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OCCASION

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8 JUL 1999

06.05.99
GLO/EF/vz



INTERNATIONAL CENTRE FOR SCIENCE
AND HIGH TECHNOLOGY

28 JUL 1999 ✓

28 JUN 1999 ✓

Final Report

C93/128

*Workshop on
Business creation for Industrial Exploitation of
Medicinal and Aromatic Plants*

at

Beijing, China
24-26 May, 1999



INTERNATIONAL CENTRE FOR SCIENCE
AND HIGH TECHNOLOGY

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BACKGROUND

The tremendous increase in the cost of developing new drug molecules, the potential of medicinal plants to provide novel molecules, cost effectiveness in using plant derived medicines in the primary health care system and increasing people's faith in non-conventional medicines, are some among the many factors responsible to resurge interest in plant medicines. The international health agencies are now laying increasing emphasis to strengthen the role of traditional medicines in the management of primary health care needs. The plant medicines not only ensure affordability to the economically weaker section of the society, but also contribute to the socio-economic growth of the under-developed countries by cutting down expenses on medical bills and providing opportunities for sustainable use of local resources for the development of the area. Coupled with these factors the phenomenal popularity of herbal medicines in the Western world and impressive annual growth figures have opened new vistas to countries rich in biodiversity to exploit their resources. More and more pharmaceutical industries are now interested in marketing of herbal medicinal products and drug development from plant remedies.

The area of aromatic plants is even more attractive which has fancied the human kind since its beginning. The demand for essential oils has steadily grown over the years as flavour and fragrance components. The natural aromatics have always enjoyed dominance over synthetics ensuring vast potential for expanding the essential oils industry especially to meet the increased demand of their use in flavour industry.

JUSTIFICATION

Increased activity on medicinal and aromatic plants, especially in the developed part of the world has created a huge market potential for medicinal and aromatic plants. The developing countries are unable to exploit this market in the absence of uniform international guidelines in the trade and regulatory aspects of herbal medicines. Also the worldwide concern for biodiversity conservation has made the trade in medicinal and aromatic plants as highly sensitive. The fast emerging market of medicinal plants and essential oils needs to be strategically tapped by under-development countries, which are rich in vegetative flora to derive maximum benefit through bioprospecting. In the situation, it is imperative to take stock of existing rules and regulations governing herbal medicines in different countries and to analyse market forces to enhance business prospects for medicinal and aromatic plants and their products for the developing countries.

It has become essential to follow good manufacturing practices to ensure product uniformity, quality and high standards of herbal medicinal products. Quality, efficacy and safety of herbal medicines has to be ensured to provide scientific footing to improve business prospects for the herbal products. The standards for essential oils are getting more and more stringent in the competitive international market, which requires the use of state-of-the-art technology in their production.

There is a need to develop agrotechnologies for growing herbal species using good agricultural practices where natural flora cannot withstand the pressure of increased industrial consumption.

OBJECTIVES

The workshop will assess the international market potential and forces governing trade in medicinal and aromatic plants and their products. Strategies to improve business and provide sustainability to the herbal industry by identifying unique problems related to phytoindustry, will be deliberated by industry representatives with experts having in-depth knowledge of medicinal plants. The existing rules and regulations for accessing international market will be reviewed. The workshop will discuss the emerging trends in the production of herbal medicines and strategies to exploit the global market. The workshop will deliberate on the significance of implementing good manufacturing practices for the production of quality herbal medicines. The role of agrotechnologies and good agricultural practices in growing endangered or highly traded species to ensure sustainable growth of industry will be elaborated at the discussion sessions.

- To help small and medium entrepreneurs to have interactive discussions with the experts from the research institutes.
- To create links between the small and medium enterprises (SME's) and research institutes to improve industrial utilization of medicinal and aromatic plants.

EXPECTED OUTPUTS

The proceedings of this workshop are expected to provide peer view of global herbal market and strategies to improve business prospects for medicinal and aromatic plants and their products for developing countries. The workshop will assess for small and medium enterprises, the existing production practices and emerging trends in the aromatics and herbal medicines. The workshop is expected to discuss the specific problems of the herbal industry and market dynamics governing trade in herbal products.

The workshop will establish link between SME's and research institutes.

The workshop will demonstrate the impact of GMP's in the production of herbal medicinal products to the industrial representatives.

ACHIEVEMENTS

The delegates at the workshop were from seven countries and regions. They stated and exchanged idea, views and concerns in research & development, production, trade of medicinal and aromatic plants in this workshop. The content that discussed were quality control, developing new products, cultivation, selecting seed and breeding, disease and pests control and treatment application of bio-technique, phormacodynamic, toxicology and chemistry of medicinal and aromatic plants.

RECOMMENDATION

1. The activities in the sector of industrial utilization of medicinal and aromatic plants help to exchange and share the information sources, including seeds, seedling, yields of herbal medicine, products and prices.
2. Hence, the group strongly recommends that ICS spread new technology and methods, especially all kinds of information of standardization.
3. ICS should strengthen exchanging scholars and short-term training.
4. The group suggest to install a center of natural products and medicinal research on the basis of the present condition, including botanical garden, specimen library, instrument center, computer center, biotechnology laboratory and modern factories in order to train staff on natural medicine and products.
5. ICS should continue convention workshops on medicinal and aromatic plants, introducing regulations, laws and development of all countries, providing programme and suggestion in this area, solving general problems and proposing guides for development in this field.
6. ICS should publish a report on medicinal and aromatic plants per year. The content is the producing, marketing information, trading all over the world as well as product information.

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EXPENSES OF THE WORKSHOP

1. Travel expenses	9000 USD
2. Accommodation fee	6000 USD
3. Proceedings fee	1000 USD
4. Allowance	2400 USD
5. Taxi	800 USD
6. Photograph	200 USD
7. Other	600 USD
Total	20000 USD

PROGRAM

Morning, May 24th (Monday)

May 24, 8:30 - 9:00

Opening Ceremony

Chairman: Professor Shilin Yang

Opening Address: Delegate from ICS

Academic lectures

Chairmen: Professor Xinsheng Yao and Dr. Christine Leon

9:00 - 10:00	Professor Peigen Xiao
10:00 - 11:00	Professor S.S. Handa
11:00 - 12:00	Dr. Chiu Shen Hiu
12:00 - 12:30	Lunch

Afternoon, May 24th (Monday)

Chairmen: Professors Peigen Xiao and S.K. Sharma

13:30 - 14:30	Professor K.H.C. Baser
14:30 - 15:30	Professor Xinsheng Yao
16:30 - 17:30	Professor Yingjie Chen
17:30 - 18:00	Dinner
18:30 - 21:30	Performance

Morning, May 25th (Tuesday)

Chairmen: Professors Baser and Yingjie Chen

8:30 - 9:30	Professor Sharma
9:30 - 10:30	Dr. Christine Leon
10:30 - 11:30	Professor Delong Xie
11:30 - 12:00	Professor Shilin Yang
12:00 - 12:30	Lunch

Afternoon, May 25th (Tuesday)

Chairmen: Dr. Ya Cai and Professor Delong Xie

13:30 - 14:00	Professor Daofeng Chen
14:00 - 14:30	Dr. Ke Liu
14:30 - 15:00	Dr. Qingming Che
15:00 - 15:30	Dr. Chunyan Zhu
15:30 - 16:00	Dr. Min Zhu
16:30 - 17:00	Dr. Yongmin Yu
17:00 - 17:30	Dinner
18:00 - 21:30	Performance

May 26th(Wednesday)

8:30-11:30 Visit IMPLD

13:30-5:30 Visit Xi-Yuan Hospital, China Academy of Chinese Traditional
Medicine and TongRenTang Chinese Material Medicine Factory