

# PLANTS & PEOPLE

Volume 12

Spring 1998

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## **SPECIAL EVENTS PLANNED FOR THE ANNUAL MEETING IN DENMARK**

by Jan Salick, President

We anticipate exceptional annual meetings in Aarhus, Denmark this summer (July 13-17) hosted by Professor Henrik Balslev and featuring a special symposium on Palms and People. There are many special events associated with the meetings, as well, to which we are looking forward.

For fun and relaxation, Henrik is offering two 1-day field trips. On 13 July, before the meetings, you can visit the Danish Lake District on a classical botanical fieldtrip to the central part of Jutland. This provides beautiful glacial landscapes of moraines, valleys and hills and the vegetation of lake-shores, hills and forests. After the meetings, on 17 July, there is a more specialized tour to observe economic plants of Eastern Jutland. We will see many of the economically important plants of the area, visit an experimental station, and see installations where plants are processed.

To open the meetings, there will be an informal reception and mixer following registration on Monday evening, 13 July. Fieldtrippers, please save a little energy to meet with the larger group. Jetlaggers, this is made for you since your body may think it's still meant to be broad daylight.

On Tuesday evening, 14 July, there will be time for a series of parallel workshops. So far three groups have asked to be announced, (1) Formation of a European SEB Chapter, headed by Professor Almeida of Portugal; (2) Curation of Economic and Ethnobotany Collections, led by Dr. Hew Prendergast, head of CEB; and (3) SEB Coordination of Webpages and Teaching on the Web, facilitated by James Morley, Kew. More workshops can be added between now and the meetings or, in situ, at the meetings.

Professor Sir Ghilleen Prance, our past-President and Director of the Royal Botanic Gardens, Kew, was not able to speak to us last year. As a result, we have asked him to give a special presentation on ethnobotany this year. Iain has been one of the leaders in the renaissance of economic and ethnobotany in recent years, and his address will likely lead us to further innovation and insight. The title of his talk is: "Ethnobotany of Amazonian Indigenous People".

Henrik Balslev is also planning a special banquet for us on Wednesday evening, 15 July, including the address of the Distinguished Economic Botanist of 1998. We won't announce that award yet, but be assured that the presentation will be lively and entertaining, as well as intellectually stimulating. Aside from the DEB, awards for student presentations and posters, and for past service, as well as the Richard Schultes Award will be made at that time.

Please remember to bring nomination suggestions to the meetings. We will be looking for nominations for Distinguished Economic Botanist, President-elect, Secretary, Council Members and committee members.

Finally, in traveling to or from the meetings in Denmark, we should consider visiting the Royal Botanic Gardens, Kew in London, which is soon to open its new Economic Botany exhibit. With Kew's completion of the restoration work on Museum No. 1, a Plants and People exhibition is due to open there at the end of May.

As you can see, the meetings promise to be eventful and exciting. Please, register as soon as possible and send Henrik abstracts, to facilitate planning and preparation. Also, check on reduced airfare specials as soon as possible.

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

# Notes from the Field

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Dear Members,

Well time passes and another letter is finally upon your doorstep. I am overwhelmed at the new materials that are now generated from the WEB, but I would still prefer if more people would write. I challenge members to send in their most traumatizing field experience, their failures, and their success in situations that are universal, so younger professionals as well as more seasoned members can benefit. The point is to initiate conversations among the members instead of my narrative. Send them anonymously or take the plunge and get your name in print.

The announcement of the meeting should have been received by now and hopefully many of you have made your reservations. Our UK Chapter is very active and we are excited about meeting with colleagues from Europe and regions nearby. Look for the additional information in this issue.

Please note the new WEBSITE [www.econbot.org](http://www.econbot.org). We would like to thank Michael Thomas for his volunteerism and ability to create a beautiful page with such a simple website address.

As every spring the list of classes is included. Please check see if your class is there and accurately listed. Remember this is a list for members only. Ask people to join before you share the list. I will be working on a list of summer programs to include next. Please forward your syllabus and information about your summer program.

Keep those rich tidbits of information heading my way or a letter to know what you like and what you may want deleted in the future.

See you in Aarhus,

Trish

## MEETINGS AND CONFERENCES

### PAST MEETINGS

**The Second Annual Aromatherapy and Herb Conference & Trade Show** held February 20-22, 1998, in Scottsdale, Arizona attracted 600 people from all over the world.

The conference presented 62 workshops and lectures. On the subject of herbs, David Christopher and Sandra Ellis from the School of Natural Healing, gave very informative talks. Peter Busnack, Director of Reeves Mountain School of Self-Reliance, talked about how he survived in the desert without bringing food or water, and common weeds that are edible in the Southwest region. Linda Burnham, Wendy Payton and Judith Jackson, talked on the subject of beauty care. Carol Schiller, author, and Nadine Artemis, from Aromatic Osmosis, spoke on the benefits of aromatherapy. Dr. Kim Le, author, addressed the important role the mind plays in the healing process.

The third annual conference is being planned for 1999. The number for the International Aromatherapy and Herb Association is: (602) 938-4439 or email: [jeffreys@aztec.asu.edu](mailto:jeffreys@aztec.asu.edu).

### REGIONAL WORKSHOP ON MEDICINAL PLANTS AND TRADITIONAL MEDICINE IN AFRICA, CONAKRY, 17-21 NOVEMBER, 1997

The Environment Liaison Centre International (ELCI) was established in 1974 with the aim of strengthening communication and cooperation between NGOs and local communities, providing liaison between NGOs and the United Nations Environment Programme (UNEP), helping to strengthen NGO and local communities capacities in developing countries, and encouraging the advisory role of NGOs through the organs of the United Nations. ELCI is an international non-governmental organisation, which groups together more than 900 organisations in more than 100 countries. ELCI acts as the secretariat as well as the

## Newsletter Committee

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# MEETINGS AND CONFERENCES

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coordination centre for several NGO networks and supports communities and organisations at the local and national level by helping to develop effective leadership on plant genetic resources, natural pesticides and medicinal plants.

A regional workshop on medicinal plants and traditional medicine in Africa was held in Conakry, the Capital of Republic of Guinea (West Africa), from 17 to 21st November 1997.

The workshop was the first in a series of workshops, which are organised on a regional basis designed to identify needs and priorities in Medicinal Plants and Traditional Medicine in Africa. A similar workshop is scheduled for NGOs and researchers from Anglophone countries in April 1998.

The objectives of the workshop were to provide a forum for exchange of experiences on sustainable use and conservation of medicinal plants and on traditional medicine practices in Africa, to examine mechanisms and strategies to develop participatory action/research regarding medicinal plants and traditional medicine in accordance with the priorities established by the communities themselves, practitioners and their representatives, to encourage appropriate collaboration between practitioners and specialists (scientists, health professionals, etc.) to meet local development objectives pertaining to medicinal plants and traditional medicine, review progress which contribute to the development of various fields in medicinal plants and traditional medicine and encourage continued work in the areas; identify gaps, needs and priorities and recommend action for sustainable utilisation and promotion of medicinal plants and traditional medicine to meet medicinal resources conservation and local health needs in Africa, identifying potential and regional actions which complement the needs and capabilities identified by participating countries with regard to utilizing medicinal plants and traditional medicine.

A report will be produced (in French) and will comprise the papers presented at the seminar and summaries of discussions and recommendations.

## PHYTOMEDICINES DEVELOPMENT: BOTANICALS FOR THE 21TH CENTURY DIA Conference, Cape Town, South Africa 1998

### SUMMARY

- There is a major trend in the United States toward self-medication and natural healthcare choices.

- The US currently lacks sufficient practitioners who are trained and knowledgeable in the use of phytomedicines and, therefore, the potential for problems (both lack of efficacy and potential adverse events) with the use of botanicals becomes very real and an issue for concern.
- The need to address the quality of botanical medicines and regulations which assure label integrity and good manufacturing practices is essential.
- There is a need to invite orthodox ("western trained") medical practitioners to learn and adopt traditional medicine approaches in Africa and in industrialized nations.
- We must build human bridges and strategic alliances to solve sourcing issues and to create sustainable commercial development for medicinal plants as a business.
- Commercial opportunities for botanicals include use as foods (including dietary supplements), drugs (over-the-counter (OTC) and prescription), Biologics (e.g. as vaccines) cosmetics and devices. In some countries, they may be regulated as a separate category called "traditional medicines".
- It was apparent that the regulation of botanicals in the US and in other countries differs greatly from one another.
- There seems to be an ongoing global re-examination of the regulatory status of botanicals. In some cultures, it is moving more strongly toward the "western" paradigm of phytomedicines as drugs, in others the trend is toward considering botanicals within their traditional context.
- Quality standards, extraction methods and chemical and taxonomic identification, both for raw materials and finished goods, is essential, but remains as much an art as a science.
- Intellectual property rights and ownership of plants and the knowledge of their use is a complex and controversial issue.
- Many of the traditional and agricultural sources of phytomedicines are under-informed and therefore at a negotiating disadvantage.
- The ecological impact of a growing botanical trade (phytomedicine industry) is profound.

### CONCLUSIONS

- The conference focused was on the development of botanicals for use in both the "traditional medicine" context of the African continent and as phytomedicines for export to the current major pharmaceutical markets in the world. This is a complex issue and reemphasized the necessity for each culture to build laws, policies, and commercial relationships consistent with their specific needs.
- The cultural differences between the use of botanicals in their traditional context and the use of phytomedicines in a "western" setting quickly became apparent.
- Our enlightened interests of the various botanical constituencies are remarkably common and complementary.
- It is hoped that is the first of a series of conferences to be held in Africa to continue the personal, scientific, and commercial relationships that have been formed or strengthened here.

**The Ecological  
Impact  
of a  
Growing  
Botanical Trade  
(Phytomedicine)  
Industry  
is  
Profound**

## MEETINGS AND CONFERENCES

### NEW MEETINGS

On October 18-21, a meeting on **New Rural Industries** will be hosted in Perth, Australia. People interested in attending are those who work within the field developing new industries in Agriculture. Contact: Promaco Conventions Pty. Ltd., PO Box 890, Canning Bridge, Western Australia, 6153 or Email: promaco@promaco.com.au

There will be a series of **seminars and lectures on Ethnobotany in the Bellingham, Washington area**. They begin in February and continue throughout the year. They are on Friday evenings and Saturdays and a schedule is available from The Friends of the Trees (360) 738-4972, email tern@geocities.net

It is my pleasure to announce **The International Conference on Asia-Pacific Mycological Conference on Biodiversity and Biotechnology**, July 6-9, 1998, Hua Hin, THAILAND.



The focus at this conference is on the diversity of the mycota of the Asia Pacific region; and recent developments in biotechnology and the discovery of novel bioactive compounds.

Keynote Lectures - Dr. Amy Rossman: U.S. National Fungus Collection, U.S.A. "Fungal Diversity in the Asia-Pacific Tropics" and Dr. Joe Baker, O.B.E.: Office of the Environment, Australia "Bioprospecting-Biotechnology Bioactive Compounds from Natural Resources".

Invited Symposia cover topics on biodiversity and biotechnology. Offered papers Symposia include: fungal taxonomy and ecology, fungal ultrastructure, genetic and molecular studies, fermentation physiology, enzymes, screening of novel fungal metabolites, biochemical processes, and new approaches to biodiversity. Posters on any aspects of Asian Pacific mycology will be considered.

For further information please contact: BIOTEC Committee, Gypsum Metropolitan Tower, 15th Floor, 539/2 Sri-Ayudhya RD., Rajdhevee, Bangkok, 10400 THAILAND. Tel. 662-642-5322, Fax 662-248-8305 e-mail: mycology@biotec.or.th <http://www.biotec.or.th/diary/mycology/mycology.htm>

**The Fourth Conference of the Parties to the Convention on Biological Diversity** is to be held in Bratislava, Slovakia May 4-15, 1998. Contact: CDB Secretariat, World Trade Center, 413 St. Jacques St., Office 630, Montreal, Quebec, Canada H2Y 1N9 Telephone 514-288-2220, Fax 514-288-6588 e-mail biodiv@mtl.net

International Society of Ethnobiology presents **Ethnobiology: Dialogue Between Cultures Forging Meaningful Partnerships, The 6th International Congress of Ethnobiology**, 23-28 November 1998 in Whakatane, Mataatua, New Zealand. To be hosted by the Maori of Mataatua.

The Conference will be composed of Plenary Sessions and Working Sessions on such topics as: Cultural Perspective on Conservation; Intellectual Property Rights and Ethnobiological Research; Balancing Local Cultural Preservation and Global Benefit Sharing; Ecological Change, Cultural Transition, Human Health; Ethnobiological Research Methodologies; Blending excellence in formal and informal science.

Four pre-conference workshops will also be held on: Codes of Ethics and Standards of Conduct for Ethnobiologists (19-22 November, limit 40); Applying Local Knowledge of Forest Plants in the Pacific (9-20 November, limit 25); Developing Research Protocols between Indigenous Peoples and Ethnobiologists 18-22 Nov. limit 40); and Insects in the Human Diet (15-22 November, limit 25).

Abstracts of not more than 500 words should be sent to the address below, (preferably by email or disc in MS Word/Word Perfect). Abstract should contain: the Title, Name and Affiliation of Author/s and should be in Times New Roman, 12 pt. Last date for the receipt of abstracts is July 15, 1998. Full papers are due by October 1, 1998.

Registration fee is US\$ 150, \$ 50 for students and indigenous peoples. Payment in US dollars may be sent by check or money order payable to International Congress of Ethnobiology, to BDCP-ICE, 11303, Amherst Avenue, Suite 2, Silver Spring, MD 20902. Payment may be also made by Bank Transfer to: BDCP-ICE, at Riggs Bank, Washington D.C., USA.

For further information please contact: Sixth International Congress of Ethnobiology, Bioresources Development and Conservation Programme, 11303 Amherst Avenue, Suite 2, Silver Spring, MD 20902. Phone: (301) 962- 6201 Fax: (301) 962- 6205 Email: ICE\_6@classic.msn.com

The  
Asia-Pacific  
Mycological  
Conference  
on Biodiversity  
and  
Biotechnology  
to be Held in  
Thailand  
July 6-9, 1998

# MEETINGS AND CONFERENCES

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## New Crops and New Uses:

### Biodiversity and Agricultural Sustainability Conference

will be held November 8-11, 1998 at the Hyatt Regency at Civic Center in Phoenix, Arizona.

Session Topics include: World Biodiversity Update; Strategic Opportunities in New Crops and New Uses; Biodiversity and Industry Opportunities; Processes and Strategies in Commercializing New Crops; Status of New Crops and New Uses.

Panel discussions and special topics will be hosted by AAIC divisions. Poster and presentation manuscripts may be submitted for publication in New Crops and New Uses: Biodiversity and Agricultural Sustainability, a book to be published after the conference and included in the registration fee.

Registration: \$250 before August 30, 1998 (\$75 for students); \$280 late or on-site registration.

For further information, contact:

Dave Dierig, President (AAIC)  
USDA-ARS US Water Conservation Laboratory,  
4331 E. Broadway Rd., Phoenix, AZ 85040  
(602) 379-4356 (ddierig@uswcl.ars.ag.gov)

## Society for Medical Plant Research 46th

**Annual Conference.** Vienna, Austria. The Congress will be held August 31 - September 3, 1998 at the University of Vienna, Austria.

Some of the topics that will be covered include botany, cultivation, breeding, biotechnology, processing, phytochemical quality control, chemical and microbial contamination, phytochemistry, biosynthesis, analytical methods, pharmaceutical, technology, pharmacology, toxicology and clinical studies.

Contact Prof. Dr. W. Kubelka, Prof. Dr. B. Kopp, Prof. Dr. J. Jurenitsch, Institute of Pharmacognosy, University of Vienna, Vienna, Austria.

## Wood/plant fibre identifications courses

(Durham, England - July 88)

Two short Summer Schools which may be of interest to people. Both are to be held in Durham. The courses are highly practical and the course tutors well known to many of us as "real experts" in their fields.

1) Identification of woods - tutors Dorothy Catling and Rowena Gale. 20-24<sup>th</sup> July.

2) Identification of plant fibres - tutor Dorothy Catling. 27-29 July.

Accommodation (B&B plus dinner) in Grey College at per night. Details at :

[www.dur.ac.uk/~db10mdw/DocCse.html](http://www.dur.ac.uk/~db10mdw/DocCse.html)  
Jacqui Huntley, Department of Archaeology

## The Institute of Ecology and Resource Management at the University of Edinburg

in Scotland, UK runs a series of 3-month courses as well as shorter 1 week and 2 day professional courses for people working in Forestry and Resources Management. In addition, they offer specialist programmes linked to the taught post-graduate programmes. Courses offered include:

Tropical Forest Management and Planning. 29 June - 18 September 1998; Tropical Agroforestry 29 June - 18 September 1998; Tree Improvement - October-December 1998, January-March 1999; Participatory Appraisal - 20-24 April 1998; 27 April - 1 May 1998; 20-24 July 1998 (3 one week courses); and Environmental Consensus and Conflict Resolution Workshop. A 2-day workshop run twice a year 15-17 April and 23-25 April 1998.

Further information on the Short Courses and other courses may be found at the IERM home page at: <http://helios.bto.ed.ac.uk/ierm/> In addition, specialist programmes can be arranged linked to the post-graduate programme and further information about these can be found by emailing [ghilton@ed.ac.uk](mailto:ghilton@ed.ac.uk), tel: +44 131 650 6439, fax: +44 131 662 0478, or writing the Institute of Ecology & Resource Management, The University of Edinburg, Darwin Building, Mayfield Road, Edinburg, EH9 3JU, Scotland, UK.

## Workshop on the promotion of Non-Wood Forest Products in North America

Tabasco -Villahermosa, Mexico, 16-18 November 1998 (tentative date).

This Workshop, to be held in conjunction with the 19th Session of the North American Forestry Commission, NAFC will concentrate on discussing issues concerning the promotion and development of non-wood forest products (NWFP) of North American forests.

Emphasis will be given on food items, essential oils, medicinal plants, gum naval stores, ornamental material, natural flavours gathered from wild sources in forests for subsistence or on a commercial scale. Key findings and recommendations of this workshop will be brought to the attention of the 19th Session of the NAFC.

Contact: [Paul.Vantomme@fao.org](mailto:Paul.Vantomme@fao.org)

**Society for  
Medical Plant  
Research  
to Hold  
The 46th Annual  
Conference in  
Vienna, Austria**

**Wood & Plant  
Fibre  
Identifications  
Courses Offered  
this July  
in Durham,  
England**

## MEETINGS AND CONFERENCES

**Conference on  
"Enterprise  
Development  
Through  
Agroforestry:  
Farming the  
Agroforest for  
Specialty  
Products"  
October 4-7, 1998  
in Minneapolis,  
Minnesota**

**N.A. Conference on Enterprise Development Through Agroforestry: Farming the Agroforest for Specialty Products.**

October 4-7, 1998 DoubleTree Park Place Hotel, Minneapolis, Minnesota.

This intense learning experience will directly focus on the markets, marketing, production, processing, and farm and woodlot landowner outreach for the range of specialty forest products, including forest-based medicinals and botanicals, food products, and handicraft and floral products.

This major networking opportunity will allow participants to describe their own experiences and gain exciting new knowledge through many posters, practitioner displays and informal presentations, a

dozen how-to workshops, informal "forest farming cafes" (informal discussion groups held during every meal), and commercial exhibits by companies that buy and market large volumes of these products.

A 2-day post conference tour of specialty forest product production, processing and marketing sites in Minnesota, Wisconsin, and NE Iowa also is planned.

Interested persons should contact:  
Scott J. Josiah, Ph.D., Center for Integrated Natural Resources and Agricultural Management, University of Minnesota  
1530 Cleveland Ave. N., 115 Green Hall,  
St. Paul, MN 55108-1027  
PH. 612-624-7418 FAX: 612-625-5212.  
email: josia001@maroon.tc.umn.edu

## ANNOUNCEMENTS

### Take Action!

The Tropical Forest Conservation Act has been introduced by Senators Kasich (OH), Portman (OH), and Hamilton (IN). This allows the rechanneling of debt owed to the US by less developed nations to fund conservation within those countries.

Contact: [actionsignup@worldwildlife.org](mailto:actionsignup@worldwildlife.org) to find out more.

For those of you with great patience, the *Journal of Ethnopharmacology* should have been received by now. If you want to subscribe or have not received your issue, please contact:

Professor Nina L. Etkin  
President, International Society for  
Ethnopharmacology  
Department of Anthropology  
2424 Maile Way  
University of Hawaii  
Honolulu, Hawaii 96822 USA  
<http://www2.hawaii.edu/~etkin>

**The National Botanical Garden** is being developed in Wales. The old gardens, once lush and manicured, have been revitalized at Middleton Hall. The Towy Valley, the location of the gardens, offers a variety of microclimates and will blend the expansive

landscape with displays and educational programs. They are seeking members to join and support this effort. Contact: The National Botanic Gardens of Wales, Middleton Hall, Llanarthne, Carmarthenshire, SA32 8HW. Phone: 02558 668768, or fax: 02558 668933.

**Favourable Interim Judgement Delivered On Opposition to Neem Patent**  
by Vandana Shiva

On the 30th September 1997, the European Patent Office (EPO) delivered a favourable interim judgement on the challenge of a European patent on the fungicidal effects of neem oil (Patent No. 436 257 B1) owned by W. R. Grace & Co, by Dr. Vandana Shiva (Director of the Research Foundation), Ms. Magda Alvoet (leader of the Green MPs of the European Parliament) and other NGOs of the Neem Campaign.

For India, this optimistic development comes close on the heels of the repeal of the Turmeric patent (No. 5 401504) on 23rd August 1997, after the US Patent Office found the claim to novelty to be false.

The Opposition Division of the EPO has asked the applicants for more detailed information concerning the extraction process in order to proceed to the next stage.

**The National  
Botanical Garden  
is being  
developed  
in Wales**

## ANNOUNCEMENTS (cont.)

The Neem Campaign, consisting of a group of NGOs and individuals, was initiated in 1993 in India to mobilise worldwide support to protect indigenous knowledge systems and resources of the Third World from piracy by the West, particularly in light of emerging threats from intellectual property rights regimes under WTO and TRIPS. The Neem patent became the first case to challenge European and US patents on grounds of biopiracy.

The revoking of the turmeric patent in the US and now the consideration for revocation of the neem patent on grounds of 'prior art' in the European Patent Office demonstrates the imperative need for Europe and the US to revoke all patents based on indigenous knowledge and "prior art".

In addition, the US also needs to change its patent laws, which allow biopiracy by non-recognition of foreign prior art. Patents are supposed to satisfy three criteria - of novelty, non-obviousness and utility. Novelty implies that the innovation must be new. It cannot be part of 'prior art' or existing knowledge. Non-obviousness implies that someone familiar in the art should not be able to achieve the same step. Most patents based on indigenous knowledge appropriation violate the criteria of novelty



combined with non-obviousness because they range from direct piracy to minor tinkering which involves obvious steps to anyone trained in the techniques and disciplines involved.

Using the turmeric and neem case, India needs to challenge the WTO ruling in the TRIPs dispute initiated by the US. The Ruling states that India has "failed to implement a mechanism for preserving novelty and priority". However, when 'novelty' itself is under question as in the case of turmeric, neem and countless other cases of biopiracy, 'preserving novelty' by introducing US like patent laws in India amounts to perpetuating Biopiracy.

There are strong grounds for challenging the WTO decision. India should not let this opportunity pass.

### JOBS JOBS JOBS

I apologize in advance if these positions are no longer available, but I put them in as I receive them. -Editor.

#### Position available for experienced postdoctoral fellow

Where: University of Western Sydney, Hawkesbury, NSW. Australia.  
Duration: three years starting early 1998.  
Project: isolation and characterisation of the key enzymes of the terpene metabolic pathway of the Australian native *Melaleuca alternifolia* (teatree). The project will be carried out in collaboration with Southern Cross University at Lismore NSW and the Australian Tea Tree Oil Research Institute.  
Required background: Considerable experience in the isolation and characterisation of enzymes, preferably those related to plant terpene synthesis. A working knowledge of techniques of molecular biology would be useful since a part of the project is in collaboration with a plant genetics group using molecular approaches.

Contact: Dr S. G. Wyllie  
School of Science  
University of Western Sydney, Hawkesbury  
Richmond, NSW 2753 Australia.  
ph +61 245701632  
fax +61 245701621  
email g.wyllie@UWS.edu.au

#### Opportunity at Hauser

I am performing a search for **Hauser**, for a graduate student expert in natural products secondary metabolites in field cultivated plant materials, to consult on a contract basis.

Rick Remington, Hauser  
303-443-4662

**Position available for sales person** who has experience in natural products or a knowledge of plant materials as applied to the cosmetic and herbal industry. The company is based in the UK and the work will be UK-based initially. The salary range is around 20-25K. Please reply in confidence to the list owner:

Dr John Wilkinson,  
email: J.Wilkinson@mdx.ac.uk  
Tel: 0181 362 6425  
Fax: 0181 805 0702.

**Favourable  
Interim  
Judgement  
Delivered on  
Opposition to  
Neem  
Patent**

**Several  
Employment  
Opportunities  
Are  
Available**

## GRAZING IN THE FIELD

### Dear Colleagues,

I would like to know more about the Society for Economic Botany, including activities, projects and publications (books, periodicals, CD-ROMs, posters, etc.) I'm looking for programmes as scholarships, training courses and internships, so I would thank you very much if you sent me information about this or made any contact suggestion.

My best wishes,  
Luis Nuno Quental  
Rua do Monte Alegre 42 - 1 Dto  
4200 Porto, Portugal  
e-mail: cool@morango.esb.ucp.pt

### BIONET

1400 16th Street, NW; Suite 502  
Washington, DC 20036 USA  
Tel: 1.202.547.8902; Fax: 1.202.265.0222  
E-mail: bionet@igc.apc.org  
URL: <http://www.igc.apc.org/bionet>

### Biodiversity Indicators and Targets Initiative (BITI) Campaign

Earlier this year, BIONET launched the BITI, designed to catalyze governmental action — at the national and international levels — in two areas: (a) setting concrete quantitative and qualitative biodiversity TARGETS (and timetables) for implementing the CBD; and (b) applying a core set of biodiversity INDICATORS of tangible progress toward achieving targets. As a first step, BIONET and a group of 9 other co-sponsors (6 NGOs, 2 governments and the U.N. Environment Programme) organized a meeting of the Global Biodiversity Forum (GBF) on this topic at U.N. Headquarters in April 1997. The meeting has opened up a number of exciting opportunities for a multi-year initiative (see below). BIONET members/partners most actively involved in this initiative at present include: World Resources Institute, IUCN, Worldwatch Institute, Center for International Environmental Law (CIEL), UNEP, World Conservation Monitoring Centre and the Dutch Institute for Environment and Public Health.

### Volunteers Needed For Data Collection On *Allotropia*

Reprint from *Cisпус AMA Quarterly* - July 1997. USFS The Cisпус Adaptive Management Area (Washington State, USA) in

conjunction with the Pacific Northwest Research Station will be conducting a study on the effects of resource management activities on the viability of populations of *Allotropia virgata*. The plant, commonly known as candy stick, contains no chlorophyll and obtains its nutrients via a three-way symbiotic relationship with a fungus (such as Matsutake mushroom) and a conifer host.

*Allotropia* is currently a "survey and manage" species, a designation from the Northwest Forest Plan that mandates information be gathered on known sites in order to design or modify current management practices. Beginning in August, forty 10 acre study areas will be surveyed throughout the AMA. Volunteers are needed to help collect data on the presence of *Allotropia* within these study areas. For more information, contact Jeff Ricklefs 360-497-1169, Maggie McHugh 360-497-1130, or Mark Pistrang 360-494-0636.

USFS homepage has an e-mail locator for employees: <http://www.fs.fed.us/gpnf>

### Project Xela Aid Overview

Xela Aid is non-sectarian organization that delivers on-going assistance to economically disadvantaged people of Guatemala. It is a joint humanitarian project which brings together volunteer professionals, students and interested others from the United States to work with people and organizations in Quetzaltenango (Xela), in Northern Guatemala, where the project currently focuses its efforts. Xela Aid has been highly successful a bringing together resources and technical expertise in order to address some of the most critical problems of the Guatemalan people. These efforts are enhanced through alliances with institutions in the United States, such as LandLab (a research and education facility at California State Polytechnic University, Pomona) and two of the prestigious Claremont Colleges: Pitzer College and Harvey Mudd College.

For information on specific fundable projects, please contact James Ehlers, Special Projects Director, at (909) 920-3003. Or additional information may be requested by contacting Leslie Baer, Founding Director at Xela Aid, 2207 W. Orangewood Ave., Orange, California 92668. Xela Aid web site: <http://www.arcadiaweb.com/xela-aid>

**Volunteers  
Needed for  
Data  
Collection  
on *Allotropia***

**Xela Aid  
delivers  
assistance to  
economically  
disadvantaged  
people  
of Guatemala**

## GRAZING IN THE FIELD (cont.)

### United Plant Savers

UpS held their annual meeting in Hawaii at the Amy Greenwell Ethnobotanical Gardens on January 17, 1998. The meeting was well attended by local folks and the out-of-doors facility made the afternoon pleasant. Lectures were offered by Board members and local experts and ranged from herbal medicine to ecological issues specific for the Hawaii flora. **The United Plant Savers**, UpS is a group of dedicated professionals focused on collecting information to secure then long-term survival of American medicinal plants. They are actively researching the propagation and survival of wild plants. Your participation is requested and desired.

They have put together a list of medicinal plants that they feel are "at risk" in the environment. I have included the list below for your comments and any information on the plants should be directed to:

UpS, PO Box 98, East Barre, VT 05649

American Ginseng (*Panax quinquefolius*)  
 Black Cohosh (*Cimicifuga racemosa*)  
 Bloodroot (*Sanguinaria canadensis*)  
 Blue Cohosh (*Caulophyllum thalictroides*)  
 Echinacea (*Echinacea spp.*)  
 Goldenseal (*Hydrastis canadensis*)  
 Helonias Root (*Chamaelirium luteum*)  
 Kava Kava (*Piper methysticum*) (Hawaii only)  
 Lady's Slipper Orchid (*Cypripedium spp.*)  
 Lomatium (*Lomatium dissectum*)  
 Osha (*Ligusticum porteri*, L. spp.)  
 Partridge Berry (*Mitchella repens*)  
 Slippery Elm (*Ulmus rubra*)  
 Sundew (*Drosera spp.*)  
 Trillium, Beth Root (*Trillium spp.*)  
 True Unicorn (*Aletris farinosa*)  
 Venus' Fly Trap (*Dionaea muscipula*)  
 Wild Yam (*Dioscorea villosa*, D. spp.)

### Laboratory openings anyone?

I am very much interested in continuing my research in botanical pest control at Nagoya University, Japan. Therefore, I would like to request an opportunity to work in a laboratory under learned supervision.

Farid A. Talukder, Postdoctoral Fellow  
 Laboratory of Applied Entomology  
 Nagoya University,  
 Chikusa-ku, Nagoya 464-0814 Japan  
 Phone: (052) 789 5567; Fax No: (052) 789 4012  
 E-mail: talukder@geocities.com

### Notes on Myrrh

Commiphora mukul gum/Balsamodendron mukul  
 Ayurveda - Guggulu is a small tropical, thorny tree, 4-6 feet tall with aromatic gum. Especially found in Gujarat and Sindha states.

The flowers are red. The gum is bitter-pungent in taste, hot in virya and alterative. It is used for abnormal growth, tumors, cysts, arthritis, glandular swelling, cancer, inflammation, and as a tonic for long life and health. It reduces Kapha and Vata.

Western - Guggul lowers cholesterol and triglycerides. It improves the LDL/HDL ratio. It contains essential oils and sterols, Guggulsterone and guggullipid. Guggulsterone has been shown to exhibit thyroid-stimulating activity. It increases white blood cell count, disinfects secretions, and increases appetite. It possesses significant cholesterol-lowering and anti-inflammatory activity. The soluble portion can be separated into base, acid and neutral fractions. The neutral fraction contains most of the cholesterol-lowering activity, while the acid fraction contains the anti-inflammatory components. (Satyavati GV: Guggulipid: a promising hypolipidaemic agent from gum guggul. *Econ Med Plant Res* 47-82, 1991)

Indian Ayurveda - Other research shows it helps regulate menstruation, catalyzes nerve tissue and can be used for arthritis.

Alan Tillotson, MA, AHG, Medical Herbalist  
 Chrysalis Natural Medicine Clinic  
 1008 Milltown Rd., Wilmington, DE USA  
 (302) 994-0565, (302) 995-0653 fax  
 AlanT3@aol.com

### Pharmacist Seeks Help

I am a pharmacist and manager of a drug therapy newsletter for over 400 hospitals in the USA and work out of my home in Skokie, Illinois (north suburb of Chicago). My goal for this year is to develop an email herb/nutrition newsletter. I will be looking for individuals for an editorial board within the next few months.

I am also interested in coordinating a study on Echinacea in the hospital setting. I have several pharmacists interested and a company willing to provide the herbs free and possibly fund the study. My goal is to attempt to show a decrease in morbidity and a reduction in antibiotic use in surgical, cancer, and/or critically ill (ICU) patients. If we can demonstrate a decrease in antibiotic use and a reduction in costs (antibiotics amount to about 30% of the hospital's drug budget), I believe it will change the way herbs are used in this country.

**The United Plant Savers held their annual meeting in Hawaii**

**Pharmacist seeks help coordinating a study on Echinacea**

## **GRAZING IN THE FIELD (cont.)**

**Kabeh is  
Compiling  
Information for a  
Research Study  
on the Economics  
of Deforestation  
and Tropical  
Timber**

**In December,  
Representatives  
From 19 Countries  
Gathered at the  
Thammasat  
Campus  
Near Bangkok,  
Thailand  
for an  
International  
Seminar on  
Sui Generis  
Rights**

Assistance will be needed in literature research (gathering original studies), protocol design, etc. If anyone is interested in helping, please contact: Elliot Freeman RPh, Managing Editor Midwest Shared Newsletter Service Member, Association of Natural Medicine Pharmacists Elfreem@aol.com.

### **NTFP Info needed - Tropical Hardwood Harvesting Operating Costs**

Needed: Information sources that can provide approximate operating costs per acre (hectare) for tropical hardwood harvesting. Kabeh is compiling information for a research study on the economics of deforestation and tropical timber. Please reply to: Kabeh James@igc.org (FUTURESMKT@aol.com)

[I do not have any details about the following document and I am hoping that other readers/members can give us more insight about the declaration. -Editor.]

### **THE THAMMASAT RESOLUTION: Building & strengthening our sui generis rights.**

We, 45 representatives of indigenous, peasant, non-governmental, academic and governmental organisations from 19 countries, came together on 1-6 December 1997 at Thammasat campus just outside Bangkok, Thailand, for an international seminar on Sui Generis Rights co-organised by Biothai and GRAIN. We met to study, assess and develop our response to the increasing privatisation of biodiversity and local knowledge, especially as driven by the Trade Related Intellectual Property Rights (TRIPS) agreement of the World Trade Organisation (WTO) and resulting legislation at the regional and national levels. We focused in particular on the sui generis rights option for intellectual property over plant varieties as imposed on all WTO member states by the TRIPS Agreement, as well as on other international agreements related to biodiversity such as the Convention on Biological Diversity (CBD.).

In Thai, 'Thammasat' means 'knowledge of nature'. It also means 'justice'. The name of our venue is central to us. Indigenous peoples, farmers and local communities have, over millennia, nurtured and developed the biodiversity on which humanity now depends; wisely using their knowledge of nature to create sustainable food

and health systems based on sharing their knowledge and biodiversity with others. Such community systems are being destroyed by economic development under the guise of free trade, Green Revolution agriculture and the new biotechnologies, and globalisation. They are also being destroyed by the rampant pirating and monopolisation of biodiversity and related knowledge through the extension of intellectual property rights (IPR) to life forms. Perhaps no country exemplifies our concerns about WTO-enshrined globalisation as much as our host country.

At the time we were meeting, Thailand - and much of the rest of Southeast and East Asia - is going through a profound crisis resulting from years of economic growth founded upon fleeting speculative investment. The currency tailspin which started last July is accompanied by destabilisation of markets, loss of employment and cutting of public spending, and results in a clear loss of control over our own economies and livelihoods with the IMF taking the steering wheel. The WTO TRIPS Agreement obliges developing countries to provide some form of IPR on plant varieties by the year 2000. This may be done by patents or by some 'sui generis' rights system - meaning, in Latin, a system 'of its own kind'. In 1999, one year before implementation, this provision will be reviewed and we are preparing ourselves for this review.

We reaffirm our total and frontal opposition to the extension of intellectual property rights to life forms, be it on humans, animals, plants, micro-organisms, or their genes, cells and other parts. We are also decidedly against biopiracy and the monopolisation of biodiversity-related knowledge through such IPRs. We believe that sui generis rights in TRIPS as well as the overall implication of TRIPS, and for that matter the whole of the WTO, are highly detrimental to peoples' economies, cultures and livelihoods. The sui generis provision of TRIPs gives WTO member states room to develop their own kind of IPR protection for plant varieties, and many nations are now changing their national IPR laws.

While some people look at the sui generis option in TRIPS as a window through which other forms of rights over biodiversity can be articulated in legislation, it is our conviction that such rights will be linked to IPR and will result in new and further monopoly rights over

## GRAZING IN THE FIELD (cont.)

plant varieties. The same is true of any sui generis rights option which could be developed and proposed under the TRIPS Agreements for local and indigenous knowledge. The reaffirmation of our sui generis rights 'Sui generis' perfectly describes the rights and systems we are struggling to defend - our 'own kind' of rights and systems. We recognise our sui generis rights to exist independently of the IPR-based sui generis systems promoted by the TRIPS Agreement.

Our rights are inalienable; they existed long before IPR regimes were established. As legal, political, economic, social and cultural rights, they are part of peoples' sovereignty and therefore part of human rights. As community/collective rights, they are indivisible and intergenerational; they include Farmers' Rights and apply to Indigenous Peoples, peasant and family farmers, fisherfolk and other local communities which derive their livelihoods from biodiversity. Their place and expression is firstly at the local level, but they must also be recognised and guaranteed at the national and international levels.

The rights that we are struggling to develop, defend and let flourish should never be misinterpreted as, or denatured into, intellectual property rights. Because peoples' rights are under tremendous threat, we see the promotion of such rights also as a tool for resistance against, and the rolling back of, the forces of monopoly. It is on this basis that we will actively engage our societies from the village level through to our governments in the capitals to take part in the struggle for our sui generis rights, and on to

the international level to oppose IPR on all forms of life. This implies a whole range of information, research, campaign and coalition building activities over the long term.

Some of the immediate tasks at hand are to: Demand the revision of TRIPS in order to allow for the full exclusion of IPR monopolies over life forms and biodiversity-related knowledge under the WTO; Reinforce the defense mechanisms of local communities who are highly vulnerable to unbridled bioprospecting and to the introduction of genetically engineered organisms; Support any calls by local communities for a moratorium on bioprospecting, and demand an immediate moratorium on genetically engineered organisms; Assert the primacy of international agreements on biodiversity, such as the CBD and FAO instruments, over TRIPS and other trade regimes, for the resolution of these issues; Reaffirm the original intent of the CBD for the conservation and sustainable use of biodiversity and prevent the CBD from becoming a mechanism for transnational corporations to trade in biodiversity in the name of 'access' and benefit-sharing'; and Mobilise a strong global movement engaging environmental, trade, agriculture, consumer, labour, health, food security, women's, human rights and all people's organisations in these campaigns. In the spirit of justice and embracing all knowledge of nature, we commit ourselves to the Thammasat Action Plan and invite other organisations, movements and peoples to join us in the struggle to achieve this vision.

Bangkok, 5 December 1997

**'Thammasat'  
means  
'knowledge of  
nature'.  
It also means  
'justice.'**

## UK CHAPTER UPDATE

The UK Chapter, one of most active SEB international chapters, has a Newsletter of their own. I will not be able to duplicate it, but they can be reached through several of their members. Hew Prendergast is the secretary and his email is: h.pendergast@rbgkew.org.uk.

The newsletter contains announcements of the SEB annual meeting, their local meetings, reviews of books, announcements of scholarships and positions available, their newly proposed constitution, and the Liverpool

Museum display on venom, which includes nettles. They also had a survey of all the Ethnobiology programs in England, which was spurred by the annual SEB class list and the presentation by Alexandra Paul and Will McClatchy about their survey on courses in economic botany and ethnobotany. I will be working to receive this list and integrate it into the one that is included in every Spring Newsletter. Please remember that this list is a membership benefit and we do not offer it to everyone. It encourages membership and participation.

## Botanizing the Web



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

The USDA  
Has Revised  
Their  
Ethnobotanical  
Web Site

The  
Independent  
Forum  
on Forests  
Extends an  
Invitation  
to Join

I have been pleased by the number of times I have seen the Journal for the Society quoted on the Web especially in the ListServ conversations. Here are some new listings I have found by being a member of list groups and from those wonderful members who send me things periodically. Thanks to you all.

### GOTHIC GARDENING

People call me weird because I collect black and white daylilies and irises in hopes of creating a black and white garden...and then I ran across a web site (<http://www.gothic.net/~malice/>) on gothic gardening...check out "The Somber Garden". Many, many herbal references too....

### ETHNOBOTANICAL SITE - USDA

<http://www.ars-grin.gov/ngrlsb/>  
2,000+ species of plants used for foods, spices and medicines. Site has had significant revisions of late in case you haven't checked it recently.

### WEBSITE ARTICLE: Harvesting of minor forest products in Czech Republic.

<http://dahlia.vszbr.cz/~bartosz/plvang.htm>

Overview of MINOR FOREST PRODUCTS: tanbark, Slash, birch twigs and branches, stumps, roots, Christmas trees, birch sap, resin tapping, forest fruits mushrooms, ornamental plants, ornamental plants, medicinal plants, bast reeds, pit-sand, pit-run gravel, quarry.  
SECONDARY FOREST PRODUCTS: charcoal, agriculture, forest product industry, minor forest products, landscape gardening.

The provisional **Global Plant Checklist** of vascular plants is now on-line at:  
<http://iopi.csu.edu.au/iopi/>.

It is still at an early stage so please don't expect too much yet! So far it contains data sets contributed from four regions (Australia, Europe, North America north of Mexico, and Peru), plus two edited family data sets (those for Casuarinaceae and Magnoliaceae). Partly edited datasets for several other families are to follow shortly. The IOPI Global Plant Checklist is a collaborative project amongst the botanists of the world and interested information scientists. Specialists from 27 institutions in 14 countries have contributed to get the Checklist this far. On behalf of IOPI, I invite everyone to take a look, try it out, and send comments to me.

Karen Wilson ([karen@rbgsyd.gov.au](mailto:karen@rbgsyd.gov.au))  
Convener of the IOPI Checklist Committee

### AMERICAN INDIAN ETHNOBOTANY DATABASE

American Indian Ethnobotany by Daniel E. Moerman, Ph.D. ([dmoerman@umich.edu](mailto:dmoerman@umich.edu))  
William E. Stirton Professor of Anthropology,  
University of Michigan-Dearborn Database:  
[http://www.umd.umich.edu/resources/bydept2/besci/anthro/about\\_ethnobot.html](http://www.umd.umich.edu/resources/bydept2/besci/anthro/about_ethnobot.html)

### FOREST@LISTSERV.FUNET.FI

EFI announces its new Web service:  
<http://www.efi.joensuu.fi/>

The European Forest Institute's Web service has been reconstructed. It now includes an electronic form of the 'EFI News, the most current information on EFI's activities, and a "one-stop shop" of forestry information.

### INDEPENDENT FORUM ON FORESTS— INVITATION TO JOIN

<http://www.ulb.ac.be/assoc/iff/>

Greetings. The Independent Forum on Forests (IFF - provisional name) is an informal international network aimed at stimulating independent and innovative thinking about forest management and related areas. The forum ultimately aims at enabling the emergence of innovative approaches to conduct forest policy. It was created following an informal meeting held in February 97 in Utrecht (NL) which found that, for a variety of reasons, the nature of current discussions regarding forests, particularly at the international level (including certification, IPF, etc.), was not satisfactory.

Producing discussion papers on key issues pertaining to forests is the core activity of the network. The papers are to be policy oriented, be based on best available knowledge and have an adequate degree of understandability and practicability. The discussion papers produced by network members, through discussions over the net, will be made widely available, including to decision makers.

Individuals from a wide variety of disciplines related to forest resource management (land use, forestry, history, ecology, timber trade and industry, etc.) are welcome to join the network so as to address, as much as possible, forest-related issues in an holistic manner. Should you be interested in participating in this forum, don't hesitate to email the steering committee at [iff@ibm.net](mailto:iff@ibm.net). Should you decide to join, you will be granted with an access to the IFF's website, where the discussions papers are to be made available

## Botanizing the Web (cont.)

for consultation. The Steering Committee: Jean-Pierre Kiekens, Environmental Strategies Europe / University of Brussels, Belgium; David Brand, State Forests of New South Wales, Australia; Vidar Nordin, V.J. Nordin Associates / University of Toronto, Canada.

[I have included this in this section because it is a list server. I find that there are interesting discussions about cactus, including this long intensive discussion about control of cochineal. -Editor.]

Peter Felker has a serious problem with cochineal insects on his experimental *Opuntia* nurseries. I suggested that he might try releasing some lady beetles for biological control of the cochineals. Does any one have experience with biological control of cochineals on *Opuntia*?

Gilreath's dissertation contains a wealth of information about *Opuntia* and their cochineal insect pests.

REFERENCE: Gilreath, M.E. 1985. Population ecology of *Dactylopius confusus* (Homoptera: Dactylopiidae). Ph.D. Dissertation. Texas A&M University. College Station, Texas. 186 p.

Submitted by: Dr. Darrell Ueckert, Rangeland Ecologist, Agricultural Experiment Station, San Angelo, Texas.

**INFOREST website launched**  
<http://www.inforest.com>

This site is new and currently contains mostly U.S. information on forests, but would like to expand to include international links. Please e-mail the webmaster with your ideas.

We are looking for a moderator for our Forestry Discussion board. Please let me know if you are interested in helping to keep the board productive and enjoyable for all our readers. Thank you for your help!

Sincerely, Dana Hutchins, Webmaster

I am pleased to announce that the draft **FAO Strategic Plan for Forestry** has been placed on the FAO Forestry Internet site for perusal and comment in English, French and Spanish. The Strategic Plan, prepared following an articulated process of consultation and revision, describes the way in which FAO will carry out its mission and objectives in forestry. The URL is:

<http://www.fao.org/waicent/faoinfo/forestry/strategy/forstrat.htm>

Regards,

Stephen A. Dembner, Editor, Unasyuva Publications and Information Coordinator  
 Forestry Department  
 Food and Agriculture Organization  
 Via delle Terme di Caracalla, 00100 Rome Italy  
 Tel: +396 07054778; FAX: +396 57053024

**Inforest  
 Launches  
 a New  
 Website**

## RECIPES...Rose Petal Sorbet

A delicate perfume of rose petals is appealing in the sorbet. Use fragrant roses and decorate with lavender or raspberries. You can use red food coloring if you want to have a hint of pink in the sorbet.

### ROSE PETAL SORBET

- 1 - 3/4 Cups Sugar Syrup
- 2 to 3 Cups fragrant rose petals
- Juice of 1 lemon
- Frosted rose petals, petal garnish

In a medium bowl or jar, combine sugar syrup with the rose petals and let stand overnight to infuse the syrup with the rose flavor. The following day, strain the syrup into another bowl. Stir in the lemon juice. Transfer the rose syrup to an ice-cream maker, then freeze

according to the manufacturer's directions. Garnish with frosted rose petals, if desired. Makes approximately 1 pint.

### SUGAR SYRUP

- 5 cups sugar
- 4 - 1/4 cups water

In a saucepan, combine the sugar and water. Cook over high heat, stirring with a wooden spoon, until the sugar has dissolved. Continue heating until the syrup comes to a full boil, and then immediately remove the syrup from the heat and pour it into a large jar in which you can store it. Syrup will keep for up to 2 months in the refrigerator.

**Try  
 Refreshing  
 Rose Petal  
 Sorbet  
 This Summer**

## ETHNOBOTANNEWS

### Read About the Origin of Coca-Cola

The Australian New Crops Newsletter No.8 July 1997. R.fletcher@mailbox.uq.edu.au This Newsletter is full of helpful items for farmers and researchers interested in new crops. There was one section which highlighted some of the correspondence from the ListServ. The interaction stated that if you are interested in new crops do your homework; find out the information about the seed and crop yield, and, more importantly, whether there is a market out there for your crop (and if not, how to create it). Finding market info is even more difficult than seed germination and yield data. However, most frustration comes when addressing the capital situation. For example, when a farmer brings something to market it sometimes hits big and then the larger landowners capitalize on it, force the price down, and there is no margin left for the original farmer. Some suggested possible scenarios that may abate the situation, but that appears to be the biggest challenge for the smaller growers.

The American Herb Association Volume XIII, Issue 3, Summer 1997. There is a great article in here about the origin of Coca Cola. Named in 1886 by Frank Robinson, the original recipe formulated by John Pemberton is supposedly still under lock and key with the extant relatives. It contains 10 pounds of coca leaves to a gallon of syrup, caffeine, vanilla, citric acid, sugar, gingerene, caramel coloring, and essential oils of orange, lemon, neroli, cassia, nutmeg, coriander, and spice bush. The original recipe was made after the kola nut was purported to be the new wonder drug, but was so bitter only a pinch was tolerable. He added this to a syrup and his partner Frank Robinson created the now-famous logo. Voila! Pemberton died 2 years later of a cocaine overdose. The flavor notes were smoothed a little and the original patented recipe is still preferred today.

ICARDA Issue No.4, Autumn/ Winter 1996, ICARDA@CGNET.COM. "First Find your Lentil", is an article about genetic diversity. Should one look within cultivated fields or in wild stands? This is a step-by-step process of how to organize, find, and use genetic material in research.

Discovery December 1997, pp109-113 contained an article about Mary Eubanks, a

post doctoral researcher at Duke. She has worked on corn for over a decade trying to prove her theory, but her most current research on the origin of corn has created a flurry of pollen and is given evidence that her theory may have some substance. Corn, a well-known, well-used commodity has had many people theorizing about its origin. Now Mary has been able to produce a hybrid that resembles the world's most ancient preserved ears of corn. The DNA from this hybrid suggests that she has found a key to the past. "Corn Wars" have been raging for a long time and this will be considered as not worthy of any attention or may create an aMAzing view of the ancient beginnings of corn. Her new hybrid is called tripsacorn. Contact her at:

Duke University, NC 27708  
Fax: 919-660-7293, email: eubanks@duke.edu

Your resource inventory and assessment people may be interested in the following publications:

1. GAP Analysis Bulletin No. 6. GAP is a US geographic approach to planning for biological diversity. The bulletin is produced periodically and reports on new developments and progress of the GAP program. To receive the Bulletin, contact Elisabeth S. Brackney or Michael D. Jennings, c/o Gap Analysis Bulletin, USGS/BRD/Gap Analysis Program, 530 S. Ashbury Street, Suite 1, Moscow, ID 83843 USA. Fax: +1-208-885-3618. Email: brackney@uidaho.edu. I believe the Bulletin is gratis.

2. IGBP Science No. 1 - The terrestrial biosphere and global change - Implications for natural and managed ecosystems. This issue is a 32 page synthesis of GCTE and related research. Available gratis from IGBP Secretariat, Royal Swedish Academy of Sciences, Box 50005, S-104 05 Stockholm, Sweden. Tel: +46-8 16 64 48, Fax: + 46-8 16 64 05. Email - lisa@igbp.kva.se

3. The Earth Observer - A bimonthly Earth Observation System Publication. A technical publication of interest to remote sensing people. Contact EOS Project Science Office, Code 900, NASA Goddard Space Flight Center, Greenbelt, MD 20771 USA. Fax: +1-301-286-1738. Email - lynda.p.williams.1@gsfc.nasa.gov. Web site <http://eosps0.gsfc.nasa.gov> This also is free.

### Mary Eubanks Has Produced a Hybrid that Resembles the World's Most Ancient Preserved Ears of Corn

# ETHNOBOTANNEWS (cont)

(continued from page 14)

4. Corbley, Kevin P. 1998. It is not easy being green: forest developer pursues green certification with GIS and image processing. Geo Info Systems 8(2):32-35. For information about subscriptions to Geo Info Systems call +1-218-723-9180 (USA).

Once again a farmer in Argentina mentioned that chopped cactus is used to clarify drinking water....

In the book Charles Goodnight, Cowboy and Plainsman by J. Evetts Haley, there are numerous quotations from Goodnight's recollections about life on the prairie. Here is a portion of one from pages 43-44.

"In case of dire thirst, placing a small pebble in the mouth will help, a bullet is better, a piece of copper if attainable is better, and a prickly pear is the best of all. Of course there are no pears on the Plains, but in the prairie country there were many. If, after cutting off the stickers and peeling, you place a piece of the pear in your mouth, it will keep your mouth moist indefinitely. If your drinking water appears to be muddy, peel and place a thin slice of pear in it. All sediment will adhere to it and it will sink to the bottom, leaving the water clear and wholesome." Looks like there may be something to it. Commercial water clarifiers are often water soluble polymers like polyacrylamide which physically entangle sediment particles forming heavier-than-water or filterable clumps. The slimy stuff in prickly pears is probably a water soluble polysaccharide, which does the same thing.

Interesting, isn't it? I once did a research project to identify and evaluate some industrial uses for the slimy stuff in Okra. I isolated the polymer (a long chain polysaccharide) but didn't find a use. It was somewhat thermally unstable and very subject to shear degradation.

Bobby Crabb  
Cactus Hobbyist  
Kerrville, TX

Here is an excerpt from an on-line conversation within the Forest Service. I list it here to show the need to work as a team for all parties involved. -Editor

Attached is an announcement for a Senate Hearing in WA, DC, on the subject of Special

Forest Products. We inform the line and staff that about 42 tribes in the West retain treaty rights to many of these species and monitoring is becoming difficult - some tribes get 'out-competed' for berries and beargrass. Please share this announcement.

Sounds like they are looking for input on some items which are of importance of many Tribes, but not sure how Treaty Reserved Rights would play into this Hearing, if at all.

[Just a listing that sounds interesting. -Editor]

Puffballs from the Past - Identification of Gasteromycetes From A Lillooet Archaeological Site and Speculation Regarding Their Aboriginal Use. By Compton, Brian D., Rolf Mathewes, and Gaston Gusman. In Canadian Journal of Archaeology / Journal Canadien d'Archeologie No. 19. 1995.

What a pleasant surprise it was to open up popular magazines and turn on the television to stories about two prominent members of the Society for Economic Botany. These reports about Mike Balick and Paul Cox are increasing public awareness about the importance of our largely untapped and endangered tropical plant resources that are home to nearly two thirds of the world's flowering plants, many of which have untold value as potential medicinal cures and sources of other useful chemical compounds.

Balick, who works in Latin America, was featured in "Exploring the Forest Pharmacy," Country Living Healthy Living (Fall 1997). If you missed the CBS evening news Eye-on-America segments aired February 9 and 10, 1998, highlighting Paul Cox's search for new pharmaceuticals among tropical plants in Polynesia, you can read all about it in the "The Plant Detective", Country Living, January 1998.

These stories are good introductions to ethnobotany because they describe how the knowledge of indigenous healers can provide valuable clues in the search for new cures; they underscore how relevant plants are to human welfare and survival; they graphically illustrate the importance of biodiversity conservation; and the pictures are beautiful.

Submitted by Mary Eubanks

## Prickly Pear to Clarify Drinking Water?

## Mike Balick and Paul Cox Are In The News

## PUBLICATIONS

**The Directory for Medicinal Plant Conservation contains Listings by Geographic Region and Organization**

**Plants in Ayurveda is a Great Reference for Nomenclature of Botanical and Sanskrit Names**

The Directory for Medicinal Plant Conservation is published by the German Federal Agency for Nature Conservation and IUCN/SSC Medicinal Plant Specialist Group. Edited by Kasperek, and Shippman. This is a great listing by geographic region and by organizations. Each listing includes the organization's goals, activities, geographic interest, database, information and resources, funding, and contacts. Also included in this incredibly useful text are Information Sources such as the Journal of the Society for Economic Botany, databases, and awards. Order from Landwirtschaftsverlag, Postfach 480249, D-48079 Munster, Germany. FAX: (49) 2501 801204.

The Foundation for Revitalization of Local Health Traditions, FRLHT, has published a book titled Plants in Ayurveda. It is a great reference for nomenclature of botanical and Sanskrit names. Only 500 copies are available for \$50 inclusive of shipping. Contact them at root@frlht.ernet.in or The Medplan Conservatory Society, #8, I Floor, IV Main, MSH Layout, Anandanagar, Bangalore 560 024 India.

The Food and Agriculture Organization of the U.N. has recently issued an interesting publication "AFRICOVER Land Cover Classification." This describes a land cover classification system that is being implemented for the continent of Africa focusing primarily, but not exclusively, on vegetation. The document is put out by the Environment and Natural Resources Service, Research, Extension and Training Division, FAO Sustainable Development Department, Via Terme di Caracalla, 00100 Rome, Italy. Price for the 76 page document is unknown. Document D/W4634E/1/4.97/600.

Medicinal Plants: Can Utilization and Conservation Coexist? by J. Wood Sheldon, .M.J. Balick, and S. Laird. In Advances in Economic Botany. Volume 12. Order No. AEB 12, ISBN 0-89327-406-2.

This study examines several medicinal plants species, their value to traditional and contemporary medicine, and how overharvesting of these plants affects natural and human forest communities.

In a period of expansion of medicinal plant use there is a paucity of texts on sustainable information. I find this book to be unique in providing such critical information in a

period when the Natural Products industry has become mainstream, with supply as one of the most important issues for the future success of the industry. However, I was sorry to see that it was outdated. I encourage some of us to update it and continue to write on this neglected subject.

More information can be obtained by e-mailing: scipubs@nybg.org or by calling 718-817-8721.

Cox, Paul Alan. 1997. Nafanua: Saving the Samoan Rain Forest. Illustrated by Michael Rothman. W. H. Freeman & Company, New York. ISBN 0-7167-3116-7, list \$23.95.

This book is a great adventure narrative, based on ethnobotanical discoveries and the passion and commitment that accompany this discipline. It begins as a simple ethnobotanical research narrative within a Samoan village. Paul enriches the story by interweaving the ecology and history of the region throughout the story. As the research period becomes enriched with ethnobiology, unique events occur that demand personal commitments and alter the objective position that was the original goal of the researcher. It becomes obvious to Paul that his role has been changed and he no longer can remain as an outsider, but must accept the new role that has been chosen for him.

Paul and his family lived with the villagers during their greatest adversary, a hurricane that destroyed the village. This is one personal account of an ethnobotanist's experiences that lends experience for all of us who work in the field, especially how he approaches the politics and personal issues that often gently nudge at all ethnobotanists.

Botanical Safety Handbook, CRC Press, 1997, ISBN 0-8493-1675-8, \$39.95 or from the authors at AHPA call 301-951-3204. This book summarizes the approximately 500 plants in commerce. Alphabetically listed by scientific name, each herb listing contains the family name, common names, part most frequently used, other safety or data that affects safe use of the medicinal, and the posology. The appendices are as long as the listing and include: Herbal Constituents, Herbal Action Profiles, and Herb listings by Classification (defined within the listings). This text is a gallant effort and a required text for anyone who uses medicinal plants to maintain their health or as part of their business. Please take the time to review this text and let us know what you think.

## PUBLICATIONS (cont.)

(continued from page 8)

Ethnobotany and the Search for New Drugs, Ciba Foundation Symposium 185, John Wiley Publishers, NY, NY. 1994. ISBN 0-471-95024-6. I realize that this book is not new, but it is quoted in so many ethnobotanical readings and presentations, that I thought it worthy of mention. This original symposium hosted many of our past presidents, DEBs, and members. Topics include: ethnobotany, drug development and conservation; Amazonian ethnobotany, African medicinal plants; ethnopharmacology, ethnobotany and NCI, Chinese ethnopharmacology, and anthropological issues in ethnobotany. Besides the original presentation, the publication includes the audience discussion that occurred afterwards.

Certification of Forest Products: Issues and Perspectives, Viana et al, Ed. Island Press, Washington D.C., 1996. As we expand and encourage the use of plants it directly affects the stability of the resources. One approach to this is to certify commodities to verify that certain criteria have been met to prevent the loss of natural resources. This book is the first of many that I am sure we will see on the shelves as we begin to work on certified non-timber forest products. Even though the book is focused mostly on timber, there is one chapter on NTFPs.

Here are a few items I found through listservers, etc. I have not seen these or read them, so am very interested in your thoughts and hope you can send in a review for the next Newsletter issue. -Editor

1. Pamphlet: Harvesters Guide to Morels.
2. Pamphlet: Harvesters Guide to Chanterelles.
3. Pamphlet: Harvesters Guide to Fall Fungi and Other Choice Edible Mushrooms of the Summer

Direct inquiries to:  
Executive Committee of the Mycological Association of Washington  
12200 Remington Drive  
Silver Spring, MD 20902 (USA).

Contribution to Indian Ethnobotany 3<sup>rd</sup> ed. / S. K. Jain, Editor. Scientific, Jodhpur. 1997. ISBN: 81-7233-150-9. \$19

Prices are in US \$; postage, packing and forwarding are additional. Contact:

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## GERMPLASM NEWS & VIEWS

by David Theodoropoulos

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### Part One of Three

*"Here comes the Anthrose, better hide your past away, Here come the Anthrose, on another holiday..."*

From the song "Here Come the Anthrose," words & music by Jimmy Curtis and Floyd Westerman (Sisseton-Wahpeton Dakota Sioux) © 1982 Red Crow Prod.

### BIOPIRACY: Part I—What Is It?

"Biopiracy" looms as an important issue which threatens ethnobotany by undermining the goodwill and traditional cordial relations between academic and rural

students of plants, and by undermining the traditional free exchange of plants and knowledge between peoples.

Consider some examples: A cell line derived from Californian John Moore was patented in 1984, whereupon Mr. Moore sued. The California Supreme Court ruled in 1990 that he has no rights to his misappropriated cells or the profits derived from them. Traditionally grown, naturally pigmented cottons were selected and "patented" under the Plant Variety Protection Act, PVPA. US firms have produced patented, neem-based insecticides and have begun to market them in India, the home of traditional neem use as insecticide. Traditional endod (*Phytolacca*) use in

(continued on page 18)

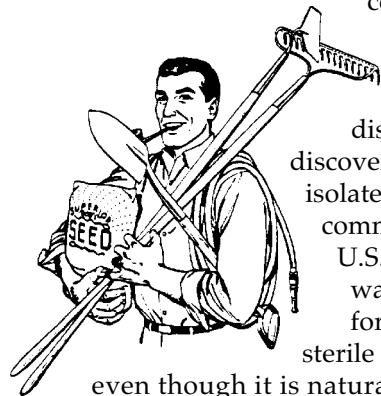
**Three Pamphlets Have Been Published By The Mycological Association of Washington**

**"Biopiracy" Undermines the Goodwill and Traditional Cordial Relations Between Academic and Rural Students of Plants**

## GERMPLASM NEWS & VIEWS (cont.)

(continued from page 17)

Africa led to the finding that it is effective against the zebra mussel, a pest of polluted waters, and this use was patented by U.S. researchers. A non-sugar sweetener from a fruit used in Gabon was patented by researchers at a U.S. university, and no benefits are planned for the people of Gabon. A U.S. citizen patented a traditionally used clone of *Banisteriopsis caapi* (PPA #5751). European researchers patented



genes coding against cardiovascular disease, discovered in an isolated Italian community. A U.S. patent was granted for all male-sterile quinoa,

even though it is naturally occurring in traditional varieties. The U.S. government applied for U.S. and world patents on cell lines from a Guaymi woman from Panama, Solomon Islanders, and a Hagahai man from New Guinea. The Hagahai patent was later disclaimed in response to public outcry. Genes from the people of Tristan da Cunha have been patented. Monsanto has asked its employees to bring back soil samples if they take exotic vacations. Pharmaceutical companies (Glaxo Wellcome, Merck, Pfizer, Phytera) have begun bidding for access to botanic gardens' collections since they are exempt from the Convention on Biological Diversity (CBD) sovereignty provisions. Calls have been made to "close this loophole." Firms have been established to market Ayurvedic medicines in the US, and to collect and market Amazonian medicinal plants in order to provide employment for forest dwellers and an incentive to protect the forest. Native Seeds/SEARCH, The Seed Saver's Exchange, and various small seed companies finance the collection and public distribution of traditional varieties as a preservation strategy, often trading across national boundaries. Botanic gardens exchange seed worldwide and

distribute plants to the public via fundraising plant sales. Latin American, Pacific, Asian, Middle Eastern, African, Indian, European and other immigrants to California and elsewhere are bringing seeds and cuttings of their traditional foods, spices and medicines with them, to grow, exchange and sell.

All of this broad spectrum of actions, ranging from the obviously exploitive to the actively beneficial, have been labeled "biopiracy," the "theft" of germplasm and knowledge. Various legal and institutional measures have been implemented to deal with this "theft." The analogous "cultural theft" has led to various accusations, some valid, some spurious, leveled at anthropologists, artists, museums, "new agers," artifact collectors, etc., yet all have often greatly aided cultures: Californian Indians are turning to Harrington's and others' work to help resurrect their nearly lost languages; Wilbert was consulted by young Warao concerning the dances of their grandparents. Some Amazonian ayahuasqueros have begun shipping the botanicals for preparing their sacred drink to interested groups in the U.S., recognizing that their own survival in the forest may depend on this—"From what we have seen of your culture, you need this medicine."

Can we distinguish between theft and exchange? Will we be able to do so before all goodwill is poisoned by greed and suspicion? What steps can we take to safeguard our own traditions of free inquiry and free exchange? To prevent the exploitation of our own work, ethnobotanical inquiry, by wealth and power? To prevent the expropriation and privatization of our necessities, our cultures, our minds? The world's biological diversity has been likened to a great library. Next issue: Part II—Locking the door after the library is afire.

For further reading [or rantings -Editor] on biopiracy, consult various issues of RAFI Communiqué and the RAFI Occasional Paper Series, available from Rural Advancement Foundation International - USA, P.O. Box 655, Pittsboro, North Carolina 27312, Tel (919) 542-1396; e-mail: rafi@ando.net. I am indebted to RAFI for most of the above examples.

Can We Distinguish Between Theft and Exchange?

What Steps Can We Take to Safeguard Our Own Traditions of Free Inquiry and Free Exchange?

## In the Classroom

by Gail E. Wagner

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Here are two bits on teaching ideas. The first is a description of a class exercise that can run during the entire semester or quarter. The second is a summary of resources on teaching about intellectual property rights.

### What Is It?

Thanks to the fact that I maintain a small but varied garden and I am in the habit of collecting plants or things made from plant parts from various places, I was able to offer the following exercise to my ethnobotany class last semester. I'm sure even non-gardeners could collect or buy enough items to offer a version of this to their class. I call my exercise WHAT IS IT?, in part because as I walk down the hall with the current item, somebody always stops and asks me this question.

Each week I bring in some plant part or something made from a plant (see list below) and challenge the class to research questions about it. The first person to answer all questions correctly wins the item! I ask for the following sorts of information, modified to fit each item: (1) common name; (2) family, genus, species; (3) what is it used for/how did it get that common name; (4) where is it native; (5) how have you seen it used; (6) is it wild or domesticated . . . and so on.

Here's a list of what I have brought to class: American Devil's Claw (*Proboscidea parviflora*), bottle gourd (*Lagenaria siceraria*), calabash gourd bowl (*Crescentia sp.*), dried okra fruit (*Hibiscus esculentus*), luffa (*Luffa aegyptica*), Job's tears (*Coix lacryma-jobi*), buttons made from black walnut nutshells (*Juglans nigra*), broomcorn (*Sorghum vulgare*), bittersweet (*Celastrus scandens*), beauty berry (*Callicarpa americana*), bamboo (*Bambusa sp.*), and teasel (*Dipsacus sp.*).

You may need to guide the students to the economic botany section of the library or to appropriate web sites where they can research their answers. One enterprising student stopped by the herbarium for help. Although not all students try to win each item, occasionally an item will catch their fancy and they try for it (the luffa is especially a hit).

### Intellectual Property Rights

This is by no means a complete summary, but here are enough references to get you started on this important topic that should be a part of all ethnobotany / economic botany courses. If you want to really involve your students in this topic, Will McClatchey invented a semester-long role-playing game for his class in Florida . . . but it sounds like it's not for the weak of heart!

Brush, Stephen B. 1993 *Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology*. *American Anthropologist* 95(3):653-686.

Brush, Stephen B. and Doreen Stabinsky, editors 1996 *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*. Island Press, Washington, D.C.

Busch, L. et al. 1991; *People, Power, and Profit: Social, Economic, and Ethical Consequences of the New Biotechnologies*. Basil Blackwell, Oxford.

Crucible Group 1994; *People, Plants and Patents: The Impact of Intellectual Property on Trade, Plant Biodiversity, and Rural Society*. International Development Research Centre, Ottawa.

Cunningham, Anthony B. 1996 *Professional Ethics and Ethnobotanical Research*. In *Selected Guidelines for Ethnobotanical Research: A Field Manual*, edited by Miguel N. Alexiades with assistance from J. W. Sheldon, pp. 19-51. New York Botanical Garden, Bronx, NY.

Greaves, Tom, editor 1994 *Intellectual Property Rights for Indigenous Peoples: A Sourcebook*. Society for Applied Anthropology, Oklahoma City.

Posey, Darrell A., et al. 1994 *Indigenous Peoples, Traditional Technologies and Equitable Sharing: International Instruments for the Protection of Community Intellectual Property and Traditional Resource Rights*. Draft Document, Oxford Centre for Environment, Ethics and Society, Oxford University.

**"What Is It?"  
Can be a  
Fun and  
Educational  
Class Exercise**

**Intellectual  
Property Rights  
Should Be  
a Part of All  
Ethnobotany  
and Economic  
Botany  
Courses**

# ***ETHNOBOTANICAL HUMOR***

by Linda Maloney,  
submitted by her professor, Oswald Tippo

*It used to be a plant just grew,  
Was green, with pretty flowers too,  
With red or pink or purple hue,  
I'd sniff its fragrance and absorb its view  
Like yellow fields that Wordsworth knew,*

*But I am much much smarter now,  
I've had a course and heard the vow,  
And when I meet the bud on bough,  
I ask not who, but rather, how.*

*At first you see, you cannot tell,  
But within these plants are things called cells,*

*All square with membranes and nuclear saps,  
Meiosis and fusion and DNA maps,  
And up in one corner, unnoticed and glum,  
Sits an endoplasmic reticulum.*

*I say castrate those stamens for a di-hybrid boss!*

*We will plan some mutations, invite Mendel, have games  
And for all the strange products, invent Latin names,*

*And they will be quiet and grow as they should,  
Just sucking up nitrates for their phloem and their wood,  
And out of this garden, out of newly shaped hoods,  
There'd be whispers of pleasure, of excitement, of good,  
Of how it is, to be understood.*

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