

## Adrenalin Rush Through the Native Bush: A Mary Helliar Study Tour to New Zealand

**Therese Landers**

Green Avenue Nurseries, Naas, Co. Kildare, Ireland

### INTRODUCTION

Several study tours to New Zealand have been accounted for in past I.P.P.S. papers, many of which I have read and enjoyed. Naturally this account is the most important one of all to me, and I would like to share my love and enthusiasm for the plant life of New Zealand with as many as are interested.

My visit to New Zealand in January of 1999 was made with the intention of seeing the native plants in their natural habitat. Establishing contacts with I.P.P.S. members was also a priority.

My work at the time, as manager of a small liner nursery in Ireland, had brought me into contact with many New Zealand plants, notably *Pittosporum*, *Leptospermum*, *Phormium*, and many of the tussock grasses. I, therefore, had background knowledge of the main plants in the flora. The New Zealand flora is more valued for its foliage than for its flowers and on most plants the flowers are insignificant although usually scented.

### ORIGIN OF NEW ZEALAND'S FLORA

Before undertaking the visit I wanted to find out more about the origins of this unique flora. To illustrate its uniqueness, consider the following facts:

- Of New Zealand's 2450 native species, 84% are endemic, i.e., they are found nowhere else in the world.
- And 50% of all New Zealand's plants are dioecious, i.e., they have separate male and female forms.

These traits can be explained by the way the New Zealand flora evolved. Eighty million years ago there was a large super continent in the Southern Hemisphere called Gondwanaland. Due to geological forces, it started to fragment and New Zealand was one of the fragments (Australia and Antarctica were amongst the larger ones).

The landmass we know as New Zealand drifted away on its own. The species of plants and animals that went with it evolved in complete isolation from those left behind on the larger land masses. Some possess features that are only found in fossils elsewhere in the world.

Flowering plants without flamboyant flowers were able to survive because there was less competition for insect pollinators. Also they evolved relationships with insects such as moths which were attracted by scent rather than visual cues.

Another striking feature of the flora is the number of woody species — more than 10% — with a divaricate habit. Divaricate means “stretched apart” and in plants refers to wide-angled spacing of branches. New Zealand has a greater proportion of divaricate plants than any other biogeographical region. In New Zealand species, divarication is accompanied by lack of fully expanded leaves and few flowers near branchlet terminals. In the majority of species, this habit is permanent, whilst in others it occurs in the juvenile stage only.

Well known genera that have divaricate members are *Hebe*, *Pittosporum*, *Myrsine*, *Coprosma*, and *Corokia*. For example, many are familiar with the tangled appearance of *Corokia cotoneaster*. Some botanists believe that the divaricate habit was favoured in New Zealand because of the feeding habits of the moa (a large extinct bird) — the plant presented an exterior of twiggy nonfoliar appearance to deter the browsing birds. Others consider it an adaptation to withstand exposed situations, with the flowers occurring a few centimetres down from the branchlet tips where they are less likely to be damaged by wind or frost. Like many of these long-standing debates, the answer could well be that divarication is the result of a combination of these factors.

### **DISCOVERING NEW ZEALAND'S NATIVE PLANTS**

The real joy of my visit was obtained from walking in the native bush or bushwalking as it is known there. New Zealand has more than 11% of its land devoted to National Parks which are conservation areas.

My trip through both islands enabled me to experience the bush from near tropical to temperate regions. Each area differed greatly in the make-up of its flora. Some important plants are only to be found in small pockets, e.g., the Nikau Palm (*Rhopalostylis sapida*) which is the southern-most palm in the world. It is found in abundance near Punakaiki in the South Island.

Others were ubiquitous, such as the flax-like *Dianella* with its brilliant blue berries. This plant lined the paths on many bush walks. Bushwalking was made all the more enjoyable by the sounds of the bush from the cricket-like cicada to the glorious song of the bellbirds and tuis.

### **NEW ZEALAND NURSERIES**

Many nurseries are devoted to producing native plants. One of the best known and certainly the biggest is Naturally Native in Tauranga in the North Island. Several other smaller producers also stock wide ranges of native plants. I enjoyed my visits to Oratia Nursery in Auckland, Annton Nursery in Hamilton, and C.H. Simpson Nursery in Nelson. I was struck by the dedication of the owners to producing native plants and their knowledge of the plants they grew. Many of the growers do the bulk of their own propagation and personally collect the native seed from selected sites around the country.

In my view, a trip to New Zealand could almost be declared compulsory for anyone interested in its native flora.

I am most grateful to the sponsors of the Mary Helliard Award and the Merlin Trust for their help in making my visit possible.

Full reports on the Mary Helliard study tours are available to sponsors of the GB&I Region's Mary Helliard Travel Scholarship Fund. Please contact the GB&I Region office at 2 Crondall Lane, Farnham, Surrey GU9 7BQ, tel/fax +44(0)1252 725880 for more details.