

CHINESE
HERB
GARDEN

The Chinese Herb Garden is a joint collaboration project between the University of Bristol Botanic Garden and the Register of Chinese Herbal Medicine (RCHM). It was established in 2000 to create a teaching and research garden for Chinese Herbal Medicine.



The Chinese Herb Garden in summer showing the first 3 years growth.

GROWTH OF THE HERB GARDEN

The climate of China ranges from the subtropical south, through the high Himalayan mountains and the Gobi desert, to the dry and cold Mongolian steppes in the north. Each region has its own traditional local plants used for Chinese medicine by the indigenous people. It is therefore only possible to grow a small selection of Chinese herbs suited to the temperate oceanic climate of western UK. Through careful husbandry and selection of hardy varieties, it has been possible to grow tender species such as *Cyperus rotundus* (*xiang fu*) and *Melia toosendan* (*chuan lian zi*).

Some species including *Salvia miltiorrhiza* (*dan shen*) have no history of cultivation in the UK and need to be tested for optimum conditions.

The University of Bristol is committed to the maintenance and development of the Chinese Herb Garden. As a result of a University estate restructure, in 2004 the Chinese Herb Garden will, as part of the Botanic Garden relocation, be moved to a larger University owned site. This will enable the expansion of the display garden and the creation of a trial plot for potential field cultivation of herbs such as *Akebia trifoliata* (*mu tong*).

Greenhouse space will also be allocated for more tender herbs. The emphasis of the garden will, however, remain with plants which are suitable for growth outside in this country.

Salvia miltiorrhiza (*dan shen*)
has only been grown in the UK for 3 years.

CONSERVATION PROGRAMME

Botanic Gardens have a vital role to play in the conservation of plants. There are 35,000 species of plant in China. Over 4000 of these are threatened in the wild.

Although 8% of the land area of China is given over to nature reserves, these are often remote and difficult to police. Hence cultivation on a farm scale is usually considered as a vital conservation tool.

The rapid expansion of Chinese Herbal Medicine around the world has created problems of supply and increased pressure on some plant species, which are being pushed to extinction due to over-harvesting.

The Chinese Herb Garden has launched its own Conservation Programme for Chinese Herbs as a positive step to halting this problem.

Some details of this are given in this leaflet.



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Tel: 01603 623994

Garden Location: University of Bristol Botanic Garden, North Road, Leigh Woods, BRISTOL BS8 3PF
Tel: 0117 973 3682 Open: Monday-Friday 9.00am - 5.00pm

Web Sites: www.rchm.co.uk www.bris.ac.uk/depts/botanicgardens



Curator Nick Wray with Jim Belcher of Balance Healthcare Ltd.

APPROVED SUPPLIERS

The quality of herb supplies can vary greatly in the herb industry.

In some cases this can lead to adulteration of herbs. The RCHM has initiated an **Approved Suppliers Scheme** to improve this situation and provide a professional service for Chinese Herbalists. In order to be included on this list, the supplier must undergo a detailed external audit to check for codes of practice with respect to importation restrictions, storage and safety standards.

Balance Healthcare Ltd. was the first supplier to pass the audit. It has showed its continued commitment to the quality of herbs by providing funds for the Conservation Programme in the Chinese Herb Garden.

SUSTAINABLE HARVESTING

In many cases of herb importation, we do not know the cultivation history of the plants. Small farmers in China will usually sell to a co-operative, which then mixes the batches making it impossible to separate at the market. What is needed is a controlled and recorded cultivation according to set standards to ensure that endangered herbs were cultivated and not wild harvested or contaminated with chemicals.

It is also possible to include wild harvested herbs with this system as long as they follow sustainable standards of harvesting.

The RCHM is now actively researching this area with the aim of drawing up a list of suppliers and herbs, which are both sustainable and organically grown. We intend to give publicity to any grower and importer, which can meet these criteria and thus move the market in this direction. Many herbalists in the UK are interested in supporting this, as are their patients.



Organic Turmeric (yu jin) cultivation in Sri Lanka

HERB SUBSTITUTIONS

Every year sees the inclusion of more herbs in the CITES List of endangered plants used in herbal medicine

The RCHM is actively researching the methods for herb substitution to replace the loss to the materia medica and also as a method of protecting threatened herbs which are not yet covered by CITES.

This requires a detailed study by experienced herbalists and the result is often not a single herb but a choice of several herbs, which can be used as substitutes in different herbal formula relating to different clinic situations and symptoms.

The use of plants from our native European herbal tradition is also being researched as possible replacements for endangered Chinese herbs. Due to the different methods of diagnosis and species this is a more difficult process. This study is made easier by the presence of an established companion European Herb Garden at this Botanic Garden.



The companion European Herb Garden allows research into the fusion of European and Chinese Herbal traditions.

DISPENSARY PRACTICE

The success of the Module 5 Dispensary and Pharmacognosy course at the Chinese Herb Garden has enabled direct education of undergraduate students attending colleges of Chinese Herbal Medicine.

This 4 day module is taught by the leading experts in the UK.

It covers the practical methods of running a modern professional herbal dispensary and an introduction to the pharmacognosy of Chinese Herbs.

It also includes discussion on the conservation of Chinese Herbs in China and the UK - spreading an increased awareness of conservation in practising herbalists.

The course is now used by 5 major colleges of Chinese Herbal Medicine in the UK and Ireland.

Details of this courses can be found on the RCHM website at www.rchm.co.uk.

It is also open for herbalists or other workers in the herbal industry.



Herbal Dispensary training practice to meet the needs of a new herbal profession.

FRITILLARY FARMING



4 varieties of bei mu (jian/chuan/zhe/lu) from the West China University

36 species of Fritillary bulb are used in China as the herb *bei mu*. All species are now very rare in the wild with only 2 species cultivated. Although not yet officially on the CITES list, it is only a matter of time and it is vital to act now to preserve the species and also its possible use in the materia medica.

The West China University has conducted detailed research into this problem and we are grateful to them for providing us with a range of dried samples of different species for teaching.

These include the large *F. thunbergii* (*zhe bei mu*) which is commonly cultivated, and the much smaller *F. cirrhosa* (*chuan bei mu*), which is usually wild collected and now endangered. Both species are available in the UK at present. By instructing herbalists in the differentiation of these herbs it may help to reduce the demand for wild harvested Fritillary species.

NANJING TOURS



Nongya Nature Reserve in Anhui province used for herbal tours.

It is clear that a Conservation Programme for Chinese herbs cannot simply be based in the UK. The Nanjing Botanic Garden with its long history of plant conservation is well placed to assist from within China. Funding for their work is being developed through a new ecotourism initiative.

Many foreign herbal students from around the world undertake clinical herbal training at the University of Traditional Chinese Medicine in Nanjing. Most of these students will have an interest in seeing the herb plants in the wild. The Nanjing Botanic Garden has the botanical expertise and local knowledge to organise day trips to nature reserves with a botanist. The tours will generate income for Nanjing Botanic Garden.

The first of these was run in autumn of 2002 for 20 students.

We are grateful to Bernadette Ward of the Acupuncture Foundation College in Dublin for her assistance in arranging this link.