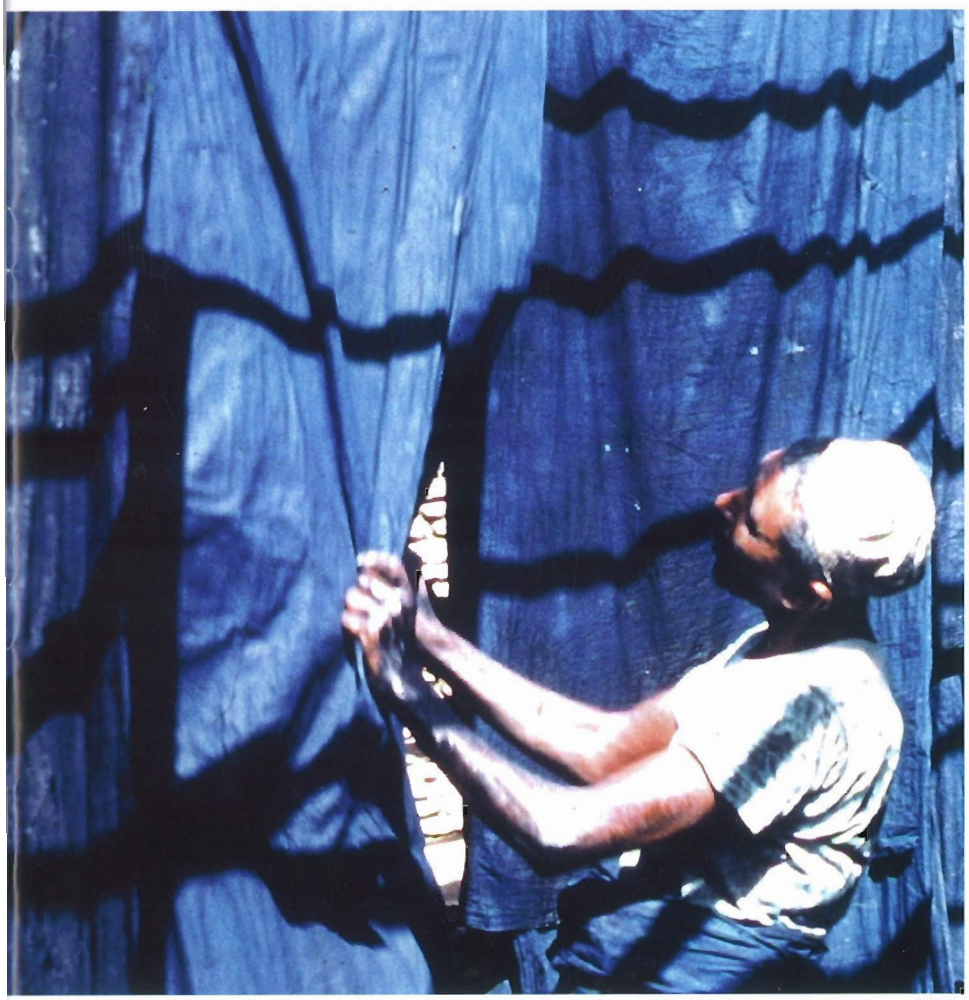
August 2008

herbs

33.3
Volume Number

The Journal of the Herb Society



INDIGO • CHINA AND THE FOXGLOVE TREE • BIODYNAMICS

AGM AND CONFERENCE • SEPTEMBER 27

HEALTH AND FORTUNE

Gareth Evans travels to China at *Paulownia* blossom time and gains first-hand experience of the herbs of Eastern and Western medicine

Somewhere high over the steppes of Kazakhstan flying towards Beijing, I was full of expectation. To be visiting a country with such an ancient and highly developed herbal tradition was awe inspiring.

In the English-language *China Daily* I found an announcement of an annual 40-day Peony Festival, with a mere 1,100 peony varieties in nine colours, which reminded me that historically we in the West have as much interest, if not more, in China's rich horticultural heritage, as in its medicinal expertise.

My travelling companions in the three-week group trip soon became used to my interest in almost every plant in sight. There was so much that was new, while the

familiar was set in a startling new context.

For instance, we were fortunate to be travelling at *Paulownia* blossom time. It is the only tree in the foxglove family, and is found only as a specimen tree in the UK. In its native soil, however, it flowered exuberantly in temples, fields and back yards. A bringer of good fortune (the phoenix roosts in its branches only in benevolent reigns), it is traditionally used to make the fish-shape gongs found in Buddhist temples; the wood resounds with thunder-like tones as its knotless wood seasons hard.

Most of the *Paulownia* in the countryside will be escapes from gardens and plantations as the timber is highly valued. The bark, wood, flowers, fruits, and leaves of the tree (*pao tong*) are used in Traditional Chinese Medicine (TCM), and it has a wide range of applications: it is said to promote growth of hair, darken greying hair, reduce swelling in the feet, heal bruises and treat patients suffering with hallucinations and delirium. But throughout China, even the most humble object seems to be of significance, with multiple cultural allusions in myth, medicine and folk customs in a country that is packed with complex systems of associations.

Like so many important Chinese garden introductions, one of the six species of *Paulownia* is named after the redoubtable Scottish plant-hunter Robert Fortune (1812–80). Although he had been curator at the Chelsea Physic Garden for two years, he, like many other western travellers before and after, took no interest in – or worse, denigrated Chinese medicine – until he experienced it first-hand (see box *Robert Fortune and the Chinese Doctor*), when his attitude changed. Over many trips he determinedly extracted 'ornamentals' from Chinese gardeners and nurseryman with terrier-like persistence (when one of my travel companions queried my own obsessive pursuit of trees, I replied that I had not started on weeds yet!).

Weeds

Of course, the weeds were remarkable, particularly the beautiful *Rehmannia glutinosa* sprouting from the venerable walls of the palaces of the Forbidden City. More at home on the dry mountain slopes of northern China, it had escaped the palace, which was being refurbished ready for the Olympic Games.

Robert Fortune and the Chinese doctor

By the time of his 1853 trip Robert Fortune was an 'old China hand'. Fluent in Mandarin he was on his third extended excursion there. However, his usually robust constitution succumbed to a burning fever and he agreed to be seen by local 'folk doctor' from a nearby village with 'considerable reluctance; but a drowning man will catch at a straw'. It is worth quoting his genial description at length as it records TCM's characteristics, many of which are recognizable today.

The doctor quizzes the feverish Fortune about onset of the fever, the frequency and duration of attacks, and then he pronounced on Fortune's habits and diet:

> '"I understand from the priests and your servants you are in the habit of bathing every morning in the cold stream which flows past the temple; this must be discontinued.
> '"You are also in the habit of having considerable quantities of Ke-me [a form of noodle] put in your soup; this you must give up for the present, and you will live on congee [a simple rice porridge] for a few days."
> 'I told him his directions should be attended to.'

Fortune then experiences a form of folk medicine called *Guo-sho* or skin scrape that was performed with an oiled coin. The 'pinch-pull' action with knuckles of two fingers he describes can leave marks on the body for some time. It is a forceful technique.

> 'He then dispatched a messenger to his house for certain medicines, and at the same time ordered a basin of strong hot tea to be brought into the room. When this was set before him he bent his two forefingers and dipped his knuckles into the hot tea.
> 'The said knuckles were now used like a pair of pincers on my skin, under the ribs, round the back, and on several other parts of the body. Every now and then the operation of wetting them with the hot tea was repeated.
> 'He pinched and drew my skin so hard that I could scarcely refrain from crying out with pain; and when the operation was completed to his satisfaction, he had left marks which I did not get rid of for several weeks after. ... '

The patient is given an infusion that appears to include a well-known anti-fever drug, the fruits of the Chinese gardenia.

> '[The tea] consisted of dried orange or citron peel, pomegranate, charred fruit of *Gardenia radicans* [*G. augusta*, *zhi zi*?] the bark and wood of *Rosa Banksiana* [*R. banksiae*, Lady Banks rose], and two other things unknown to me. The teapot was then filled to the brim with boiling water, and allowed to stand for a few minutes, when the decoction was ready for the patient.
> 'I was now desired to drink it cup after cup as fast as possible, and then cover myself over with all the blankets which could be laid hold of. The directions of my physician were obeyed to the letter, but nevertheless I lay for an hour longer ere perspiration broke, when of course I got instant relief.
> 'Before taking his leave the doctor informed me he would repeat his visit on the third day following about ten in the morning, this being about an hour before the fever was likely to return.
> 'He told me not to be at all afraid, and gave me the welcome news that the next attack, if indeed I had any more, would be slight, and that then I would get rid of it altogether.

The treatment was repeated on the third day when:

> 'Ere I had drunk the last cupful my skin became moist, and I was soon covered with profuse perspiration. The fever had left me, and I was cured. I was probably the first Hong-mou-jin [westerner] the doctor had treated, and he was evidently much pleased with the results of his treatment.
> '[Western] Medical men at home will probably smile as they read these statements, but there was no mistaking the results.'

Quotes from *A Residence Among the Chinese...* Robert Fortune, London 1857

A species that graces the greenhouses and conservatories of the grandest homes of Europe, *Rehmannia* also has a central role in TCM (*di huang*). Its reputation as a 'longevity' herb is said to come from the power of its constituents to protect the liver, reduce blood pressure and cholesterol levels. It features in more than one standard TCM formula, such as 'The Pill of Eight Ingredients' that can be dated back to second century medical writings. Available as an over-the-counter drug in the many pharmacies in China, these pills are often preserved in a lustrous wax covering to be kept until required.

While in Beijing we made a visit to the famous *Tongrentang* pharmacy. This herb department store features the glamorous displays and packaging associated with the marketing of luxury goods such as perfume or chocolate. We had to climb to the third floor to see raw plant material, and that, too, consisted of exhibits of 'prize' ginseng in presentation boxes, their roots painstakingly pinned in auspicious configurations. No doubt that this elaborate display reflected the value that some of the plant materials could reach when exported to the West along the historic trading route of luxury goods known as the Silk Road.

Ginseng roots arranged in auspicious configurations and set in presentation boxes in a Beijing pharmacy

Silk Road herbs

This trading route to India, Afghanistan and Persia reached its Chinese terminus in the well-defended city of Xi'an. Its history is reflected in the number of 'alien' pomegranate trees and grapevines that are a feature of the region and which were introduced via the Silk Road, – along with Buddhism. In the opposite direction Chinese drugs, such as the highly valued rhubarb (*Rheum palmatum*), camphor, and galangal reached the Indian and Arabian cultures. From there knowledge of them came to us in the West, closely followed by the raw drugs themselves.

Silk cloth for export would have come from such centres as the canal-side city of Suzhou, once known as the home of luxuries and beautiful women. The evidence today of such former wealth (other than the hundreds of wedding-dress shops) resides in the remarkable private gardens that are classics of Chinese design.

To reach this city the intrepid Robert Fortune adopted a Chinese disguise.

Rehmannia glutinosa

> Of course, the weeds were remarkable, particularly the beautiful *Rehmannia glutinosa* sprouting from the venerable walls of the palaces of the Forbidden City.

Disembarking at the city he stood on one of the high-arched canal bridges and wondered at the bustling city life around him. Whether *The Travels of Marco Polo* are a first-hand account or not, it is no surprise that the text describes the growing of rhubarb at Suzhou for export, no doubt along with its silk. Perhaps surprisingly for a 'silk town', Suzhou's adopted tree is the camphor tree (*Cinnamonum camphora*) and not the white mulberries only on which the silk worm will feed.

Camphor

In the spring countryside the young red leaves of this cinnamon relative gives a strange Constable-like autumnal tone to the landscape. In the city the camphor tree gave shade to the pavements and squares; at a house entrance it traditionally would show the 'status' of the daughter of the household, as one was planted on her birth only to be chopped down by a successful suitor. Now the many city boatmen still sell camphor oil for aches and pains.

We tend to think of the introduction of Chinese medicine into the West as a twentieth century phenomenon, so it is,

> Perhaps surprisingly for a 'silk town', Suzhou's adopted tree is the camphor tree (*Cinnamonum camphora*) and not the white mulberries on which the silk worm will feed

for me, something of a shock to come across a Chinese medicinal technique used in Europe in the late 1600s. Moxibustion is a branch of acupuncture practice whereby small piles of dried mugwort (*Artemisia vulgaris*) are burnt close to the skin. At the end of the seventeenth century western texts appeared on the subject – for two unrelated reasons: missionaries and gout.

Jesuit missionaries gained high positions at the Chinese Emperor's court and spread the word about moxibustio. But it was a Dutch minister in Java who first published in the West about the technique, sending samples of 'the Indian moss' or 'moxa' to his son in Utrecht to sell. Like many western medical conditions today, gout in the West was a disease of affluence and suffers, who could afford a high protein, fat and alcohol diet, were often immobilised for weeks with a painful attack.

Not realising that moxa was a familiar European weed, many paid well for a treatment that was said to provide welcome relief if performed effectively. When an English diplomat was 'cured' of his gout attack while at a Dutch conference it helped spread its reputation across Europe. A measure of the success of the treatment was the view that moxibustion was in fact European after all and indeed could be found in the works of Galen and Hippocrates.

It was around this point in history that eastern and western medicine most obviously parted company. The Renaissance anatomists had reached into the inner world of the human body to map it with the greatest accuracy thus far. Although Chinese surgeons did exist, it was not a significant part of TCM compared with its main focus – the study of the vitality of the living body and its harmony and balances. The theories of *yin-yang* and *wu xing* (five elements) derive from centuries of effort to understand and control these energies.

Visiting western physicians remarked on the ignorance their Chinese counterparts in regard to internal anatomy. The differing viewpoints of the two cultures (before Chinese efforts to integrate them early in the twentieth century) can be judged by the remark of Chinese physician *Lu Maoxiu* (1818-86): 'Once life has ceased, how could one learn anything significant.'

Almonds

In addition to the extraordinary sights there were many smaller pleasures on our trip. There were the tiny almonds in the northern city of Chengde that were so sweet that they tasted of marzipan. Cool in summer, Chengde has a long cold winter from which the elderly protect themselves with an almond drink to ward off chest infections – a good example of food used as preventative medicine.

Later in the trip we benefited from a form of *Tui na* massage that had originated in folk medicine. Similar techniques were used on Robert Fortune, but in our case it was performed on our feet, the skilful practitioner picking up on my 'dodgy' stomach with ease.

In all the provinces and regions the people we met were amiable, friendly, relaxed and full of humour. China is changing at a headlong rate and while the young people respect their medicinal tradition, they do not necessarily adhere to it, and sometimes combine it with older remedies. One young guide extolled the virtues of mixing boiled *Coca Cola* and ginger for a cold.

Much has been learnt from China through the centuries, but much research must be done into the techniques and *materia medica* of TCM.

However, the words of Robert Fortune, cured of his ailment 150 years ago, are worth heeding: 'Being a very ancient nation and comparatively civilised for many ages, many [medical] discoveries have been made and carefully handed down from father to son which are not to be despised, and which one ought not to laugh at without understanding.'

Gareth Evans works in the education department of the National Botanic Garden of Wales