

# Flowers fit for a Dalai Lama

Chris Chadwell

Despite the heaviest monsoon rains and more landslides than I had experienced during 24 plant-hunting and scientific expeditions along the Himalaya (rains which caused massive flooding in Pakistan and a flash flood claiming over a hundred lives in normally rain-free Ladakh, just to the north), Stage I of this conservation project was completed during autumn 2010. I am grateful to the HPS for an award through The Kenneth Black Legacy; without this funding and associated encouragement this worthwhile project would not have begun.

## Sharing knowledge and establishing a working relationship with Tibetan doctors

My first port of call was Dharamsala, Northern India, home to Men Tsee Khang (The Tibetan Medical & Astrological Institute of HH The Dalai Lama). Training for a doctor of traditional Tibetan medicine is rigorous and takes many years, like that of our GPs. Herbal medicine is still the primary healthcare for Tibetan people – *gSo-ba Rig-pa* (art of healing) is practised

using a rich pharmacopoeia of plants gathered in the wild, plus assorted animal and mineral ingredients combined into formulations administered as powders, tablets, capsules, decoctions, pills, syrups and medicated massage oils from the Institute's clinics or dispensed in remoter districts by local traditional doctors. It is believed that one becomes sick when the three humours (wind, bile and phlegm) produced by the three mental poisons (desire, hatred and stupidity), along

with seven constituents (food, blood, flesh, fat, bone, marrow, semen) and three excrements (sweat, urine and faeces) are unbalanced. Four factors are responsible for imbalances, namely unsuitable climate, improper diet, improper behaviour and the influence of demons!

I delivered lectures to staff and students of the Medical College, on Himalayan plants used in Tibetan medicine, comparing species from Bhutan (where I had been a consultant to The Royal Government in the 1990s, funded by the EU) and Ladakh (where I have named medicinal species on a voluntary basis) with those found in the Western Himalaya (fig. 1). Operating as I do off a shoe-string budget, I was delighted when my eldest son, adept at using e-Bay, secured a quality second-hand lap-top and digital camera, so thanks to PowerPoint I was able to include the Tibetan and Latin names of each plant with each image, invaluable as few were familiar with the botanical names and I struggled to pronounce some Tibetan ones! Fortunately I was able to lecture in English, and for those who find Latin plant names

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Fig. 1 An attentive audience

troublesome, may I stress their value, as without an international botanical language how would we communicate our judgements on the ornamental merit or cultivation requirements of a particular specimen in our gardens? Unless one can compare true like with like, such observations lead to much confusion and no little dispute!

My lectures were thankfully very well received, thanks in part to stories about noteworthy ‘herbs’ such as *Cordyceps sinensis* (known as *Caterpillar Fungus*, which is not a plant at all but a moth caterpillar infected by a fungus), the sale of which has raised millions for the Maoist cause in Nepal, and *Ephedra gerardiana* (Joint Pine), recognised for millennia in China as an asthma treatment, containing an alkaloid for which Maradona tested positive.

Later, Mrs Urvashi Suri, daughter of the late Prem Nath Kohli, an Indian forestry officer turned horticulturist and conservationist, presented a Kohli Memorial Gold Medal on behalf of The Sino-Himalayan Plant Association (of which I am founder and editor) in recognition of the significant contribution of the Institute’s staff, past and present, to the study of flora used in Tibetan medicine (fig. 2).



Fig. 2 Presentation of the Kohli Memorial Gold Medal

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### **The case for cultivation: inspection of the herb garden, Dharamsala**

There has been concern about the conservation of these ‘medicinal’ species for some time. Tibetan doctors are fully aware of the dangers – it is not just the sustainability of collecting directly from the wild (especially where the roots of medicinal species are required), but also destruction of habitat.

Space is strictly limited on the site, with plots of level ground at a particular premium, so what can be spared for the Herb Garden is minimal. Furthermore, the modest elevation (c.1600m) means that few genuinely ‘Himalayan’ species are suited to that climate. An exception is the tall, adaptable *Inula racemosa*, which displays showy golden-yellow flower-heads; its rhizome alleviates shoulder and neck pain. Many higher-altitude species have been tried and failed – though I suspect a few more could survive, if raised by seed, a conservation-friendly method allowing more gradual adjustment than transplanting roots. There is no tradition of cultivating *Sgaos-men* (high-altitude plants, which would qualify as hardy in the UK) anywhere in the Himalaya, so even basic gardening techniques are unknown to most traditional doctors. On the other hand, *Throgs-men* (low-altitude plants), which include familiar culinary items such as ginger and pomegranate, are widely grown in tropical and sub-tropical climes.

Much better results have been achieved at the Institute’s nursery in Ladakh where some 40 typically Tibetan borderland species are undergoing trials, and Eastern Himalayan species have been successfully raised on land near Darjeeling, Kalimpong and Gangtok (Sikkim).

I spent some time in the herbarium assisting the Director, Dr Norbu, with plant identification, and at his request I will return in August, prior to my expedition to Ladakh. This will lead to further contact with members of staff specifically involved in existing

cultivation projects. Following visits to various nurseries and trial grounds, I'll be able to make suggestions and recommendations, in reports and illustrated lectures.

It is essential that any advice should build upon existing trials and be consistent with traditional practices. Too often, Western 'experts' fly in briefly on major projects, hastily compose reports suggesting 'improvements' from their perspective, based solely upon 'best practice' in the West. Whilst good on paper, if few of their recommendations are adopted there is little to show for it! Better to make slow, steady progress on a small scale, over several years, which is respectful to the Tibetan way of doing things.

### Collection of seed from hardy perennials

I concentrated on what I describe as 'woodland' and 'open location' herbaceous perennials in the forests and on mountain slopes in the Western Himalaya above 2000m. A good selection was collected from specimens which should prove to be garden worthy though, as always with fresh introductions, an element of experimentation is involved. Most are little known in cultivation and it should be recognised that populations in the wild exhibit considerable variation, such that seedlings raised may exhibit different degrees of ornamental merit.

Seed was sent to the HPS Seed Distribution for specialist groups and experienced growers who we hope will in due course donate seed from the plants raised to the Distribution. The growers will also add to knowledge on cultivation, which I can pass on to Tibetan doctors. It's particularly useful to know what happens several years on. Most records are limited to

germination results during the first year after sowing, as methodical records over a longer period require careful labelling of each pot with both the collector's abbreviation (in this case CC) and collection number. Please note, the collectors' numbers are not an ego trip but essential for long-term record keeping, not to mention corrections to identification.

The vast majority of 'Himalayan' hardy plants which grace our gardens have a medicinal use e.g. the roots of *Persicaria affinis* (formerly *Polygonum affine*) are used in formulations against lung disorders. I saw it growing gregariously in clumps on rocky ground, seemingly by the million, the rich red autumn foliage rivalling any of the varieties in cultivation, but not a viable seed could be found!

Noteworthy herbaceous perennials at the fruiting stage during the expedition included: *Arisaema consanguineum* (impressive, numerous narrow leaflets); *Arisaema jacquemontii* (fig. 3) (likely to prove one of the toughest, able to cope with minimal shade); two forms of *Geranium*



Fig. 3 *Arisaema jacquemontii*



Fig. 4 *Geranium wallichianum*

*wallichianum* (fig. 4) (a highly variable species, best known for ‘Buxton’s Variety’ – the root used for stomach conditions); *Hedychium spicatum* (member of ginger family with scented white flowers – its rhizome used for poor circulation caused by thickening of blood); *Iris milesii* (distinguished flowers, pale mauve with dark blotches); *Ligularia amplexicaulis* (statuesque and showy yellow flower-heads); *Lilium polyphyllum* (lovely yellowish exteriors, whitish interiors with pink); *Selinum tenuifolium* (attractive umbellifer with dissected foliage – entire plant used against fever from poisoning).

It must be stressed that all plants are considered toxic in Tibetan medicine, not just those we classify as poisonous. Their formulations are very much cocktails acting in combination, with anything from a minimum of 3 plant ingredients to more than 100!

### **Putting something back: advising Tibetan doctors on growing Himalayan hardy plants**

This project is consistent with modern-day conservation practice, a golden opportunity for the HPS to be involved directly in helping the people of the Himalaya through effective cultivation of the species used in Tibetan medicine. After all, many noteworthy garden plants originated in these regions and we, who enjoy growing them in our gardens, owe a collective debt to the countries of origin. Long gone are the days when Britishers, as we are still, mostly affectionately, known in the Indian sub-continent, simply went and took from what were considered to be ‘our’ territories. We should be putting something back.

### **Tibetan medicine in India**

In 2010 India recognised Tibetan medicine as one of its official medical systems, of great significance to the people of Tibet exiled there, and a boost to the Institute. But it requires the ingredients in Tibetan medicines be properly tested – and the only way the results can be transmitted widely is through the use of Latin plant names, of species which have been accurately and reliably identified by Western scientific methods. My unique knowledge of Himalayan flora means I am well placed to assist.

### **Stage II**

Further funding has been received from the Kenneth Black Legacy to support the next stage of this project, which involves a seed-collecting expedition to Ladakh, known as ‘Little Tibet’, in September, and inspecting the medicinal plant nursery and trial ground near Leh.

### **Acknowledgements**

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Should members wish to learn more about the project, Chris has an entry in the latest HPS List of Lecturers, with a new digital presentation: *Flowers fit for a Dalai Lama*.