

# PLANTS & PEOPLE

Volume 12

Winter 1998

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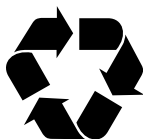
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## **1998 BUSINESS NEWS OF THE SOCIETY FOR ECONOMIC BOTANY**

•The results of the elections for the 1998-1999 slate were:

Beryl Simpson,  
President-Elect

Cath Cotton & Will McClatchey,  
Council Members-at-Large

•Thanks to outgoing Council Member, Brad Bennett, for cheerful service to the Society and always stepping in to help at the meetings.

•Thanks and welcome to Susan Frayman, who has seamlessly taken over as Managing Editor of the journal at the New York Botanical Garden.

•Our journal, *Economic Botany*, is now included among the journals represented on The Essential Electronic Agricultural Library (TEEAL) compact disks.

•The 2000 Meetings will be held in late June at the University of South Carolina in Columbia, South Carolina. The local arrangements chair is Gail E. Wagner. More information will be posted on our web site as it becomes available.

**1999 SEB Meeting slated for August 1-7.** The 1999 meetings will be held in conjunction with the XVI International Botanical Congress (IBC) at the America's Center in St. Louis, Missouri, during August 1-7. For more details and pre-registration with the IBC, visit their web site ([www.ibc99.org](http://www.ibc99.org)).

intention of bringing together a broad assortment of plant scientists from a number of disciplines and countries. There will be a large and diverse number of national and international plant groups and societies participating in the Congress.

The Scientific Program of the Congress is divided into the following disciplinary areas: (1) Botanical Diversity: Systematics and Evolution; (2) Ecology, Environment, and Conservation; (3) Structure, Development, and Cellular Biology; (4) Genetics and Genomes; (5) Physiology and Biochemistry; and (6) Human Uses of Plants: Economic Botany and Biotechnology.

The Society for Economic Botany banquet, business meeting, and other venues have not yet been formally scheduled. We will update this information on our web page as it becomes available. However, some information can be given about the general Congress schedule.

The current IBC schedule calls for field trips on Saturday, July 31, as well as after the Congress. The opening session will be from 2-5 pm on Sunday, August 1, followed by a reception. During the following six days, there will be Plenary Talks, Posters, and General Symposia scheduled from 9:00 am to 6:30 pm, except ending at 4:00 p.m. on August 7. The Congress banquet will be Wednesday evening. Because of the size and structure of the Congress, members of

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**VISIT THE NEW SEB WEB SITE:**  
<http://www.econbot.org>

# Notes from the Field

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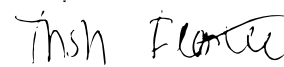
Dear Members,

As the leaves fall, we are returning from the fields and entering the classrooms, laboratories, and offices. I hope you have all had an invigorating summer. The summer meeting was very successful and we now have many new international members who are anxious to become part of our Society. We hope we can meet them in St. Louis this summer at our 1999 meeting held in conjunction with the International Botanical Congress.

Other newsworthy items are:

The extensive review of the 1998 meeting, a request to update the SEB membership list, the Journal Index, and lots of new books and courses are coming your way.

I am indebted to Gail Wagner, who has successfully, once again, filled up these pages for your reading pleasure. We would love to have others submitting a variety of articles on all subjects. Please send to me at [tflaster@rmi.net](mailto:tflaster@rmi.net)



Trish Flaster

## 1998 BUSINESS NEWS

*Continued from previous page*

the Society for Economic Botany (and other societies) will not be able to present individual papers. Instead, we are sponsoring or co-sponsoring several general symposia.

SEB is sponsoring the symposium "Ecological Ethnobotany: Multi-Level Plant/People Interactions," organized by Jan Salick and Barbara Pickersgill. We are co-sponsoring two other symposia: "South American Plants and Their Chemistry and Pharmacology Interactions with Human Activities," organized by Walter H. Lewis, Memory Elvin-Lewis, and Abraham Vaisberg, and "Anthropogenic Plant Migrations: Habitat Transformation by Overt and Inadvertent Introductions," organized by David Lentz, C. Edelmira Linares, and Robert Bye (co-sponsored with the Economic Botany Section of the Botanical Society of America).

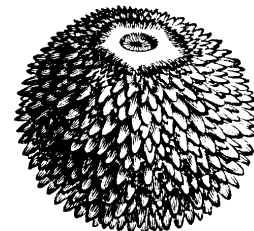
Two plenary lectures will be of particular interest to SEB members. Beryl Simpson (our President-Elect) will talk on "Balancing the Ethno' and the Botany in Ethnobotanical Studies," and Toni Kutchan will speak on "Future Prospects for Biotechnological Use of Plants that Produce Alkaloids."

Two keynote symposia sound particularly interesting. These each include five 30-minute presentations. "Feeding the World:

Past, Present, Future" has been organized by Luis Herrera-Estrella (Mexico) and Gurdev Khush (Philippines). "Plant Conservation Biology" has been organized by Jose Sarukhan (Mexico) and Anthony H. D. Brown (Australia).

These will be large meetings with thousands of scientists from around the world. Registration fees for the IBC alone are high: \$300 for scientists from developed countries, \$200 from developing countries, and \$100 for students and companions. Unfortunately, the SEB will need to also assess some supportive fees. Nevertheless, we encourage you to start saving now to attend this very exciting event. Rooms are expected to cost from \$40-\$126 per person per night. Be sure to check out the IBC web page to pre-register, to learn more about requesting roommates or child care, to suggest destinations for field trips, to obtain guidelines for posters, or to apply for a Fellowship.

The Council would like to see an inexpensive directory printed every year or two, with the first coming out in 1999. (See Membership Directory Column.)



## Newsletter Committee

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Gail Wagner

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# 1998 BUSINESS NEWS

**Annual Meeting 1998 in Aarhus, Denmark**  
by Gail E. Wagner

The Society for Economic Botany held the 1998 annual meeting at the University of Aarhus, Denmark, during July 13-17. Field trips were run on Monday the 13th and Friday the 17th (see elsewhere in Newsletter). The meetings were fast-paced, but still allowed quality time and one-on-one meetings with other participants. We stayed in pleasant dormitory facilities at the Vejlbj Idraetshojskole, where we enjoyed a wonderful breakfast each morning. The University was a quick ride away on a convenient bus line.

The meetings were opened by Karl Pedersen, Dean of the Faculty of Natural Sciences, and Ivan C. Nielsen, Chairman of the Institute of Biological Sciences. Most impressively, these busy administrators continued to attend the meetings. The local arrangements chair and organizer extraordinaire was Henrik Balslev. A number of hard-working helpers contributed to a very smoothly run meeting: Anja Byg, Dorte Folsted, Morten Jensen, Inger Juste, Claudia Levín, Anne Martinussen, and Flemming NØrgaard.

In addition to 27 contributed papers, there was a workshop by James Morley (Royal Botanic Gardens, Kew) on "Developing a Strategy for the SEB Website"; live demonstrations by Stephen Davis (Royal Botanic Gardens, Kew) on the Survey of Economic Plants of Arid and Semi-arid Lands (SEPASAL) database; various book and journal displays; 12 posters; and an outstanding invited symposium on "Palms and People."

Contributed papers ranged from studies of specific plants (e.g. *Cannabis sativa*, *Ipomoea* spp., *Helianthus* spp., and *Oxalis tuberosa*) to area studies (Fiji, Borneo, southeast Asia, central Himalaya, Turkey, Kuwait, Burkina Faso, Sahel, southeastern U.S., Mexico, Panama, Amazonia, northwestern South America, and Venezuela). A number of posters dealt with palms, but others targeted other plants and a variety of areas, including Brazil, Italy, an Ecuadorean island, Senegal, Burkina Faso, and Venezuela. The Palms and

People symposium organized by Henrik Balslev featured 15 presenters covering a wide range of topics, including uses of palms by various groups, conservation and sustainability, development and economic issues, biochemistry, archaeology, and ecology. Dr. Balslev hopes to publish the papers presented for the symposium.

The Distinguished Economic Botanist, Hugh Iltis, gave a lively two-slide projector autobiographical talk on "Homeotic Sexual Translocations and the Origin of Maize (*Zea mays*): A New Look at an Old Problem." Each banquet guest was delighted to find a sample of maize and a packet of teosinte at their place. This talk must go down in SEB history as the one held the latest in the evening, thanks to the richly deserved Danish reputation for good food, good drinks, and good talk. Hospitality is not to be rushed in Denmark!

As you can imagine, it would be difficult to talk about economic botany without visual aids, and a number of speakers brought items to supplement their talks, ranging from palm products to richly colored Turkish carpets. Gathering around to view the items and ask questions sparked new friendships and interests among the participants. It was a noticeably international group with participants from Kuwait, Portugal, Great Britain, Sweden, Malaysia, Denmark, Colombia, Italy, Guinea, Venezuela, the Netherlands, Turkey, Senegal, China, Equador, Ukraine, Morocco, Spain, Mexico, Panama, Fiji, Finland, and the United States of America.

The Julia F. Morton Award for the outstanding poster by a student or young professional was awarded to Anne Martinussen (Department of Systematic Botany, University of Aarhus) for her poster, "The Use of Natural Plant Resources in the Village of Medina Kouta, Senegal." The Edmund H. Fulling Award for the outstanding presented paper by a student or young professional was jointly awarded to Patti Anderson (Botany Department, University of Florida) for her paper, "Harvesting and Conservation of the Palm *Iriarteia deltoidea* in Ecuador" and to

*Continued next page*

**An  
outstanding  
invited  
symposium  
on "Palms  
and People"**

**The Edmund H.  
Fulling Award  
was jointly  
presented to  
Patti Anderson  
and  
Carsten Olsen**

**The Julia F.  
Morton Award  
was presented  
to  
Anne  
Martinussen**

**The Council  
met during  
the first  
field trip.**



**all very  
high quality  
presentations**

## **1998 BUSINESS NEWS**

*Continued from previous page*

Carsten Olsen (Department of Economics and Natural Resources, Royal Veterinary and Agricultural University, Denmark) for his paper, "Assessing the Sustainability of Commercial Medicinal Plant Collection in Central Himalaya." Julie Runk (Smithsonian Tropical Research Institute, Panama) was awarded as runner-up for her paper, "Non-timber Forest Products Used for Crafts in Panama's Darien: Preliminary Findings." These were all very high quality presentations chosen from among a field of very professional efforts. Congratulations to all!

During the SEB annual meeting, The Healing Forest Conservancy presented their annual Richard Evans Schultes Award to the late

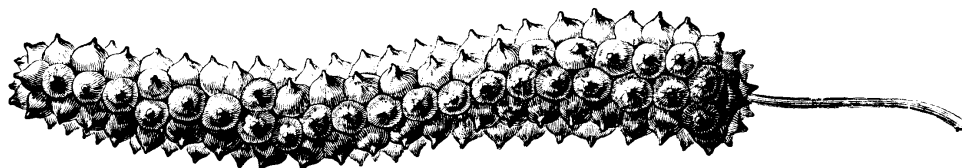
D. Michael Warren, founder and director of the Centre for Indigenous Knowledge for Agriculture and Rural Development (CIKARD). The Schultes Award is presented annually to a scientist, practitioner, or organization that has made an outstanding contribution to ethnobotany or to indigenous peoples issues related to ethnobotany. Dr. Warren pioneered the multidisciplinary field of indigenous knowledge systems (IKS) relating to health, nutrition, and agriculture. Through his research, he demonstrated the rational, health-promoting basis for African ethnomedicine, particularly that of Yoruba health knowledge and beliefs.

I am so grateful that all of this was submitted by Gail E. Wagner (See In the Classroom) (Ed.)

**UK  
chapter  
active**

## **SEB INTERNATIONAL LIAISON**

Peter Lapinskas (Scotia Pharmaceutical LTD, [peterl@scotia-holdings.com](mailto:peterl@scotia-holdings.com)) has been appointed SEB's International Liaison to help coordinate and advise local and regional Sections and Chapters. The UK Chapter has been active this year. Teresa Almeida (Departamento de Botanica, Universidade de Coimbra, Arcos de Jardim, P-3000 Coimbra, Portugal; [talmeida@ci.uc.pt](mailto:talmeida@ci.uc.pt)) is currently exploring interest in the formation of a European Chapter. Please contact her if you are intrigued.



# **NEW SEB MEMBERSHIP DIRECTORY**

It has been five years since the SEB has produced a membership directory, and a new one is long overdue. Therefore, we want to take advantage of this need by modernizing the information by including email addresses in addition to correct snailmail addresses, phone numbers, and fax numbers, of members in the new directory.

**deadline  
is  
February 1,  
1999**

If you want to update your contact information, please send it to the address below. The deadline for submitting updated information to be included in the new directory is February 1, 1999. **If you do not update your membership information, your address will not be included in the 1999 directory.**

You may xerox this form for convenience:

## **SOCIETY FOR ECONOMIC BOTANY MEMBERSHIP DIRECTORY UPDATE FORM**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Affiliation: \_\_\_\_\_

**xerox  
this  
form**

**This form must be received  
by February 1, 1999.**

Please mail it to:

Brian M. Boom, Ph.D.  
Vice President for Botanical Science  
and Pfizer Curator of Botany  
The New York Botanical Garden  
200th Street and Southern Boulevard  
Bronx, NY 10458-5126 USA  
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FAX: (718) 220-6783  
Email: [bboom@nybg.org](mailto:bboom@nybg.org)  
<http://www.nybg.org>



**Ann  
Martinussen  
with her  
winning  
poster.**

# LETTERS TO THE EDITOR

**I am one  
of the two  
inventors  
named in this  
patent**

**Issues  
surrounding  
the patenting  
of germplasm  
are complex**

Dear Trish Flaster,  
The article by David Theodoropoulos entitled "Germplasm News and Views" in the spring 1998 Society for Economic Botany Newsletter claims that "a U.S. patent was granted for all male-sterile quinoa, even though it is naturally occurring in traditional varieties." I am one of the two inventors named in this patent. What the patent actually covers is a cytoplasm from the U.S. weed species Chenopodium berlandieri, which produces alloplasmic male sterility when combined with the Chenopodium quinoa nucleus. This patent does not cover any plant which does not contain this particular cytoplasm, and therefore does not affect any "naturally-occurring traditional varieties." It most certainly does not cover "all male-sterile quinoa" as stated in the Newsletter article. The patent was granted to Colorado State University Research Foundation in 1994, but has never been invoked due to lack of commercial potential; because of this it has not been maintained with the US Patent Office and is no longer in effect. Seed containing the patented cytoplasm has for several years been freely distributed to interested researchers in Andean countries and elsewhere. David Theodoropoulos' sole source of information for this article appears to be the Rural Advancement Foundation International (RAFI), a Canadian-based organization which campaigns against plant and animal patents. My experience of this outfit is that they are not interested in letting facts get in the way of any campaign which will attract publicity and donations, and I am disappointed to see their distortions repeated in the Society newsletter. Issues surrounding the patenting of germplasm are complex and should indeed be of concern to Society of Economic Botany members; however, informed discussion is not helped by uncritical dissemination of RAFI's claims. Mr. Theodoropoulos might be interested to know that in June, 1997, RAFI brought the quinoa patent before a Tribunal on Human Rights convened in New York as part of the UN-sponsored "Rio + 5" conference, claiming that this patent threatened the rights of Andean quinoa growers. The Tribunal subsequently declared that due

to the very narrow scope of the patent and the fact that the patented germplasm was of U.S. origin, no human rights were infringed. Needless to say, RAFI has not been nearly as active in distributing this piece of information as they have in making erroneous and exaggerated claims about the threat this patent supposedly represents. I would like to see the Society newsletter continue to report on germplasm ownership issues, but please do so in a more informed and accurate manner.

Sincerely,  
Sarah Ward  
Assistant Professor of Plant Breeding and Genetics,  
Department of Soil and Crop Sciences,  
Colorado State University,  
Fort Collins, CO 80523  
Phone: (970) 491-6157  
email: sward@lamar.colostate.edu

Here is David's reply to Sarah.

Dear Ms. Ward,  
...I would like to thank you for having read the column and responding, and would like to apologize to you if the statement about your patent caused you distress. You are probably not aware that my own work is included in the list of actions mentioned in the column which have been called "biopiracy," so I do understand your feelings at being labeled. The intent of that portion of the column not to endorse any particular position of RAFI's but to raise issues. I can see that, due to the emotionalism surrounding the debate, some might stop reading half-way through the column, and miss my later comments, which pointed out the actively beneficial aspects of some of these actions, and that we need to be able to distinguish between theft and exchange. Your own action of freely distributing the germplasm to Andean researchers is exemplary. I did not mean to imply in the column that RAFI is my sole source of information on patenting issues. I review many industry publications and when I compare RAFI's statements to the reportage of the same subject in pro-patenting publications, I must conclude that RAFI is accurate more often than not. Whether I agree with their analysis is another matter. While I do agree with them

# LETTERS TO THE EDITOR

*Continued from previous page*

on many points, I must strenuously disagree with them in a great number of cases - however, it would be inappropriate for me to exclude them from the debate on this basis. The discussion is becoming quite polarized, and I hope I can succeed in treating both sides in a professional manner. I seek some common ground, or perhaps a third point of view, in the debate within the column. My view is quite different from both RAFI's and the biopatient industry. For example, you state, "My experiences with this outfit is that they are not interested in letting facts get in the way of any campaign which will attract publicity and donations, and I am disappointed to see their distortions repeated in the Society newsletter." The same claim could be leveled at the biopatient industry - they are not interested in letting the facts get in the way of collecting their royalties, and it would be irresponsible of me to repeat their distortions in the Society Newsletter. I see both sides promoting policies which are based on egregious distortions of biological and political realities and which would have profoundly negative consequences for the science of ethnobotany as well as for human society at large. My intent in the column is to point out, gently, the fallacies and inconsistencies of both sides in an effort to reach a sounder and more workable system we can all live with. It may well be that I am entirely in error—time will tell.

In any case, a brief correction will appear in the next issue. A detailed discussion of your patent will be impossible, since at present I have only RAFI's claim and you counterclaim. Could you please send me a copy of the patent itself, a copy of any legal papers relating to your abandonment of the patent or its nullification, a copy of the report or ruling from the Tribunal on Human Rights and any other research or documentation that you feel is appropriate.

You mentioned that you hoped that the Society Newsletter would continue to report on the issues, but in a "more informed and accurate manner." I volunteer many hours researching and writing this column. The volume of journals and industry publications which cross my desk is such that I despair of finding time to even box them up and store them, much less give them the careful reading they deserve. This is a common problem

in our information-glutted society. I do try to be informed and accurate, and if I have failed in this instance I apologize for any slight you felt. Please feel free to contribute news and information to the column. Everyone is invited to contribute a guest column at any time—all viewpoints are welcome at the table.

Best Wishes,  
David Theodoropoulos

## **KLINGER BOOK AWARD FOR 1998**

This year's winning book is by Amadeo Rea — At the Desert's Green Edge: An Ethnobotany of the Gila River Pima (University of Arizona Press). This book is an outstanding example of scholarship and devotion to the rights and individuality of the Native Americans with whom the author worked. Moreover, Rea has presented the material in an easily understood and attractive format.

Pages within the SEB website (<http://www.econbot.org>) are now devoted to the Klinger Awards. The pages include illustrations of the covers of winning books, and a list of books nominated for each year. The pages may be found at: <http://www.fau.edu/biology/awards.html>

To nominate a book for the 1999 award, contact the Committee Chair: Daniel F. Austin - [daustin@fau.edu](mailto:daustin@fau.edu), or the committee members (Bradley Bennett - [bennett@servax.fiu.edu](mailto:bennett@servax.fiu.edu); Timothy Johns - [Johns@agradm.lan.mcgill.ca](mailto:Johns@agradm.lan.mcgill.ca); John Rashford - [rashfordj@cofc.edu](mailto:rashfordj@cofc.edu); or Hew Prendergast - [H.Prendergast@lion.rbgkew.org.uk](mailto:H.Prendergast@lion.rbgkew.org.uk)).

Other great titles being considered for this award are:

1. Robert Voek. 1997. **Sacred Leaves of Candomblé: African Magic, Medicine, and Religion in Brazil**. University of Texas Press, Austin.
2. Michael Balick & Paul Cox. 1996. **Plants, People and Culture**. W. H. Freeman and Co, New York.
3. Miguel Alexiades. 1996. **Selected Guidelines for Ethnobotanical Research: A Field Manual**. The New York Botanical Garden.
4. Carol A. Newall, Linda A. Anderson, J David Phillipson. 1996. **Herbal Medicines: A Guide for Health-Care Professionals**. The Pharmaceutical Press, London.

**At the Desert's  
Green Edge: An  
Ethnobotany of  
the Gila River  
Pima**

**nominate  
a book  
for the  
1999 award**

# GRAZING IN THE FIELD

## Identification of Burial Flowers

I'm hoping some of the readers can help me with background research for one of my projects. A friend and I have identified some burial flowers that were recovered from inside a metal coffin (circa 1850). We would like information on burial practices pertaining to floral offerings in the period 1840-60. So far, our library research has turned up very little, and the Internet has not proved very helpful. We would appreciate any information or advice that the readers may have.

Thanks.

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I am an undergraduate at Harvard University who wants to take a semester or a year off starting February 1999 to pursue a volunteer position doing fieldwork in medicinal ethnobotany. I'm not sure how to go about doing so. I'm interested in working anywhere in the U.S. or around the world and would not require any financial assistance. I would greatly appreciate any help you could give me.

Thanks for your time. I look forward to hearing from you soon.

ROBERT F. LUO  
email: rluo@fas.harvard.edu  
home phone: 425.271.8181  
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(Please write to Robert for his impressive CV. Editor.)

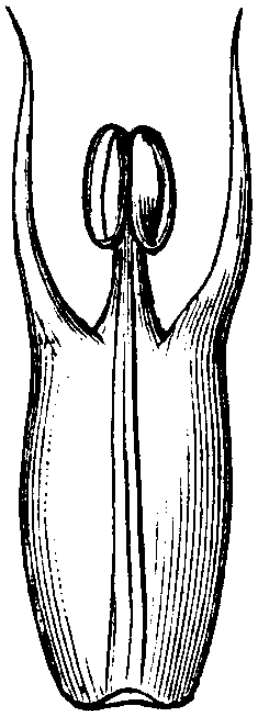
People and Plants Handbook will soon be available on the recently created People and Plants website. The printed edition of the Handbook is now reaching over 3000 people in some 130 countries, and we expect that the Internet version will provide information to thousands of additional colleagues interested in ethnobotany, conservation, and development.

I would appreciate it if members could send recent reports, publications, or other materials to People and Plants resource centers in Morocco, Malaysia, and Papua New Guinea. We are particularly interested in any ethnobotanical aspects of your work as it applies to conservation and development. We find that the work of others is a source of inspiration for our own projects and publications.

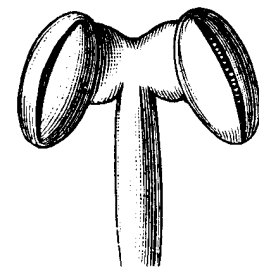
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**A friend and I  
have identified  
some burial  
flowers**



# IN THE CLASSROOM

by Gail E. Wagner

I thought I would talk in a little more detail about the South Carolina Homegardening Project that is run by the undergraduate Ethnobotany class at the University of South Carolina. This project was begun in 1994 after a trial project in 1993 indicated that the study of local yards would make a potentially great vehicle for teaching ethnobotany. Actually, in 1993 several students decided to compare the landscaping at apartment complexes with the prices of apartments, to see whether there was a correlation between “nicer” landscaping and higher rental prices.

In 1994 I decided to require each student to work on parts of the same project, rather than allow a number of individual or group projects. I presented the students with basic background research and readings on homegardens, and together we compiled a questionnaire with over 40 questions about the personal background of the gardener; gardening methods; and uses for garden produce. Since then, a few questions have been dropped and a few added, for a total of 45 questions that take approximately two hours to answer in an interview. In addition to the interview, students produce a sketch map of the garden and a list of plants. I submitted a project overview to the University Ethics Committee for approval, and composed an Interview Agreement form to be used for written permission before each interview.

Personal background questions are very basic and include age bracket, gender, self-identified ethnic identity or ancestry, occupation, at-home family size, what generation in America, how long lived in South Carolina, and gardening background. So far we do not include questions about family income. Under gardening methods, we ask about tools used; time and spacing of planting; source of seeds or plants; what are the soil and sunlight conditions; whether the gardener uses water, compost, chemicals, or beneficial insects; use of annuals vs. perennials; and whether the gardener grows multiple varieties, makes cuttings, or rotates crops. Under uses for produce, we specifically ask whether the gardener cans, freezes, or dries

any produce; grows a surplus; gives, sells, or trades any produce; or uses any medicinally.

Some of the most interesting answers are in response to more open-ended questions, such as whether or not any of the plants have special meaning for the gardener (so far 69% say yes, and tell a story); what are their objectives in gardening; what garden stories can they tell; and what are the five basic rules in gardening.

The students form teams of two, and each team is required to interview two gardeners. If one student interviews while the other maps, then at the next site they switch responsibilities. One of the students is responsible for one of the interviews, and it is his/her responsibility to turn in the Interview Agreement form, questionnaire (hard copy and on disk), and map, and a thank-you note to the gardener. Each student then writes a paper on some hypothesis he/she proposes, with the stipulation that they must use all the interviews collected by their class (and may also use data from previous classes). At the end of the semester, they give presentations on their work.

Preparation on my part is extensive. Initially, I prepared a bibliography on homegardening and put selected books and articles on reserve at the library. This year I compiled a Homegardening Reader that the students are required to purchase. I provide some basic South Carolina census data. The data from previous years along with the current class data are available on electronic reserve, as are the forms and other handouts (look for “ANTH 213” under [www.sc.edu/library](http://www.sc.edu/library)). I devote several classes entirely to the project, covering the basics of the project, results from previous years, interview and mapping techniques, ethics, and scientific paper writing. Students submit a hypothesis for approval before they can begin writing their paper, and they are given handouts (and engaged in discussions) on how to write scientific papers, make tables, and cite references. I edit their papers and they submit a final revised version, on which I also comment. I write a thank-you note to each of the informants. Yes, class size is

*Continued on page 11*

**Some of the most interesting answers are in response to more open-ended questions**

**Students submit a hypothesis for approval**

## FELLOWSHIP

The Garden Club of America is pleased to announce a fellowship to Ph.D. candidates and Ph.D.s to enable study in medicinal botany. The fellowship was established to protect and preserve knowledge about the medicinal use of plants with therapeutic potential. Providing this research opportunity for botanists can, in turn, assist medical science in its ability to protect lives and develop new medicines. The fellowship was created in 1997 and endowed by a generous contribution from Anne S. Chatham, a member of the Garden Club of America's Scholarship Committee and a member of Jupiter Island Garden Club.

the  
**Anne S. Chatham  
Fellowship in  
Medicinal Botany  
will provide  
one grant award  
of \$4000.00  
annually**

To this end, the Anne S. Chatham Fellowship in Medicinal Botany will provide one grant award of \$4000.00 annually. The Missouri Botanical Garden administers this fellowship and a panel of botanists, specializing in Economic Botany and Ethnobotany, will select candidates. Eligible applicants should send a brief application letter, a description of the proposed research (minimum 1-2 pages), and current CV to Dr. James S. Miller, Missouri Botanical Garden, PO Box 299, St. Louis, MO 63166-0299 by January 15, 1999. Announcement of the successful candidate is expected in March 1999. Additional information can be obtained at the Anne S. Chatham Fellowship site on the World Wide Web at: <http://www.mobot.org/MOBOT/research/applrsrch/chatham.html>

## *Timothy C. Plowman Latin American Research Award*

The Botany Department at The Field Museum invites applications for the 1999 **Timothy C. Plowman Latin American Research Award**. The award of \$1500.00 is designed to assist students and young professionals to visit the Field Museum and use the extensive economic botany and systematic collections. Individuals from Latin America and projects in the field of ethnobotany or systematics of economically important plant groups will be given special consideration.

Applicants interested in the award should submit their CV and a detailed letter describing the project for which the award is sought. The information should be forwarded to the Timothy C. Plowman Award Committee, Department of Botany, The Field Museum, Roosevelt Rd. at Lake Shore Dr., Chicago, IL 60605-2496, USA and received no later than October 31, 1998. Announcement of the recipient will be made no later than December 31, 1998.

Anyone wishing to contribute to **The Timothy C. Plowman Latin American Research Fund**, which supports this award, may send their checks, payable to The Field Museum, c/o Department of Botany, The Field Museum, Chicago, IL 60605-2496, USA. Make certain to indicate the intended fund.

**Participants  
in the Palm  
Symposium.**



# IN THE CLASSROOM

*Continued from page 9*

small and that is a factor; there are generally 16-20 students in the class.

There are a number of obvious deficiencies in the current project: no formal botanical identifications are made at the gardens, maps are not drawn to scale, and no systematic sampling strategy is employed. At present, students recruit their own informants from a wide geographic range of locations. My goal is to work toward studying one neighborhood each year, correcting some of these deficiencies. Also, by spending so much class time on the project (students these days already have many out-of-class commitments), there is not much class time for the other sorts of ethnobotanical demonstrations that could be made.

But, there are an overwhelming number of benefits. For just about every student, this is the first original research they have conducted and written. By leading them carefully through each of the steps, the project does not become overwhelming. They leave the class with not only first-hand experience with ethical issues, ethnobotanical interviewing, and scientific writing, but also perhaps their best effort at writing. Their paper from this class is one that they may submit along with their resume in applications to graduate school.

I'd like to hear from others in more detail about class projects they have tried, whether it was a success, partial success, or a failure. Please contact: Gail Wagner, Department of Anthropology, University of South Carolina, Columbia, SC 29208; (803)777-6548; FAX (803)777-0259; wagnerG@garnet.cla.sc.edu

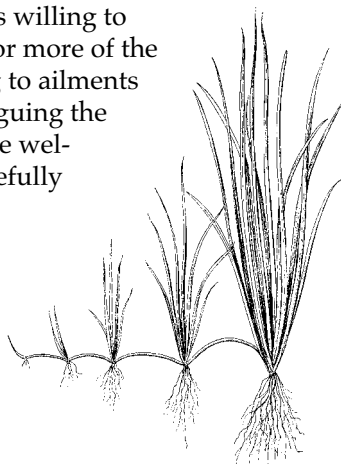
**there are an overwhelming number of benefits**

# GREEN FARMACY GARDEN

Jim Duke  
Herbal Village  
8210 Murphy Road  
Fulton, MD 20759

Closing in on age 70, my desires for gardening have not yet diminished. It's nice here on my 6-acre farmette called Herbal Village (Fulton, Howard County, Maryland). Matter of fact, gardening is one easy way to accomplish five things useful at slowing the ravages of old age: (1) exercise, (2) fresh air, (3) relaxation, (4) sunshine (not too much now), and (5) communion with Nature. This year I am finally putting together what I call my "Green Farmacy Garden," arranged with some 80 plots representing most of the major ailments. In each plot, I grow some of the major herbs recommended for the ailment, assigning it a relative efficacy code (three being the most efficacious). It's my feeling that city people who are taking herbs in tinctures and tablets should make a self-empowering visit with the herbs they feel are, or should be, helping them. Communication with the herbs, gardening, and harvesting, all are self-empowering and healing in themselves.

The garden is not open to the general public, but half- or full-day tours can be arranged by reservation for 1-20 people. Funds derived from such tours will be plowed right back into maintenance of the garden. Call me, Jim Duke, for details pertinent to bookings at (301) 498-1175. Some of the plants I intend to include are extremely difficult to come by (e.g., belleric myrobalan, brigham tea, brindleberry, chebula, cinnamon, devil's claw, guggul, gymnema, pygeum, yohimbe). If anybody can help with living plants of these rarer ones, let me hear from you. Volunteers willing to work with one or more of the 80 plots relating to ailments that may be plaguing the volunteer will be welcome under carefully circumscribed circumstances. There's a lot more of interest to learn at the Herbal Village come visit.



**Communication with the herbs, gardening, and harvesting are self-empowering and healing**

# Botanizing the Web



Visit the  
New  
SEB Web Site  
[www.econbot.org](http://www.econbot.org)

Check out our web page, [www.econbot.org](http://www.econbot.org), to keep updated on upcoming meetings, what's new, officers, and publications. Through the web page you can print SEB color brochures, subscribe to the Society, link to the Editorial Offices to view winners of the Klinger Book Award or study the Economic Botany Journal policies and manuscript requirements, link to the SEB UK Chapter Home Page, view pictures (we hope) of the 1998 meetings, and more!

I enjoyed reading the Spring 1998 Society for Economic Botany Newsletter and particularly the article on "Botanizing the Web." I have been very involved with revamping the look of the Center for Plant Conservation (CPC) website and am always on the lookout for ways to publicize our site.

Our website [www.mobot.org/cpc](http://www.mobot.org/cpc) contains the following information:

- Mission statement
- Frequently asked questions
- Contact information

- Information on the National Office
- Participating Institutions
- Information on the National Collection of Endangered Plants
- Information on our Friends of CPC program
- Publications
- Internships
- Seed Storage
- Links to other conservation sites

Submitted by Faith Maddy,  
[maddy@mobot.mobot.org](mailto:maddy@mobot.mobot.org)

A new issue of IBIN.net, the newsletter of the Indigenous Peoples' Biodiversity Information Network, is available on-line at [www.ibin.net](http://www.ibin.net)

For a Medical Botany syllabus see: [www.ars-grin.gov/duke/syllabus](http://www.ars-grin.gov/duke/syllabus)

Check out the new updated  
Phytopharmacognosy website organized by  
[J.Wilkinson@mdx.ac.uk](mailto:J.Wilkinson@mdx.ac.uk)  
[www.mdx.ac.uk/www/pharm/](http://www.mdx.ac.uk/www/pharm/)

Here is a new Website for Special Forest  
Products: [www.se4702.forprod.vt.edu/  
special\\_fp/special\\_fp.htm](http://www.se4702.forprod.vt.edu/special_fp/special_fp.htm)

The DEB,  
Hugh Iltis,  
points out  
tillering in  
a maize  
plant at the  
home of  
Henrik  
Balslev.



# PUBLICATIONS

Recently many books have been published within the general field of economic botany and ethnobotany. This resurgence of interest in cultural and biological diversity verifies an expansion within our discipline. To offer members the best coverage, the Newsletter lists new publications and often writes short reviews. More in-depth reviews of some of these same books as well as many others are in the SEB Journal. If you are interested in any of these books for review or other books, please contact Dan Austin Book Review Editor, [daustin@fau.edu](mailto:daustin@fau.edu)

**SPECIAL OFFER:** The Journal of Economic and Taxonomic Botany would like to offer SEB members 3 issues for only \$US 50.00. The articles include topics germane to our membership, focusing on Medicinal, and Economic Plants from the Indian subcontinent and Asia. This is a savings of \$110.00. Send payment or inquiries to: Pawan Kumar Scientific Publishers, 5-A New Pali Road, P.B. No 91, Jodhpur 342 001, India.

The Journal of Experimental Botany. Oxford University Press is pleased to announce that it is now fully available online. Subscribers can now access a backfile of papers, full text articles, and the latest information before publication. Visitors can view a free sample copy. Please visit our [www home page at http://www.oup.co.uk/exbotj/](http://www.oup.co.uk/exbotj/) Contact Oxford University Press, 2001 Evans Road, Cary, NC 27513, USA. Phone: 1-800-852-7323 or 919-677-0977 Fax: 919-677-1714 email: [jnlorders@oup-usa.org](mailto:jnlorders@oup-usa.org)

Environmental Archaeology: The Journal of Human Palaeoecology The Association for Environmental Archaeology, an international group of approximately 500 members based in the UK, has just launched a new journal. We are inviting all members of SEB to submit papers. Economic botany is of great interest to both archaeobotanists and palynologists, and any new research, that may help us better understand the use of plants in the past, would be of interest.

Submitted by: Dr. Wendy Smith, PR Officer - Association for Environmental Archaeology, Department of Ancient History and Archaeology, University of Birmingham, Edgbaston Birmingham B15 2TT, UK

Special Forest Products: Biodiversity Meets the Marketplace. Editors: Nan C. Vance and Jane Thomas. General Technical Report GTR-WO-63. Washington, DC: U.S. Department of Agriculture. 1997. To order a printed copy call (503) 808-2138 or write to: PNW Publications. Portland Habilitation Center. 5312 NE148th. Portland, OR 97230-3438 Include GTR number.

Although North American forests traditionally have been viewed as a source of wood and paper, a variety of profitable products are being discovered that come not only from trees, but from non-woody plants, lichens, fungi, algae, and microorganisms. The northern temperate forests' abundant biotic resources are being transformed into medicinals, botanicals, decoratives, natural foods, and a host of other novel and useful products. These products are referred to as secondary, specialty, special, or non-timber forest products. Consumer forces, social climate, expanding global markets, and an increase in entrepreneurialism are contributing to a new interest in developing these products as a viable economic option. Species diversity, a biological attribute that contributes to the ecological stability of forests, takes on an economic value to those sourcing or "biodiversity prospecting" for natural products. Consideration should be given to how this diversity might contribute to stabilizing economies, particularly of communities that have a vital relationship with forests. A totally integrated model of ecosystem management or of sustainable forestry would include this kind of interaction.

A Field Guide to Medicinal and Useful Plants of the Upper Amazon by J.L. Castner, S.L. Timme, J.A. Duke.

The size of this book does not reveal the depth of information for the casual field ethnobotanists or the professional. The photographs are the best I have ever seen in a field guide making them an excellent supporting tool. The photos do more than assist in identification, they also demonstrate the traditional use of the plant. The bibliography is complete and will help the user to continue to find professional sources for their taxonomic goals.

**Subscribers can now access a backfile of papers, full text articles, and the latest information before publication**

**The photographs are the best I have ever seen**

*Continued next page*

# PUBLICATIONS

*Continued from previous page*

My only criticism is that there are no references for the use statements. Then again, with many references, it would never fit in your backpack.

Contact: Feline Press, P.O. Box 7219, Gainesville, FL 32605, USA.

jlcastner@aol.com

\$38 including S&H.

Discounts are available with quantities.

ISBN 0-9625150-7-8.

## Economic Uses of Traditional African Plants

by Helen Marcan. This informal text is organized alphabetically by families and genera, with a cross reference by country and use and concludes with an extensive bibliography to offer a wonderful representation of useful African plants. A typical listing first offers a plant description, then medicinal use, non-medicinal or culinary uses, and is followed by any cautionary comments. Ms. Marcan's extensive ethnobotanical experiences are obvious throughout this publication. Any African researcher will find this essential for their shelf. Contact the author for copies at 11 Heath Close, Milcombe, Banbury, Oxon OX15 4RZ, UK.

## Measures of Success, Designing, Managing, and Monitoring Conservation and Development Projects

by Richard Margolis and Nick Salafsky. Trying to find definitive case studies on sustainability is near to impossible. Even guidelines are limited, but a few researchers, such as Chuck Peters, Tony Cunningham and Jan Salick, have been authoritative in this area. Only the Biodiversity Support Program has made it their mission to meet this need as we try to harness the appropriate methods to conserve our natural areas, including traditional cultures. Through their experiences in projects from Latin America, Africa, and Asia, they have been able to verify successes of designing, managing, and monitoring conservation and development projects. No longer are these just academic theories, but field-tested systems compiled as tools for our future use. This is a step-by-step guide to assist the process of developing clearly-stated and designed goals that provide

accountability for managing field projects. I cannot praise this text enough. Contact: Island Press, 24850 East Lane, P.O. Box 7, Covelo, CA 95428, USA.

ipwest@igc.apc.org \$35.00.

ISBN1-55963-612-2.

## Native Ethnobotany

by Daniel Moerman. This is an incredible undertaking, which has resulted in the indexing of 4,000 plants and 44,000 uses. This encyclopedia of information is reasonably priced so anyone can purchase it. The plants are cataloged and each use includes the associated tribe and references. The catalogue is followed by a listing of the tribes and the plant uses, and then a list of plant uses, and finally the bibliography. There are many cross-references that allow this book to be extremely useful for any interested person, whether a student or professional. What a monumental work by Dan!

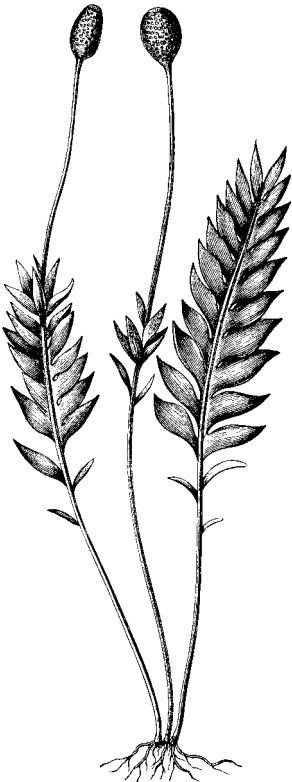
Contact Timber Press, 135 S.W. Second Ave. Suite 450, Portland, OR 97204, USA. \$79.95 ISBN 0-88192-453-9.

Over the past several years, Dan had a fund raising drive so copies of this text could be sent to each registered Amer Indian Tribe. He did manage to send out 105 copies and is still hoping for a big gift to be able to send the remainder. Please consider this, and contact him at the above address, Ed.

Forest Pharmacy, Medicinal Plants in American Forests by Steven Foster. This small book restates the valid use of native plants in U.S. forests today. The forest is a pharmacopeia that still has potential. Steven's well-known photos highlight pages that identify keystone medicinal species from our forests. The 57-page booklet identifies 120 trees, herbaceous plants, and shrubs listed for their medicinal values, 14 of which are discussed in depth. The majority of the book is not a plant listing, but a discussion of the process that has led to the demise of the forest plant use and their resurgence with international models to support the current trend of safe and long-term modern plant medicines. The booklet concludes with a discussion regarding the regulation of medicinals, patent laws, dietary supplements, and challenges for the future. At the end of the text are three tables listed by

*Continued next page*

No longer are these just academic theories



# PUBLICATIONS

*Continued from previous page*

plant forms and their uses. An extensive reading list concludes this work. Contact: Forest History Society, 710 Vickers Ave, Durham, NC 27701. ISBN 0-89030-151-8.

Wild Species as Commodities: Managing Markets and Ecosystems for Sustainability, by Curtis H. Freese, World Wildlife Fund. March 1998. Island Press. ISBN: 1-55963-571-1. \$US 29.95 paperback. Wild Species as Commodities presents a balanced, scientifically rigorous consideration of the link between the commercial consumptive use (CCU) of wild species and biodiversity conservation. The outgrowth of a four-year World Wildlife Fund study, the book is both a synthesis of findings and a practical guide. Topics examined include: the economics of wild species use, social and institutional frameworks, ecological impacts, conservation benefits of wild species use, and management

principles, and guidelines. Wild Species as Commodities provides a primer on the CCU-biodiversity link, and an interdisciplinary analysis of the major economic, social, and ecological factors involved, along with guidelines for incorporating biodiversity conservation into commercial harvesting programs.

A new book on Analogue Forestry, A Technology to Build Biodiversity in Degraded Ecosystems, by Ranil Senanayake and John Jack, published by Monash University, Australia. Contact: Publications Secretary, Department of Geography and Environmental Science, Monash University, Clayton, Victoria, Australia. Fax: 61-3-9905 2948. email [gary.swinton@arts.monash.edu.au](mailto:gary.swinton@arts.monash.edu.au) The authors offer a unique remedy for replenishing the over-harvested, marginalized tropical rainforests.

**it is forbidden to walk around (except for scientists such as us)**

## Field Trip #1

by Teresa Almeida

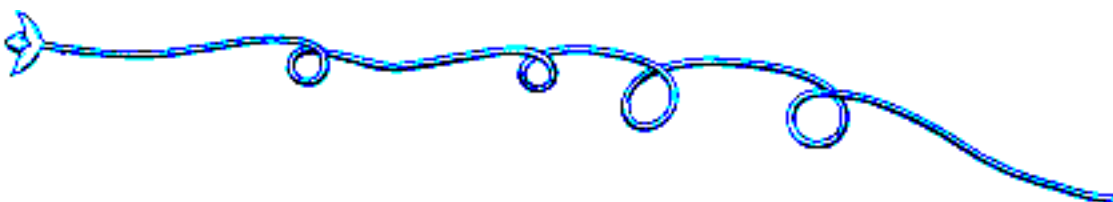
On the 13th of July, 1998, a lovely day (it did not rain!), we started our trip to the Danish Lake District. We visited eight lakes. Some are solitary; others are linked by narrow water courses. The deepest lake was 25 m. They are divided into two main types, either alkaline (in the east) or acidic (in the west). But, they are all presently clean and transparent, sometimes with sandy bottoms.

Some lakes are private, but all of them are considered nature reserves. Thus, one can swim across the lake, but it is forbidden to walk around (except for scientists such as us). It is almost unbelievable that some of these lakes were completely polluted a few decades ago. The Danish have oxygenated some lakes so well that they now look brand new.

And, by some miracle, the flora indicated in the guide was there: Batrachium peltatum, Callitriche cophocarpa, Myosotis palustris, Isoetes lacustris, Litorella uniflora, and so on.

Hans-Henrik Schierup, our extremely knowledgeable and friendly colleague, made us feel at home. And, we were amazed to learn that 30 million years ago the flora of the lignite area was just like Miami nowadays! Besides, he gave us a vivid lesson on Phragmites (reed), using a huge specimen just taken from Hampen So. We learned about its economic value: it is still used for thatching roofs which last for 50-60 years and provide nesting sites for sparrows. Locals believe, the best sign is to have Sedum growing on top of the thatch because it protects the dwelling from lightning and every other evil. So, next time . . . don't miss it!

**30 million years ago the flora of the lignite area was just like Miami nowadays!**



## Field Trip #2

by Gail E. Wagner

The second field trip skimmed across the beautiful Danish countryside north of Aarhus to visit four places. Along the way we learned details about farming in Denmark from our knowledgeable trip leader, Dr. Esbern Warncke, and from informative brochures. The farmers in Denmark formed their first union in 1805. Today, the typical farm is family owned and operated and averages 40 hectares in size.

After driving by the Danish Agricultural Advisory Centre, we stopped at the Foulum Research Centre of the Danish Institute of Agricultural Sciences. The Institute, which is newly formed under the Ministry of Food, Agriculture and Fisheries, conducts innovative and holistic research on all aspects of agriculture. There, we toured the experimental fields where organic crop rotations for grain (barley, wheat, oat, ryegrass, peas, lupine, ley, grass, clover, and beet) are tested. The plots were beautiful and I saw many crops that are uncommon in South Carolina. The abundance of flowers in July in Denmark reminded me of a lush early April in South Carolina.

Our third stop was in Lindenberg at a tree nursery and forest. Did you know that

there is some form of public access to both public and private forests in Denmark? Already 11% of Denmark is forested (that's about 1000 sq m of forest for every Dane), but the goal is to double this area by 2100. Denmark is also one of the leading growers of Christmas trees in Europe. We met students transplanting tree seedlings, and then viewed incredibly trimmed Abies (seed collected from western North America), whose branches are cut to great heights on each tree for sale as greenery.

Our final and most dramatic stop was in Kongerslev at the Pindstrup Mosebrug A/S peat bog. On the right-hand side of the road a peat strip mine serviced by railroad cars stretched to the horizon. The 8-10 m of peat that overlies chalk in this area is mined in rectangles and stacked to dry. On the left-hand side of the road we enjoyed walking out onto an undisturbed bog — what May Thielgaard Watts once called a “history book with a flexible cover.” Shoes were shed as people explored the bog at the macro and micro levels.

Altogether, the trip was a wonderful opportunity to become acquainted with both the Danish countryside and other conference attendees. Check our web page — we hope to post some pictures showing the places we visited!

**Shoes  
were  
shed  
as  
people  
explored  
the bog  
at the  
macro  
and  
micro  
levels**

**SEB President-  
Elect Gail  
Wagner and  
Webmaster  
James Morley  
at the peat  
bog.**



# ETHNOBOTANNEWS

Science News, 1998, 154(5):79 reports from the Innovations in Materials Conference that scientists at the E. Khashoggi Industries of Santa Barbara, California, have developed highly biodegradable foam for fast-food packaging made of starch, chalk, and wood fiber coated with wax.

Submitted by Gail E. Wagner

"An expression of culture, history, and lifestyle" in Nutrition Reviews, 1997, 55: 383-389 is about the importance of the Mediterranean diet in preventing heart disease and that cactus pears, Opuntia ficus-indica were an important part of that diet.

"1 in 8 Plants In Global Study Threatened, 20-Year Project Warns Of Major Diversity Loss" by Curt Suplee Washington Post Staff Writer Wednesday, April 8, 1998; Page A01. The first international survey of plant diversity has found that at least one out of every eight known plant species on Earth is now threatened with extinction or nearly extinct. The results of a 20-year joint effort among 16 organizations including the Smithsonian Institution show that habitat destruction and introduction of non-native species have caused approximately 34,000 species to become so rare that they could easily disappear. That amounts to 12.5 % of the 270,000 fern, conifer and flowering species known worldwide. Of the imperiled species, 91 % exist in no more than one country.

...In some cases, entire plant families are in trouble. For example, 75 % of the yew family — which produces the anti-cancer drug taxol is threatened with extinction globally. Even familiar groups are in trouble, including approximately 14 percent of roses, 32 % of lilies and irises, and 29 % of palms.

...Agriculture could be affected by loss of potential new food strains and ecosystem vigor. "There is an accumulating body of evidence indicating that as biological diversity is lost, there are changes in the way both natural and managed ecosystems function," said ecologist Christopher B. Field of the Carnegie Institution of Washington, "and they can often have negative impacts on goods and services. When there

are more plant species present, the recovery from disturbance is faster and total production is greater."

The IUCN, which is scheduled to release the study simultaneously in Washington, London, Capetown and Canberra, emphasizes that data from some parts of the world "are patchy or lacking," particularly in sections of Africa, Asia, the Caribbean and South America. Thus, Brazil, with 56,215 reported plant species, is listed as having only 2.4 percent of its flora threatened. The U.S. figures from the report agree in general with a 1987 study from the Center for Plant Conservation in St. Louis, which found about 25 % of American species in danger. © Copyright 1998 The Washington Post Company

"Confused on Garlic Products: JAMA Study on Garlic Oil Not Applicable to Most Garlic Products in U.S." Austin, TX, June 17, 1998. JAMA published a study erroneously concluding that garlic is not helpful in lowering cholesterol. The study was based on a garlic oil product that does not contain one of garlic's essential therapeutically active compounds, allicin. "It's obvious that the active principle deteriorates in the steam-distilled oil preparation, so they shouldn't expect any significant biological activity, unless the product is prepared fresh for each usage," said Varro Tyler, former Dean of Pharmacy at Purdue University and a trustee of the American Botanical Council.

Rational Phytotherapy: A Physician's Guide to Herbal Medicine by Tyler, Schulz, and Haensel, states that, according to clinical studies published in Germany, where the JAMA study originates, preparations made from garlic oil are not as effective as garlic powder.

The placebo-controlled study published in JAMA involved administration of 5 mg oil capsules twice daily, on and off for six months and concluded "The commercial garlic preparation investigated had no influence on serum lipoproteins, cholesterol absorption, or cholesterol synthesis. Garlic therapy for treatment of hypercholesteremia cannot be recommended on the basis of this study."

**fast-food  
packaging  
made of  
starch, chalk,  
and wood  
fiber  
coated  
with wax**

**JAMA  
Study  
on  
Garlic Oil  
Not Applicable  
to Most  
Garlic  
Products  
in U.S.**

## ETHNOBOTANEWS

*Continued from previous page*

Garlic oil does not represent all garlic preparations, or even the benefits of whole garlic as a food. Kwai's, standardized garlic powder contains the chemicals alliin and alliinase which produce another compound, allicin, the focus of much of garlic. The majority of clinical studies on Kwai do suggest a cholesterol-lowering activity, especially of LDL ("bad") cholesterol.

The JAMA study's primary author, Dr. Heiner K. Berthold, claimed that the garlic oil was chemically similar to powdered garlic preparations, and included allicin. Dr. Joerg Gruenwald (head of PhytoPharm Consulting in Germany and former director of research at Lichtwer Pharma manufacturers of Kwai) in Berlin, said, "Products based on the steam-distilled oil of garlic do not contain the chemical alliin which is essential in forming allicin."

"There are at least 12 clinical studies indicating beneficial cholesterol-lowering activity of Kwai, the leading European

garlic product. In addition, there are 46 clinical studies on other cardiovascular effects of Kwai."

Wakunaga, makers of Kyolic garlic, said, "These negative results do not apply in any way to Kyolic Aged Garlic Extract." All research is published in peer-reviewed journals and shows that Kyolic consistently helps drop cholesterol levels.

The method of preparation of various commercial herbal products has a major influence on their activity in the human body.

Submitted by:

Dr. Arthur O. Tucker  
Department of Agriculture &  
Natural Resources  
Delaware State University  
Dover, DE 19901-2277  
E-mail: [atucker@dsc.edu](mailto:atucker@dsc.edu)  
[www.dsc.edu/tucker.htm](http://www.dsc.edu/tucker.htm)  
FAX 302-739-4997

**Products based on the steam distilled oil of garlic do not contain the chemical alliin**

**Great food, drink, and company were enjoyed at the banquet.**



# MEETINGS AND CONFERENCES

## Past Meetings

Proceedings Available: Natural Resources Income Opportunities on Private Lands, submitted by Jonathan Kays  
<jk87@umail.umd.edu>

On April 5-7, 1998, the Natural Resources Income Opportunities on Private Lands Conference was held in Hagerstown, Maryland, to address the increasing interest of landowners and professionals in income opportunities related to natural resources and recreational access. Attended by 290 landowners and resource professionals from 23 states and the District of Columbia, the conference dealt with how to choose and manage a private land income opportunity while protecting natural resources and minimizing personal liability and financial risk.

The proceedings is divided into eight sections and covers the presentations made by 38 speakers. Topics covered in the proceedings include: trends in recreation and policy, legal liability, marketing, evaluating the resource potential of your property, challenges, and management concerns, such as managing risk, insurance needs, estate planning, and taxes. Papers are included on specific enterprises related to recreational tourism, recreational access, and forest farming and utilization. They include ginseng, maple syrup, sawmilling, fee fishing, recreational enterprises, aquaculture, hunting leases, forest guide services, and alternative forest products.

The proceedings cost \$20 a copy, with four or more copies \$17 each, and eleven copies or more costing \$15 each. Make a check payable to the Washington County Extension Advisory Council, and send it to: Conference Proceedings, Washington County Cooperative Extension, 1260 Maryland Avenue, Hagerstown, MD 21740.  
Phone: (301) 791-1304.

## Upcoming Meetings

Combating Desertification with Plants (Israel November 2-5, 1998)

Topics include: Agroforestry, Aromatics, Industrial and Pharmaceutical Plants, Desert

Oil Plants, Non-Wood Forest Products, Salinity and Halophytes, Fruits and Nut Adaptation at Besor, Technology Transfer, Women - the Best Investment in Development, and more.

The Conference is being organized by IPALAC - the International Program for Arid Land Crops, and sponsored by UNESCO's Division of Ecological Sciences and Finland's Division of International Development Cooperation.

Contact: Arnie Schlissel at email:  
ipalac@bgumail.bgu.ac.il  
www.fao.org/WAICENT/FAOINFO/  
FORESTRY/NWFP/ipalac.htm

Fourth International Cactus Congress. International Cactus Congress to be held jointly between San Antonio and Saltillo, Mexico, in September 2000. Robert Barnes, the Executive Vice President of the American Society of Agronomy, the Soil Science Society of America, and the Crop Science Society of America, made a proposal to the joint societies at their annual convention to co-sponsor the Fourth International Cactus Congress in 2000. It is gratifying that the American Society of Horticultural Science (ASHS) also approved cosponsoring the Fourth Congress.

The University of Texas Health Science Center in San Antonio Health Science Center will host the congress. Contact Fourth International Cactus Congress Plans. International Cactus Congress to be held jointly between San Antonio and Saltillo, Mexico in September 2000. Robert Barnes, the Executive Vice President of the American Society of Agronomy, the Soil Science Society of America and the Crop Science Society of America, made a proposal to the joint societies at their annual convention to co-sponsor the Fourth International Cactus Congress in 2000. It is also gratifying that the American Society of Horticultural Science (ASHS) also approved cosponsoring the Fourth Congress while The University of Texas Health Science Center in San Antonio Health Science Center will host the Congress.

Contact Portillo Martinez  
lportill@MAIZ.CUCBA.UDG.MX

**Combating  
Desertification  
with Plants**

**Fourth  
International  
Cactus  
Congress  
in  
2000**

# MEETINGS AND CONFERENCES

## Building Bridges II

Will McClatchey and Alexandra Paul, with the help of a number of economic botanists and organizations such as the New York Botanical Garden, Missouri Botanical Garden, University of Hawaii and the University of Florida are working on a second Building Bridges with Traditional Knowledge conference (BBT) to be held in Hawaii, May 28- June 3, 2001. The first BBT conference held Feb. 1997 at the University of Florida, Gainesville was a success beyond what we (the graduate student ethnobotany group and our sponsors) had hoped. For the second BBT, we plan to keep the theme of conservation and development and expand the focus so that it is more global. Building Bridges is a conference designed to serve as a conservation and development neutral ground where companies, traditional people, scientists, governments and non-profits can explore ways to work together to forge mutually beneficial relationships.

Recently ethnobotany, ethnoecology and ethnosience in its various forms has enjoyed a renaissance. In addition to its new found popularity, ethnosience has also been given a new task. As industries, governments and indigenous peoples attempt to balance development, conservation and cultural integrity, it has become clear that no one discipline or model can proffer all the answers. Communication among developmental agencies, NGO's, industry, native peoples, government officials, biologists and social scientists, thought difficult and rare, is now becoming a legal and moral necessity. Ethnoscience with their multi-disciplinary training, language and cultural proficiency can and have formed valuable associations among people, governments and institutions. However, there is much work needed to enable all of the relevant parties to understand how these collaborations should be conducted. This six day conference offers a unique opportunity for a diverse group of scholars, industry members, conservation organizations and indigenous peoples to discuss conservation and development issues in North, South and Central America,

Europe & the Mediterranean, Australia and the Pacific Islands, Africa and Asia. It will also enable novices in ethnosience and development to interact with established scientists and members of relevant professional fields.

The objectives for the conference are to: Discuss strategies for incorporating traditional knowledge into research, conservation and development projects and mechanisms for insuring that local people are considered, consulted and compensated.

Discuss the benefits and costs of various strategies used in the past and those proposed for the future.

Discuss the advantages of interdisciplinary and applied research and the role of ethnosience in facilitating people-conscious conservation and development.

Discuss the role of institutions such as universities, aid agencies, corporations, NGO's, PVO's, and governments in fostering interdisciplinary research, conservation and development projects that benefit all the participants, including the local people.

Discuss the differences in interest inherent in attempts at collaboration between traditional peoples, universities, aid agencies, corporations, NGO's, PVO's, and governments and how these differences can be overcome in successful conflict resolution.

## Grants

Partial attendance grants will be given to students, small foundations, grass roots organizations, and small companies who can demonstrate partial institutional support and submit applications by Sept. 15, 2000.

## Speakers

There will be 20 ethnoscienceists from all over the world invited to speak about the theoretical implications of their research. These individuals will speak in the morning sessions. These morning sessions will allow economic botanists, ethnobotanists, ethnoecologists etc. to explore the implications of their research and the

*Continued next page*

**Building  
Bridges  
with  
Traditional  
Knowledge  
conference  
(BBT)  
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2001**

**Partial  
attendance  
grants  
available**

# MEETINGS AND CONFERENCES

*Continued from previous page*

possible formation of ethnoscientific theory. Sixteen workshop leaders will be invited to teach morning applied workshops geared towards providing practical information for companies working with local communities, NGO's and grass -roots organizations.

An additional 30 scientists, politicians, traditional people, industry members and foundation representatives from all over the world will be invited to speak in the afternoon sessions.

## Invited Participants

One of the unique features of the conference is that we hope to invite four hundred participants from local communities around the world. It is important that a conference about building bridges with traditional knowledge involve as much participation as possible from the people who are the keepers of traditional knowledge. To this end we will raise the funds and in-kind contributions required to help these local community travel to and attend this conference.

We are in the early planning stages and would appreciate any feedback from Economic Society members about possible organizations to involve, possible speakers, possible sponsors, etc. Many members of the society may also want to attend and apply for grants to help bring collaborators from their field sites to the conference. Working with established economic botanists to find ways to bring their collaborators to the conference will enable us to provide examples of existing collaborative bridges for other organizations or researchers who are newcomers to the field or who would benefit from the experience of their peers. Registration information will be forthcoming in future issues of the newsletter.

Please contact us if you have any questions or comments or would like to help. We can be reached at:

bbt2@hawaii.edu or  
Fax: (808) 956-3923 or  
Building Bridges Conference  
University of Hawaii  
Honolulu, HI 96822-2279

## CLASSES

### Pharmacognosy Course

We are starting the world's first Internet course on phytopharmacognosy over the Internet. Topics will include botany, plant identification, microscopy, basic chemistry, phytochemistry, pharmacology of herbal constituents (whole extracts as well as isolate chemicals), analysis and quality control of herbal products, research into herbal phytochemistry, and lab techniques (HPLC, TLC, extraction, etc). The first course will start in October 1998 and is limited to 20 students. Tutorials will be conducted via email and lectures delivered by hard copy, with review and feedback via the Internet. The course fees are 500 UK pounds and the course will run over a 6-month period and requires approximately 150 hours of student independent learning.

There will be no examinations, but a certificate will be issued confirming completion of the course.

For more information on how to register, please contact Dr. John A. Wilkinson BSc PhD DIC MRSC C CHEM  
Senior Lecturer in Pharmacognosy and Phytochemistry on the BSc degree in Herbal Medicine Programme, School of Health, Environmental and Biological Sciences  
Middlesex University, Enfield, Middlesex EN3 4SF United Kingdom  
email: J.Wilkinson@mdx.ac.uk  
Phone: 0181 362 6425 Fax: 0181 805 0702  
International: 44 181 362 6425;  
Fax: 44 181 805 0702;  
<http://www.mdx.ac.uk/www/pharm>

XIX Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS) "Geoinformation For All" to be held in Amsterdam, The Netherlands, July 16-23, 2000. Contact: ISPRS Organizing Committee, Attn. Ms Saskia Tempelman, c/o ITC  
P.O. Box 6  
7500 AA Enschede  
The Netherlands. Tel: +31-53-487-4358.  
Fax: +31-53-487-4335.  
email: [isprs@itc.nl](mailto:isprs@itc.nl)  
URL: <http://www.itc.nl/~isprs>

**we hope  
to invite  
four hundred  
participants  
from  
local  
communities  
around  
the world**

**"Geoinformation  
For All"  
to be held in  
Amsterdam,  
July 16-23,  
2000**

# MEETINGS AND CONFERENCES

**Third  
International  
Symposium on  
Novel and  
Non-Conventional  
Plants:  
Prospects Of  
Their  
Practical Use,  
which will  
be held in  
Puschino on  
June 21-25,  
1999**

The Organizing Committee of the Third International Symposium on Novel and Non-Conventional Plants: Prospects Of Their Practical Use, which will be held on June 21-25, 1999 in the city of Puschino, Russian Federation, herewith invite you to participate. Registration form can be emailed or faxed to:

**Dr V.K. Gins,  
Symposium Secretary, s.265,  
A.N. Bakh Inst. of Biochem.  
Leninskii Prospect, 33,  
Moscow 117071, Russia**  
Phone: (095) 954 31 26  
Fax: (095) 954 27 32  
email: INBIO@GLAS.APC.ORG

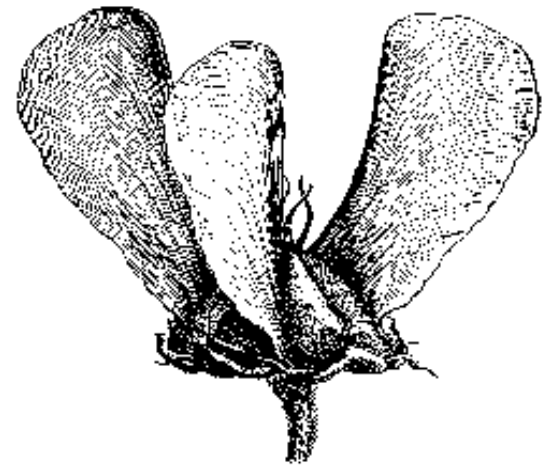
**Permacultur@aol.** Elfin Permaculture's third Annual Permaculture Design Course Online will begin at the end of November 1998. The in-depth course runs 5-6 months, depending on class needs. The course includes at-home reading assignments, "lectures," discussions of current themes and student projects, student reports, and a permaculture design project completed by each student. Successful completion of all course requirements leads to certification as an entry-level permaculturist.

The course is particularly suited to people who cannot take two or three weeks for a live permaculture course, people living in areas distant from such live courses, and people seeking a particularly in-depth training in permaculture. Advance students may arrange to take the course at an advanced level. The course is not suitable for people who require a more tactile approach to learning, unless arrangements are made to hybridize the course with live training programs.

As in all Elfin Permaculture programs, we offer some scholarships. However, for the online course the number of scholarships is very limited, with a backlog of qualified applicants. Students are encouraged to seek funding from suitable donors.

Elfin Permaculture has arranged several alternative approaches for people who want exposure to the course material but cannot take the course at this time. As in our previous online courses, we offer monitor status at a nominal fee, so people can follow the course reading, receive special instructor's materials, and read class discussion as they see fit. In addition, Elfin Permaculture offers for the first time a complete set of reading assignments and course notes, on disk or in print. We are aware that for some people, downloading email materials is not possible or is prohibitively expensive due to time charges by their ISP. They can now receive the class materials by mail. In addition, we will take up to two conventional correspondence students, on a one-on-one basis, at one time, either via mail or email.

For more information, request the course protocol and reading list from **ElfinPermaculture** at [Permacultur@aol.com](mailto:Permacultur@aol.com) home page: <http://home.ptd.net/~artrod/epta/eptahmp.html>



## **ECONOMIC BOTANY INDEX**

The index to our journal, Economic Botany, is nearing completion. Now is the time to check whether you are missing any back issues. Once the index is published, we'll be selling a lot of back issues, so check what you need and order now.

**Are you  
missing  
any  
back  
issues?**

# GERMPLASM NEWS & VIEWS

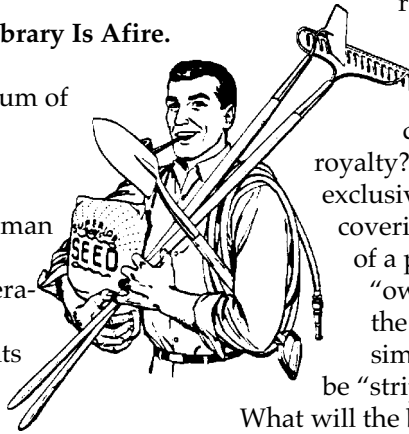
by David Theodoropoulos

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“...there was one thing we weren’t thinking of,  
and that’s money—  
money changes everything...  
we think we know what we’re doing  
but we don’t pull the strings  
it’s all in the past now  
money changes everything...”  
—Tom Gray, “Money Changes Everything”

## BIOPIRACY: Part II— Locking the Doors after the Library Is Afire.

In Part I, we examined a spectrum of actions which have been called “biopiracy,” ranging from the clearly exploitive, such as the unprecedented patenting of human cells without the source individual’s consent or remuneration, to the clearly beneficial transport and exchange of plants and knowledge between cultures by the free and uncoerced actions of individuals, such as immigrants, travelers, and botanic gardens. How are we to distinguish between theft and exchange? Various proposals that attempt to redress the obviously exploitive instances will also harm the beneficial. The Convention of Biological Diversity (CBD) gives signatory nations sovereignty over all biological diversity within their borders, and it is supposedly proposed to make this retroactive to include *ex situ* material gathered before its enactment. Ownership of traditional varieties and intellectual property for rural communities and indigenous peoples is another step, as is PIC[NIC] (Prior Informed Consent, or assumption of No Intention of Consenting). The benefits these proposals attempt include: redressing inequalities in the wealth and power of nations; encouraging nations to protect “their” biological diversity and “their” indigenous peoples for their potential economic value; providing indigenous peoples with a chip with which to bargain for economic benefits as well as for their cultural survival. Advocates for indigenous and rural peoples argue for intellectual property rights (IPR) to ensure that they receive their fair share of benefits resulting from their plants and knowledge. Advocates for corporations



argue for IPR that they may recoup their investment in breeding and biotechnology, and provide a return for investors. Leaving aside the more fundamental questions of whether monopolistic control of humanity’s food, medicine, and genetic makeup is desirable, or whether those who already have an excess of wealth to invest are due further return, or whether IPR as applied to living organisms is biologically sound, many other questions are unanswered. Will corporations seeking to commercialize an organism whose

range overlaps several countries or indigenous nations be able to pit one against another in “bidding down” to the lowest royalty? Will corporations seek exclusive or blanket contracts covering all plants and knowledge of a particular group, effectively “owning” their culture? Under the CBD, can nations make a similar claim? Will they then be “strip mined” and discarded?

What will the benefits be, and who will administer them? The local missionaries? A government or corporate-installed tribal government? The traditional elders? For what? Clinics? Missionary-run schools? Computers? Television? Land rights? Something you don’t like? Who will decide? How will dissent over use be handled? Will informed consent include full disclosure of the harmful properties of schools, clinics, television, or money? Is a collective claim on a healer’s knowledge always just? Communities often have ambivalent relationships with their healers—I know curanderos who have to deal with accusations of witchcraft and death threats from their communities. Some healers have secret “proprietary” knowledge—does their community have a claim on this? Who will qualify as an “indigenous community” with rights? Relocated Cherokees, African-Brazilians, American hillfolk, Hawaiians, Mestizos? Will states (e.g., Florida) claim bio-sovereignty? Will national sovereignty over biologicals create black markets and smuggling? What types of corruptible permit bureaucracies will develop to place roadblocks before research? (cf. Holling & Meffe, *Conservation Biology* 10(2):328-337, & Winker 10(3):703-707.)

*Continued on back page*

**monopolistic  
control of  
humanity’s  
food,  
medicine,  
and genetic  
makeup**

**How will  
dissent  
over use  
be  
handled?**

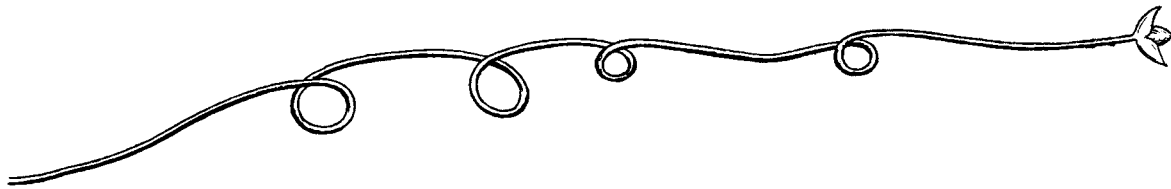
# GERMPLASM NEWS & VIEWS

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How will immigrants be able to access their traditional foods and remedies? Could they be prosecuted for illegal export of seeds or knowledge? Will the extension of sovereignty over ex situ material effectively extinguish all public domain germplasm, since it would be "owned" by some nation? What will become of our traditions of free inquiry and free exchange?

The logic and structure of IPR seems to lead inevitably towards systems of complete control. Just as the invention of

barbed wire led inevitably to the privatization of lands which previously could not be controlled, so IPR is extending those barbed-wire fences into the commons of crop germplasm and wild biological diversity, into the very DNA of our cells, and into our cultures and minds. Nothing is off limits. Everything will be commodified, nothing will have value outside the market. The CBD obligates nations to recognize IPR of living organisms, and in our rush to embrace this, we risk creating a new form of predatory colonialism. Next issue: Biopiracy: A Modest Proposal.



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