

Medicinal uses of flowers

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Flowers in Agriculture

- Two types of plant/crops grown in agriculture for food or medicinal use:
 - Produced for leaves, stems, tubers
 - Produced for reproductive parts of the plant
 - » This always starts with the flower of the plant
 - » The part that is used may be the flower itself or the fruit or seed

Flowers are used in food and medicine

- Examples of food (vegetables and herbs)
 - Broccoli, cauliflower, artichoke:



- Saffron (<=name of food/spice; plant is: Crocus):



Flowers are used in food and medicine

- Examples of medicine
 - St John's Wort (*Hypericum perforatum*)
 - » used to treat depression and nerve pain
 - Rose
 - » petals are anti-depressive
 - Chamomile
 - » Herbal tea



Traditional Chinese Medicine University

- Shanghai, China
- They focus on the medicinal uses of plants
- This is NOT an art-form; rather it is science

Traditional Chinese Medicine University

传统医学与人类健康 ——张江共识

2006年12月9日，“中医药国际论坛”在中国上海（浦东）张江召开。会议的主题是“传统医学与人类健康”。来自世界各地的二百余位专家、研究人员和学者围绕大会主题，展开了富有成效及建设性的讨论，并达成以下共识：

传统医学是人类共同的文化遗产。在人类社会历史进程中，为人类健康和社会进步曾作出过巨大贡献。今天，虽然普通医学已经获得高度发展，然而，传统医学却在各国中应其国情扮演有不同的角色。另外，为了应全球不断增长的对中医药的需求，传统医学需要通过学术研究得到进一步的发展和推广。

什么是传统医学研究的恰当方法呢？这在全球范围内还是一个主要的关注点和极大的争议。在此，我们倡议建议：当我们在对传统医学作研究时，对于传统医学所持的整体观念和独特理论应该受到尊重和采纳。传统医学在临床运用上具有非常丰富的历史，其疗效和安全性也需要通过研究，尤其是运用先进的科学技术和方法得到进一步的开发和证实。

为了实践以上建议，研究的质量需要得到提高和推进。在专家、研究人员和学者间分享研究经验和信息应该得到强调。传统医学的培训和教育，尤其是对恰当研究方法的培训和教育应该得到加强。推进此研究所需的充足资源也需要去动员。

Traditional Medicine and Human Health — Zhangjiang Statements

"The Zhangjiang Forum of International Development of Traditional Medicine" was convened in Zhangjiang Hi-Tech Park, Pudong New Area, Shanghai on 9th December 2006. The topic of the forum is "Traditional Medicine and Human Health". Over 200 experts, researchers and academicians from different parts of the world had fruitful and constructive discussions and therefore agreed to followings.

- Traditional medicine is regarded as the mutual cultural heritage of human beings. It had made great contribution to human health and social advancement in the history of human development. Today, although conventional medicine has been extremely developed, traditional medicine continues to play different role in different countries according to the national circumstance. In a sense, in order to meet an increasing demand for traditional medicine globally, traditional medicine need to be further developed and promoted through the research.
What is appropriate research methodology for research of traditional medicine, which is big debate and major concern globally. Here we strongly recommend that holistic view of traditional medicine and their special theories should be respected and considered when conduct the research to traditional medicine. Traditional medicine has long history in the clinical application, knowledge base on the efficacy and safety of traditional medicine need to be further expanded and proved by research, especially using advanced scientific technology and methods.
- In order to achieve above recommendations, quality of research needs to be improved and promoted. Sharing of experiences and information of research among experts, researchers and academicians should be strengthened. The training and education, particular for appropriate research methodologies in traditional medicine need to be enhanced. Adequate resources in promoting such research need to be mobilized.

Traditional Chinese Medicine University

- Shanghai, China
- They focus on the medicinal uses of plants
- This is NOT an artform; rather it is science
- They have a museum:



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- Some “very strange” meds:
- Also, lots of info on acupuncture



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- There is a lot of recorded history



Research into active compound today

- For each traditional medicine there is a long history of testing and documentation
- In most cases there was, in the past, no way to determine what the compound was.
- Today we have some modern scientific tools that allow us to identify the compounds.
 - Gas chromatography; Mass spectrometry, chemistry,...
 - These tools are being used at the TCMU to investigate what some of the old medicines are

Are the flowers having an effect on us?

- Of course, yes:
 - but is this our own perception? (i.e. a human trait rather than a trait of the plant?)
 - Is it possible for flowers to manipulate us (as a plant trait)
 - » Remember in the scent lecture you saw a plant manipulating a bee with its scent
 - Many of you showed clear signs of being manipulated by the plants when you were selecting one for your needs.
 - » Makes you wonder: was it your needs that were being met, or the needs of the plant?

Medicines

- Compounds that have some effect on us in ways other than food
- Induces some sort of change in us

Examples which I saw at the TCM in Shanghai

- Chrysanthemum



Examples which I saw at the TCM in Shanghai

- Rose



Examples which I saw at the TCM in Shanghai

- Magnolia



Examples which I saw at the TCM in Shanghai

- Dendrobium orchid (Shihu)
(The stem is used)



Note that much more is likely to be found

- We need to not forget what our ancestors learned
- We should explore what they observed; investigate using modern tools
- We should not get trapped in old beliefs! But they may offer a hint to us.

Speaker Introduction

Dr Robert Flannery, PhD

Presentation that involves medicinal use of a flower