The Himalayas – Source of Many of Our Ornamentals©

Peter Cave
456 Wainui Road, RD3, Raglan 2397, New Zealand
Email: petercave@slingshot.co.nz

Today I'm going to talk about the exotic plants from the Himalayas. Many of you may not know that plants from the south side of the Himalayas are the absolute backbone of English gardens.

HIMALAYAN PLANT DIVERITY

At the core of this amazing plant source is the holy trinity of *Magnolia*, *Camellia*, and *Rhododendron*. How many gardens do you know without any of these key plants? I could make a very long list of other Himalayan plants. The large conifers: *Picea* (spruces), *Larix* (larches), *Abies* (firs), *Pinus* (pines), and *Cedrus* (cedars). There are many palms, bamboos, and many orchids, including *Cymbidium*, from this area. Lots of garden trees and shrubs including roses, *Viburnum*, *Cotoneaster*, *Daphne*, *Michelia* (see *Magnolia*), *Philadelphus*, *Deutzia*, *Pieris*, *Acer*, etc. There is a huge range of beautiful herbaceous alpine plants such as *Primula*. In fact when you are in this zone you could easily imagine you are in a garden. Many of our garden centres would have Himalayan plants for nearly half their stock.

PLANT HUNTING

I have been fortunate to do some plant hunting that is, collecting ornamental plants in the wild. Every country has its native plants just like New Zealand. There is one guiding principle to do this; you need to find an area of similar climate to your own country. So for New Zealand an annual temperature range of -5 to 25°C is good. As your plant source country gets nearer to the equator, you need to go higher and higher into the mountains to get that similar climate zone. So in the Himalayas a similar climate zone exists between about 2500 m and 4000 m above sea level (a.s.l.). In North Vietnam we collected between about 1000 m and 3000 m a.s.l.

I would like to take you on a little further to an understanding of why this diversity occurs here. There are two important principles at work.

High Mountains

The first is the Himalayas themselves, the highest mountains on the planet, with 14 peaks above 8,000 m. They were generated when the Indian Plate split off from the Australian plate about 70 million years ago and drifted rapidly north. As it approached Tibet from the south much of the intervening ocean bed was picked up and carried, so that now the areas above 6000 m on Mt. Everest are all sedimentary rock with ammonites and other marine fossils. Tibetans mine coral from the mountains for jewellery! Everything below this is granite. The end result of this plate collision is that we now have a huge barrier range running east west across the Asian continent.

Diversification

The second principle is plant diversity. Plants can diversify quite quickly given suitable habitats, but the main driver of diversity is time. The longer plants have growing in an area the more they diverge into more species.

HIMALAYAN HAVEN

Put these two together and you have plants on the wet southern side of the Himalayas growing away happily as an Ice Age approaches. The ice runs into the Himalayas from the north and can't get past. The rest of the Northern Hemisphere is wiped clean by the Ice Age and has to start diversifying all over again. The Himalayas become a safe haven for many of the best ornamentals we know. Since the last Ice Age occurred just 10,000

years ago the haven beneath the high mountains has presumably fulfilled this role many times.

LUCKY

Finally I'd like you consider how lucky you are. Modern man has only been around for 100,000 years. Over the past 10,000 years civilisation has occurred and we are no longer nomadic. Trade in food and commercial plants has dominated recent centuries. Only in the last century really have people been able to explore the planet and gather ornamental plants. Gardening for everyone is possible. So in all of history, it is only right now that you could be a nurseryman!