

# Metamorphosis

Part nine in a series examining regional variations in native flora. In this issue, Philip Smith traverses the marble and limestone landscapes of Nelson in his journey down the country.

Words and photographs by Philip Smith

**W**hen placed under extreme heat and pressure beneath the Earth's surface, limestone is transformed into marble – a stone that is perhaps the most distinctive component of Nelson's remarkable geological diversity. A different kind of metamorphosis is also a hallmark of this region, where a wide array of plant species have arisen on the area's marble and limestone landscapes.

One highly localised example of this is the marble endemic, *Clematis marmoraria*; a compact, creeping species, which grows within strikingly beautiful habitats on two mountains in Kahurangi National Park. Although

*C. marmoraria* is seldom seen in New Zealand gardens, it has played a role in *Clematis* breeding here and overseas. The dolomite-rich peak of Mt Burnett bears several endemic species, including a small tree, *Myrsine argentea*, and a sedge, *Carex dolomitica*; neither of which are generally available within horticulture. However, an attractive shrub of Mt Burnett, called *Melicytus aff. obovatus*, has been brought into cultivation in recent years - on account of its vibrant green, narrow leaves and arching growth form. Like other members of the variable complex of forms loosely included within *Melicytus obovatus*, it enjoys high levels of fertility, whilst it also enjoys a more shaded aspect than its close relatives. The limestone kowhai, *Sophora longicarinata*, is a particularly graceful small tree that is mostly confined to the Nelson region. It differs from our other kowhai through its relatively compact stature and long, elegant leaves (on which the leaflets have the appearance of tiny green beads). One of our most gardenworthy *Leptinella* species, *L. calcareo*, is restricted to coastal habitats (notably limestone cliffs) in northwest Nelson, whilst a particularly fine *Hebe* called *H. stenophylla var. hesperia* is only found within a similar range (on limestone bluffs near the coast).

The region's considerable diversity of plants is not just associated with limestone and marble, as in the case of a nationally endangered tree daisy, *Olearia polita*, which only occurs naturally in beech forests



of the Hope Valley. Along with many other distinctive regional plants, this attractive shrub (which has beautifully scented flowers) is grown by Tim Le Gros of Titoki Nursery, who has taken on the legacy of a pioneering local plantsman, Martin Conway. As one example of his commitment to stimulating interest in Nelson's regional flora, Martin played a central role in the conservation of the tiny remnant population of narrow-leaved maire, *Nestegis montana*. Although this beautiful tree is relatively common in parts of the North Island, it was down to a handful of widely dispersed trees around the Waimea Plains. In a year of heavy flowering, Martin (together with the eminent horticulturist, Lawrie Metcalf) took the unconventional approach of cutting a branch off a male tree from a distant population and tying it to an isolated female tree. The resulting seedlings have formed the basis for reviving this tree's population within the district.

To the west of Motueka, the fascinating plant communities of the Cobb Valley are home to two interesting species of *Pittosporum* that demonstrate the diversity of this often misunderstood genus. The Nelson endemic, *Pittosporum dallii*, bears large sprays of cream flowers in good years, as well as attractive toothed, dark green leaves. The unusual *Pittosporum patulum* is almost unrecognisable as belonging to that genus, due to its enigmatic juvenile growth form, which is more akin to that of a lancewood with delicate, bronze-coloured, toothed leaves. This nationally endangered species is a beautiful small tree with significant potential for use within gardens in its home regions - including the subject of the next planting guide, Canterbury (where the Prebble brothers of Texture Plants have made great efforts towards promoting awareness of this singular *Pittosporum*). ❶



01: *Hebe stenophylla*. 02: *Pittosporum dallii*. 03: *Dracophyllum traversii* at Mt Arthur. 04: *Chionochloa conspicua*. 05: *Nestegis montana* in the Wai-iti Valley. 06: *Melicytus crassifolius* at Boulder Bank.

## NELSON'S FLORA

Name	Height (m)	Width (m)	Growth FORM	Notes
<i>Atriplex cinerea</i>	0.5	2.5	Sprawling shrub	Vivid silver leaves; arrived naturally from Australia; in NZ, only found in Nelson
<i>Brachyglottis hectorii</i>	2.4	1.4	Shrub	Attractive white-flowered shrub; only found in northwestern South Island
<i>Brachyglottis laxifolia</i>	0.8	1.6	Mounding shrub	Compact, silver-leaved shrub that is similar to <i>B. greyi</i> ; endemic to Nelson
<i>Chionochloa conspicua</i>	2	1	Tussock	Similar to toetoe; often found on forest edges; should be planted much more
<i>Clematis marmoraria</i>	0.3	0.6	Scrambler	Rare in cultivation; grows amongst marble on two mountains in Nelson region
<i>Coprosma 'Wharariki'</i>	0.4	1	Creeping shrub	Useful groundcover shrub from near Farewell Spit; elegant, dark green foliage
<i>Coprosma obconica</i>	2	1.4	Shrub	Small-leaved <i>Coprosma</i> with a similar texture/growth habit to <i>C. propinqua</i>
<i>Dracophyllum traversii</i>	5	4	Small tree	Spectacular groves of <i>neinei</i> occur on ridgelines of Mt Arthur; difficult to grow
<i>Hebe divaricata</i>	1.5	1	Shrub	Attractive, compact <i>Hebe</i> which is endemic to northern South Island
<i>Hebe leiophylla</i>	2.4	1.2	Shrub	Graceful, upright shrub; well suited to cultivation in a range of situations
<i>Hebe stenophylla</i> varieties	1.6	1.6	Shrub	Both <i>H. stenophylla</i> var. <i>stenophylla</i> & var. <i>hesperia</i> make good landscape plants
<i>Hebe townsonii</i>	1.4	1	Shrub	Exceptional species of <i>Hebe</i> from this region; particularly good growth form
<i>Hoheria angustifolia</i>	8	5	Tree	Very graceful, weeping tree; locally significant and exceptional in bloom
<i>Hoheria ovata</i>	5	3.5	Small tree	Endemic to northwestern South Island; good for rapid cover; attractive flowers
<i>Kunzea ericoides</i>	10	5	Tree	An excellent tree for rapid shelter; differing forms occur throughout the region
<i>Leptinella calcareea</i>	Flat	0.7	Groundcover	Endemic to northwest Nelson; a fine groundcover which should be grown more
<i>Libertia 'nonoploid'</i>	0.6	0.9	Sword-leaved	An intriguing form from local beech forests; like a green <i>L. peregrinans</i>
<i>Libertia mooreae</i>	0.4	0.4	Sword-leaved	A relatively compact species of <i>Libertia</i> ; attractive white flowers
<i>Melicytus crassifolius</i>	0.5	1.5	Mounding shrub	A local form of <i>M. crassifolius</i> from Boulder Bank seems to be notably compact
<i>Melicytus obovatus</i>	1.6	1.6	Shrub	This vibrant, compact shrub has enormous potential for structural plantings
<i>Metrosideros robusta</i>	10	5	Tree	Grows very large over centuries; starts life on the ground in certain situations
<i>Myrsine argentea</i>	3	2	Small tree	Recently-described species which is restricted to limestone of Mt Burnett
<i>Nestegis montana</i>	10	6	Tree	Conservation efforts have brought this back from near extinction in the region
<i>Lophozonia menziesii</i>	8	8	Tree	Silver beech recently underwent a name change; very beautiful specimen tree
<i>Olearia polita</i>	3	1.6	Shrub	Nationally endangered small-leaved shrub which is restricted to Nelson region
<i>Pimelea carnosa</i>	0.05	1	Groundcover	Blue-foliaged coastal groundcover; recently described; similar to <i>P. urvilleana</i>
<i>Pittosporum dallii</i>	3	3.5	Small tree	Nationally threatened small tree from Nelson region; beautiful foliage & flowers
<i>Pittosporum patulum</i>	3.5	2.5	Small tree	Remarkable tree occurring from Nelson to Canterbury; similar habit to lancewood
<i>Plagianthus divaricatus</i>	2	1.5	Shrub	Often cut down low by wind and salt (as at Boulder Bank); good for estuaries
<i>Poa aff. cita</i>	0.5	0.7	Tussock	This coastal form of silver tussock has more lax foliage than typical forms
<i>Prumnopitys taxifolia</i>	15	7	Tree	Matai is a significant component of local forest ecologies; useful specimen tree
<i>Scutellaria novae-zelandiae</i>	0.25	0.7	Herb	Beautiful, critically endangered herb that is restricted to Nelson/Marlborough
<i>Sophora longicarinata</i>	3	3.5	Small tree	Elegant kowhai species; found mainly on limestone in Nelson/Marlborough
<i>Sophora microphylla</i>	6	8	Tree	The more common <i>S. microphylla</i> can be planted to form graceful woodlands
<i>Strebilus banksii</i>	8	7	Tree	Bright green, weeping tree which grows on islands in Abel Tasman; likes fertility