



Clematis in Wellington Conservancy

Current status and future management

JULY 2006



Department of Conservation
Te Papa Atawhai

Clematis in Wellington Conservancy

Current status and future management

By John Sawyer and Faith Inman

Published by
Department of Conservation
P.O. Box 5086
Wellington, New Zealand

This publication was written by John Sawyer and Faith Inman.

Cover photo: *Clematis paniculata*. Photo by Jeremy Rolfe.

© Copyright 2006, New Zealand Department of Conservation

ISBN: 0-478-14095-9

In the interest of conservation, DOC supports paperless electronic publishing. When printing, paper manufactured with environmentally sustainable materials and processes is used wherever possible.

CONTENTS

Abstract	1
Acknowledgements	2
1. Introduction	3
<i>Clematis</i> in New Zealand	3
Purpose of this report	3
2. Goal and objectives of indigenous clematis conservation	4
3. Methods	5
4. <i>Clematis</i> species in Wellington Conservancy	6
4.1 <i>Clematis afoliata</i> Buchanan	7
4.2 <i>Clematis foetida</i> Raoul	8
4.3 <i>Clematis forsteri</i> Gmelin	9
4.4 <i>Clematis paniculata</i> Gmelin	10
4.5 <i>Clematis quadribracteolata</i> Colenso	11
4.6 A note on <i>Clematis hookeriana</i> Allan	12
4.7 <i>Clematis vitalba</i> L.	13
4.8 <i>Clematis montana</i> DC.	14
4.9 <i>Clematis flammula</i> L.	15
5. Threats to indigenous clematis species	16
Habitat conversion	16
Stock and feral herbivores	16
Fire	16
Competition with exotic plants	17
Sex imbalance	17
6. Management requirements for indigenous clematis	18
6.1 Public awareness	18
6.2 Survey	18
6.3 Database management	18
6.4 Monitoring	19
6.5 <i>Ex-situ</i> conservation	19
6.6 Research	20
7. How you can help	21
DOC addresses in Wellington Conservancy	21
8. Cultivation methods	22
How to grow indigenous clematis	22

Bibliography	24
Appendix 1	
Native plant nurseries that sell clematis	25
Appendix 2	
Books about clematis	27
Websites	27
Appendix 3	
Database of indigenous clematis records for Wellington Conservancy	29
Appendix 4	
Species record sheet	57

Abstract

This report provides information about five indigenous and three naturalised clematis species found in the wild in Wellington Conservancy. The indigenous species are *Clematis afoliata*, *C. foetida*, *C. forsteri*, *C. paniculata*, and *C. quadibractiolata*. The three naturalised species are *Clematis vitalba* (old man's beard), *C. montana* (primrose star, anemone clematis) and *Clematis flammula*. Old man's beard is a common weed that smothers secondary forest and prevents the regeneration of indigenous species. Primrose star is a garden escape that may become a weed of scrub and cut-over forest. *Clematis flammula* is a perennial weed found most often scrambling in hedges and scrub.

Fire, naturalised weeds, stock grazing and wild animals (such as possums) pose threats to indigenous plant communities that support clematis vines in Wellington. No clematis species in Wellington Conservancy is nationally threatened but both *Clematis quadibractiolata* and *Clematis afoliata* are regionally uncommon and threatened. This report contains descriptions, photographs and distribution maps for each indigenous clematis species. Actions necessary to protect indigenous clematis vines in the wild and information about their propagation is provided.

Aside from the three naturalised species, there are a further two exotic clematis species commonly grown in Wellington Conservancy. These are *Clematis tangutica* (Chinese clematis) and *Clematis cirrhosa*.

A database of clematis observations for the conservancy used to create the distribution maps, is included as an appendix. References to publications and web based resources about clematis vines are also provided. New wild clematis vine observations (including naturalised species) may be sent to the Department of Conservation using copies of the Department's species record sheet.

This report has been produced to raise awareness of what clematis vines look like and their distribution in Wellington Conservancy. Information provided here is a baseline against which future changes in the status and abundance of clematis may be monitored.

Acknowledgements

We thank the following people for help and advice during the preparation of this report.

- Joe Cartman for information about indigenous clematis and cultivation techniques.
- Lisa Forester, Nick Singers, John Barkla, Andrew Townsend, Philip Brown, Kate McCombs and Colin Ogle for providing photographs.
- Matt Gardener (Plantwise Nursery) for information on cultivation of Clematis.
- Audrey Eagle for permission to use her illustrations of indigenous clematis species.
- Peter de Lange for valuable comments on a draft of the manuscript.
- Jeremy Rolfe for production and publication of the report.

We are grateful to the people who allowed us to use their photos:

- John Barkla
- Geoff Bryant
- Szczepan Marczynski
- Jeremy Rolfe
- Janet Rowley
- Andrew Townsend

1. Introduction

Eight species of clematis (family: Ranunculaceae) are known from the wild in Wellington Conservancy (see Table 1). Wellington Conservancy is one of thirteen regions administered by the Department of Conservation and covers the southern part of the North Island, including Tararua, Rimutaka and Aorangi Forest Parks, the islands of Kapiti, Mana and Matiu/Somes and the Chatham Islands. The Chatham Islands are not mentioned further in this report as only one species *Clematis paniculata* has been recorded there as a naturalised population at Wharekauri woolshed covenant (de Lange *et al.* 1999).

CLEMATIS IN NEW ZEALAND

Clematis is a genus of about 300 species of vines and erect or ascending perennial herbs (sometimes woody) found throughout the world (Webb *et al.* 1988) and widely distributed mainly through the temperate regions, chiefly in the northern hemisphere (Rehder 1940). The word ‘clematis’ comes from the Greek for ‘vine shoot’ on account of its climbing habit. Indigenous New Zealand clematis differ from most of the other species in that they are dioecious, meaning that species have separate male and female plants. Some Australian species (for example, the Tasmanian endemic *Clematis gentianoides*) are also dioecious as are some others worldwide (Toomey & Leeds 2001). Currently, botanists accept nine New Zealand endemic clematis species. Endemic means they do not grow naturally in the wild anywhere else in the world. Five of these species are found in Wellington Conservancy (Table 1).

New Zealand clematis species were first described by botanists in the late eighteenth century. Two of the Wellington indigenous species, *Clematis forsteri* and *C. paniculata*, were described by the German botanist Johann Friedrich Gmelin (1748–1804). *Clematis quadribracteolata* was described by William Colenso (1811–1899) the English missionary, teacher, ethnologist and printer as well as an avid naturalist (Bagnall & Petersen 1948). A further three exotic clematis species have been recorded naturalised in Wellington Conservancy (see Table 1).

PURPOSE OF THIS REPORT

The purpose of this report is to provide information about clematis vines in Wellington that will aid voluntary conservation of indigenous species and direct control efforts to sites supporting exotic ‘weedy’ species. Information contained in the report is to provide a baseline for monitoring the changing condition (distribution and abundance) of clematis over time. Information about the propagation of indigenous clematis species is provided to assist people who want to grow them on their property.

2. Goal and objectives of indigenous clematis conservation

The main goal for clematis conservation in Wellington Conservancy is to ensure all indigenous species maintain or increase their current range and abundance within their natural ecological limits. Other goals are:

- To increase levels of public awareness about indigenous and naturalised clematis species
- To disseminate data about locations of wild indigenous clematis populations and how these species should be protected
- To involve a wider range of people in collecting information about the distribution and abundance of clematis species populations
- To encourage people to propagate indigenous clematis and to utilise seed and plants of local provenance in ecological restoration projects

The main strategy for conservation of indigenous clematis is to encourage people to:

- Conserve populations of indigenous species where they are found
- Propagate them for introduction to suitable habitats
- Inform the Department of Conservation when new populations are located

3. Methods

Information about the distribution of clematis has been collated from a variety of sources and this was used to prepare distribution maps for each species. Sources included:

- Field reports by botanists (including record sheets completed by staff of the Department of Conservation, staff of other organisations, members of Wellington Botanical Society and other botanists)
- Herbaria throughout New Zealand (e.g., AK, CHR and WELT¹)
- Plant species checklists (see Sawyer 2001)

Records used in the distribution maps date from 1937 to as recently as 2006. Distribution maps depict wild clematis populations. No attempt has been made to record occurrences of planted clematis in private gardens. Each population or plant is represented by a dot. Some clematis vines may be more or less widespread than represented in the distribution maps because some plants may have been overlooked during survey work or have since disappeared.

¹ Herbaria searched included Auckland Museum (AK), Lincoln (CHR), Forest Research Institute (NZFRI), Museum of New Zealand - Te Papa Tongarewa, Wellington (WELT) and Victoria University of Wellington (WELTU). Herbarium acronyms follow those recommended by Holmgren *et al.* (1990).

4. *Clematis* species in Wellington Conservancy

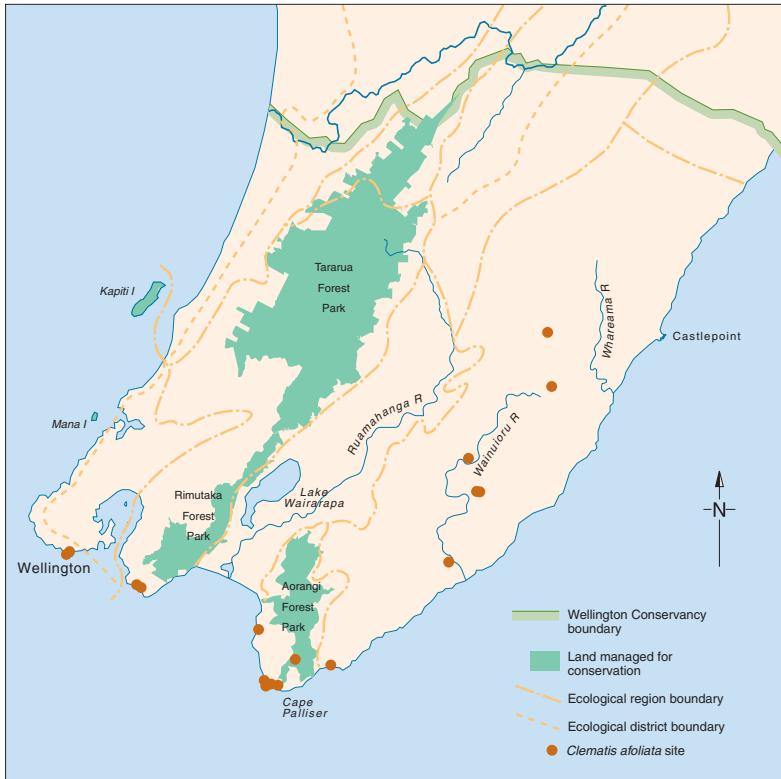
The eight species of clematis (five indigenous, three naturalised) recorded from the wild in Wellington Conservancy are shown in Table 1. The indigenous species differ from the naturalised species in several ways. Indigenous clematis are dioecious (male and female flowers on separate plants). The naturalised clematises are hermaphrodite (flowers have male and female parts). Indigenous clematis are evergreen, while most naturalised clematis are deciduous. There are some exotic evergreen species that may become weeds in New Zealand in the future (see below). A note on *Clematis bookeriana* is provided in Section 4.6.

Other clematis species are widely grown in gardens in Wellington Conservancy but have been excluded from Table 1 because they have not naturalised in the region. They include *Clematis tangutica* (Maxim.) Korsh from China, and *Clematis cirrhosa* L. from Spain, the Balearic Islands, Algiers and the mountains of north Africa has also been recorded as a garden plant near Wainuiomata.

TABLE 1: WILD CLEMATIS SPECIES IN WELLINGTON CONSERVANCY

LATIN NAME	COMMON NAME	DESCRIPTION OF FLOWERS	FLOWERING TIMES	LEAVES	SEPALS (NO.)	SIZE
<i>Clematis afoliata</i>	Leafless clematis, pohue	Greenish-yellow 30-40mm	August -November	No leaves	4	1.5 m
<i>Clematis foetida</i>	Yellow clematis	Yellow 15-25 mm	September-November	3-foliate	5-8	10 m
<i>Clematis forsteri</i>	Small white clematis	Pale-yellow to greenish-yellow	September-November	3-foliate	6-8	10 m
<i>Clematis paniculata</i>	White clematis, Bridal Veil, Puawhananga, Piki-kai-arero	White 50-100mm	October -November	3-foliate	6-8	15 m
<i>Clematis quadribracteolata</i>	None	Light brown to purple-brown	September-October	3-foliate	4	
<i>Clematis vitalba</i>	Old man's beard	Cream coloured (20-30 mm)	December-May	5-foliate	4-(5)	20 m
<i>Clematis montana</i>	Primrose star, anemone clematis	White-pink	October -November	3-foliate	4	
<i>Clematis flammula</i>	None	White (20-30 mm diameter)	January-March	2-3 lobed	4	5 m

4.1 CLEMATIS AFOLIATA BUCHANAN



Common name: Leafless clematis

Distinguishing features: This is the most unusual of Wellington's indigenous clematis. As its name suggests, *Clematis afoliata* is distinguished by its lack of leaves. It is a sprawling yellowish-green vine which usually appears as a tangled mass of wiry stems bound together by spiralling tendrils. It grows to about 1.5 m tall. Although it is slow growing, this pioneer species is used in early stages of ecological restoration projects. The greenish-yellow male flowers are 3–4 cm across and often have a reddish blotch at the base of the 4 sepals. The female flowers are similar but slightly smaller.

Habitat requirements: It is found on open, rocky scrubland or grassland and has been recorded hanging down cliffs.

Flowering time: August–November

Fruit: November–January

Regional status: Gradual Decline

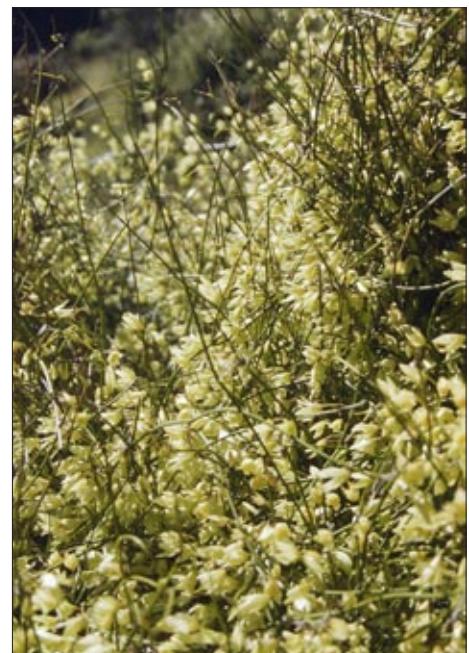
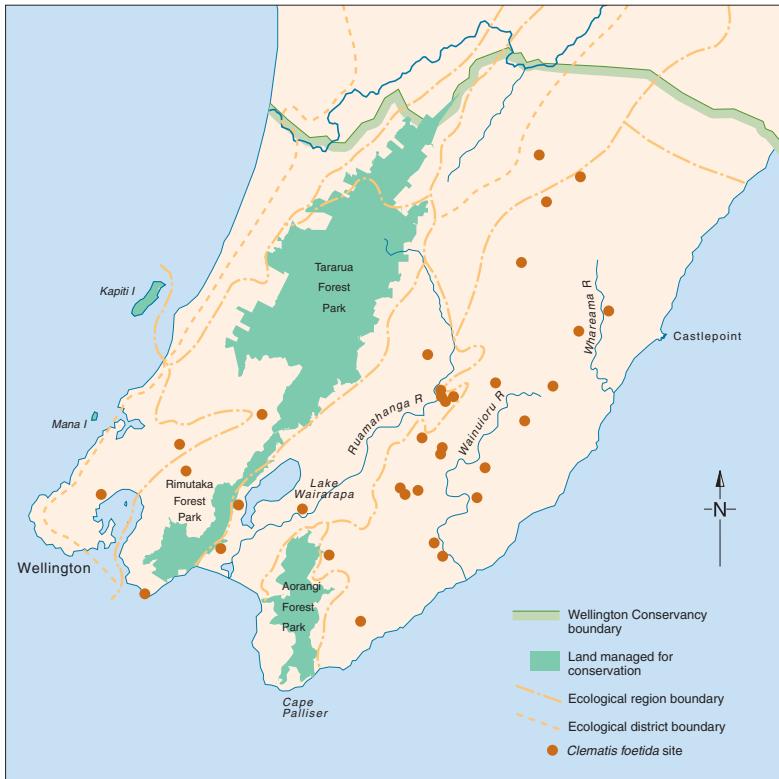


Photo: Jeremy Rolfe.

4.2 CLEMATIS FOETIDA RAOUL



Common name: Yellow clematis

Distinguishing features: *Clematis foetida* is distinguished by the large volume of strongly scented, star-shaped, yellow flowers 1.5–2.5 cm across. It is a large climbing vine with 3-foliate leaves. The dark-green leathery leaflets sit at the end of long, hairy petioles. The leaflets are highly variable in shape and may be either smooth or hairy. It is evergreen.

Habitat requirements: It can be found in shrub/scrubland or along forest edges where it grows well up into the trees and can get up to 10 m tall, nearly as large as *Clematis vitalba* or *C. paniculata*.

Flowers: September–November.

Fruit: November–January

Regional status: Not threatened

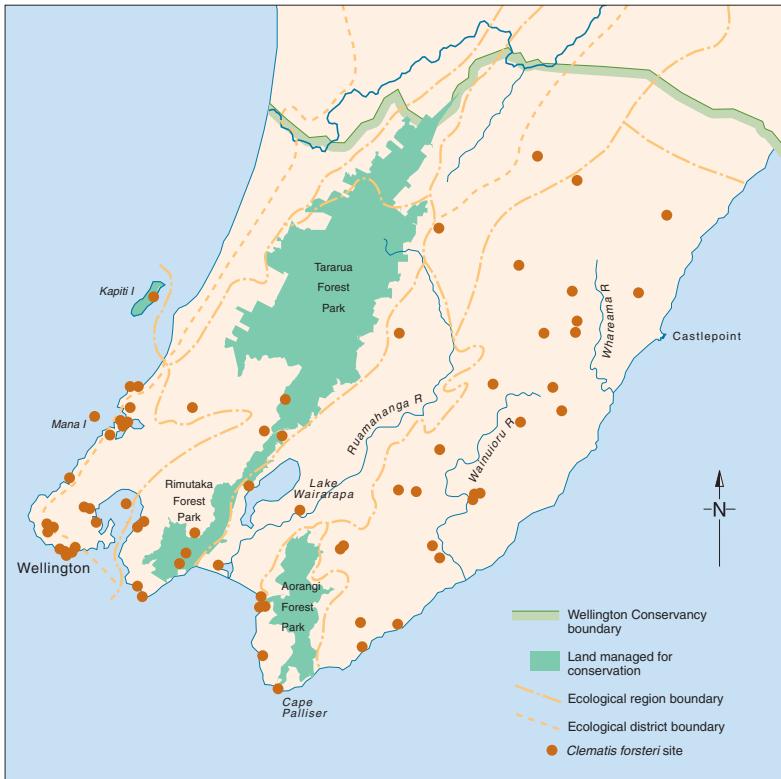


Photo: DOC.



Photo: John Barkla.

4.3 CLEMATIS FORSTERI GMELIN



Common name: Small white clematis

Distinguishing features: *Clematis forsteri* has 3-foliate leathery leaves which vary in shape. The slender petiole is usually from 2–5 cm long. The flowers have sepals that are hairy on both surfaces, especially on the underside. They are similar to *C. foetida*, but do not have such a strong smell. The *C. forsteri* flowers are described as having a spicy cinnamon or clove scent. The central bundle of long stamens is tipped with pink lanthers on the male flowers. On the female flowers, feathery styles reach 2–3.5 cm long at fruiting. Fewer flowers than *C. foetida*, and smaller flowers than *C. paniculata*, it is known to interbreed with both species. *C. forsteri* is a moderately fast growing, evergreen climber that can attain heights of up to 10 m.

Habitat requirements: Lowland forest and scrub, especially forest edges.

Flowers: September–November

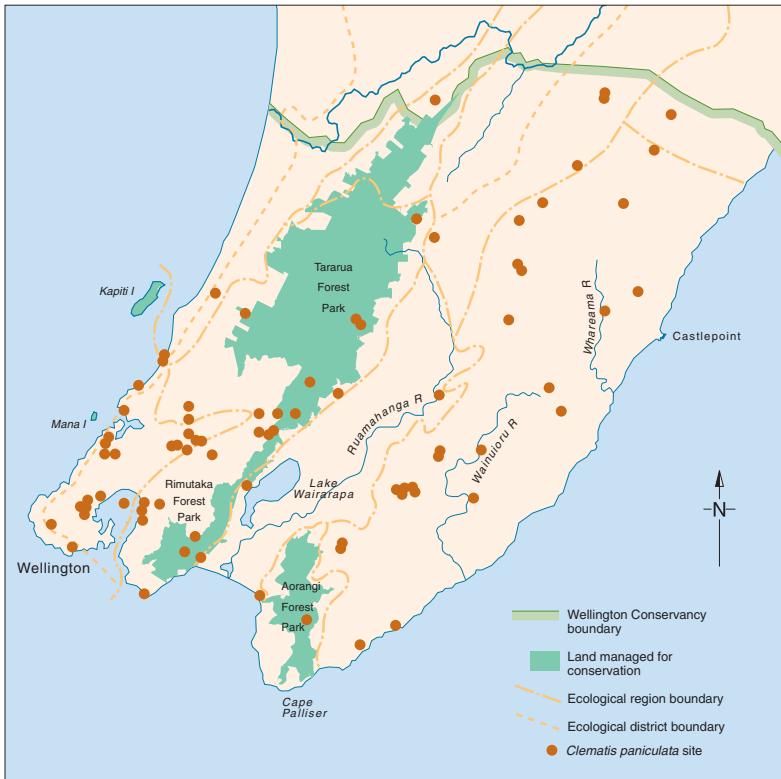
Fruit: November–January

Regional status: Not threatened



Photos: Jeremy Rolfe.

4.4 CLEMATIS PANICULATA GMELIN



Common names / Maori names:

White clematis, Bridal Veil, Bush clematis, Puawhananga, Piki-kai-arero

Distinguishing features: Large white sepals (5–10 cm) surround a cluster of yellow stamens topped with pinkish-red anthers. Female flowers similar but smaller. It is a large, fast-growing vine with thick stems at the base which climb up to 15 m into the trees. The abundant flowers are often lost in the tree tops, or found cascading over indigenous shrubs. The flowers have a sweet smell, though not as strong as the other species. The dark-green foliage has shiny compound leaves bearing three leaflets at the end of long twining petioles. By December, the female flowers are replaced with silvery seed heads consisting of persistent plumose styles 3–5 cm long. This is an evergreen species.

Habitat requirements: Common in lowland and low mountain slopes on the edge of forest fragments.

Flowers: August–November

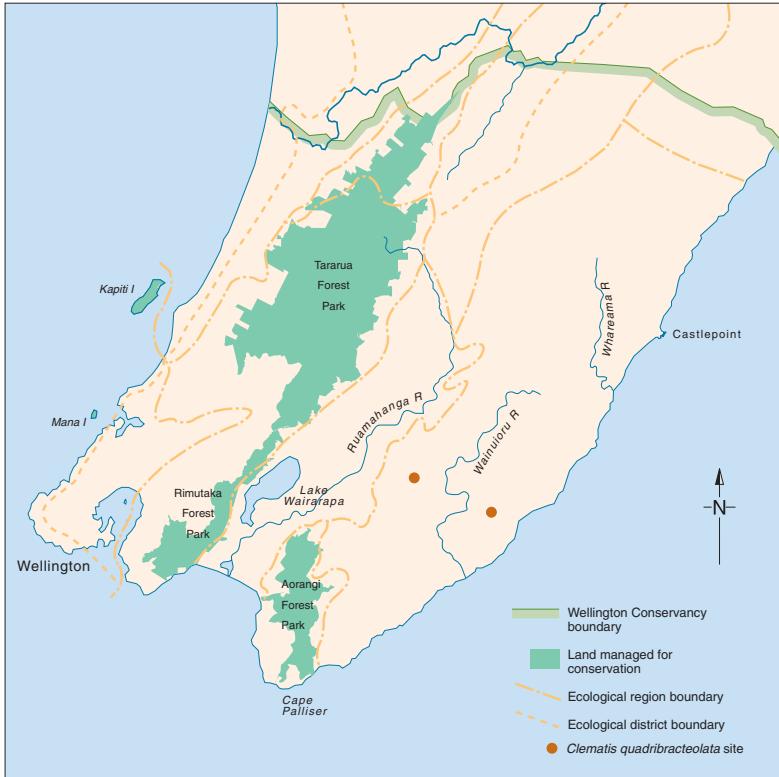
Fruit: October–January

Regional status: Not Threatened



Photos: Jeremy Rolfe.

4.5 *CLEMATIS QUADRIBRACTEOLATA* COLENZO



Common name: None known

Distinguishing features: As the name implies, *C. quadribracteolata* is easily recognised by its four small, purple-brown bracts which are sparsely hairy underneath. It is a slender vine with narrow branchlets and thin, brownish-green, 3-foliate leaves with sparse hairs. It is usually found trailing through or climbing over low vegetation. The plumose styles of the female flowers are 2–3.5 cm long. Evergreen.

Flowers: September–October

Fruit: November–December

Habitat requirements: *Clematis quadribracteolata* grows on tussock grasses in the North Island especially in damp areas. In Wellington Conservancy it is found in low, wet areas near streams and along roads.

Regional status: Regionally Critical

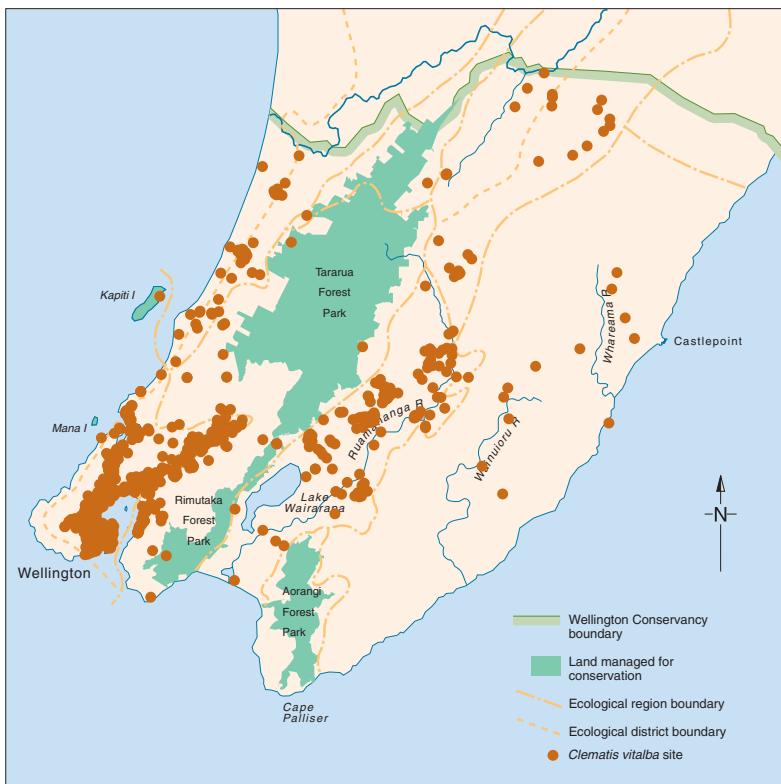


Photo: Andrew Townsend.

4.6 A NOTE ON *CLEMATIS HOOKERIANA* ALLAN

Clematis hookeriana is a name that was adopted by Allan (1961) for plants now referred to the admittedly rather variable *C. forsteri* (Garnock-Jones in: Webb et al. 1988; Heenan & Cartman 2000). Previously this species had been considered endemic to the Cook Strait coastline. Allan (1961) had coined the name because he believed that such plants had previously been wrongly identified as either *Clematis hexasepala* (Hooker 1852) or *Clematis colensoi* (Hooker 1864)—names which are, for various reasons no longer in use today anyway. As regards *C. hookeriana*, Heenan and Cartman (2000) showed that the name was illegitimate and invalid because a Latin description or diagnosis had not been prepared for it by Allan (1961) nor did he select a type specimen. This is part of a series of actions that must be undertaken to effectively and validly publish a plant name (see Greuter et al. 1994). The same also holds true for plants treated by Allan (1961) as *Clematis hookeriana* var. *lobulata* (see Heenan & Cartman 2000).

4.7 CLEMATIS VITALBA L.



Common names: Old man's beard, traveller's joy.

Distinguishing features: *Clematis vitalba* is a large smothering vine that grows to 20 m tall. Unlike indigenous clematis, it is deciduous and its leaves have 5 leaflets. It is also poisonous. Its cream coloured flowers are 2–3 cm wide with hairy sepals bent back from the centre and a central cluster of stamens. The flowers are hermaphrodite and bear long fluffy persistent styles when in fruit. It spreads by seeds and adventitious roots.

C. vitalba was introduced to New Zealand from Europe as an ornamental in the 1920s. Millions of dollars have since been spent trying to eradicate it and repair the damage it has done to forests. The strongly ribbed stems must be destroyed or they will re-sprout.

Habitat requirements: Common on the edges of second-growth forest, along hedges and in trees.

Flowers: December–May

Fruit: March–October

Regional status: ‘Unwanted Organism’ under the Biosecurity Act 1993: it is illegal to propagate, sell or distribute *C. vitalba* in New Zealand. An invasive pest plant.



Photos: Jeremy Rolfe.

4.8 *CLEMATIS MONTANA* DC.

Common name: Primrose star, anemone clematis, Chinese clematis

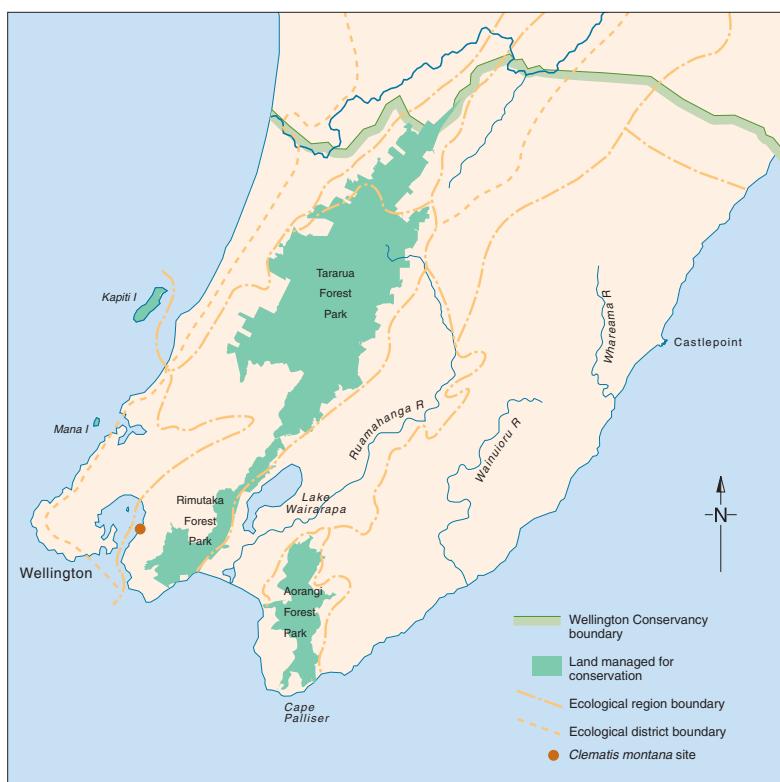
Distinguishing features: This is a deciduous species with thin, 3-foliate leaves with serrated margins. Long petiole 4-8 cm with sparse hairs. Styles are 4-5 cm. The four white-pink sepals are hairy underneath.

Habitat: Scrub and cutover forest.

Flowers: October–November

Fruit: January–April

Regional status: Naturalised garden escape.

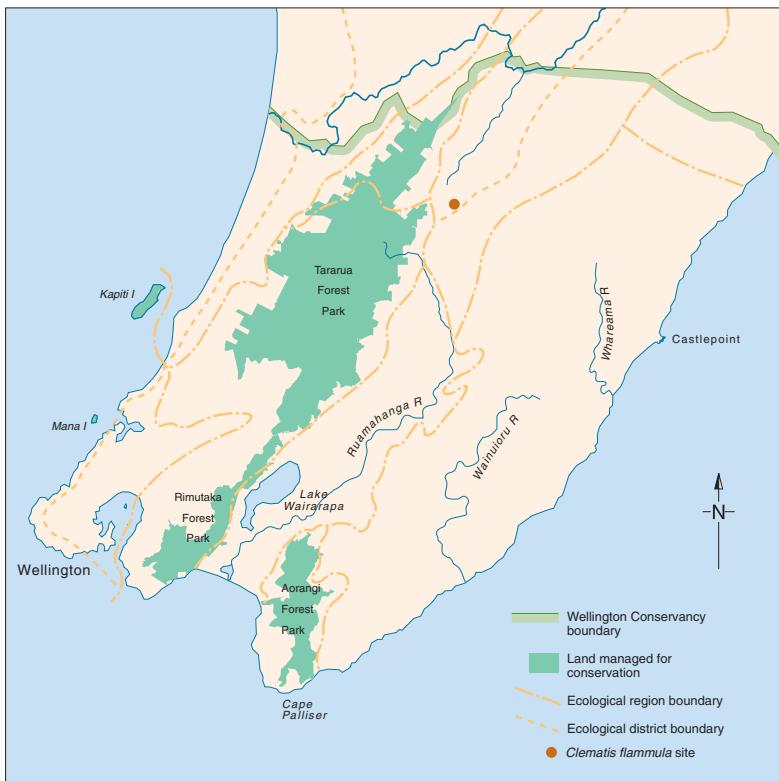


Photos: Geoff Bryant / cfgphoto.com.

4.9 *CLEMATIS FLAMMULA* L.



Photo: Szczepan Marczynski



Common name: Fragrant virgin's bower

Distinguishing features: Perennial, deciduous woody climber, stem terete, weak ribbing. Leaves very sparsely hairy, green and thick, 2-pinnate, 8-15 × 3-12 cm, ovate to lanceolate, cuneate to truncate at base, acute to obtuse; margin entire or 2-3 lobed; petiole glabrous, 4-5 cm long. Small white flowers 20-30 mm diameter with 4 sepals. Seeds hairy & compressed, 5-6 mm long.

Habitat: Mostly found scrambling in hedges and scrub (Webb et al. 1998). Specimens have been collected from Wellington (CHR 541210 A and B) and has been recorded as adventive but uncommon at the rest area on the Masterton to Eketahuna road near Mount Bruce. "A few pieces of heavily fruiting vine protruding from roadside barberry hedge" (AK 295803).

Flowers: January-March.

Fruit: May

Regional status: Naturalised garden escape



Photo: Janet Rowley.

5. Threats to indigenous clematis species

Of the five indigenous clematis species found in Wellington Conservancy, two are listed as regionally threatened. *Clematis quadribracteolata* (Regionally Critical) is only known from three sites and is the clematis of greatest conservation concern in the conservancy (Sawyer 2004). *Clematis afoliata* (Gradual Decline) is quite widespread around the Wellington coast but is never found in abundance and is rarely found in protected areas (Sawyer 2004).

Continued habitat destruction (as a result of development and through the effects of exotic pests) poses a threat to all other indigenous clematis species and the indigenous plant life of the conservancy. There is limited information about threats to indigenous clematis and so much of what is described here is based on anecdotal evidence.

HABITAT CONVERSION

The conversion of forest and scrub to farmland, urban landscapes and roads has caused a massive reduction in the available suitable habitat for indigenous clematis in Wellington Conservancy. Habitat conversion over the past 300 years has caused the greatest impact to clematis abundance and distribution in Wellington Conservancy.

STOCK AND FERAL HERBIVORES

Deer, rabbits, sheep, cows and goats all browse indigenous clematis which affects the survival of mature plants and can reduce seedling recruitment. In Wellington Conservancy grazing has been the cause of clematis decline especially in lowland forest remnants and scrub. More research is required to determine the overall effects of grazing on specific clematis species so as to determine appropriate conservation management strategies.

FIRE

Intentional and accidental burning can have a devastating effect on clematis. Clematis vines do not appear to recover after burning (Joe Cartman pers. comm.). Since the seeds are short lived, and must be kept cold and moist in order to germinate, it is unlikely they survive even mild blazes. Research is required to test the heat resistance of clematis seeds to discover the role that fire plays in seed ecology for indigenous species in this genus.

COMPETITION WITH EXOTIC PLANTS

Clematis vitalba is known to grow over and smother indigenous clematis in the wild (Joe Cartman, pers. comm.). This aggressive European weed

grows twice as large as the largest New Zealand clematis and since it usually occupies the same habitat, competition from *C. vitalba* may be a serious threat.

Japanese honeysuckle (*Lonicera japonica*) is another vine that competes for space and resources with indigenous clematis. Both of these naturalised plants, along with other introduced weeds, may cause indigenous clematis to be limited in distribution to edge habitats where their vigour and survival will be compromised. Research on the process of competition between indigenous clematis and naturalised plants is required.



Above: Japanese honeysuckle (*Lonicera japonica*). Left: *Clematis vitalba* can smother indigenous vegetation. Photos: Jeremy Rolfe.

SEX IMBALANCE

Because indigenous clematis are dioecious, habitat fragmentation resulting in disjunct populations can result in lowered fecundity as a result of abnormal sex ratios. If more male plants are produced than female plants, there will be fewer seeds and fewer seedlings in the next generation. This is of particular concern for *Clematis quadribracteolata*. Research is required to determine the sex-ratio dynamics in clematis populations.

6. Management requirements for indigenous clematis

This section provides general advice and options for protection and conservation management of clematis populations in Wellington Conservancy. Conservation management will involve various combinations of the following activities.

6.1 PUBLIC AWARENESS

Raising public awareness about indigenous clematis species will be important to encourage public involvement with plant conservation. This report provides information to help people recognise, protect and cultivate the wild clematis species found in Wellington Conservancy. Sources of more information about clematis are also provided in this report. The Department of Conservation will distribute this report to associates, botanical and restoration groups and members of the public and in so doing will encourage greater participation in plant conservation.

6.2 SURVEY

Further plant surveys are required to gain a better understanding of clematis distribution in Wellington Conservancy. These will be undertaken by staff of the Department of Conservation and interested parties including members of the general public. Observations of clematis in the conservancy may be reported using copies of the species record appended to this report (see Appendix 4) and also using the on-line recording form of the New Zealand Plant Conservation Network (see www.nzpcn.org.nz).

Improved distribution information as a result of survey will lead to a greater understanding of the ecological requirements and threats to indigenous clematis. Distribution information when over-laid with maps of protected area boundaries may be used to determine the extent to which clematis species are formally protected and so help set priorities for land protection initiatives.

6.3 DATABASE MANAGEMENT

New clematis records will be entered into the national plant database (BIOWEB), as they are verified, to create up-to-date species distribution maps of clematis in Wellington Conservancy. This will enhance the usefulness of the database by providing a record through time of the changing size and status of wild populations.

6.4 MONITORING

Regular inspections of clematis populations are valuable in detecting changes in their condition. It also provides a means to determine the effectiveness of management. Monitoring can involve measuring certain population characters such as the number of plants, the size of plants and their spatial distribution. It may also involve photographing populations or individual plants repeatedly over time to determine if and/or how they are changing.

For *Clematis quadribracteolata* it will be necessary to inspect populations regularly to ensure the species does not go extinct locally and see that management responses can be implemented if threats to its survival are detected. *Clematis afoliata* also requires regular inspections to detect changes in the species status and to prevent further decline. It will also be important to continue to monitor the spread of the naturalised *Clematis vitalba* to ensure the impacts of this invasive weed on indigenous plant communities are minimised. Monitoring is a low priority for other indigenous species of clematis in Wellington Conservancy.

6.5 EX-SITU CONSERVATION

The highest priority for ex-situ conservation is *Clematis quadribracteolata* because the few widely scattered populations places it at risk of local extinction as a result of land clearance or development, fire and impacts of animal pests. *Clematis afoliata* is also a priority to provide insurance populations in case wild sites are destroyed and to provide materials for use in coastal restoration projects.

Collection of seeds of local provenance is recommended with the resultant seedlings planted in secure ex-situ locations in the region and also in areas (such as protected sites) subject to ecological restoration by the Department of Conservation and other groups. The use of other clematis species in restoration plantings is also encouraged, where appropriate, as part of the overall planting scheme. Information about how to cultivate indigenous clematis is provided in this report (see Section 9) for the home gardener to propagate and grow indigenous clematis *ex-situ*.

Note that care should be taken when purchasing clematis to obtain seed and/or seedlings of local provenance (from sources within Wellington Conservancy). It is also important to be certain of species identification if plants are collected from the wild, as there is a slight risk of accidentally propagating exotic species. It is illegal to collect indigenous plants from lands administered by the Department of Conservation without a permit.

6.6 RESEARCH

Several areas for further research have been identified. First, work needs to be done to assess the threats to wild clematis. How much do fire, grazing, and invasive plants impact detrimentally on clematis populations? Can clematis seeds survive a light burning?

More research on the cultivation of all indigenous clematis is required. Propagation and planting protocols for *C. quadribracteolata*, in particular, need to be developed if large scale planting in restoration areas is to be successful. Along with collecting distributional data, the reasons for the present distribution of clematis need to be examined. What ecological factors are critical for establishing thriving populations of clematis in the wild? What factors limit clematis distribution?

7. How you can help

A species record sheet is provided in Appendix 4 and is to be used to record new observations of clematis populations in Wellington Conservancy. Completed sheets should be sent to the nearest Department of Conservation office (addresses below). That information will be stored on the national plant database (BIOWEB) and used to improve our understanding of the biogeography and ecology of the species and to improve conservation management.

DOC ADDRESSES IN WELLINGTON CONSERVANCY

Poneke Area Office

P.O. Box 5086, Wellington
Tel: (04) 472 5821

Kapiti Area Office

P.O. Box 141, Waikanae
Tel: (04) 293 2191

Wairarapa Area Office

P.O. Box 191, Masterton
Tel: (06) 377 0700

Biodiversity – Technical Support Team

P.O. Box 5086, Wellington
Tel: (04) 472 5821

For more information about clematis biology and ecology a number of publications are included in the bibliography and in Appendix 2. Those publications also provide information about clematis species not found in Wellington Conservancy. Websites with clematis or indigenous plant information are also included in Appendix 2.

8. Cultivation methods

Clematis is highly prized as an ornamental plant because of its attractive flowers and foliage. It is also sought after because the vines grow through and over other vegetation and that allows it to be intercropped with other plants, giving the garden a fuller look.

Growing indigenous species can add interest to your garden while enhancing its ecological value. Although it is possible to choose from hundreds of cultivated hybrid species from around the world, none of these species will be as suitably adapted to grow in the Wellington region as indigenous species. Because they are indigenous here, they have also evolved special relationships with the other indigenous plants and animals. Studies have shown that indigenous vegetation results in richer and more diverse indigenous fauna such as bees and butterflies. Since indigenous clematis are well adapted to the local soils and climate, they will be easier to care for than exotic species, requiring less water and fertilizer.

A list of native plants nurseries where seed or seedlings can be purchased is included in Appendix 1. It is important to obtain plants and seeds from local provenance to avoid genetic mixing. The source of nursery plants should be checked prior to purchase. Indigenous clematis are dioecious which means they have male flowers on one plant and female flowers on another. Both are needed to produce fertile seeds.

HOW TO GROW INDIGENOUS CLEMATIS

Collect seed between November and February (when it is usually ripe). Either sow immediately, or keep moist in a cold refrigerator for 1-2 months. Seeds should be sown into a standard seed mix with good drainage and no fertiliser, covered lightly with soil, and kept moist. The fluff does not need to be removed.

Seedlings will appear after 2-7 months (Matt Gardener, pers. comm.) in spring when the soil temperature rises to around 8-10°C. When seedlings are large enough to handle, transplant into larger pots with clean potting soil or compost and grow until large enough to plant out of doors. Clematis should be planted where it will have room to grow and climb and plants should be well mulched. They do not require fertilizer and they do not need to be pruned, but can be allowed to grow wild over the nearby vegetation. *Clematis quadribracteolata* is readily propagated from cuttings (Jo Cartman pers. comm.).

Many gardeners have noticed young seedlings are prone to damping off, probably caused by a type of fungus. Practicing good sanitation (using clean pots and fresh soil) and not over watering the seedlings should help to avoid this problem. Adult plants may be attacked by insects, but there is no evidence of the indigenous plants being entirely destroyed by

pests. Although, if slugs and snails are present they can wipe out whole pots of seedlings as the plants germinate. Generally, indigenous clematis are hardy plants which will add charm and fragrance to the garden.

Bibliography

- Allan, H. H. 1961: Flora of New Zealand: Volume 1. Indigenous Tracheophyta. Psilopsida, Lycopsida, Filicosida, Gymnospermae, Dicotyledones. Department of Scientific and Industrial Research. Wellington, New Zealand
- Bagnall, A.G. and Petersen, G.C. 1948: William Colenso. A. H. & A. W. Reed, Wellington.
- de Lange, P.J.; Sawyer, J.W.D.; Ansell, R. 1999: Checklist of indigenous vascular plants recorded from the Chatham Islands. Department of Conservation, Wellington.
- Eagle, A.. 1986a: Eagle's trees and shrubs of New Zealand v.1. Auckland, William Collins (New Zealand) Ltd. 311p.
- Eagle, A.. 1986b: Eagle's trees and shrubs of New Zealand v.2. Auckland, William Collins (New Zealand) Ltd. 384p.
- Greuter, W.; Burdet, H. M.; Chaloner, W. G.; Demoulin, V.; Hawksworth, P. M.; Jorgensen P. M.; Nicolson, D. H.; Silva, P. C.; Trehane, P.; McNeill, J. 1994: International Code of Botanical Nomenclature (Tokyo Code). *Regnum Vegetabile* 131.
- Heenan, P.B.; Cartman, J. 2000: Reinstatement of *Clematis petriei* (Ranunculaceae), and typification and variation of *C. forsteri*. *New Zealand Journal of Botany* 38: 587-596.
- Holmgren, P. K.; Holmgren, N. H.; Barrett, L. C. 1990: Index Herbariorum, ed. 8. *Regnum Vegetabile* 120: 1-693.
- Howell, C.; Sawyer, J.W.D. 1999: Pest Plant Atlas: Wellington Conservancy excluding the Chatham Islands (Volume 1). Department of Conservation, Wellington, New Zealand.
- Rehder A. 1940: Manual of cultivated trees and shrubs hardy in North America. New York: Macmillan. 996p.
- Sawyer, J.W.D. 2001: Bibliography of plant checklists and vegetation survey data for Wellington Conservancy (excluding Chatham Islands). 2nd Edition. Department of Conservation. Wellington, New Zealand.
- Sawyer, J.W.D. 2004: Plant Conservation Strategy: Wellington Conservancy 2004-2010: Wellington Conservancy. Department of Conservation. Wellington, New Zealand
- Toomey, M.K.; Leeds, E. 2001: An Illustrated Encyclopedia of *Clematis*. Timber Press. Oregon, USA.
- Webb, C.J., Sykes, W. R. and Garnock-Jones, P. 1988: Flora of New Zealand, Volume IV. Botany Division, DSIR, Christchurch, New Zealand.
- Wilson, H. 1982: Stewart Island Plants. Field Guide Publications, Christchurch, New Zealand.

Appendix 1

NATIVE PLANT NURSERIES THAT SELL CLEMATIS

Seeds are available from several international on-line companies, but the seeds sources are uncertain and are unlikely to be from the Wellington area. Some Wellington nurseries may also sell clematis sourced from plant populations outside Wellington Conservancy. It is best contact the nursery and find out where they sourced there plants. Provided here is a list of resources with local nurseries listed first, then national nurseries for species that are unavailable locally.

Plantwise Nursery

Summit Rd 1
Lower Hut
Phone: 04 567-1732
Matt Gardener - Manager

Clematis paniculata. Seeds are locally sourced. Native plants are mainly grown for Hut City Council restoration and landscaping projects, but public sales also available.

Oratia Native plant Nursery

Website: <http://www.oratianatives.co.nz/index.asp>
625 West Coast Road
Oratia, Auckland
Phone: (09) 818-6467
Fax: (09) 818-6457

Matai Nurseries

Website: <http://www.nznatives.co.nz/index.php>

New Zealand Natives
52 Harris Street
Waimate 8791
South Canterbury
Freephone: 0800 262 824
Fax: 03 689 8938
E-mail: lester@nznatives.co.nz

Clematis paniculata and *C. quadribracteolata* available.

Yaku Nursery

Website: <http://www.vanplant.co.nz/yaku/default.htm>
278 Tikorangi Road
RD 43, Witara 4656
Fax: 06 7544500
E-mail: yaku@clear.net.nz

Clematis afoliata, *C. forsteri* and *C. paniculata* occasionally available.

Matawhero Nursery Ltd. – New Zealand Native plants

RD 1, Gisborne,

New Zealand

Ph: 06 868 4483

Free Fax: 0800 628 294

E-mail: info@mailorderplants.co.nz

Website: www.mailorderplants.co.nz

Clematis paniculata and *C. forsteri* available.

New Zealand Tree Seeds

P.O. Box 435

Rangiora

New Zealand 8254

Ph: 03-3121635

Fax: 03-3121638

E-mail: sales@nzseeds.co.nz

Website: www.nzseeds.co.nz/index.html

Suppliers of New Zealand native and exotic tree and shrub seed. New Zealand native ornamental grasses, tussocks and smaller plant seeds.

Clematis afoliata and *Clematis paniculata* available.

Taupo Native Plant Nursery

P.O. Box 437

Taupo

Ph: 07 378 5450

Fax: 07 378 6038

E-mail: tauponativeplant@clear.net.nz

Website: www.tauponativeplant.co.nz

Clematis afoliata and *C. paniculata* available.

Naturally Native Nursery

30 Gamman Mill Road

Oropi RD3

Tauranga 3021

Ph: +64-7-543 1494

Fax: +64-7-543 3494

Orders Fax: 0800 334 457

E-mail: info@naturallynative.co.nz

Website: www.naturallynative.co.nz/

Also located in Auckland and Whakatane

Clematis paniculata available.

Appendix 2

BOOKS ABOUT CLEMATIS

An Illustrated Guide to Common Weeds of New Zealand

By Bruce Roy, Ian Popay, Paul Champion, Trevor James and Anis Rahman

A guide to identification of the common weeds in New Zealand, using colour photographs and simple text for easy identification of weeds.

Clematis: The Genus: A Comprehensive Guide for Gardeners, Horticulturists and Botanists

By Christopher Grey-Wilson

A complete and colourful guide to the entire clematis genus, including all Wellington species.

Native New Zealand Flowering Plants

By J.T. Salmon

A comprehensive guide to flowering plants in New Zealand with descriptions and colour photographs to allow easy identification.

WEBSITES

New Zealand Plant Conservation Network (NZPCN)

www.nzpcn.org.nz

This non-profit, non-governmental organisation was established in 2003 to promote the conservation and restoration of New Zealand's unique native plant life. The website has authoritative information about all New Zealand's native and exotic plants.

New Zealand Ecological Restoration Network (NZERN)

www.bush.org.nz/

This is a non-profit, community-driven organisation dedicated to sharing knowledge and experiences about ecological restoration in New Zealand. This website has a useful planting guide by ecological region and soil type. It also has a database of native plants.

Landcare Research – Green ToolBox native plant selector

www.landcareresearch.co.nz/research/biodiversity/greentoolbox

This site is a database for choosing indigenous plant species produced by Landcare Research – Manaaki Whenua, a New Zealand environmental research organisation. This web link has a plant database similar to the NZERN site, but in a simpler format. It includes information about indigenous plants, animals, and environmental research.

Royal New Zealand Institute of Horticulture

www.rnzh.org.nz/index.html

This site provides information on *Clematis vitalba*, with pictures and links to indigenous plant sites, publications about invasive weeds and an indigenous plant photo gallery.

New Zealand Plant Protection Society (Inc.)

www.hortnet.co.nz/publications/nzpps/index.htm

This site is geared towards people in agriculture or forestry, but it has books for sale such as New Zealand weed guides.

Christchurch City Council

www.ccc.govt.nz/Environment/Weeds/Clematis_vitalba.asp

This site contains a good guide on how to distinguish between old man's beard and indigenous clematis with pictures. It has links to other plant sites.

International Clematis Society

www.clematisinternational.com

This site sells books on clematis, has a question and answer forum and clematis pictures. It is mostly intended for people who grow exotic hybrid clematis.

Appendix 3

DATABASE OF INDIGENOUS CLEMATIS RECORDS
FOR WELLINGTON CONSERVANCY

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	58200	17700	2758200	6017700	A Grant	19720601	Moore's Taipos, Eastern Wairarapa	Scrub on ridge top	CHR 18593
<i>Clematis afoliata</i>	Wellington	R27	54400	81800	2654400	5981800	A J Healy	19370701	Red Rocks, Wellington Coast		CHR 18521
<i>Clematis afoliata</i>	Wellington	R27	53600	81500	2653600	5981500	A J Healy	19370707			CHR 83873
<i>Clematis afoliata</i>	Wellington	R27	54300	82400	2654300	5982400	B G Hamlin	19491010	Stream Between red Rocks and Sinclair Head		
<i>Clematis afoliata</i>	Aorangi	S28	96700	54200	2696700	5954200	Brownsey, P.J.; de Lange, P.J.	19910101	Cape Palliser	Ngawahi	de Lange & Brownsey, WELL 79162, CHR 474969 A&B
<i>Clematis afoliata</i>	Aorangi	S28	98200	53600	2698200	5953600	Brownsey, P.J.; de Lange, P.J.	19910101	Cape Palliser	Ngawahi, 2 km west of Cape Palliser	Brownsey & de Lange, WELL 79239
<i>Clematis afoliata</i>	Aorangi	S28	98200	53600	2698200	5953600	Brownsey, P.J.; de Lange, P.J.	19910101	Cape Palliser		de Lange & Brownsey, AK 208551
<i>Clematis afoliata</i>	Aorangi	S28	96700	54200	2696700	5954200	de Lange, P.J.	19910920	Near Ngawahi, Cape Palliser		CHR 474969
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	de Lange, P.J.	19900101	Lower Waipapa stream	Te Kopahou catchment, Wellington South Coast	de Lange 1990. Believed to be same site as 1991 (Horne), (Horne & Micalfe 1992), 1994 (Micalfe, Horne, Rolfe & Sawyer)
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	42000	95000	2742000	5995000	Druce List No. 233	19860101	Forest Sanctuary, Waipunga Stream	Rocky Hill Taipos	Druce List No. 233

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	41500	95000	2741500	5995000	Druce, A.P.	19821101	Waipunga Valley, Rocky Hill Taipos, Eastern Wairarapa		CHR 389626
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	57200	29500	2757200	6029500	Druce, A.P.	19770601	Poronui Taipos, Wairarapa		CHR 310285
<i>Clematis afoliata</i>	Aorangi	S28	96600	53500	2696600	5953500	Druce, A.P.	19920501	Washbrook Stream, Cape Palliser		CHR 475322
<i>Clematis afoliata</i>	Aorangi	S28	98300	53800	2698300	5953800	Druce, A.P.	19741101	Little Mangatetoe Stream, Cape Palliser		CHR 277218
<i>Clematis afoliata</i>	Eastern Wairarapa	T28	36000	80000	2736000	5980000	Druce, A.P.	19990101	Eastern Wairarapa, Pahaoa Taipos	northwest of Honeycomb Rock) N166 22-29.	Druce List Number 81. 1100' asl.
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	58200	17700	2758200	6017700	Druce, A.P.	19990101	Eastern Wairarapa, Moores Taipos	northwest of Ureti Point) N162 41-55-	Believed to be same site as 1971 (Druce, CHR 210693, CHR 210694)
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	57200	29500	2757200	6029500	Druce, A.P.	19990101	Wairarapa (eastern), Poronui Taipos	west of Castepoint N158 40-68-	Druce List Number 81. Believed to be same site as 1977 (Druce, CHR 310285)

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	57200	29500	2757200	6029500	Druce, A.P.	19770101	Poronui Taipos	west of Castlepoint N158 40-68-	Druce, CHR 310285.
											Believed to be same site as Druce List Number 81
											Druce List No. 19
<i>Clematis afoliata</i>	Aorangi	S28	3000	59000	2703000	5959000	Druce, A.P.	19990101	southern Wairarapa, Aorangi Range		
<i>Clematis afoliata</i>	Cook Strait	R27	54700	82300	2654700	5982300	Druce, A.P.	19990101	Wellington Coast, Sinclair Head-Owhiro Bay		
<i>Clematis afoliata</i>	Aorangi	S28	10500	57200	2710500	5957200	Druce, A.P.	19990101	Wellington south coast and adjacent hills ... from Paekakariki to Te Kaukau Point, Aorangi coast	between west end of Ocean beach and Te Kaukau Point	Druce List No. 118
<i>Clematis afoliata</i>	Eastern Wairarapa	T28	36000	80000	2736000	5980000	Druce, CHR 210693, CHR 210694	19710101	Pahaoa Taipos	northwest of Honeycomb Rock) N166 22-29-	Druce, CHR 210693, CHR 210694. Druce List Number 81
<i>Clematis afoliata</i>	Eastern Wairarapa	T26	58200	17700	2758200	6017700	Druce, CHR 244204	19720101	Moores Taipos	northwest of Ureti Point) N162 41-55-	Druce, CHR 244204. scrub on ridgtop. Believed to be same site as Druce List Number 81
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	42800	95000	2742800	5995000	Druce, CHR 244678	19710101	Near Taipo Minor	N162 24-30-	Druce, CHR 244678. 1100' asl.

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Aorangi	S28	98300	53800	2698300	5953800	Druce, CHR 277218	19740101	Cape Palliser, Little Mangatotoe Stream	steep hillside grassland N168/9 79-83-	Druce, CHR 277218, 350' asl.
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	41500	95000	2741500	5995000	Druce, CHR 389626	19820101	Rocky Hills Taipos	Waipunga Valley N162 24-30- rock outcrop	Druce, CHR 389626, 1000' asl
<i>Clematis afoliata</i>	Aorangi	S28	96600	53500	2696600	5953500	Druce, CHR 475322	19920101	Cape Palliser	Washbrook Stream	Druce, CHR 475322
<i>Clematis afoliata</i>	Cook Strait	R27	54400	81800	2654400	5981800	Hanlin, CHR 83873	19490101	Red Rocks	stream between Red Rocks and Sinclair Head	Hanlin, CHR 83873
<i>Clematis afoliata</i>	Cook Strait	R27	54400	81800	2654400	5981800	Healy, CHR 18521	19370101	Red Rocks	Immediately behind in small valley	Healy, CHR 18521. Believed to be same site as (Moss)
<i>Clematis afoliata</i>	Cook Strait	R27	53600	81500	2653600	5981500	Healy, CHR 33672	19370101	Rocky scree near Sinclair Head		Healy, CHR 33672
<i>Clematis afoliata</i>	Cook Strait	R27	54400	81800	2654400	5981800	Healy, CHR 35556	19410101	Red Rocks		Healy, CHR 35556. Believed to be same site as 1927 (Healy, WELT 25674)
<i>Clematis afoliata</i>	Cook Strait	R27	54400	81800	2654400	5981800	Healy, WELT 25674	19370101	Red Rocks		Healy, WELT 25674. Believed to be same site as (Horne & Mitcalfe 1992), (de Lange 1990), 1994 (Mitcalfe, Horne, Rolfe & Sawyer)
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Horne	19910101	Lower Waipapa stream	Te Kopahou catchment, Wellington South Coast	Horne. Believed to be same site as (Horne & Mitcalfe 1992), (de Lange 1990), 1994 (Mitcalfe, Horne, Rolfe & Sawyer)

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Horne and Mitcalfe	19910101	Waipapa Stream SE of Te Kopahou-Hawkins Hill Ridge		Horne & Mitcalfe
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Horne and Mitcalfe (1992)	19920101	Lower Waipapa stream	Te Kopahou catchment, Wellington South Coast	Horne & Mitcalfe 1992. Believed to be same site as 1991 (Horne), (de Lange 1990), 1994 (Mitcalfe, Horne, Rolfe & Sawyer)
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Horne, J.C.; Mitcalfe, B.; Rolfe, J.; Sawyer, J.W.D.	19940101	Lower Waipapa stream	Te Kopahou catchment, Wellington South Coast	Mitcalfe, Horne, Rolfe & Sawyer. Believed to be same site as 1991 (Horne), (Horne & Mitcalfe 1992, (de Lange 1990)
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Moss	19990101	Red Rocks	Immediately behind in small valley	Moss. Believed to be same site as 1937 (Healy, CHR 18521)
<i>Clematis afoliata</i>	Cook Strait	R27	54300	82400	2654300	5982400	Oliver, WELT 8735	19490101	Red Rocks	gully by Red Rocks	Oliver, WELT 8735
<i>Clematis afoliata</i>	Tararua	R28	69300	74700	2669300	5974700	Park	19990101	Cape Turakirae	Paddock before the Orongorongo River	Park
<i>Clematis afoliata</i>	Aorangi	S28	94700	65500	2694700	5965500	Park-Ng	19550101	Near Cape Palliser	One paddock back from the road	Park-Ng
<i>Clematis afoliata</i>	Aorangi	S28	96000	54000	2696000	5954000	Park-Ng	19990101	Just past Ngawili going towards Cape Palliser	One paddock back from the road	Park-Ng

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis afoliata</i>	Tararua	R28	68800	74900	2668800	5974900	Park-Ng	19990101	Cape Turakirae	In paddock containing the green shed	Park-Ng
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	40100	1700	2740100	6001700	Sawyer, J.W.D.	19950101	Wainuiorū River Valley	on ridge above river	Sawyer
<i>Clematis afoliata</i>	Aorangi	S28	96400	54700	2696400	5954700	Sawyer, J.W.D.	19950101	At Pleurosorus rutifolius site		John Sawyer
<i>Clematis afoliata</i>	Aorangi	S28	98100	53800	2698100	5953800	Silbery, T.	19990101	Mangatotoe (near Ngawi)		Silbery
<i>Clematis afoliata</i>	Eastern Wairarapa	T27	42000	95000	2742000	5995000	Sneddon, WELTU 15781, WELTU 15782	19820101	Rocky Hills Forest Sanctuary		Sneddon, WELTU 15781, WELTU 15782
<i>Clematis foetida</i>	Puketoi	T25	55200	67200	2755200	6067200	Unknown	19740101	Tiraumea Valley	Tiraumea Valley, South of Puketoi Range	
<i>Clematis foetida</i>	Wairarapa Plains	S27	4000	91000	2704000	5991000	Unknown	19000101	Wairarapa Plains		Wairarapa Plains
<i>Clematis foetida</i>	Eastern Wairarapa	S27	29000	95100	2729000	5995100	Unknown	19990101	Martinborough	Whakarua, 10km east of Martinborough	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	26200	94500	2726200	5994500	de Lange, P.J.	19960101	Eastern Wairarapa	Spring Hill Station, Site visit PNA 1457	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	45600	18400	2745600	6018400	de Lange, P.J.; "et al." (= Foster, G.; Sawyer, J.W.D.; Townsend, A.J.)	19960101	Eastern Wairarapa, Waipapa Stream Bush	PNA site 1802 Waipapa Stream Bush T26 456	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	45500	18400	2745500	6018400	de Lange, P.J.; Sawyer, J.W.D.; Townsend, A.J.	19961016	Wairarapa (eastern), Waipapa Stream Bush		

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis foetida</i>	Puketoi	T25	64000	62500	2764000	6062500	Druce, A. P.	19720101	Puketoi Range	Puketoi Range	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	45600	18400	2745600	6018400	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Oterei	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	34000	81000	2734000	5981000	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	South Pahaoa G.	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	32500	83500	2732500	5983500	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	North Pahaoa G.	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	34000	81000	2734000	5981000	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Pahaoa	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	41400	93500	2741400	5993500	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Rocky Hill	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	51700	10100	2751700	6010100	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Te Maipi	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	58200	17600	2758200	6017600	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Moores	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	63500	29500	2763500	6029500	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Mangapakeha	
<i>Clematis foetida</i>	Wairarapa Plains	T27	34300	4200	2734300	6004200	Druce, A.P.	19990101	Wairarapa, Ruamahanga River	area east of Ruamahanga River (including Maungaraki Range)	
<i>Clematis foetida</i>	Tararua	S26	95500	11400	2695500	6011400	Druce, A.P.	19760101	Hutt River Gorge	Pakuratahi Forks, Hutt River Gorge , Tararua Range	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis foetida</i>	Wairarapa Plains	T26	36500	15500	2736500	6015500	Druce, A.P.	19760101	East of Carterton	forest remnants, Tauwheru Valley, East of Carterton	
<i>Clematis foetida</i>	Wairarapa Plains	S27	90500	92100	2690500	5992100	Druce, A.P.	19740101	Rimutaka Range.	Wilderness Bush and Karaka Bush, near Waiorongamai, eastern foot of Rimutaka Range.	
<i>Clematis foetida</i>	Wairarapa Plains	T27	43600	300	2743600	6000300	Druce, A.P.	19690101	Wairarapa, Carterton, Wainuiouru Valley	Black-Beech forest, Wainuiouru Valley, SE of Carterton	
<i>Clematis foetida</i>	Wellington	R27	77800	4900	2677800	6004900	Druce, A.P.	19760101	Wellington, Hutt Valley	Silverstream Bush, Hutt Valley	
<i>Clematis foetida</i>	Wairarapa Plains	T26	34600	14300	2734600	6014300	Enright and John	19980101	Wairarapa	Wairarapa	
<i>Clematis foetida</i>	Eastern Wairarapa	S27	29100	94800	2729100	5994800	Enright, et al.	19980101	East Wairarapa	Ahi Paku station, QEII covenant and surrounding area Tawhirirwa-Manuka Stream Bush,	
<i>Clematis foetida</i>	Wairarapa Plains	T26	34600	14300	2734600	6014300	Enright, P and John, O.	19980101	Tawerau valley	Covenant on the property of Andrew Lamb, Tawerau valley	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	34200	4100	2734200	6004100	Enright, P.	19990101	Eastern Wairarapa	Pukemangamanga Bush	
<i>Clematis foetida</i>	Eastern Wairarapa	S27	26200	94500	2726200	5994500	Enright, P.	19990101	Long Bush	Spring Grove covenant, Long Bush	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	69900	33900	2769900	6033900	Enright, P.	20010101	Eastern Wairarapa, Tinui	Tinui Taipos	
<i>Clematis foetida</i>	Eastern Wairarapa	T27	34200	3100	2734200	6003100	Enright, P.	19990101	Waimana Bush.	Waimana Bush.	
<i>Clematis foetida</i>	Tiaraua	R27	79100	99500	2679100	5999500	Enright, P. and John, O	19970101	Upper Hutt	Whiteman's Valley (Brickell property), Upper Hutt	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis foetida</i>	Eastern Wairarapa	S27	29800	6500	2729800	6006500	Enright, P. et al.	19990101	Wairarapa	Bush Patch on the property of Jamie Strang. Topomap S27 298065	
<i>Clematis foetida</i>	Aorangi	S27	10000	80900	2710000	5980900	Enright, P., John, O.	19980101	South wairarapa	Rutakoputuna	
<i>Clematis foetida</i>	Puketoi	T25	55200	67600	2755200	6067600	Gabites, I.	19860101	Tiraumea Scenic Reserve	Tiraumea Scenic Reserve	
<i>Clematis foetida</i>	Eastern Wairarapa	T26	45600	18400	2745600	6018400	Gabites, I.	19860101	Wairarapa Lake	Wairarapa Lake shore scenic reserve	
<i>Clematis foetida</i>	Eastern Wairarapa	T25	51300	44100	2751300	6044100	Horne, Micalfe and Rebergen:	20000101	Wairere Farms ltd	Wairere Farms ltd	
<i>Clematis foetida</i>	Wellington	R27	61000	94200	2661000	5994200	Mead, A..	19740101	Khandallah Domain	Khandallah Domain	
<i>Clematis foetida</i>	Eastern Wairarapa	S28	17000	67000	2717000	5967000	Micalfe, et al.	19970101	Tora	Tora Bush Scenic Reserve	
<i>Clematis foetida</i>	Wairarapa Plains	R27	86500	82500	2686500	5982500	Ogle, C.	197720101	South Wairarapa	Lake Pounui, Northern margin	
<i>Clematis foetida</i>	Wairarapa Plains	T26	33800	16400	2733800	6016400	Rebergen, A.	19960101	Ruamahanga River	Ruamahanga River Terrace north of Gladstone	
<i>Clematis foetida</i>	Wairarapa Plains	T26	34100	15700	2734100	6015700	Rebergen, A.	19980101	Masterton/ Gladstone	Te Whiti, Caveland Road, Masterton/ Gladstone	
<i>Clematis foetida</i>	Eastern Wairarapa	S27	90500	92100	2690500	5992100	Rebergen, A.	20000101	Eastern Wairarapa	Tuki Waha, owner Mike Falloon.	
<i>Clematis foetida</i>	Eastern Wairarapa	S27	25300	95500	2725300	5995500	Silbery, et al.	19990101	Eastern Wairarapa	Whangaeahu River covenants	
<i>Clematis foetida</i>	Wairarapa Plains	T26	31200	24500	2731200	6024500	Silbery, T. et al.	19980101	Solway	Solway Remnants PNA 0709A	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis foetida</i>	Tararua	R28	70300	72700	2670300	5972700	Townsend, A.J.	19960101	Rimutaka coast, Cape Turakarae Scientific Reserve	Cape Turakarae	
<i>Clematis foetida</i>	Eastern Wairarapa	T25	56800	57200	2756800	6057200	Wgtn Bot Soc	19960101	Alfredton	In and around Suckling Bush, QEII Covenant, Turnberry, Alfredton	
<i>Clematis forsteri</i>	Tararua	R27	68700	87700	2668700	5987700	A.J Healy, J Salmon	19371014	Muritai, Wellington Harbour	CHR 33854	
<i>Clematis forsteri</i>	Tararua	R28	70300	72800	2670300	5972800	Bagnall, R.	19750101	Cape Turakirae	Cape Turakirae	
<i>Clematis forsteri</i>	Wellington	R26	67200	13500	2667200	6013500	Bagnall, R.G.	19770101	Plimmerton wetland	Taupo Mire	
<i>Clematis forsteri</i>	Wellington	R26	67500	13500	2667500	6013500	Bagnall, RG and CC Ogle	19810101	Plimmerton	Plimmerton wetland	
<i>Clematis forsteri</i>	Tararua	R27	70400	88800	2670400	5988800	Clelland, D.	19840101	Rimutaka Forest Park, Mt Hawtrey Bush	Rimutaka Forest Park, Mt Hawtrey Bush	
<i>Clematis forsteri</i>	Cook Strait	R26	68000	17800	2668000	6017800	Clelland, D.	19840101	Pukerua Bay	Pukerua Bay to Wairaka Point	
<i>Clematis forsteri</i>	Wellington	R27	66400	92700	2666400	5992700	de Lange, P.J.	19920101	Matiu, Wellington Harbour	Matiu	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	62700	38500	2762700	6038500	de Lange, P.J., et al. (= Foster, G.; Sawyer, J.W.D.; Townsend, A.J.)	19960101	Eastern Wairarapa	Spring Hill Station, Site visit PNA 1457 (Eastern Wairarapa).	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	45600	18400	2745600	6018400	de Lange, P.J.; et al. (= Foster, G.; Sawyer, J.W.D.; Townsend, A.J.)	19961011	Eastern Wairarapa, Waipapa Stream Bush	Waipapa Stream Bush, PNA site 1802	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	45500	18400	2745500	6018400	de Lange, P.J.; Sawyer, J.W.D.; Townsend, A.J.	19961016	Wairarapa (eastern), Waipapa Stream Bush		
<i>Clematis forsteri</i>	Cook Strait	R27	54300	98400	2654300	5998400	de Lange, P.J. and Taylor, G.	19900101	Makara	Smiths Gully (between Makara and Pipinui Point)	
<i>Clematis forsteri</i>	Puketoi	T25	64000	62500	2764000	6062500	Druce, A.P.	19720101	Puketoi	Puketoi Range	
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	25200	66200	2725200	5966200	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Oterei	
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	34000	81000	2734000	5981000	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	South Pahaoa G.	
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	32500	83500	2732500	5983500	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	North Pahaoa G.	
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	34000	81000	2734000	5981000	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Pahaoa	
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	25200	66200	2725200	5966200	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Oterei	
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	41200	93200	2741200	5993200	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Rocky Hill	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	51700	10100	2751700	6010100	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Te Maipi	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	58500	17600	2758500	6017600	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Moores	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	63500	29500	2763500	6029500	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Mangapakeha	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	56700	29400	2756700	6029400	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Poronui	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	64000	32000	2764000	6032000	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Timui	
<i>Clematis forsteri</i>	Eastern Wairarapa	U25	83400	54900	2783400	6054900	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Kupekore	
<i>Clematis forsteri</i>	Aorangi	S28	95500	70600	2695500	5970600	Druce, A.P.	19700101	Wairarapa (southern), Palliser Bay	Putangaria stream, Palliser Bay	
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	60600	12400	2760600	6012400	Druce, A.P.	19730101	Wairarapa (eastern)	Mt Rewa and Mt Meredith, Eastern Wairarapa	
<i>Clematis forsteri</i>	Tararua	R27	79500	81900	2679500	5981900	Druce, A.P.	19740101	Wellington, Rimutaka Range	Mt Matthews, Rimutaka Range	
<i>Clematis forsteri</i>	Tararua	R27	81100	86100	2681100	5986100	Druce, A.P.	19800101	Wellington, Rimutaka Range	Rimutaka Range	
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	41500	94500	2741500	5994500	Druce, A.P.	19820101	Rocky Hills	Forest Sanctuary Waipunga Stream, Rocky Hills Wairarapa	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Wairarapa Plains	T27	34300	4200	2734300	6004200	Druce, A.P.	19990101	Wairarapa, Ruamahanga River	area east of Ruamahanga River (including Maungarakī Range)	Wairarapa
<i>Clematis forsteri</i>	Wairarapa Plains	S27	93000	96200	2693000	5996200	Druce, A.P.	19710101	Western Lake	Western Lake Reserve, Lake Wairarapa	
<i>Clematis forsteri</i>	Aorangi	S28	96100	59700	2696100	5959700	Druce, A.P.	19700101	Wairarapa (southern), Palliser Bay	Putangarua stream, Palliser Bay	
<i>Clematis forsteri</i>	Aorangi	S28	95400	70600	2695400	5970600	Druce, A.P.	19700101	Wairarapa (southern), Palliser Bay	in the vicinity of Putangarua stream, Palliser Bay	CHR(?) 159915, 159918
<i>Clematis forsteri</i>	Eastern Wairarapa	T26	63500	29500	2763500	6029500	Druce, A.P.	19621201	Mangapukehu Taipos, Eastern Wairarapa		
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	42800	94900	2742800	5994900	Druce, A.P.	19711201	Near Taipo Minor, Eastern Wairarapa		CHR 244678
<i>Clematis forsteri</i>	Eastern Wairarapa	T27	34300	81100	2734300	5981100	Druce, A.P.	19710101	Pahaoa Gorge Taipos, Eastern Wairarapa		CHR 210693
<i>Clematis forsteri</i>	Eastern Wairarapa	S27	29000	95200	2729000	5995200	Enright, et al.	19980101	East Wairarapa	Tawhiriwai-manuka Stream	
<i>Clematis forsteri</i>	Wellington	R26	65700	10900	2665700	6010900	Enright, P.	20000101	Porirua	Onehunga Bay, Whiteria Park, Porirua	
<i>Clematis forsteri</i>	Eastern Wairarapa	U26	77100	38200	2777100	6038200	Enright, P.	20010101	Eastern Wairarapa, Tinui	Tinui Taipos	
<i>Clematis forsteri</i>	Eastern Wairarapa	S27	13500	83900	2713500	5983900	Enright, P., John, O.	19980101	Ruakokoputuna	Ruakokoputuna	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Aorangi	S28	96300	70500	2696300	5970500	Gabites, I.	19860101	Putangarua Scenic Reserve	Putangarua Scenic Reserve	
<i>Clematis forsteri</i>	Puketoi	T25	55200	67600	2755200	6067600	Gabites, I.	19860101	Tiraumea	Tiraumea Scenic Reserve	
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	17000	67000	2717000	5967000	Gabites, I.	19860101	Tora	Tora Bush	
<i>Clematis forsteri</i>	Woodville	T25	34000	52100	2734000	6052100	Gabites, I.	19860101	Mount Bruce	W.A. Millar Scenic Reserve	
<i>Clematis forsteri</i>	Wellington	R27	63000	7000	2663000	6007000	Gabites, I.	19860101	Porirua	Porirua scenic reserve	
<i>Clematis forsteri</i>	Tararua	R28	69000	74800	2669000	5974800	Gabites, I.	19860101	Orongorongo	Turakirae Head Scientific Reserve, Orongorongo River mouth	
<i>Clematis forsteri</i>	Tararua	S26	1000	15000	2701000	6015000	H H Allan	19441231	Canyon Creek, Tararua	CHR 48012	
<i>Clematis forsteri</i>	Wellington	R27	54300	82200	2654300	5982200	Horne and Mitcalfe	19940101	Wgtn South Coast	Waipapa stream (southeast of Te Kopahou-Hawkins Hill Ridge)	
<i>Clematis forsteri</i>	Tararua	R27	81100	86100	2681100	5986100	Horne, C. and B. Mitcalfe	19940101	Rimutaka	Rimutaka Reserve	
<i>Clematis forsteri</i>	Cook Strait	R27	53000	82000	2653000	5982000	Horne, J.C. and Mitcalfe, B.J.	19920101	Sinclair Head	First washout (first stream west of Sinclair Head)	
<i>Clematis forsteri</i>	Cook Strait	R27	52500	82200	2652500	5982200	Horne, J.C. and Mitcalfe, B.J.	19910101	Sinclair Head	Second washout (second stream west of Sinclair Head = Astonii stream)	
<i>Clematis forsteri</i>	Cook Strait	R27	54100	97900	2654100	5997900	Horne, J.C. and Mitcalfe, B.J.	19930101	Smith's Bay, Cook Strait	Smiths Bay, Smith's Gully and coastal slopes south	
<i>Clematis forsteri</i>	Tararua	R28	77900	79900	2677900	5979900	Horne, J.C.; Mitcalfe, B., Sawyer, J.W.D.	19960101	Rimutaka Forest Park	Mukamuka Stream catchment	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Eastern Wairarapa	T25	51300	44100	2751300	6044100	Horne, Micalfe and Rebergen.	20000101	Wairere Farms ltd	Wairere Farms ltd	
<i>Clematis forsteri</i>	Wellington	R26	65500	10800	2665500	6010800	Hughes, P.	19880101	Porirua	Whitireia Peninsula, Porirua	CHR 21334
<i>Clematis forsteri</i>	Wellington	R27	60000	88500	2660000	5988500	I W Davey	19381014	Top of Mt. Victoria, Wellington		
<i>Clematis forsteri</i>	Cook Strait	R26	67600	17900	2667600	6017900	Mead, A.	19740101	Pukerua Bay	Pukerua Bay Gorge	
<i>Clematis forsteri</i>	Cook Strait	R26	67600	17900	2667600	6017900	Mead, A..	19740101	Pukerua Bay	Pukerua Bay Reserve	
<i>Clematis forsteri</i>	Wellington	R26	80700	13300	2680700	6013300	Mead, A..	19740101	Whakatikei Flat	Whakatikei Flat	
<i>Clematis forsteri</i>	Cook Strait	R27	50700	87500	2650700	5987500	Micalfe and Horne (1992)	19920101	Wellington southwest peninsula	Erin Go Bragh Bush (Warrants Bush), Waiairiki Valley/Outlook Hill	
<i>Clematis forsteri</i>	Cook Strait	R27	54300	82200	2654300	5982200	Micalfe and Horne (1992)	19920101	Wellington southwest peninsula	Wellington (Lower Waipapa Stream)	
<i>Clematis forsteri</i>	Cook Strait	Q27	49150	86350	2649150	5986350	Micalfe and Horne (1994)	19940101	Wellington south coast, Waiairiki Stream	True right head of Waiairiki Stream	
<i>Clematis forsteri</i>	Wellington	Q27	49500	88000	2649500	5988000	Micalfe and Horne (1998)	19980101	Wellington south coast, Waiairiki Stream	True left head of Waiairiki Stream	
<i>Clematis forsteri</i>	Wellington	R26	66000	10500	2666000	6010500	Micalfe, B.	19950101	Kapiti Coast	Whitireia Park, Kapiti Coast	
<i>Clematis forsteri</i>	Wellington	Q27	49500	88000	2649500	5988000	Micalfe, B.; Horne, C.	19981003	Wellington south coast, Waiairiki Stream	true left head of Waiairiki Stream. Wairau South Coast	Some indigenous vascular plants in the true left head of Waiairiki Stream (Q27 495 880)

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Wellington	Q27	49500	88000	2649500	5988000	Mitcalfe, B.; Horne, C.	19981003	Wellington south coast, Waiariki Stream	Waiariki Stream true left head.	
<i>Clematis forsteri</i>	Cook Strait	Q27	49150	86350	2649150	5986350	Mitcalfe, B.; Horne, C.	19940101	Wgtn South Coast	true right head Waiariki Stream, Wgtn South Coast Q27 4915 8635	
<i>Clematis forsteri</i>	Wellington	Q27	49500	88000	2649500	5988000	Mitcalfe, B.; Horne, C.	19981003	Wellington south coast, Waiariki Stream	True left head	
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	17000	67000	2717000	5967000	Mitcalfe, et al.	19970101	Tora	Tora Bush Scenic Reserve	
<i>Clematis forsteri</i>	Tararua	S27	96400	8300	2696400	6008300	Mitcalfe, B., Horne, C., Peterson, C.	19980101	Rimutaka Summit	Catchment of Rimutaka Stream	
<i>Clematis forsteri</i>	Wellington	R27	57200	91800	2657200	5991800	Myers, S.	19850101	Otari Open Air Plant Museum	Otari Open Air Plant Museum	
<i>Clematis forsteri</i>	Tararua	S27	200	7200	2700200	6007200	New Zealand Native Forests Restoration Trust	19970101	Rimutaka	Rimutaka Restoration Reserve	
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	17000	67000	2717000	5967000	Ogle, C and Parrish, R.	19820101	Tora	Tora Bush - Wairarapa	
<i>Clematis forsteri</i>	Cook Strait	R26	68800	17900	2668800	6017900	Ogle, C.C.	19720101	Pukerua Bay	Pukerua Bay Recreation Reserve	
<i>Clematis forsteri</i>	Cook Strait	R26	68500	17700	2668500	6017700	Ogle, C.C.	19800101	Pukerua Bay	Pukerua bay, Wairaka Rd Gully	
<i>Clematis forsteri</i>	Cook Strait	R26	68600	17800	2668600	6017800	Ogle, C.C.	19800101	Pukerua Bay	Pukerua Bay, Coastal section of Wairaka and Raroa reserves	
<i>Clematis forsteri</i>	Cook Strait	R26	67800	17800	2667800	6017800	Ogle, C.C.	19850101	Pukerua Bay	Pukerua Bay Wildlife Management Reserve	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Wellington	R27	63000	7000	2663000	6007000	Ogle, C.C.	19800101	Porirua	Porirua (Elston) Scenic Reserve	
<i>Clematis forsteri</i>	Cook Strait	R27	56000	2300	2656000	6002300	Ogle, C.C.	19840101	Pipinui point north of Makara Beach	Pipinui point north of Makara Beach	
<i>Clematis forsteri</i>	Aorangi	S28	99500	52900	2699500	5952900	P Heenen	19981021	Cape Palliser	Pukemuri Covenant, Tora	CHR 533019
<i>Clematis forsteri</i>	Eastern Wairarapa	S28	17400	61800	2717400	5961800	Rebergen, A.; Silbery, T.	20000101	Tora	covenant above Ruakokoputuna River	
<i>Clematis forsteri</i>	Eastern Wairarapa	S27	13000	83100	2713000	5983100	Rebergen, A.; Silbery, T.	19990101	Ruakokoputuna	Tom Dick Reserve (South Wairarapa District Council) and Coastal Cliffs (Department of Conservation)	
<i>Clematis forsteri</i>	Wairarapa Plains	S28	95800	72600	2695800	5972600	Rebergen, A.; Silbery, T.	20000101	South Wairarapa	Waingawa River Bush	
<i>Clematis forsteri</i>	Wairarapa Plains	S26	25500	29200	2725500	6029200	Rebergen, A.; Silbery, T.	19980101	Waingawa	Waingawa River Bush	
<i>Clematis forsteri</i>	Wairarapa Plains	S26	25500	29200	2725500	6029200	Rebergen, A.; Silbery, T.	19980101	Waingawa	Waingawa River Bush, PNAP site 801, Wairarapa Plains Ecological District.	
<i>Clematis forsteri</i>	Wairarapa Plains	S26	25500	29500	2725500	6029500	Rebergen, A.; Silbery, T.	19980101	Waingawa River	Waingawa River Bush	
<i>Clematis forsteri</i>	Wairarapa Plains	R28	86500	79400	2686500	5979400	Silbery and Enright	19980101	South Wairarapa	Wing Point wetlands between L. Onoke and Pounui Lagoon	
<i>Clematis forsteri</i>	Eastern Wairarapa	S27	25300	95500	2725300	5995500	Silbery, et al.	19990101	Eastern Wairarapa	Whangaehu River covenants, Eastern Wairarapa	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis forsteri</i>	Wellington	R27	55400	83300	2655400	5983300	Southern Environmental Association (Wgtn) inc	19980101	Wellington South Coast	valleys above high waterfall on stream leading to Whare-Raurekau on Wellington South Coast	
<i>Clematis forsteri</i>	Tararua	R28	70000	72800	2670000	5972800	Townsend, A.J.	19960101	Rimutaka coast, Cape Turakarae Scientific Reserve	Cape Turakarae Scientific Reserve	
<i>Clematis forsteri</i>	Wellington	R27	65700	9400	2665700	6009400	Truebridge Callender Beach	19900101	Porirua Harbour	Te Onepoto Bay, Porirua Harbour	
<i>Clematis forsteri</i>	Wairarapa Plains	S27	4000	91000	2704000	5991000	Unknown	19000101	Wairarapa Plains	Wairarapa Plains	
<i>Clematis forsteri</i>	Wellington	R27	53500	81500	2653500	5981500	Unknown	19401101	Sinclair Head, Wellington	CHR 33175	
<i>Clematis forsteri</i>	Wellington	R27	53500	81500	2653500	5981500	Unknown	19401101	Sinclair Head	CHR 33163	
<i>Clematis forsteri</i>	Wellington	R27	58500	91500	2658500	5991500	Wassilieff, M.	19920101	Wellington Town Belt	Wellington Town Belt	
<i>Clematis forsteri</i>	Wellington	R27	63200	7600	2663200	6007600	Wellington Botanical Society	19770101	Porirua	Porirua (Elston) Scenic Reserve	
<i>Clematis paniculata</i>	Puketoi	U26	77100	38200	2777100	6038200	Unknown	19740101	Tiraumea Valley, South of Puketoi Range	Tiraumea Valley, South of Puketoi Range	
<i>Clematis paniculata</i>	Tararua	R27	70400	91400	2670400	5991400	Unknown	19730101	Wellington Harbour	Wainui Ridge to York Bay,	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	26200	94500	2726200	5994500	Armitage, I.P.	19750101	Stoke's valley	Fletcher Development Co. Ltd's Property at Stoke's valley	
<i>Clematis paniculata</i>	Tararua	R28	70600	72900	2670600	5972900	Bagnall, R.	19750101	Cape Turakarae	Cape Turakarae	
<i>Clematis paniculata</i>	Wellington	R27	62000	3000	2662000	6003000	Bagnall, R.G.	19800101	tawa	Redwood Bush area, Tawa	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Wellington	R26	66500	12500	2666500	6012500	Bagnall, RG and CC Ogle	19810101	Plimmerton		
<i>Clematis paniculata</i>	Manawatu Gorge South	R26	86000	37600	2686000	6037600	Beveridge, et al	20000101	Waikanae Scenic Reserve.	Waikanae Scenic Reserve.	
<i>Clematis paniculata</i>	Tararua	R27	70400	88800	2670400	5988800	Clelland, D.	19840101	Rimutaka	Rimutaka Forest Park, Mt Hawtree Bush	
<i>Clematis paniculata</i>	Tararua	R27	70400	91400	2670400	5991400	Coulter, I	19720101	Wellington Harbour	Wainui ridge to York Bay	
<i>Clematis paniculata</i>	Wellington	R27	66500	92600	2666500	5992600	de Lange, P.J.	19920101	Somes/Matiu	Somes/Matiu	
<i>Clematis paniculata</i>	Manawatu Gorge South	T24	33500	79500	2733500	6079500	Doc	19990101	Brown's Flat	Brown's Flat and adjacent forest, Western Tararua Range	
<i>Clematis paniculata</i>	Puketoi	T25	64500	65200	2764500	6065200	Druce, A. P	19720101	Puketoi Range	Puketoi Range	
<i>Clematis paniculata</i>	Manawatu Gorge South	R26	86000	37600	2686000	6037600	Druce, A.P	19780101	Waikanae Scenic Reserve.	Waikanae Scenic Reserve.	
<i>Clematis paniculata</i>	Puketoi	U25	80800	68800	2780800	6068800	Druce, A.P	19720101	Pongaroa		
<i>Clematis paniculata</i>	Tararua	S27	97300	7400	2697300	6007400	Druce, A.P	19660101	Mt Rimutaka	Mt Rimutaka and Ridge south to old railway	
<i>Clematis paniculata</i>	Puketoi	U24	70200	80900	2770200	6080900	Druce, A.P	19750101	Northern Wairarapa	Waewaepa range, southern Hawkes Bay, Northern Wairarapa	
<i>Clematis paniculata</i>	Eastern Wairarapa	S28	25200	66200	2725200	5966200	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Oterei	
<i>Clematis paniculata</i>	Eastern Wairarapa	T27	41700	93600	2741700	5993600	Druce, A.P	19720101	Wairarapa (eastern), Wairarapa Taipos	Rocky Hill	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Eastern Wairarapa	T26	58200	17600	2758200	6017600	Druce, A.P.	19720101	Wairarapa (eastern), Wairarapa Taipos	Moores	
<i>Clematis paniculata</i>	Wellington	R27	82800	5600	2682800	6005600	Druce, A.P.	19570101	Taita		an experimental catchment, Taita
<i>Clematis paniculata</i>	Eastern Wairarapa	T26	60600	12400	2760600	6012400	Druce, A.P.	19730101	Wairarapa (eastern)	Mt Rewa and Mt Meredith, Eastern Wairarapa	
<i>Clematis paniculata</i>	Tararua	R27	79500	81900	2679500	5981900	Druce, A.P.	19740101	Wellington, Rimutaka	Mt Matthews, Rimutaka Range	
<i>Clematis paniculata</i>	Tararua	R27	81100	86100	2681100	5986100	Druce, A.P.	19800101	Wellington, Rimutaka	Rimutaka Range	
<i>Clematis paniculata</i>	Eastern Wairarapa	T27	41700	93600	2741700	5993600	Druce, A.P.	19820101	Rocky Hill Taipos,		
<i>Clematis paniculata</i>	Wairarapa Plains	T27	34300	4200	2734300	6004200	Druce, A.P.	19990101	Wairarapa, Ruamahanga River	area east of Ruamahanga River (including Maungaraki Range)	
<i>Clematis paniculata</i>	Tararua	S25	29000	54000	2729000	6054000	Druce, A.P.	19690101	Tararua Range	Mt Makakahi in the Tararua Range	
<i>Clematis paniculata</i>	Tararua	S26	17500	30800	2717500	6030800	Druce, A.P.	19680101	Tararua Range, Mount Holdsworth	Mt Holdsworth, Tararua Range	
<i>Clematis paniculata</i>	Tararua	S26	16400	32300	2716400	6032300	Druce, A.P.	19700101	Tararua Range, Mount Holdsworth	Atiwhakau stream, Mt Holdsworth	
<i>Clematis paniculata</i>	Wairarapa Plains	T27	43600	3300	2743600	6003300	Druce, A.P.	19690101	Wairarapa, Carterton, Wainuior Valley	Black-Beech forest, Wainuior Valley, SE of Carterton	
<i>Clematis paniculata</i>	Aorangi	S28	5300	67300	2705300	5967300	Druce, A.P.	19760101	Aorangi	(Aorangi)	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Wellington	R27	77800	4900	2677800	6004900	Druce, A.P.	19760101	Wellington, Hutt Valley	Silverstream Bush, Hutt Valley	
<i>Clematis paniculata</i>	Wellington	R27	82800	5600	2682800	6005600	Druce, A.P.	19770101	Wellington, Hutt Valley, Taita, Soil Bureau Property	DSIR land resources property, eastern Hutt Hills, Taita, Hutt Valley.	
<i>Clematis paniculata</i>	Tararua	S26	95500	11400	2695500	6011400	Druce, A.P.	19760101	Hutt River Gorge , Tararua Range	in the vicinity of the Pakuratahi Forks, Hutt River Gorge , Tararua Range	
<i>Clematis paniculata</i>	Tararua	R27	81100	86100	2681100	5986100	Druce, A.P.	19760101	Rimutaka (Rimutaka)		
<i>Clematis paniculata</i>	Wellington	R27	80000	4000	2680000	6004000	Druce, et al	19970101	Silverstream	Fendalton Recreation Reserve and Wairoa Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	R26	74500	23000	2674500	6023000	Enright and John	19970101	Paekakariki		
<i>Clematis paniculata</i>	Wellington	R27	82100	5900	2682100	6005900	Enright and John:	19960101	Wallaceville	Grant's Bush, Wallaceville Animal Research Centre	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	29000	95200	2729000	5995200	Enright, et al.	19980101	East Wairarapa	Tawhiriwainanuka Stream Bush, Ahi Paku station, QEII covenant	
<i>Clematis paniculata</i>	Eastern Wairarapa	T26	69900	33900	2769900	6033900	Enright, P	1/1/2001	Eastern Wairarapa, Tinui	Tinui Taipo	
<i>Clematis paniculata</i>	Wairarapa Plains	S27	28800	96300	2728800	5996300	Enright, P and John, O.	19980101	Tahoroa Bush, Wairarapa	Tahoroa Bush, Wairarapa	
<i>Clematis paniculata</i>	Eastern Wairarapa	T27	34200	3100	2734200	6003100	Enright, P.	19990101	Waimana Bush	Waimana Bush	
<i>Clematis paniculata</i>	Tararua	R27	82700	81200	2682700	5981200	Enright, P.	19960101	Rimutaka	Wharekauhau Station and Rimutaka Forest Park	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Tararua	R27	85400	2700	2685400	6002700	Enright, P. and John, O.	19970101	Upper Hutt	Whiteman's Valley (Brickell property), Upper Hutt	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	13500	83900	2713500	5983900	Enright, P., John, O.	19980101	Ruakokoputuna	Ruakokoputuna	
<i>Clematis paniculata</i>	Wairarapa Plains	S27	26200	94500	2726200	5994500	Enright, P.:	19990101	Long Bush	Spring Grove covenant, Long Bush	
<i>Clematis paniculata</i>	Wellington	R27	66500	92600	2666500	5992600	Fregard and Weeber	19860101	Somes/Matiu	Somes/Matiu	
<i>Clematis paniculata</i>	Manawatu Gorge South	R26	86000	37600	2686000	6037600	Gabites, I.	19860101	Waikanae Scenic Reserve	Waikanae Scenic Reserve	
<i>Clematis paniculata</i>	Puketoi	U25	74100	57400	2774100	6057400	Gabites, I.	19860101	Pongaroa	Pongaroa scenic reserve	
<i>Clematis paniculata</i>	Puketoi	T24	70000	80000	2770000	6080000	Gabites, I.	19860101	Pahiatua	Waewaepa Scenic Reserve	
<i>Clematis paniculata</i>	Wellington	R27	62500	5400	2662500	6005400	Gabites, I.	19860101	Porirua scenic reserve	Porirua scenic reserve	
<i>Clematis paniculata</i>	Wellington	R27	80300	7300	2680300	6007300	Gabites, I.	19860101	Trentham Scenic Reserve	Trentham Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	R28	70300	72800	2670300	5972800	Gabites, I.	19860101	Turakirae Head	Turakirae Head Scientific Reserve, Orongorongo River mouth	
<i>Clematis paniculata</i>	Tararua	R27	74200	92300	2674200	5992300	Gabites, I.	19860101	Wainuiomata Scenic Reserve	Wainuiomata Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	R26	80700	10400	2680700	6010400	Gabites, I.	19860101	Upper Hutt	Wilfred Mexted Scenic Reserve	
<i>Clematis paniculata</i>	Wellington	R27	64700	3200	2664700	6003200	Gabites, I.	19860101	Tawa	Whakatiki Scenic Reserve, Upper Hutt	
<i>Clematis paniculata</i>	Tararua	R27	81100	86100	2681100	5986100	Horne, C. and B. Mitcalfe	19940101	Rimutaka	Rimutaka Reserve	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Cook Strait	R27	54200	97900	2654200	5997900	Horne, J.C. and Mitcalfe, B.J	19930101	Wellington south coast	Smith's Bay, Smith's Gully and coastal slopes south	
<i>Clematis paniculata</i>	Eastern Wairarapa	T25	51900	42800	2751900	6042800	Horne, Mitcalfe and Rebergen	20000101	Wairere Farms Ltd	Wairere Farms Ltd	
<i>Clematis paniculata</i>	Eastern Wairarapa	T25	51300	44100	2751300	6044100	Horne, Mitcalfe and Rebergen:	20000101	Wairere Farms Ltd	Wairere Farms Ltd	
<i>Clematis paniculata</i>	Wellington	R27	62000	3000	2662000	6003000	Lewington, R	19750101	Tawa	Redwood Bush, Tawa.	
<i>Clematis paniculata</i>	Wellington	R27	61000	94200	2661000	5994200	Mead, A.	19770101	Wellington	Khandallah Domain	
<i>Clematis paniculata</i>	Wellington	R26	80700	13300	2680700	6013300	Mead, A.	19770101	Whakatīkei Flat, Wellington	Whakatīkei Flat	
<i>Clematis paniculata</i>	Wellington	R27	77000	4800	2677000	6004800	Mead, A.	19770101	Wellington	Keith George Park	
<i>Clematis paniculata</i>	Tararua	R27	71000	92000	2671000	5992000	Mead, A..	19770101	Eastbourne - Wainui	Eastbourne - Wainui	
<i>Clematis paniculata</i>	Wellington	R27	63000	7000	2663000	6007000	Mead, A..	19770101	Porirua	Porirua Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	S26	99500	11400	2699500	6011400	Mead, A..	19770101	Tararuas	Pukurātahi Forks	
<i>Clematis paniculata</i>	Wellington	R27	56800	91700	2656800	5991700	Mead, A..	19770101	Wilton Bush	Wilton Bush	
<i>Clematis paniculata</i>	Wellington	R27	64700	3200	2664700	6003200	Mead, A..	19740101	Wilton Bush	Wilton Bush	
<i>Clematis paniculata</i>	Wellington	R27	50700	87500	2650700	5987500	Mitcalfe and Horne (1992)	19920101	Wellington southwest peninsula	Erin Go Bragh Bush (Warrans Bush), Waiariki Valley/Outlook Hill	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Tararua	S26	92600	33500	2692600	6033500	Mitcalfe and Horne (1996)	19960101	Tararua Range	Pukeatua and Mangaone blocks owned by Crighton/Richards.	
<i>Clematis paniculata</i>	Wellington	R27	57500	89900	2657500	5989900	Mitcalfe, B	19930101	Wellington	118 Glenmore St, Wellington (Property of Joan Clouston)	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	26200	94500	2726200	5994500	Mitcalfe, Horne and Sugato	19970101	Stokes Valley	Original block, DP 55012 Lot 7, at Bodhinayanarama, 17 Rakau Grove Stokes Valley, Lower Hutt	
<i>Clematis paniculata</i>	Tararua	S27	97600	7400	2697600	6007400	Mitcalfe, B., Horne, C., Peterson, C.	19980101	Rimutaka	Rimutaka Summit	
<i>Clematis paniculata</i>	Wellington	R27	58000	90000	2658000	5990000	Myers, S	19850101	Wellington	Wellington Botanic Gardens	
<i>Clematis paniculata</i>	Wellington	R27	61000	94200	2661000	5994200	Myers, S	19850101	Wellington City	Khandallah Park	
<i>Clematis paniculata</i>	Wellington	R27	57200	91800	2657200	5991800	Myers, S.	19850101	Wellington City	Otari Open Air Plant Museum	
<i>Clematis paniculata</i>	Wellington	R27	58500	92800	2658500	5992800	Myers, S.	19850101	Wellington City	Ngaio Gorge/Trellissick Park	
<i>Clematis paniculata</i>	Tararua	S27	98500	7500	2698500	6007500	New Zealand Native Forests Restoration Trust	19970101	Rimutaka Reserve	Rimutaka Restoration Reserve	
<i>Clematis paniculata</i>	Tararua	R26	74900	24100	2674900	6024100	Ogle, C.	19800101	Paekakariki	Wainui Farm, Paekakariki	
<i>Clematis paniculata</i>	Cook Strait	R26	69100	18100	2669100	6018100	Ogle, C.C.	19720101	Pukerua Bay	Pukerua Bay Recreation Reserve	Ogle, C.C. Species List for Recreation Reserve, Pukerua Bay County Town

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Wellington	R27	63000	7000	2663000	6007000	Ogle, C.C.	19800101	Porirua	Porirua (Elston) Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	S25	29000	54000	2729000	6054000	Ogle, C.C.	19780101	Mt Kaiparoro, Makakahai and Mangatainoka River catchment	Mt Kaiparoro, Makakahai and Mangatainoka River catchment	
<i>Clematis paniculata</i>	Eastern Wairarapa	T26	49300	32300	2749300	6032300	Rebergen, A.	20000101	Rebergen, A. Plant list Tuki Waha, owner Mike Falloon.	Tuki Waha, owner Mike Falloon.	
<i>Clematis paniculata</i>	Wairarapa Plains	T26	34100	15700	2734100	6015700	Rebergen, A.	19980101	Masterton	Te Whiti, Caveland Road, Masterton/Gladstone	
<i>Clematis paniculata</i>	Eastern Wairarapa	T25	51500	53700	2751500	6053700	Rebergen, A.	19980101	Eastern Wairarapa	PNA 836 EW (RAP 5, Eastern Wairarapa E.D.)	
<i>Clematis paniculata</i>	Eastern Wairarapa	S28	17400	61800	2717400	5961800	Rebergen, A.; Silbery, T.	20000101	Tora	Pukemuri Covenant, Tora	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	13000	83100	2713000	5983100	Rebergen, A.; Silbery, T.	19990101	Ruakoputuna River	covenant above Ruakoputuna River	
<i>Clematis paniculata</i>	Wairarapa Plains	S28	95800	72600	2695800	5972600	Rebergen, A.; Silbery, T.	20000101	Tom Dick Reserve	Tom Dick Reserve (South Wairarapa District Council) and Coastal Cliffs (Department of Conservation)	
<i>Clematis paniculata</i>	Puketoi	U24	84500	76300	2784500	6076300	Rebergen, A.	19990101	Pongaroa	Pukewhinau trig Bush, Pongaroa	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	25300	95500	2725300	5995500	Silbery, et al.	19990101	Eastern Wairarapa	Whangaehu River covenants, Eastern Wairarapa	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Wellington	R27	55400	83300	2655400	5983300	Southern Environmental Association	19980101	Wellington South Coast	valleys above high waterfall on stream leading to Whare-Raurekau on Wellington South Coast	Found on northern rata at ridge top. Northern rata tag no 5115.
<i>Clematis paniculata</i>	Puketoi	T25	33245	50069	2733245	6050069	Steve Urlich	20021217			
<i>Clematis paniculata</i>	Tararua	R28	70000	73000	2670000	5973000	Townsend, A.J.	19960101	Rimutaka coast, Cape Turakae Scientific Reserve		
<i>Clematis paniculata</i>	Wairarapa Plains	S27	93000	96200	2693000	5996200	Townsend, A.J.; "Wellington Botanical Society"	19960101	Wairarapa (southern), Lake Wararapa, Western Lake Shore Scenic Reserve	Western Lake Shore Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	S26	6600	18700	2706600	6018700	Unknown	19500101	Tararua - Mount Reeves	Tararua - Mount Reeves	
<i>Clematis paniculata</i>	Tararua	S26	12700	15900	2712700	6015900	Unknown	19000101	Waiohine Gorge from Walls Whare	Waiohine Gorge from Walls Whare	
<i>Clematis paniculata</i>	Eastern Wairarapa	S27	27000	95700	2727000	5995700	Unknown	19990101	Martinborough	Whakarua, 10km east of Martinborough	
<i>Clematis paniculata</i>	Wellington	R27	63000	6500	2663000	6006500	Unknown	19770101	Porirua	Porirua Scenic reserve	
<i>Clematis paniculata</i>	Wellington	R27	58200	91500	2658200	5991500	Unknown	19000101	Wellington: Tinakori Hill	Tinakori Hill	
<i>Clematis paniculata</i>	Wellington	R27	58500	91500	2658500	5991500	Wasslief, M.	19920101	Wellington	Wellington Town Belt	
<i>Clematis paniculata</i>	Tararua	S26	3200	11600	2703200	6011600	Wellington Botanical society	19900101	Rimutaka	Rimutaka summit tearooms, Mt Frith	

SCIENTIFIC NAME	ECOLOGICAL DISTRICT	NZMS 260 SHEET NO.	METRIC EASTING	METRIC NORTHING	GIS EAST	GIS NORTH	OBSERVER	DATE OF RECORD	PLACE NAME	LOCATION DESCRIPTION	NOTES
<i>Clematis paniculata</i>	Wellington	R27	63000	7000	2663000	6007000	Wellington Botanical Society	19800101	Porirua	Porirua (Elston) Scenic Reserve	
<i>Clematis paniculata</i>	Tararua	S27	95400	7800	2695400	6007800	Wellington Botanical Society	19880101	Rimutaka	Rimutaka Rd- Kelly Track - Pakuratahi	
<i>Clematis paniculata</i>	Woodville	T25	56800	57300	2756800	6057300	Wgtn Bot Soc	19960101	Alfredton.	In and around, Suckling Bush, QEII Covenant, Turnberry, Alfredton	
<i>Clematis quadribracteolata</i>	Eastern Wairarapa	T27	45000	90400	2745000	5990400	Enright, P. (species record sheet)	19980101	Craiglie Station	Manuka scrub	Enright, P. (species record sheet). Locally common - brief survey found ~6 plants, 1 in seed.
<i>Clematis quadribracteolata</i>	Eastern Wairarapa	T27	45000	90600	2745000	5990600	Silbery, T. Enright, P. (species record sheet)	19980101	Craiglie Station	Small creek within gully through swampy vegetation.	Silbery, T. Enright, P. (species record sheet). Plants scrambling
<i>Clematis quadribracteolata</i>	Eastern Wairarapa	T27	45000	90600	2745000	5990600	Silbery, T. Enright, P. (species record sheet)	19980101	Craiglie Station	Part of site most closely investigated was adjacent to fence line. Probably more plants in the dense vegetation.	Part of site most closely investigated was adjacent to fence line. Probably more plants in the dense vegetation.
<i>Clematis quadribracteolata</i>	Eastern Wairarapa	S27	28600	97700	2728600	5997700	Townsend, A.J.	19940101	Gladstone - Martinborough, Mahupuku Road, Longbush	Scrub on side of road and stream.	Townsend, A. (pers. comm.)

Appendix 4

S P E C I E S R E C O R D S H E E T

SPECIES RECORD SHEET

Completed forms should be returned to:

Department of Conservation

P.O. Box 5086

Wellington

SPECIES NAME:

OBSERVER:

NAME:

TELEPHONE NUMBER:

ADDRESS:

NEAREST MAJOR LOCALITY:

MAP SERIES:

MAP NUMBER:

GRID REFERENCE:

OWNER/OCCUPIER OF LAND (if known):

DATE OF OBSERVATION AND TIME:

LOCATION:

DESCRIPTION OF SITE (INCLUDING HABITAT):

SKETCH MAP OF SITE:

POPULATION FEATURES:

Number of individuals seen.

An indication of the scope of your survey i.e. is the population more widely spread?

An estimate of the age structure (number of adults, number of juveniles), flowering? fruiting? moulting?

Have you visited site before? If so how does it compare now?

WHAT IS THE CURRENT SITE MANAGEMENT?**ARE THERE ANY THREATS TO THE POPULATION?**

e.g. herbivores, predators, land development, recreation, pollution, other.

RECOMMENDATIONS FOR MANAGEMENT OF THE SITE OR POPULATION:

WAS A PHOTOGRAPH TAKEN? Please circle YES NO

WAS MATERIAL COLLECTED? YES NO

TYPE OF MATERIAL SEED CUTTINGS SPECIMEN

WHERE IS MATERIAL NOW?