crepis praemorsa* group for constitutive heterochromatin analysis. 
Laboratoire de Biologie Végétale B, Univ. de Paris XI, Centre d'Orsay, Bâtiment 362, F-91405 Orsay, France. Phone: 33-69-417 222

**Daniel J. CRAWFORD**, 50, married, father of two. Professor at Dept. of Plant Biology, Ohio State Univ. 
Main research interests: molecular systematics; evolution on Oceanic islands. Current project: Origin and evolution of the flora of the Juan Fernandez Islands. 
Dept. of Botany, Ohio State Univ., 1735 Neil Avenue, Columbus, OH 43210-1293, USA. 
Fax: (614)-2926345

**Ping Sheng Hsu**, 68, married, father of one. Professor at Dept. of Biology, Fudan Univ. 
Main research interests: Cytotaxonomy and interspecific hybridization. Current project: Interspecific hybridization in the genus *Lycoris*. 
Dept. of Biology, Fudan Univ., Shanghai 200433, P.R. China.

**Herbert G.R. HURKA**, 52, married, father of two. Professor of Systematic Botany, Univ. of Osnabrück. 
Main research interests: Evolutionary biology and plant phylogenies; biosystematics of *Brassicaceae*. Current project: Species differentiation at molecular and phenotypic level in selected *Brassicaceae*. 
Institut für Biologie, Univ. Osnabrück, Barbarastr. 11, D-4500 Osnabrück, Deutschland. 
Fax: 0541-9692870

**Kunio IWATSUKI**, 58, married, father of two. Director, Professor at Bot. Gardens, Univ. of Tokyo. 
Main research interests: Systematics of the pteridophytes and flora of East and SE Asia. 
Current project: Molecular systematics of vascular plants. 
Botanical Garden, Univ. of Tokyo, 3-7-1 Hakusan, Bunkyo, Tokyo 112, Japan.
Mary T. Kalin Arroyo, 47, married, mother of one. Professor of Biology, Lab. of Plant Systematics and Ecology, Univ. of Chile.
Main research interests: Plant reproductive ecology; biogeography. Current project: Reproductive biology of temperate South American alpine and forest species.
Lab. de Sist. y Ecol. Veg., Depto. Biologia, Univ. de Chile, Casilla 653, Santiago, Chile.
Phone: 56-271-2983

David F. Murray, 55, married, no children. Professor of Botany and Curator; Museum, Univ. of Alaska.
Main research interests: Origin and evolution of the arctic and alpine floras. Current project: Panarctic Flora Project.
Museum, Univ. of Alaska, 907 Yukon Drive, Fairbanks, AK 99775-1200, USA.
Fax: (907)-4745469

Herwig Teppner, 51, married, father of two. Professor at Bot. Institute, Karl-Franzens Univ.
Main research interests: Karyology and systematics, crop and medicinal plants. Current project: Karyology, embryology, and monograph of Nigriella.
Karl-Franzens-Univ. Graz, Institut für Botanik, Holteigasse 6, A-8010 Graz, Österreich.

Suzanne I. Warwick, 39, married, no children. Senior Research Scientist at Centre for Land and Biological Resources Research, Ottawa.
Main research interests: Systematics and evolution of Brassicaceae: Genetic variation in weeds incl. herbicidal resistance. Current project: Genetic diversity and genetic relationships in Brassicaceae; molecular, morphological and chromosome evolution.
Hobbies: Gardening, skiing, cycling.
Centre for Land and Biol. Resources Research, K.W. Neatby Bldg., C.E.F., Ottawa, Ontario K1A 0C6, Canada
Phone: 1-613-9961665; Fax: 1-613-9951823

Tetsukazu Yahara, 38, single, father of three. Professor at Dept of Biology, Univ. of Tokyo.
Dept. of Biology, Univ. of Tokyo, Komaba 3-8-1, Meguro-Ku, Tokyo 153, Japan.
Phone: 81-3-3465-6043; Fax: 81-3-3485-2904

11. News from the Treasurer

Writes Hans C.M. den Nijs, Hugo de Vries Laboratory, University of Amsterdam, Kruislaan 318, NL-1098 SM Amsterdam, The Netherlands:

Membership fees for 1993-1995
At its business meeting during the St Louis symposium, IOPB decided on the Membership fees for the new period running from the beginning of 1993 through 1995. Personal mem-
bership fees will be US$ 33.- (or the equivalent of DFL 66.-). Members may pay their fees for two periods in once: the fees for the next period set also at US$ 33.- for the years 1996-1998. Later possible rise of the fees will not be charged to those Members who pay now for this period too.

Recommended ways of payments, (almost) free of banking charges for IOPB:

**Dutch Florins payments**
- Sending an **Eurocheque** to J.C.M. den Nijs, amounting DFL 66.-, made payable to J.C.M. den Nijs - IOPB
- Sending an **International Postal Money Order**, amounting DFL 66.-, made payable to J.C.M. den Nijs - IOPB

Eurocheques and Postal Money Orders should be send to:
Hans C.M. den Nijs, Hugo de Vries Laboratory, University of Amsterdam, Kruislaan 318, 1098 SM Amsterdam, The Netherlands

**US Dollar payments**
Sending a cheque, made out to IOPB/9039 - Eshbaugh, and amounting US$ 33.-. Cheques should be send to:
W. Hardy Eshbaugh, Department of Botany, Miami University, 316, Biological Sciences Building, Oxford, Ohio 45056, USA

The Membership fee for **Institutional Members** amounts DFL 80.- (or US$ 40.-) for the three-year period, postage not included (to be added to the amount due: DFL 20.-/US$ 10.).

Thank you very much for your cooperation.

***

12. About Sponsoring

Writes Hans C.M. den Nijs, Hugo de Vries Laboratory, University of Amsterdam, Kruislaan 318, NL-1098 SM Amsterdam, The Netherlands:

During the Business Meeting at St. Louis a discussion was held on the number of non-paying IOPB Members which our Organization could afford. It appears that IOPB as such has virtually none or a very limited possibility to support colleagues financially by using regular funds. On the other hand it is of a great importance that many scientists join the IOPB to get informed on the modern biosystematics development and to get IOPB influential as a result of a large membership. It was therefore suggested that from now on each regular member should be offered a possibility to sponsor a colleague from a country where hard
currency problems exist. The sponsoring Member would then pay his(her) own fees and also those of the "adopted" colleague.  
The Executive recommends this possibility to the IOPB Members.  
Members who should like to help out colleagues from developing countries and/or young Eastern democracies are requested to contact the Secretary, writing the name and address of the sponsored person, and indicating this name very clearly on the money order.

***

13. IOPB Symposium 1995 - first preparation in Scandinavia

Writes B.E. Jonsell, Bergius Botanic Garden, P.O.B. 50017, S-10405 Stockholm, Sweden:

The first discussion concerning the IOPB Symposium in Scandinavia had already taken place and more details will be dealt with in December. Even if it is still a long time to go, preliminary work should be done on determining the Symposium profile, logistics, etc.

***

14. Requests for Material and Information

He Jingbiao, Ass. Prof., Dept. of Biology, Wuhan Univ., Wuchang 430072, Hubei, P.R. China, would appreciate to receive papers concerning the adaptations of plants in flooding.

PLITMANN Uzi, Prof., Dept. of Botany, The Hebrew Univ., Jerusalem 91904, Israel, would appreciate to receive viable seeds of Lathyrus stenophyllus Boiss.

***

15. Publishing News


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13. IOPB Directory December 1992

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16. Miscellaneous News and Notes

Obituaries

Dr. Lawrence Heckard, curator of the University of California Berkeley's Jepson Herbarium, died November 26, 1991. He was 68.

Dr. Heckard was an expert on California flora and was responsible for the production of 'Manual of the Flowering Plants in California', a seminal plant identification text. In recent years, Lawrence Heckard's research centred in the systematics of Castilleja, Orthocarpus and Cordylanthus (Scrophulariaceae). He was active in the American Society of Plant Taxonomist and a Fellow of the California Native Plant Society. Substantial portion of his estate was left to establish 'The Lawrence R. Heckard Fund of Jepson Herbarium', which encourages research in the systematics of the vascular plants of California and their close relatives in North America.

Prof. Bogdan Kuzmanov from the Institute of Botany and Botanical Garden, Bulgarian Academy of Sciences, Sofia, died recently.

He was working in biosystematics of several plant groups from Bulgaria and was particularly interested in chromosome numbers. He served at one time as IOPB Council Member.

May they both rest in peace.

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MEMBERSHIP APPLICATION FORM

International Organization of Plant Biosystematists

The International Organization of Plant Biosystematists (IOPB) was founded in 1960 to promote international cooperation in the study of biosystematics. The IOPB acts on several levels, from coordinating and publishing information on biosystematics to organizing conferences in a triennial time schedule. The IOPB is open to all persons working or interested in biosystematics which is interpreted in a broad sense. The more recent volumes from the conferences in Zürich (K.M. Urbanska, ed., Differentiation Patterns in Higher Plants, 1987), and Kyoto (S. Kawano, ed., Biological Approach and Evolutionary trends in plants, 1990) give extensive insight in the field IOPB deals with.

In the IOPB Newsletter, an item "IOPB Chromosome Data" is regularly published as a continuation of the Taxon series "Chromosome Number Reports" at that time edited by A. Löve.

Such items as current research, requests for material and information, meeting reports, publications, etc. are also reported. The Newsletter is published twice a year, and sent to all Members. The Editor is Prof. Krystyna M. Urbanska, Geobotanisches Institut ETH, Zürichbergstrasse 38, CH-8044 Zürich, Switzerland. Contributions for the "IOPB Chromosome Data" series should be sent to the Second Editor, Prof Clive A. Stace, Department of Botany, University of Leicester, Leicester LE1 7RH, England. IOPB Members automatically have free publishing right of their data.

At present, Membership is for the three-year period between the IOPB Symposia. The next Symposium will be held in Scandinavia in 1995.

Membership fee for individuals is US$ 33.- for 1993-1995, institutional Membership fees are set at US$ 40.- for the same period. Detailed information on the payment system can be found in the Newsletter, and will be sent by the treasurer upon receipt of the application form.

Any inquiries about IOPB Newsletter subscription, Membership etc., as well as the application form should be addressed to the Secretary/Treasurer:

Dr. Hans C.M. den Nijs, Hugo de Vries Laboratory, University of Amsterdam,
Kruislaan 318, NL-1098 SM Amsterdam, The Netherlands
Phone: 31-20-525 7660; Fax: 31-20-525 7715

Please don't send such mail to the Newsletter Editor, it delays the procedure!

IOPB - Membership application form

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### Research News

for the International Organization of Plant Biosystematists Newsletter  
(IOPB Newsletter)  

**Typewritten or in capital letters**

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Address:

*Personal news (Promotions etc.)*

*Publications during the year*:

Current projects:

Projects completed:

Projects started:

Requests for research material and information:

**Articles and reports should be attached**

To be sent to Krystyna M. Urbanska, Geobotanisches Institut ETH, Stiftung Rübel, Zürichbergstrasse 38, CH-8044 Zürich, Switzerland

* Please select **three** titles and add the remainder as e.g. "seven further papers".