Native Clematis

by Joe Cartman



ITH the exception of *Clematis* paniculata the New Zealand *Clematis* species appear to be little known by the gardening public. The purpose of this article is to illustrate that there are other native species worthy of space in the garden.

The New Zealand species are, with one exception, all evergreen with opposite pairs of three foliate leaves. Some species have highly dissected leaflets but close examination shows the three foliate pattern. The exception is *Clematis afoliata* in which the leaves are reduced to a petiole with which the plant climbs.

All climbing *Ĉlematis* use the leaf petioles to curl around and hold onto twigs, netting etc for support. They are never stem twiners.

The New Zealand species are male and female on separate plants and not hermaphrodite like most of the introduced species. In any given population the male flowers are normally larger than the females and they hold the flowers better from a horticultural point of view.

The female flowers tend to hang downwards and they do not open flat like the males. This is probably to protect the stigmas from the weather.

Clematis have no petals; the colourful floral parts are sepals.

If you buy seedling plants there is around a 50% chance of getting a male plant.

Cultivation is normally straightforward. *Clematis* like cool roots and sunny tops to make them flower. *Clematis afoliata* is markedly intolerant of wet, poorly drained soils and considering its habitat preference of rock outcrops this isn't surprising. However, given the right site they are all easy to grow, often easier and more reliable than the large flowered hybrids.

Propagation from seed is easy provided the seed is fresh and has been stored under refrigeration. If seed is kept for a year or more at room temperature viability is lower and germination is erratic.

Always use wild collected seed as garden origin seed almost always gives hybrid offspring, due to the proximity of species that would otherwise not grow together in nature and to overlapping flowering times of individuals from different parts of the country. The hybrids are almost always inferior to either parent.

When hybridising deliberately the crosses should be controlled between selected parents and even then most of the offspring will be inferior to the parents and only worthy of space in the compost heap.

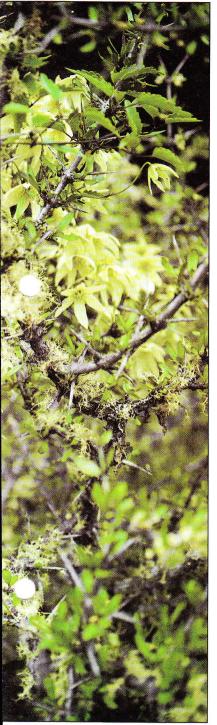
Some of our species are easy to propagate from cuttings, some are not. I am working on these problem species at the moment, for example *C. paniculata* and *C. afoliata*, as any improved forms

will have to be propagated vegetatively to maintain the good features of the plant.

The New Zealand species in the wild occupy a wide range of habitats, from sea level to the alpine zone, so most areas of forest and shrubland contain some species. Even tussock grassland contains *C. quadribracteolata* in the North Island and *C. marata* in the South.

Forests, especially the forest margins, are home to several species. Our best known species is undoubtedly *C. paniculata*. This plant is obvious in the

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FAR LEFT: Clematis paniculata.

ABOVE LEFT: Clematis forsteri.

TOP RIGHT: Clematis marmoraria, the world's smallest known Clematis, was discovered in the early 1970s.

CENTRE RIGHT: Clematis afoliata.

ABOVE RIGHT: Clematis petriei.

forest in spring with its clusters of gleaming white flowers hanging from the trees. It also appeared on our one dollar note and has featured on quite a number of the excellent bird portraits by New Zealand artists. It can even be seen on packaging in the supermarket, truly a wide range of habitat and well deserved recognition.

The leaves of this species are thick and leathery and

typically composed of three entire leaflets that often have one or two pairs of notches near the leaflet tips and sometimes wavy margins. In some populations the leaflets are dissected into smaller lobes and segments, and another feature of some populations is an irregular dark green or purple blotch in the centre of the leaf.

The flowers of the male *C.* paniculata are stunning. They

gleam with perfect whiteness on a sunny spring day. Some individuals have purple stamens which add to the effect. Flower size varies and some very large individuals have been identified with flowers as large as the palm of a hand.

C. paniculata is our most widespread species, occurring throughout the country in forests and forest margins from sea level to the lower montane level.

C. foetida and C. cunninghamii are also forest dwelling species, especially of forest margins. C. foetida occurs through most of the country except Taranaki and the far south and west of the South Island. This species has adult leaves similar to C. paniculata but not so thick and leathery, and without a dark central blotch.

The flowers are small, yellowish, produced in large numbers and are beautifully scented, the term foetida meaning strong in this case as the scent is definitely not unpleasant. Female plants are sometimes unscented; I had one by my front door for several years and it had little or no scent, unlike a male plant at the other end of the garden.

C.cunninghamii, previously known as C. parviflora, is a close relative of C. foetida and comes from the north of the North Island. It has thin leaves and rather small greenish flowers. Horticulturally it has no great merit (someone out there will probably disagree) but I grow the plant and like it.

Another forest margin species (or group of species) is *C. forsteri*. The name *C. forsteri* for the purpose of this article follows the *Flora of New Zealand* vol. 4 (1988) and includes *C. petriei, C. australis* and *C. hookeriana* as previously described in the *Flora of New Zealand* vol 1 (1963).

These names and several others have been given to a group of plants with yellowish or green flowers with 5-7 sepals and a variable, and at times a confusing array of leaf shapes. Studies done in October and November 1990 have shown that at least two

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entities appear to exist in the South Island. The boundaries of these two are not at present known and they may merge with plants from the North or they may remain distinct throughout their range. This is under study at the present and it will be several years before it is resolved.

The North Island populations will also need to be studied in some detail in the future, both in the wild and in the herbarium.

Some of the entities in this group are superb plants. The leaves are often very dissected, the segments are normally thick and glossy. The flowers are scented in all the populations I have studied. Some are spicy, others are sweet and fruity. Breeding and selection is being done with the best of these plants to enhance the desirable characteristics of leaves and flowers.

Two other species share the shrubby areas with the *C. forsteri* group; these are *C. marata* and *C. quadribracteolata*.

C. marata is a slender climber with 3 foliate leaves and very variable leaflets. The flowers have 4 sepals and are normally green with a darker mark near the base of the sepal. The only known population on Banks Peninsula has a distinct pinkish flush to the flowers. The flowers are not large but are produced in profusion and most populations are strongly scented with a spicy cinnamon smell. This is a charming small climber that lives on the eastern side of the Southern Alps.

C. quadribracteolata is our smallest climbing species with slender brown stems, tiny leaves and purple/brown flowers with 4 sepals. It is lightly scented, especially on a warm still day. It scrambles around on shrubs and tussock grasses in the central

North Island and down the eastern side of the Southern Alps where it is common but very hard to find due to its small size and brownish colour. It is best grown on a grey leaved shrub where it stands out quite well and is a charming though diminutive plant.

One of the world's strangest *Clematis* occupies rock outcrops and sunny well drained places from the southern North Island to North Otago on the dry eastern side of the country. This is *C. afoliata*. The leaves are reduced to petioles with which the plant climbs

though it often grows in places where there is nothing to climb on and it makes a mass of growth like a tangle of green wire. Flowers are produced in abundance from the leafless stems. They have 4 sepals, are pale yellow and have a delightful scent.

This plant is a real eyecatcher and to my mind is a very beautiful species. It is a little more demanding in the garden than the other species and will not tol-

erate a poorly drained site. It is also difficult to propagate vegetatively, a problem that is being worked on at the moment.

The final species is the smallest of the world's known Clematis. High on a marble plateau in the north west of the South Island, in cracks and crevices in the rocks, growstiny C. marmoraria. This species sends runners along fissures in the rock and throws up short stems clothed in highly dissected brittle leaves of shining green. The flowers are held above the foliage on short stalks and are white and about the size of a ten cent piece.

This plant is a true alpine and so unlike a *Clematis* that when it was discovered in



the early 1970s it remained a mystery until it flowered. It is a popular plant in England and has won commendations at Alpine Garden Society shows in that country.

As mentioned earlier, cultivation presents few problems. Clematis do not like soggy wet soil, but they thrive on being well watered if the surplus water can drain away freely. The root run needs to be cool, so cover with mulch or plant on the south side of a shrub.

Clematis are commonly used to cover a wall or fence and are good for this purpose, but I think they look their best when climbing through a shrub or tree. Give a little thought to the size of the Clematis in relation to its host.

Clematis paniculata requires a medium size tree or shrub and, if allowed to, will climb way out of sight and flower on the neighbours' side of the tree. It is a wise move to prevent the plant climbing so far that it cannot be enjoyed.

C. foetida will also climb out of sight if allowed to.

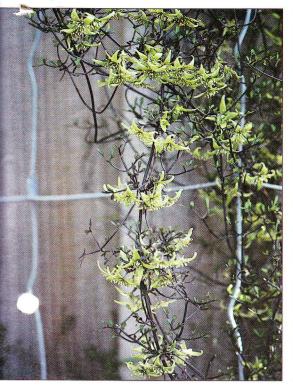
TOP LEFT: Clematis cunninghamii.

TOP CENTRE: Clematis marata.

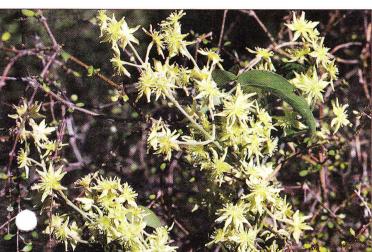
TOP RIGHT: Clematis quadribracteolata.

ABOVE LEFT: Clematis forsteri.

ABOVE RIGHT: Clematis foetida.







Zealand species flower in spring and early summer and any pruning should be done as soon as flowering has finished. Any pruning done af-

No regular pruning is needed, only removal of unwanted growths.

Native *Clematis* are relatively pest free, apart from the usual few aphids and caterpillars.

Mildew is sometimes a

ter mid December will remove next year's flowers next year's flowers are produced on this year's growth.

Mildew is sometimes a problem late in the season. Thankfully they do not suffer very much from *Clematis* wilt disease which kills off the large flowered hybrids, especially in spring and summer.

Our native *Clematis* thoroughly deserve a place in our gardens.

Native clematis are often hard to acquire, except for C. paniculata which is usually available from garden centres. Joe Cartman has seed available, all collected in the wild, of most of the species described in his article. The cost is \$3 per packet. Joe's address is 215 Cavendish Road, Christchurch 5.

C. afoliata needs a warm sunny site and will climb to three metres if allowed. It tends to send up a continual supply of new shoots from the base. In nature it often grows in a tangle without a host to climb on.

The plants listed under the *C. forsteri* heading are variable in stature. The entities corresponding to *C. petriei* and *C. australis* can grow to 3 metres but are easily managed on lower supports of 1-2 metres. Some of the North Island plants are larger, growing to 4-5 metres. All are fragrant and every attempt should be made to keep them at nose level.

C. marata and C. quadribracteolata require quite modest hosts as they are small slender species, especially the latter which can be allowed to ramble around among heathers and other small shrubs.

C. marmoraria is a plant for the rock garden and grows only ten centimetres high. It cannot climb and should be allowed to creep around in an area that is not too hot and dry and where it cannot be overshadowed by taller neighbours.

Pruning is a topic that can confuse growers, especially with the larger flowered hybrids. However, the New **BIRDNETTING** — Extruded birdnetting made to protect your best fruit from the smallest birds to the largest — at minimum cost.

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