

GLOBAL NEWSLETTER ON *UNDERUTILIZED* *CROPS*



JANUARY 2001

Editorial

Hello and welcome to the fifth Global Newsletter on Underutilized Crops. We hope you find this Newsletter interesting.

The International Centre for Underutilized Crops (ICUC) focuses its activities in knowledge based information and dissemination on underutilized species, research and development (our work is concentrated in areas of South Asia, Sub-Saharan Africa and soon to include in April 2001- South America (Guyana), in the context of sustainable livelihoods) and human resources development for the promotion and sustainable production of underutilized crops. In collaboration with international and national partners ICUC aims to strengthen national research on under-utilised crops to help aid poverty alleviation and income generation, in some of the worlds poorer countries and regions.

Within this newsletter we aim to inform you of recent scientific news on under-utilised species, act as a contact point for new organisations and networks, report on recent conferences concerning under-utilised species and of course report on the work of ICUC, over the last six months (June – December 2000).

Comments on this newsletter are always welcome!

ICUC would like to thank its supporters be they; International or National Partners, NGOs, Universities, Donor agencies, Stakeholders or interested members of the Public for their continued information, comments and technical expertise on the production of this Newsletter and interest in under-utilised crops.

WE WOULD LIKE YOUR NEWS ON UNDERUTILIZED CROPS, OR ON ANY RELATED SUBJECT, WHICH COULD HELP OTHERS TO STRENGTHEN THEIR NATIONAL PROGRAMMES. PLEASE SEND YOUR NEWS FOR THE NEXT ISSUE, WHICH WILL BE PUBLISHED IN JUNE 2001.

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Mission Statement

Food Security, improved nutrition and economic welfare of human beings raised through sustainable and increased economic production of food and industrial raw materials. This to be achieved by developing and utilising the untapped biological diversity of underutilized crops.

Preface by the Chairman

It is very pleasing to be able to report that there is a great deal of renewed interest in what the ICUC calls under-utilised crops. This interest has been catalysed by discussions at the Dresden meeting of the Global Forum (GFAR) and has been reinforced during a meeting of European interests on under-utilised crops called by the ICUC, and held in London on January 5th and during a meeting on Under-utilised and Orphan Crops called by GFAR and held in Rome on January 22nd 2001. Further information on these meetings can be found elsewhere in this Newsletter. Other significant activities of the ICUC include the re-submission to the EU (INCO-DEV- accompanying measures), of the proposal, now revised, which was submitted earlier and the completion of an external review of the *Indigenous Vegetables in Eastern and Southern Africa* project and a programme of the Southern and Eastern African network on Under-utilised Crops (SEANUC), funded by the National Lottery Charity Board (NLCB), UK. The first book under the *Fruits for the Future Project*, that on Tamarind, funded by the Forestry Research Programme of the UK Department for International Development (DFID) has been published and 4 other books will follow in 2001. There is a possibility that DFID might agree on phase 2 of this project which will allow the work to continue with an additional 5 species. The ICUC books (which are accompanied with manuals for farmers and extension workers, and extension materials), will complement a similar series of books on different under-utilised species published by IPGRI.

High priority is given by GFAR to international co-operation for agricultural research on commodities outside the CGIAR system. Non-CGIAR crops include

the under-utilised or orphan species, and GFAR has recognised the need for more research on them, research which should also adopt the commodity-chain approach. As yet, no global co-ordinating mechanism or facilitation unit has been established for these crops. The ICUC has however set out its vision, which is essentially a set of regional networks on under-utilised crops, building on the existing network activities of ICUC (e.g. UTFANET, SEANUC and WAFNET) and of other players (e.g. MESFIN, MEDUSA, BAMNET) at which level the research will be conducted. The GFAR recognises that much of the research should be at the local or regional level, in accordance with the principles of subsidiarity. The vision is to incorporate these networks into a Global Network on Under-utilised Crops, which will require a small but effective co-ordinating centre or facilitation unit. This vision can become a reality with the support and agreement of GFAR and its regional and sub-regional fora, and with modest financial support such as is being sought by ICUC from the INCO-DEV and other donors. This vision has been discussed by GFAR at the recent Rome meeting, and has met with a great deal of support.

Furthermore, the ICUC has offered itself as the base for the facilitation unit, and as the home of a European Centre (see below) which will continue developing the regional networks, co-ordinating at a Global level and supplying information, guidance, training and help to the network partners. Exciting times are ahead, which will enable many poor people to increase their incomes, improve their food security and nutrition, raise their standards of living and thus escape the poverty traps in which many are now caught. Following the ICUC meeting held in London, steps have been taken towards the establishment of a European Network on Under-utilised Crops- Advisory Committee to guide the vision of ICUC. Europe is particularly well placed, with its wealth of Advanced Research

Institutes and Universities, but also with support from the private sector, the donor community and the NGOs, to be an active partner and provider of technology and funds to support the activities of the regional networks. Discussions are taking place in the European Forum (EFARD), and between it and the European Initiative for Agricultural Research for Development (EIARD), in order to gain wide recognition of this partnership.

I believe that significant progress is being made in utilising some of the untapped biological diversity for the benefit of humankind and the environment. I would ask our readers to continue their efforts in working together for our common aims, in sharing their resources, in avoiding unnecessary duplication and in lobbying for continued and new support from the policy makers and donor community to create the wider enabling environment within which we can together achieve our purposes and goal.

Please use this newsletter a medium to exchange views and comments, to disseminate information and to keep in touch with your partners with common interests. Letters with ideas, opinions, comments or criticisms are always welcomed.

**By Roger W. Smith
Chairman, ICUC**

Organisations Concerned with Underutilized Crops

ICUC NEWS

Underutilised Fruits To Enhance Food and Nutrient Security

At a workshop on 'Fruits for the Future' held in November 2000, Mr. D.M. Jayaratne, the Hon. Minister of Agriculture and Lands in his inaugural address emphasised on the need to select and improve the fruit species that remain under-utilised for many years for the benefit of the rural population. He indicated that while the other countries of the region have embarked on commercialisation of some of these species such as jackfruit, guava, durian, rambuttan and tamarind we have not recognised their full potential and given them their deserved priority in our research programmes. If we could improve them and integrate with agricultural systems, these fruit species could supplement the household food security and improve the living standards, he said.

This Workshop was organised by the National Multipurpose Tree Research Network based at the Faculty of Agriculture, University of Peradeniya, jointly with the Department of Agriculture and the National Science Foundation. The inaugural session was addressed by Prof. H.P.M. Gunasena, National MPTS Coordinator, Dr. S.D.G. Jaywardene, Director-General, Department of Agriculture and Mr. M. Watson, Director, National Science Foundation. The academics of the University and research officers of the Department of Agriculture and the Institute of Industrial Technology discussed the

potential of several under-utilised fruit species. These included woodapple, kitaul, mangosteen, rambuttan, durian, avocado, annonas and tamarind. The present status of the above fruit species, their agronomic and industrial potential were discussed by the participants of the workshop.

At this workshop it was revealed that tropical fruits are important multipurpose trees which could supplement and improve the quality of diets, provide fodder, fuelwood, timber and medicines for the rural populations. The consumption of these fruits enable particularly the rural people, women and growing children to obtain nutrients for a balanced diet, supplement family incomes and improve household food security. These fruit species, however, have not been well managed by the rural people for economic returns due to various reasons, primarily the lack of technologies for processing, storage, product development and marketing. Some of these species have not been included in the country as they are considered unimportant and are in a state of complete neglect. Many of these fruit species are felled for timber, agricultural development and urbanisation etc. and some of them due to these reasons are at the point of extinction. The local institutions have not taken adequate action to collect and conserve them for future use.

There are several under-utilised fruit species in Sri Lanka and they also grow in other neighbouring countries of the Asian region. Major species include tamarind, divul, beli, durian, mangosteen, annonas, rambuttan, jackfruit, goraka, galsiyambala, kitul and avocado. In Sri Lanka due to its favourable climate these fruit species thrive well and produce fruits. Although often they are left unattended, they produce fruits in large quantities in many ecological regions and appear in markets during the season. They are never processed or preserved and most of them are wasted. A very clear example is the jackfruit, which

remains unharvested on trees. In other countries like Thailand, Indonesia, Philippines and India the tree improvement has been undertaken by selecting outstanding species from natural populations. These improved trees produced good harvests and have been incorporated into the agroforestry systems. They are also grown on a plantation scale in some countries such as Thailand. In Thailand improved varieties of sweet tamarind, guava, durian and rambuttan are cultivated by small farmers not only for local consumption, but also for export. It is a common feature to obtain dried, processed and packeted tamarind, durian, mango, etc. in those markets which help the rural populations to enhance their incomes and improve the living standards.

In this Workshop several papers were presented by the academics and research officers of the Department of Agriculture. Dr S D G Jayawardena, Director- General of Agriculture emphasised the importance of developing these fruit species for commercial purposes and the on-going programmes of the Department of Agriculture towards their development. His emphasis was to select certain species with high priority for development rather than embarking on an extensive programme involving many species, as the number of potential under-utilised fruit species exceed well over twenty.

The participants also noted that although the potential of under-utilised fruit species has been well recognised they have not entered into the research agenda of concerned institutions. They have been given low priority. This is an area which should receive the attention of the Departments of Agriculture, universities and other concerned institutions and industries. The genetic resources of these species have been threatened due to urbanisation and agricultural development. Hence steps should also be taken to collect, characterise, evaluate and conserve such

germplasm. Although no conscious efforts are being made on breeding, the selection process could be used for the identification of cultivars with desirable traits. It will be necessary to identify characteristics for suitable ideotypes for various utilisation purposes such as in plantation, home garden and other niches of the farming systems.

When desirable selections are identified, germplasm distribution pathways have to be developed to make them available to the farmers. The germplasm production and distribution pathways should include the participation of farmers to encourage them to increase opportunities for employment. Developments in processing and product are areas, which are highly neglected. These are essential to promote under-utilised species for commercialisation. Collaborative arrangements with industry will be required to accelerate product development and diversification.

The most important aspect for the popularisation of the fruit species will be the availability of markets. Therefore economic aspects of production and marketing will be crucial to their development. It is emphasised that market surveys are conducted and the potential in international markets explored.

*By H.P.M. Gunasena
Post-Graduate Institute of Agriculture,
Peradeniya*

UTFANET

Underutilised Tropical Fruits in Asia (UTFANET) was established in 1995 by ICUC in partnership with APAARI, CSC, FAO and IPGRI.

Countries participating within UTFANET are Bangladesh, India, Indonesia, Philippines, Vietnam, Nepal, Pakistan, Sri Lanka and Thailand. China has now, also agreed, to join the network. jackfruit product development research was funded recently by ICUC and implementation of the

project was carried out by BCSIR (Bangladesh Council of Scientific and Industrial Research). Several products including toffees, biscuits, drink and dry pulp in syrup were successfully produced. A field trial was carried out where the products found a high degree of product acceptability particularly amongst children.

In August 2000, UTFANET were invited by PCARRD to broadcast current project details and information concerning the work of ICUC and UTFANET on 3 radio stations in Manila. The interviews were in 'Tagalog' and therefore could reach a wider target audience. The interviews included the networks organisational structure, achievements, member countries and its 3 year operational plan.

A regional training course on the propagation of Mangosteen was held in September 2000 at the Philippines Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) and at the University of the Philippine's Department of Horticulture. This was followed by a study visit to potential mangosteen growing areas in Laguna, jackfruit production areas in the Visayas and pummelo growing areas in Davao.

The training activity familiarised the participants from the Philippines, India, Indonesia and Pakistan with the appropriate methods and skills in mangosteen production.

The course was sponsored by The National Lottery Charities Board (UK), PCARRD and ICUC in the UK.

A NEW ICUC PROJECT IN GUYANA AND ZANZIBAR

ICUC has obtained a grant from the UK Department for International Development (DFID) for a project to "Improve the Livelihoods of Indigenous Communities in Guyana and Zanzibar through the Production and Marketing of Agricultural and

Forest Produce". The communities ICUC will work with are poor, with few opportunities for income generation. The project will help entrepreneurs to develop businesses based on local natural resources to produce quality high value produce such as dried fruits and honey for which there is a demonstrated regional or international market.

A pilot project run by the Commonwealth Science Council has shown that both the Amerindian communities in southern Guyana and subsistence farmers in Zanzibar are well placed to develop such businesses based on produce that either now goes to waste, or is easily cultivated. However, the potential for developing viable enterprises is not realized due to a lack of knowledge of the potential markets and the technologies and skills necessary to produce goods of the necessary quality together with poor and often exploitative marketing links.

The novel aspect of this project is that ICUC will work in close collaboration with companies that have themselves set up viable commercial enterprises with entrepreneurs in Africa. Tropical Wholefoods based in London markets dried fruit produced by small enterprises throughout Uganda and exported to the UK by its sister company Fruits of the Nile. Tropical Forest Products based in Wales markets traditional African honey produced and exported by its collaborating company North West Bee Products in Zambia. The dried fruit and honey are now the basis of highly successful and expanding businesses.

While the trend in many developing countries is to migrate to the city to find employment, these companies have demonstrated that it is possible to develop small, viable businesses in regions that are often remote. There are several advantages. Rural people are provided with an incentive stay with their communities. Money is earned, and spent locally, thereby improving the

local economy, and encouraging other business to develop. As women are primarily involved with drying produce, there is more money for the household budget. And the use and marketing of local resources can in the long run lead to placing a higher value on the local environment.

The key to developing successful small, locally based enterprises is to develop trust between partners. As each link in the market chain is dependant on the others, it is essential that support and backup be provided to entrepreneurs to ensure the continued supply of quality produce. Similarly, the producers must have a commitment to meet the requirements of the market, and on time. The project will capitalize on the valuable hard-won experience gained by these companies, in developing working relationships necessary for sustained market linkages, and their knowledge of the international market to set up similar enterprises in Guyana and Zanzibar.

By Peter de Groot, CSC.

FRUITS OF THE FUTURE

The Fruits for the Future project has continued making progress on the production and distribution of information on propagation methods, harvesting, postharvest, processing, utilisation and marketing of tropical fruit tree species. The first monograph in the series, Tamarind, has now been published and is currently being distributed, the second and third (Ber and African plum) will soon follow. Information about the project and access to the annotated bibliographies can be found on the ICUC website:

<http://www.soton.ac.uk/~icuc>

A conference workshop was held in Cameroon in October, 2000 on the valorisation of *Dacryodes edulis* and other oil crop species. ICUC was present at the workshop and a poster

was presented on behalf of the Fruits for the Future project. There was a lot of interesting research presented on *D. edulis*, this new research has now been incorporated into the third monograph in the series (African plum), which will be published shortly.

The project held its first Editorial Board meeting on December 5-6 2000. The project was reviewed and recommendations made on the current production procedures. The production of additional publications and further development of the project were items for discussion. It was also noted during the meeting that there has been a lot of spontaneous interest in the project, particularly through the website and published articles, with interest from farmers, traders and the scientific community. Published materials will be distributed by a number of organisations including ICRAF and IPGRI.

By Angela Hughes. ICUC.

Networks

AARINENA

The Association of Agricultural Research Institutions in the Near East and North Africa.

AARINENA was established in 1985 to strengthen co-operation between national, regional and international research centres and institutions based on the recommendations drawn from the 14th and 16th FAO Near East Regional Conferences.

AARINENA aims to allow the dissemination and exchange of information, experiences and research results, thereby promoting collaboration and fostering research in agriculture and technology development in the Region. The association also aims to improve the self-sufficiency and welfare of the Regions' peoples by sustaining and

further improving the natural resource base.

Priorities are categorised as either technical or institutional. Examples of technical priorities are agroforestry research, use of saline and poor quality water for crop production and farming system management, whereas examples of institutional priorities are improving all components of research management, establishing links from research organisations to end users and formulating agricultural strategies at national and sub-regional levels.

Source:AARINENA

Towards 2000 and beyond

[Email:miltos@arinet.ari.gov.cy](mailto:miltos@arinet.ari.gov.cy)

TAROGEN

TaroGen, a three year project funded by AusAID has been implemented by the Secretariat of the Pacific Community (SPC) in collaboration with IPGRI, the University of the South Pacific (USP) and Hort-research (New Zealand) since 1998. It works with national programmes in the Pacific Islands to develop a regional strategy for the conservation of Taro genetic resources and crop improvement.

The objectives of the project are as follows:-

- Assist the Pacific Islands Countries (PICs) to collect Taro genetic resources worldwide, rationalise collections and carry out international exchange.
- Develop and impliment complementary strategies for the conservation of Taro genetic resources within PICs and regional institutions.
- Provide growers with improved taro varieties to overcome limiting factors on production.
- Provide efficient and effective management and monitoring of the project.

Source: APAARI Newsletter, June 2000.

REGIONAL NEWS

Europe

ICUC

European Networking on Underutilised Crops

A meeting was held in the Friend's House, Euston, London on January 5th 2001 to develop an action plan for promotion and expansion of utilisation of under-utilised crops for food/ nutritional security, industrial uses and sustainable livelihood. The meeting was called by ICUC, with the objectives to discuss possible establishment of a European Centre (Network) for Underutilised Crops, familiarise the participants with each others' field of research and to discuss possible future collaboration between them.

A group of 13 people attended from 8 European countries, in addition, representatives were present from EFARD (Prof Cees. M. Karssen) and GFAR (Mr Cristian Hoste).

Brief Statements were made by:-

1) Denzil Phillips:

Reported on the establishment of "High Value Horticulture" His present enterprise 'D.P. International' concentrates on links between agri-business and development, with emphasis on botanicals for production of medicinals and aromatics. Many new activities concentrate on markets in developed countries such as the USA and Germany. He produces a newsletter "Plantwise" and has established MNS, a news service on medicinals and plant extracts. He has a keen interest in under-utilised plant species. Denzil questioned whether a new European Centre would duplicate any current initiatives.

2) Maria Pascual-Villalobos :

The Regional Centre for Agricultural Research (CIDA) at

Murcia in Spain has been actively involved in European projects on non-food industrial crops. The main interests of her group at international level lie within botanical insecticides (screening/ use of plant extracts for pest control) and essential oils. The development of organic agriculture is also of local importance, particularly the use of intercrops to reduce pest problem in vegetable production systems.

3) Trevor Tanton :

Expressed concern that although the scope for the development of under-utilized crops is high, the potential to tap it remains low. He emphasised the need for co-ordination between all involved parties. He commented on the absence of any "master plan" for these crops, and noted that no risk assessments had been made prior to investing in R and D activities. There is a need to improve co-ordination and to prioritise activities.

Dr Haq presented The ICUC Proposal for the Global Network and the proposed 'European Centre on Underutilised Crops'. Within the Global Network, activities would be determined at regional levels taking account of the priorities of countries, regions and the GFAR Regional Fora and Sub-Fora, and as defined through regional workshops. This accords with the results of the discussions on the matter at the Dresden GFAR meeting. Dr Haq also stated that for the last 12 years, ICUC had been active in establishing regional networks- for example UTFANET, UTVAPNET, SEANUC and WAFNET. The intention is that these regional networks would be strengthened and expanded to cover all the relevant commodity groups. It was also envisaged that new networks would be established in regions which were not yet covered by ICUC (e.g. Latin America/Caribbean, North Africa and the Mediterranean).

In proposing a European Network Centre, Dr Haq pointed out that the only existing Centre which is dedicated solely to under-utilised crops was the ICUC, although he

recognised the importance of many other groups in Europe which have a keen interest in the subject. He argued that there is a real need for interested partners in Europe to work together as a European network. This Network Centre, would have access to the relevant expertise in Europe, and could become the main supplier of expertise, and the provider of markets, to the other regional networks. He pointed out that there was nothing similar in other developed areas, such as North America or Australasia.

In discussion, it was pointed out that there is a need for industry to be made aware of what is available in terms of new raw products from under-utilised species, and an equal need for potential producers of these raw material to know what markets exist or could be developed. Dr Haq envisages a European Centre would be responsible for gathering information, transferring it to those in need and would thereby perform these functions. Also in discussion, the question for the need of a European as opposed to a Global Centre, was raised. The feeling of the meeting was that there is justification for a European initiative within a Global Network. Whether this initiative should result in a Network Centre, a Consultative Group, or a Consortium, was debated without resolution.

Christian Hoste, based in Rome and Senior Adviser to GFAR, summarised GFAR, its mechanisms and potential links with a Global Network and a European Centre. He drew particular attention to the multi-stakeholder nature of GFAR, involving as it does the Advanced Research Institutes, Academic institutions, National Agricultural Research Systems the International Agricultural Research Centres, the Private Sector, NGOs, Farmers' groups and donors. All stakeholders were on an equal footing and all therefore had an equal voice in the Fora at sub-regional, regional and Global levels. GFAR is managed from an office in FAO, Rome, and is guided by its own Steering

Committee is composed of the Chairpersons of the five regional fora plus representatives of the other GFAR categories of stakeholders. He pointed out that there exists a European Forum on ARD. He reminded the meeting of the priorities which had been established by GFAR and which had been confirmed at the Dresden meeting. One of the priorities was that on Commodity Chains, covering the Industrial and major commodity crops which were not within the remit of the CGIAR. He also pointed out that the so-called orphan, neglected or under-utilised crops were a priority under the Commodity Chain heading, but a priority which GFAR had concluded should be mainly addressed at the regional, rather than at the Global level but that a Global Facilitation Mechanism was needed.

A full, open discussion took place in the afternoon. It was good to see that the discussion was a frank one, and that all members of the meeting actively participated. Germany had already pledged 0.5m German Marks for incentive work on under-utilised crops, a pledge made in Dresden. Requests had been sent to the African sub-regional fora (CORAF, ASARECA and SACCAR) seeking their priorities in this area, and responses are expected soon.

There was a discussion on the need for a European Advisory Committee, what was to be its purpose, what funding would be needed for it to work. It was also stressed by some members that it would not be sensible to establish any new infrastructures in the setting up of a European "Centre" but the feeling of some in the meeting was that Europe might be better to establish some Consultative/ Consortium/ Network mechanism with a committee built on existing experience of ICUC, which could help ICUC and its European partners with their facilitation and work including development of regional projects, and help them deliver appropriate outputs.

Noting the existence of the European Forum, and of the European Initiative on Agricultural Research for Development (EIARD), it was suggested that ICUC should ask the European Forum to ascertain the views of EIARD on the establishment of a European Network Centre, as under-utilised crops were already a priority of the European Forum and of GFAR. It was generally agreed that a European Centre of Excellence on Under-utilised crops should be recognised, and that the results of these discussions on the ICUC proposal could bring this to a reality. Recognised centres of excellence will become important within the EU Framework Programme 6 which is currently being developed. It was pointed out that we should liaise with the European Forum in deciding on the structure of a European Network Centre -whether it be the creation of infrastructure or the initiation of regional projects. Since underutilised crops is one of EFARD's priorities ICUC will formally approach EFARD for collaboration and will organise a European workshop on under-utilised crops.

It was concluded that follow-up action is needed. The meeting in Rome on Under-Utilised and Orphan Commodities (UOC) on January 22nd 2001 will review progress made by the different institutions in the field of UOC since the Dresden conference and will further develop the concept of what could be a "global facilitation mechanism for UOC". The meeting will explore how best to start operationalising such a mechanism and decide on preliminary steps to take. ICUC is invited to attend and to present a 30 minute report. It was decided that ICUC should produce a 2-page statement which reflects the unanimous views of the participants. The statement should synthesize the ideas and conclusions from this meeting, and should outline the setting up of a European Group, and the establishment of a steering committee. At the Centre there should be an International (not a European) advisory committee. No

new infrastructure should be proposed, rather the existing structures (ICUC, Regional networks etc.) should be used and built on. The draft statement should be sent to all members of the meeting as soon as possible, and dates given for comments to be received, in order that it is finally distributed as soon as possible.

It was also pointed out that there are still opportunities for proposals for projects to be put to INCO-DEV (in FP 5), and ICUC and its partners should be active in this regard. ICUC's submission under the Accompanying Measures programme was noted and the 2-page statement should be sent to Directorate General Research in Brussels, together with other lobbying to have it accepted.

A "committee was formed to finalise the text, to take matters forward and eventually to call a wider meeting if this was felt to be necessary. The Committee consisted of the following :-

Prof. Patrick Van Damme
Dr. Maria Pascual-Villalobos
Dr. Marten Soerensen
Dr. Lars Bjork
Mr. Melvyn Askew
Dr. Nazmul Haq

ECP/GR

The Europe Co-operative Programme.

The Europe Co-operative Programme (ECP/GR) have developed a network called the 'In-situ and On farm Conservation Network' to contribute to the implementation of the Global Plan of Action, within *in-situ* conservation of wild relatives and on-farm management in Europe. Bibliographies will consist of research papers relating to wild plant genetic resources for food and agricultural (PGRFA) species in gene reserves and mathematical models to forecast results of management interventions. These

papers will be compiled and available through the ECP/GR web site.

Future proposals include a pilot study to record the genetic diversity and socio-economic values of landraces within the Carpathian Mountains of Romania.

Source: IPGRI Newsletter for Europe No.18 August 2000.
<http://www.cgiar.org/ecpgr/>

THE COUNTRYSIDE AGENCY, UK.

Wild and traditionally managed plants in the UK, have recently received increased attention.

A new survey will be conducted by Kew Gardens, UK, funded in part by English Nature, Scottish Natural Heritage and the Countryside Agency (a statutory body advising Government issues relating to the UK countryside), on economic species in areas of high landscape and biodiversity value.

Contact : Dr Hew Prendergast
Kew Botanical Gardens.
Tel: 020 8332 5706

Africa

BDCP

The Bioresources Development and Conservation Programme

BDCP is conducting inventories of the West and Central African forests.

A trial deep forest farm has been completed in the Akamkpa District of the Cross River State of Nigeria to cultivate *Physostigma venenosum*. A highly prized medicinal, land preparation for this species involves minimal land clearing and no deforestation of any kind.

The Pygeum Project (medicinal tree planting project) located near

Bamenda, Cameroon began in 1996 with the planting of *Prunus africana*. Research is being conducted on inter-cropping, insect control and irrigation techniques.

Established in 1991 the Programme is dedicated to ensuring the well being of tropical ecosystems and their human inhabitants through practical, innovative mechanisms of sustainable development.

Source: ICMAP News No.7 June 2000.
Email: BDCP@bioresources.org

<http://www.bioresources.org>

COVER CROPS

Cover crops are usually nitrogen fixing plants, which have a range of beneficial effects such as smothering weeds, reducing pests and improving soil properties, as well as providing food, livestock feed, fuel and soil cover.

The Consultative Group on International Agricultural Research (CGIAR) has launched a research network on the Internet for cover crops. CcropNet comprises some 60 researchers and 30 websites from across West Africa, who are sharing their research work and findings (including a cover crop photo gallery) and are helping to refine and improve the role of cover crops in sustainable agriculture.

Source: SPORE 89.October 2000.
Email: g.tarawali@cgiar.org

www.cgiar.org/spipm/ccropnet/index.htm

Asia

The Pacific Islands KAVA Council

The Council was set up in 1998 with the official support and membership of all Kava (Kava Kava) producing

countries in the Pacific. Its main objectives are:-

- To promote the sustainable production and development of Pacific Kava.
- To develop and preserve the social and cultural manifestations of Pacific Kava.
- To maximise the social and economic benefits of Pacific Kava for member states.

Kava root (*Piper methysticum*) is used in both local and western medicine, attributed to aid and cure the symptoms of muscle fatigue /stiffness, headaches, anxiety and can induce relaxation. It is also a sacred plant used in religious ceremonies in the Pacific Islands.

Source: Plantwise Newsletter Issue No.8. July 2000

Contact: www.pacifickava.com

Crops News

AMBARELLA (*Spondias cythera*)

Ambarella is a rapid growing deciduous tree of the Tropics attaining a height of 18m in favourable conditions. Leaves are pinnate and flowers are small, inconspicuous and white borne in large terminal panicles. The long stalked fruit develops in bunches of 12 or more, oval or irregularly shaped about 6.25- 9cm long. The fruit abscise when green and ripen to a golden-yellow.

The Ambarella can be eaten raw, firm fruit have a taste likened to pineapple and on softening a musky aroma develops. The fruit can also be used in drinks, sauces, preserves and as a flavouring. Young leaves are eaten raw in South-eastern Asia whereas in Indonesia they are steamed and eaten as a vegetable. Wood has been used for canoe building in the Pacific Islands.

Source:
www.hort.purdue.edu/newcrop/

BAEL (*Aegle marmelos*)

Bael trees (*Aegle marmelos*) are slow growing trees attaining 12-15m in height with spreading and sometimes spiny branches. Flowers are fragrant borne in clusters of 4-7 along young branches and have 4 petals displaying a green colour to the outside of the petals and yellow within. Fruit may be round, oval, pyriform or oblong 5-20cm in diameter and is yellow on ripening.

Bael trees are a subtropical species, found within the wild forest areas of South Asian natural reserves, where the fruit has significance within local medicine.

Thought to have anti-helminthic, hypoglycaemic, cardiac stimulant, anti-diarrhoeal and anti-viral properties the fruit are also considered as a potential cholera cure in local medicine. Fruit (sometimes in conjunction with the leaves) is harvested at individual stages of maturity, corresponding to the desired content of an alkaloid required for specific treatments.

Abundant in Bangladesh, Nepal, India and Sri Lanka its hard shell and sticky texture make it difficult to eat by hand, but the fruit is of high nutritional value containing 8mg Vitamin C per 100g of fruit.

Source: Dr.Gyan L.Shrestha. ITDG Oct 2000 Number 27.

ALSO

www.hort.purdue.edu/newcrop/

ECHINACEA (*Echinacea purpurea*)

Echinacea purpurea (Purple Coneflower) is a perennial herb native to North America. Able to grow in poor soils, it can under optimal conditions reach a height of 60cm-150cm, while displaying flowers up to 15cm across. Flowers occur only in summer (June – September). Its leaves are oval and

coarsely toothed. Wild stocks can be found in open woods and thickets.

The leaves and root are used as stimulants to the immune system e.g. treatments for colds and flus. The plant is also believed to have antibacterial, antiviral, antiseptic and analgesic properties.

It is continuing to be harvested from wild stocks, due to demand for its uses in traditional medicine. Roots and plant organs (usually leaves) are harvested at its flowering stage for their medicinal properties.



Source:

www.egregore.com/herbs/echinacea.html

GARCINIA (*Garcinia Cambogia*)

The plant produces a small reddish or yellowish pumpkin-like fruit that displays a sour taste due to high levels of hydroxycitric acid (HCA). (Garcinia rind can contain 10-30% HCA).

Local uses of *Garcinia cambogia* include preparations for the preservation of fish and also as a constituent in curries in the coastal areas of Sri Lanka, South India and other parts of SE Asia.

Several Indian companies manufacture and export *Garcinia*

extract. It is believed to cause a decrease of body fat building up in the liver and adipose tissue, though these aspects of *Garcinia* use have yet to be fully investigated. *Garcinia* is not classed as a herbal medicine in the UK, though it has been a popular herbal product in Japan for many years.

Source:

PLANTWISE NEWSLETTER
July 2000.

[Email:Indfrag@vsnl.com](mailto:Indfrag@vsnl.com)

INCHI TREE (*Caryodendron orinocense*)

A deciduous evergreen tree of Ecuador the Inchi tree can reach a height of 15-30 metres. The female trees produce fruits from September onwards in a ripening process that can take three months. The fruits have a hard kernel similar to nuts and that is covered in a fleshy protein rich fruit wall. The kernels contain 3 seeds and nuts can be eaten raw and are used a food and vegetable oil. Harvesting occurs from November to May and the average fruiting period per tree is five weeks.

In the lowlands of Sucumbios in Ecuador, a project run by Programa Forestal Sucumbios (PROFORS), Gesellschaft für Technische Zusammenarbeit (GTZ) and the Forestry Authority (INEFAN), investigated the potential of the Inchi tree nut as a non-timber forest product .

Inchi Nuts have a fat content of 52% and also contain approximately 75% polyunsaturated fatty acids. The oil produced from the nuts is a highly desired cooking oil and is also used in the cosmetic industry. (GTZ is supporting the marketing of Inchi nut oil).

Source: Mathias Kircher
'Food Chain'.

Intermediate Technology. March 2000.

MALAY APPLE
(*Syzygium malaccense*)

Presumed to be a native of Malaysia the Malay apple is commonly cultivated in Java, Bengal, Southern India, Philippines and Vietnam. Trade route introduction increased its distribution which now also includes East Africa, Puerto Rica and the Pacific Islands.

A fast-growing pyramidal or cylindrical crowned tree which can reach 12-18m in height and 4.5m girth at full maturity. Flowers are borne on the upper trunk and on leaf-less portions of mature branches in short-stalked clusters of 2 to 8 and are mildly fragrant. The fruit is oblong, ovoid or bell-shaped, 5-10cm long and 2.5-7.5cm at the apex. Fruit display a smooth waxy skin, rose-red or crimson or streaked pink/red and white. Each fruit can produce 1-2 seeds, though seedless varieties also exist. Yields can reach 21-85kg per tree in Hawaii.

Fruit can be eaten raw or used within cooking or preservatives. In Puerto Rico the fruit is used in wine production and in Indonesia the flowers are eaten in salads or preserved in syrup. Young leaves and shoots can also be eaten raw with rice or eaten as greens. Bark, roots, fruit and leaves are used in traditional medicine to cure a wide range of ailments.

Source: www.hort.purdue.edu/newcrops/

MATÈ
(*Ilex paraguariensis*)

A tree species of native to the Araucaria forests (*Araucaria brasiliensis*) in southern Brazil, the Matè has been used by local peoples to prepare teas.

Matè extraction from the forest remains a local custom, as it can produce a stabilising factor to a

family's income generation, where the returns on cash crops such as beans and corn can be influenced by poor harvest yields and market prices.

Improving the production of Matè groves has been proposed by the Regenerative and Analog Agroforestry Programme (SAFRA) initiated by the Central-Southern Parana Farm Workers Forum. Experimentation within Matè production by farmers, farmer to farmer exchange, technical training and multi-media communication are incorporated in this programme.

Source: Paulo Petersen, Jose Maria Tardin and Francisco Marochi. LEISA Sept.2000

Email: aspta@ax.apc.org

SEA GRAPE
(*Coccoloba uvifera*)

The sea grape is a small tree native to sandy shores of the American tropics. Trees can reach 15m heights inland, but on windswept coasts height can be restricted to 2.5m.

The tree has stiff near round leaves 20cm across and fruit are globose to pyriform approx.1.8cm in diameter and borne in clusters. The pulp is edible raw or can be processed into jellies and are a popular foodsource in the Caribbean where it is also locally marketed.

Flowers yield abundant nectar utilised for honey production and the timber is much sought after within furniture production.



Coccoloba uvifera

Source:

www.hort.purdue.edu/newcrop/

WILD MELON
(*Cucumis melo*)

Now on the verge of extinction due to modern hybrids and intensified land use, the wild melon can still be found in Armenia near the Arax River in the south of the country and also towards the Southeast.

The wild variety (*C.melo* var. *agrestis*-sect. *Bubalion*) has approximately 6-7% sugar content and can be divided into 2 groups; the Asia Minor group (*C.melo* var. *gracilior*) and the Persian-Turkmenistan group (*C.melo* var. *rigidus*). Both groups of melons vary greatly in shape, size and in the texture of the fruit. All wild melons are highly fertile, where each plant has the capacity to produce on average 60-120 fruits in its lifetime and are resistant to melon fly.

Currently there are 45 varieties of melons cultivated in Armenia, including both modern and traditional varieties. Hybridisation is common where new varieties are selected for high productivity and good taste qualities (8-9% sugar content).

Source: IPGRI Newsletter for Europe. August 2000. No.18.

Contact:

Dr Andreas Melykian
Armenian Agriculture Academy
Yerevan
Armenia.

Recent Meetings

SUSTECH (Sustainable Technologies)

Meeting of the European Chemical Industry Council (CEPIC) was held on the 30th November 2000 and a Round Table was held in conjunction with ERRMA which considered the production and utilisation of speciality chemicals from renewable biomass.

The objectives of the meeting were:

- To understand existing research-related initiatives on the utilisation of renewable biomass for the production of speciality chemicals in Europe and beyond.
- To identify gaps, needs and opportunities that exist for collaborative actions.
- To test the need for SUSTECH to establish a new cluster aimed at promoting collaboration to maximise the potential renewables for the chemical industries.

Key issues identified for companies seeking renewable resources :

- Cost and performance of products derived from renewable resources (relative to competitive or equivalent products derived from conventional fossil oils).
- Assurability of supply and quality of industrial crops.
- The need for production to be free of the distorting effects and constraints of agricultural subsidies.

Areas of potential collaboration were seen to lie in the need for more demonstration projects that would establish, comparatively the economic, environmental and societal aspects of sustainability as well as any technical benefits of renewable derived products.

SOURCE:

ACTIN NEWS. Jan 2001

Contact : Dr Dale Laidler
ICI group Technology, UK.

Email: dale_laidler@ici.com

COMMITTEE ON COUNCIL REGULATION 1467/94

Committee on Council Regulation 1467/94 on conservation, characterisation, collection and utilisation of genetic resources in agriculture was convened on the 26 June 2000 in Brussels.

The group of experts recommended a 5 year programme to be launched, involving more emphasis on *in situ* conservation of both plant and animal genetic resources that co-ordinate rationalization efforts to be encouraged within *ex situ* collections, that future projects have an ecoregional emphasis coverage and that activities on PGR inventories be discontinued.

Other recommendations called for further involvement of the Commission in the execution of accompanying measures, in the handling of legal needs related to the Convention on Biological Biodiversity and in the co-ordination of networks and of national genetic resources programmes.

The Commission clearly acknowledges the specificities of forest and animal genetic resources as well as *in situ* and on-farm approaches for conservation. They made it clear that decentralisation of the responsibilities to member countries will be a condition for the sustainable operation of any future action.

The new programme should be defined in the next 6 months.

Source: IPGRI NEWSLETTER for Europe. No.18 August 2000

Email: christain.anz@cec.eu

FAO 'INTERNATIONAL CONFERENCE TO REVIEW PROGRESS TO FIGHT HUNGER'

On the 28 November 2000 the member countries of the UN Food and Agriculture Organisation (FAO) have endorsed the Director General's proposal to hold a 'World Food Summit: five years later' during the next session of the FAO conference in Rome, November 2001.

It will review the progress made implementing the 'World Food Summit Plan of Action' of 1996 after 5 years and discuss action required to reduce World poverty by half by the year 2015.

Source: FAO PRESS RELEASE
www.fao.org/

GFAR MEETING ON UNDER-UTILISED AND ORPHAN COMMODITIES

FAO, ROME: 22 January 2001

SUMMARY OF THE MAIN CONCLUSIONS AND RECOMMENDATIONS.

The objectives of the meeting were to:-

(1) Review progress made by the different institutions in the field of UOC since the Dresden Conference of May 2000.

(2) Further develop the concept of what could be a "global facilitation mechanism" for UOC.

(3) Explore how best to start operationalizing such a mechanism and decide on preliminary steps to be taken.

MAIN CONCLUSIONS

The participants whose expertise was mainly in the crop sub-sector consider that the forestry sub-sector should definitely be part of any

global initiative on UOC and saw advantages to keep the fisheries and livestock sub-sectors involved in the discussion and possible follow up actions. They identified some common interests and potential benefits for joint actions, in particular at the global level, e.g. policy issues, public awareness, fundraising, etc. As a consequence, the “C” of UOC will continue to mean ‘Commodities’ including the maintenance of the resource base that produces them.

Regarding the need to develop a “global plan of action” as suggested in Dresden, the participants agreed that not too much time should be spent in developing such a document. They, however, recognized the need to have a short (2-3 pages) paper defining a “global framework” for agricultural research for the development of UOC which would serve as a declaration of the importance of UOC and of the firm intention of the institutions to work together.

While endorsing the “commodity chain” principle and acknowledging the results achieved by the IPGRI/INIBAP – CIRAD facilitating unit based in Montpellier, France, for the main market/cash crops, the participants highlighted the complexity of tackling UOC and considered that the approach to be adopted for UOC may be different. According to them, more strategic thinking is definitely needed.

The participants agreed that most of the efforts and energies should be devoted to facilitate the emergence. Of the regional and sub-regional priorities, through a bottom-up approach. The key question remains on how to include UOC in the research priorities and get support for them from the policy and decision-makers at all levels: national, sub-regional, regional and global. All participants also recognized the urgent need to develop information systems (or strengthen existing ones) to serve the UOC community at large, including the consumers. As well as technical information, case studies, etc., such information

systems could include databases on “who’s-doing-what” (players, countries, institutions, etc.) to facilitate research partnerships and networking.

Finally, the participants decided not to go for a very ambitious programme from the start but to identify a few concrete activities which could be carried out with only marginal additional costs in order to concretely demonstrate the added value of joining forces in the field of UOC. Therefore they agreed to develop and implement the following plan of action and to meet around July 2001 to review the progress made and, if positive, to formally establish a “global facilitation mechanism” for UOC. This pragmatic approach should greatly facilitate the mobilization of funds to launch the proposed mechanism. Meanwhile, the GFAR Secretariat will continue to serve as the focal point for these different initiatives. Dr. de Haas offered to host the next meeting of this informal group on UOC in Germany.

RECOMMENDATIONS

1 “Global Framework”

FAO/AGP offered to support this exercise within the GFAR umbrella.

2 “Strategic Thinking”

All participants agreed to the need of developing a specific strategy approach to address the identification, conservation, development, sustainable use and marketing of under-utilized and orphan commodities for the benefit of local farmers in improving food security and poverty alleviation. Before deciding on commissioning a paper on this topic, the participants agreed to review a document which has been recently commissioned by IPGRI¹ through ICUC entitled: "Global Research on Under-utilised Crops: An Assessment of Current Activities and Proposals for enhanced Co-operation" authored by J.T. Williams and N. Haq.

3 Regional Priority Setting

Three initiatives have been identified in this field:

3.1. In the coming year, all regional/sub-regional fora will be revisiting their research priorities in order to provide, *inter alia*, inputs to the new regional approach of the CGIAR research planning and implementation process. The participants saw these activities as a good opportunity to start raising awareness on UOC and recommended to send messages to the regional/sub-regional fora as well as to the CGIAR Centres. Ongoing and planned activities in the Mediterranean region were briefly presented and it was suggested to consider this region to develop a pilot programme.

3.2. FAO/AGSI is actively preparing its International Conference to develop a “Global Initiative on Post-Harvest Technology (GIPHT)” by contracting the five regional fora to commission sub-regional status reports and to organize a regional workshop on the topic. The participants suggested that FAO/AGSI highlights in the terms of reference of the consultants the importance of the “under-utilized & orphan” dimension and, if possible, includes in the outline of the report a specific section on under-utilized and orphan crops that will greatly facilitate the gathering of information on UOC in the different regions.

3.3. ICUC is currently planning to support regional workshops to define or refine under-utilized crop priorities. FAO/AGP would favorably envisage to provide complementary support to this type of activities, if needed. The participants suggested to wait for the results of the FAO/AGSI regional workshops before embarking on these activities. Meanwhile, the dialogue between FAO/AGSI, FAO/AGP and ICUC should be pursued. Other agricultural sub-sectors should explore ways and

means to identify their regional/sub-regional UOC priorities.

4 Information Systems

EGFAR, the Electronic Global Forum, will develop a specific section on UOC to serve as the communication platform for the participants to this informal group (restricted access) and to start facilitating access to information and knowledge on UOC, including on planned international events.

5 Added value of a global initiative on UOC

In order to document the added value of “working together” in the field of UOC and to strengthen the case of establishing a global facilitation mechanism, the participants agree to join forces and to gather and analyze all research results obtained by individual institutions for one, if possible two, under-utilized or orphan crops or commodities. Sesame, Bambara Groundnut, oregano and jackfruit were mentioned as good potential candidates.

6 Possible support to a “Global Facilitation Mechanism”

While postponing the decision to establish a “Global Facilitation Mechanism” to their next meeting in July 2001, the participants agree on the need to explore possible support for such a mechanism, considering the concept of the “Montpellier Facilitating Unit” for market/cash crops as a very interesting possibility.

Finally, in addition to the rather short-term plan of action mentioned above, the participants also recognised the need to develop a “flagship” programme on UOC. Three potential candidates were even mentioned: “aromatic & medicinal plants”; “home gardens” and “rattan”. The decision was taken to continue discussing informally the pros and cons of such a flagship programme and to review the situation during the next meeting.

Forthcoming events

2001 American Association for the Advancement of Science (AAAS)

Annual Meeting and Science Innovation Exposition

15-20 February 2001, San Francisco, California.

Contact: AAS Meetings Office
1200 New Year Avenue, NW
Washington DC 2005.
Tel: (202) 326 6450
Fax: (202) 289 4021

Email: aaasmeeting@aaas.org

Natural Products and Cosmeceuticals 2001

26-28 February 2001. Hyatt Carlton Towers, London.

For further information contact:-
www.abc-uk.com

British Ecological Society Annual Symposium ‘DISPERSAL’

3-5 April 2001. Reading University, UK.

Contact:- James Bullock
NERC Centre for Ecology and Hydrology, CEH Dorset, Winfrith Technology Centre, Dorchester, Dorset, DT2 8ZD.

Email: jmbul@ceh.ac.uk
<http://www.demon.co.uk/bes>

Global Agriculture 2020: Which way Forward?

18-20 April 2001, Norwich, UK.

An international conference to evaluate current and projected demands on global agriculture and

to identify opportunities and priorities in bio-sciences research strategy to assist agricultural development.

Topics include: The challenge of global food supply security; Increasing crop productivity and reducing crop losses; Impact of genomics research, Germplasm resources and intellectual property; Biodiversity and agricultural practise, Assessing and controlling environmental impact, Farmers rights, Trade and regulatory framework, Developing country perspectives; Global socioeconomic development; Appropriate technology transfer; Agricultural productivity and economics; Public expectations and Novel products from agriculture.

Contact: Conference Secretariat

Email: agric.2020@bbsrc.ac.uk

RSC/SCI Flavour and Fragrance Conference

16-18 May 2001. Warwick, UK.

Contact:
Mr Karl Swift
Quest International;
Ashford, Kent, TN24 OLT, UK.

Tel: +44-1233-633734
Fax: +44-1233-633738
Email: karl.swift@questintl.com

Building Bridges with Traditional Knowledge 2001

28 May –3 June 2001. Honolulu, Hawaii.

Contact:
The Secretary
Building Bridges Conference
University of Hawaii
Honolulu, HI 96822-2279
Fax: -808-95603923

Email: Bbt2@hawaii.edu

FAO/ ECE/ILO Seminar on Harvesting of Hungarian Conference of Medicinal and Aromatic Plants 20001

'Possibilities and Limitations of Medicinal and Aromatic plant Production Towards the 21st Century'

8-10 July 2001. Budapest, Hungary.

Contact:
Dr. Oszkar Kock
Convener Institute for Agricultural Quality Control
P.O.Box 30, 93.
H-1525 Budapest, Hungary.
Tel: 36 1 2 123 127
Fax:36 1 2122 673

Email:map.congr@ommi.hu

4th European Conference on Grain Legumes

8-12 July 2001. Cracow, Poland.

Contact:
Agricultural University of Krakow,
International Congress Centre, 31-425 Krakow, al. 29 Listopada 46, Poland.

Web:
<http://www.rol.ar.krakow.pl/kongr/kongres.htm>

Vth International Safflower Conference

23-27 July 2001. North Dakota and Montana. USA.

Contact:
Dr. Janelle Jenson
Montana State University
Eastern Agricultural Research Centre, Sidney, Montana USA
Email:jjenson@sidney.ars.usda.gov

3rd IUPAC International Conference on Biodiversity (ICOB-3)

3-8 November 2001. Antalya, Turkey.

Contact:
Conference Secretariat ICOB-3
P.O. Box 143
06572 Maltepe, Ankara, Turkey
Tel: 90 312 212 22 67
Fax:90-312 213 39 21

Email:blgsener@tr-net.net.tr

6th ISRR Symposium Roots: The Dynamic Interface between Plant and the Earth

11-15th November 2001. Nagoya, Japan.

Contact:
Dr Shigenori Moritta
Graduate School of Agricultural and Life Sciences
The University of Tokyo
Tokyo 113-8657, Japan.
Tel: +81 3 5841 5070
Email:anatomy@mail.ecc.uotokyo.ac.jp

Publications of Interest

ICUC Publications

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Haq N & Atkinson M (eds.) (1999)
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Taxonomy of Cultivated Plants. Diverse interests of growers, breeders, scientists and those concerned with the legislation of cultivated plants. The book covers intellectual property rights, national collections, breeding, molecular techniques, genetically modified crops, plant databases, International Registration Authorities and patenting of new cultivars. ISBN 1 900347 89 X. £27. Contact Susyn Andrews. Tel: 020-8332 5275.

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Agroforestry in Sustainable Agricultural Systems examines

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6700 AJ Wageningen, The Netherlands. Tel: +31 317 467100. Fax: +31 317 460067. Email: cta@cta.nl Web: <http://www.cta.nl>

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WCFSO (World Commission on Forests and Sustainable Development). (1999) **Our Forests...Our Future.** Hardback £52.50 ISBN 0 521 66021 1. Softback £19.95 ISBN 0 521 66956 1. 220pp. Science Marketing, FREEPOST, Cambridge University Press, The Edinburgh Building, Cambridge CB2 1BR, UK. Tel: +44 (0)1223 326050, Fax: +44 (0)1223 326111.

Email: directcustserve@cup.cam.ac.uk

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Newsletters and Journals of Interest

Agriculture and Rural Development. ISSN 0343-6462. Published twice a year. Editor Angelika Wilcke, DLG-Verlags-GmbH, Eschborner Landstrabe 122, 60489 Frankfurt am Main, Germany. Tel: ++49 (0) 69-24788-465. Email: A.Wilcke@DLG-Frankfurt.de

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Forest Action News is published quarterly by the Forest Action Network and is a networking tool intended to facilitate information exchange/sharing between different actors in the field of forestry. Forest Action Network, P O Box 21428, Nairobi, Kenya. Tel/fax: 254 2 718398, Email: tropicalbbs@attmail.com

ICRAF Updates. Joan Baxter (Editor), ICRAF, P O Box 30677, Nairobi, Kenya. Tel: +254 2 521 450, Fax: +254 2 521 001, Email: icraf@cgnet.com

Mutation Breeding Newsletter ISSN 1011-260X. Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture and FAO/IAEA Agriculture and Biotechnology Laboratory, Seibersdorf. International Atomic Energy Agency, Wagramer Strasse 5, P O Box 100, A-1400 Vienna, Austria.

Plantwise Newsletter published by Edit UK in collaboration with Denzil Phillips International Ltd, 25 Stanmore Gardens, Kew, Richmond, Surrey, UK. Tel: 44 (0)20 8940 7857, Fax: 44 (0)20 8948 2673, Email: info@denzil.com

Underutilized Crops and the Internet

There are a growing number of sites for those working on underutilized crops, assuming you have access to an internet linked computer. The following is a summary of some sites that may be of interest. This is not an exhaustive list, but many bigger sites have useful links to related pages. Some sites also have interactive databases.

African Publishers Network (APNET), set up to promote local publishing in Africa, now brings together national publishers'

associations in more than 27 countries in Africa. It organises short-courses on publishing techniques.

<http://www.africanpublishers.org>

Central Science Laboratory, Sand Hutton, York. YO41 1LZ, UK

<http://www.csl.gov.uk>

COMPAS Newsletter (bi-annual) covers the culture, indigenous knowledge and cosmovision in agriculture and rural development.

http://www.etcint.org/compas_news.htm

Confederation of Indian Industry (CII) is the apex industry body with over 4000 members covering all sectors of the industrial economy of India. CII has been very active in Agro and Food Processing and hosts two flagship events, regarded as landmark events in this sector of India, every alternate year i.e. Agrotech and Foodpro.

<http://www.indianindustry.com>

<http://www.ciionline.org>

CTA (Technical Centre of Agricultural and Rural Cooperation). The Netherlands

<http://www.cta.nl>

CTVO-net (Chemical-Technical Utilization of Vegetable Oils) Fats and oils and their derivatives can be found in a wide range of industrial and consumer products. In the European Union, the annual consumption in chemical and technical applications is estimated at 2.45 million tons. To find new market outlets for natural fats and oils requires a better co-ordination of research efforts and more exchange of information at European level. Since 1998, this EU funded network has organised a series of targeted workshops for different application areas. Selected results are available on their website: <http://www.fnr.de/ctvo>

Cucurbit Genetics Cooperative

<http://genome.cornell.edu/cgc/>

Demeter's Genomes - Dedicated to the world's harvest and its enhancement through crop Genomic research.

<http://genome.cornell.edu/>

European Initiative for Agricultural Research for Development (EIARD) is a policy instrument to promote coordination among its 18 European partners (15 EU member states, European Commission, Norway, Switzerland) at various levels (information exchange, concentration of activities, common strategy/vision), and partnerships between all stakeholders in Europe and the developing countries as well as to enable more coherence between relevant policies in research and development.

<http://www.dainet.de/eiard/homepage>

Essential Oils World, PO Box 72, Chipping Norton, Oxon, OX7 6JU, UK.

<http://www.cotpubco.demon.co.uk/cosweb/eswhome.html>

EXPO 2000

<http://www.expo2000.de>

ILEA is the Centre for Research and Information on Low-External-Input and Sustainable Agriculture (LEISA). It seeks to exchange information on LEISA by publishing a quarterly newsletter, books and bibliographies. ILEIADOC, the database of ILEIA's documentation centre, is also available:

<http://www.oneworld.org/ileia>

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) recently launched the Sorghum Tutorial Online. This service is entirely dedicated to sorghum: its biology, current breeding techniques and how these work, and the pests and diseases of sorghum and how these are controlled or prevented.

<http://www.198.93.234.24/maha/sorg.htm>

International Federation of Essential Oils and Aroma Trades (IFEAT),

<http://www.ifeat.org.uk>

International Society for Horticultural Science (ISHS), an international network of horticultural scientists, students, and researchers looking for international cooperation. Currently has around

3800 individual and 270 organisational members in more than 100 countries, with a modest but active representation in ACP countries. Six sections currently cover major horticultural crops grown throughout the world (fruits, medicinal plants, root and tuber crops, vegetables etc.) and twelve commissions focus of different scientific and technical aspects such as biotechnology, economics and management, education and training, plant protection, post-harvest, urban horticulture, and plant genetic resources. These sections and commissions have established almost 90 working groups to study specialised areas.

<http://www.ishs.org>

Some of these groups are more active than others and have their own symposia, magazines, and websites, such as the **Commission Post-harvest Newsletter**

<http://www.ishs.org/sci/ph12000.pdf>

and the **Fruit Section Newsletter**

<http://www.ishs.org/sci/frtnwslt.htm>

or they form part of other networks, such as the **Cucurbit Network**

<http://www.cucurbit.org>

New Media Laboratory provides short and long term courses in communication in Southern Africa.

<http://www.nml.ru.ac.uk>

Participatory Research and Gender Analysis for Technology Development and Institutional Innovation (PGRG Program). The purpose is to assess & develop methodologies and organisational innovations for gender-sensitive participatory research and to operationalise their use in plant breeding and in crop and natural resource management.

<http://www.prgaprogram.org/prga/>

SCI (Society of Chemical Industry)

<http://www.sci.mon.org>

<http://www.ci.mond.org>

SEPASAL (Survey of Economic Plants for Arid and Semi-Arid Lands) database. Of the more than 40 developing country organisations using SEPASAL, 20 are African.

<http://www.rbgkew.org.uk/ceb/sepasal/internet/>

SYPEAM (Syndicat Professionnel des producteurs d'Extraits Aromatiques alimentaires et médicinaux de Madagascar), a professional association, which now provides support to producers of essential oils through training and technical information.

<http://www.sinergic.mg/sypeam/default.htm>

TRIOPS – Tropical Scientific Books is one of the leading suppliers of literature in the field of natural sciences for tropical and subtropical scientific books and all literature regarding development aid.

<http://www.booksell.com/Triops>

Tropical Fruits Network (TFNet) is an independent global network set up under the auspices of the Food and Agriculture Organisation of the United Nations (FAO).

<http://www.mardi.my/TFNet>

Some Useful Addresses

Continuing the list of useful contact addresses.

(Please refer to previous Newsletters for letters 'A' to 'C').

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