

# a better CLASS OF WEED

When is a weed not a weed? Philip Smith investigates.



'WEED' IS AN EMOTIVE WORD. However, despite our revulsion towards plants that we perceive to be weeds, we must also concede to them a certain respect. They tenaciously occupy any available space, thriving without the assistance that we normally provide to our garden plants. In fact, such adaptability has historically been a strong factor in the selection and breeding of many garden plants. Unfortunately, the line between 'desirable' and 'dangerous' has often only been recognised once many exotic species have well and truly crossed the Rubicon, and become major problems as environmental weeds. On the flip side, investigations into the 'weediness' of native species have been important in establishing success within revegetation plantings. Now, species such as manuka, kanuka, tauhinu and koromiko have changed in our collective view from noisome agricultural weeds to valuable pioneer species.

Revegetation is not the only area of horticulture in which native 'weeds' have turned from foe to friend. On the sedate greens of our bowling clubs, an interesting transformation happened in the first half of last century. The members of a Dunedin club attempted to remove a small weedy patch of the coastal native herb, *Leptinella dioica*, with heavy raking and close mowing. This only served to encourage the offending plant, and the green eventually



became exclusively covered with *L. dioica*. Varieties of *Leptinella* now constitute one of the most important turf coverings for bowls greens throughout the country, and in recent years have also become utilised by landscapers.

Weedy native species serve as a refreshing reminder that, despite the changes we have wrought on the natural environment, we cannot entirely subdue it. They are also worthy of consideration as landscape plants for the same disturbed habitats in which they manage to endure. Amongst the better known suspects, pohutukawa and cabbage trees continually appear uninvited within Auckland's inner areas; the former even managing to perch atop gutters on central city buildings. Smaller species that also make their home within the heart of the city include the epiphytic ferns, *Microsorium pustulatum* and *Pyrosia eleagnifolia*, and the small sedge, *Carex comans* (which owes its existence there to active planting, but renews its populations without intervention).

Within that great symbol of monoculture, the suburban lawn, some native species maintain a place, including the useful and almost unknown groundcover, *Centella uniflora*, and the well-known Mercury Bay Weed (of which *Dichondra brevifolia* is the best species for cultivation). On the volcanoes of the Auckland isthmus, and in other parts of the North Island, a native grass

(*Microlaena stipoides*) even forms the dominant cover in lawns, normally in the absence of highly aggressive weeds like kikuyu.

The equally artificial environment of agricultural pasture is, likewise, not entirely devoid of native vegetation. Mounds of porcupine bush, *Meliccytus alpinus*, are a common feature of South Island high country landscapes, as are the brilliant yellow floral displays of the so-called Maori onion (*Bulbinella* spp.). The great opportunists of the north are the members of the genus, *Pomaderris*, which specialise in disturbed habitats such as roadside cuttings. *Pomaderris* contains some of our finest flowering species, including the bright yellow kumarahou (*P. kumeraho*), the beautiful russet-coloured *P. rugosa*, and the delicate small shrub, *P. amoena*.

A final note on the subject of native 'weeds' relates to conservation. Amongst those plants that specialise in disturbed habitats are many of our threatened species, such as the critically endangered *Hibiscus richardsonii*. Under pressure in the wild from more aggressive exotic weeds, the open spaces associated with human habitation may in future perform a role as repositories for some of the lesser-known members of the New Zealand flora.

**References:** Howard, Gibbs & Scotter. (1993). *Establishment and Management of Cotula Greens*. NZTCl: Palmerston North.

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ABOVE LEFT: *Hydrocotyle Hebe*. ABOVE RIGHT: *Carex flagellifera* – the plantlife equivalent of downsizing to a city pad.

# weedNATIVES

Plant matrix - 'weeds' for all occasions.

name	h (m)	w (m)	form	notes
<i>Acaena anserinifolia</i> *	0.2	2	Spreading herb	A fine species, which is best used in gardens without pets
<i>Anemanthele lessoniana</i>	0.8	1.2	Tussock-like grass	A threatened species that naturalises readily; commonly used
<i>Blechnum novaezelandiae</i>	0.7	1	Ground fern	The bright red of the new fronds are a feature of roadsides
<i>Bulbinella hookeri</i> *	0.8	0.6	Deciduous herb	Bright yellow flowers adorn open ground in southern areas
<i>Callitriche muelleri</i> *	0.02	0.4	Turf-forming herb	Starwort'; a very low groundcover of damp ground
<i>Carex comans</i> *	0.25	0.4	Sedge	Common garden sedge that naturalises in central Auckland
<i>Centella uniflora</i> *	0.04	0.6	Turf-forming herb	A common lawn weed which merits more attention; useful
<i>Coprosma repens</i>	3	2	Shrub	Extremely resilient species; very useful for many purposes
<i>Coprosma rigida</i>	3	2	Shrub	Capable of enduring within rough pasture in southern NZ
<i>Cordyline australis</i>	8	6	Small tree	Cabbage trees occur frequently as garden weeds
<i>Dichelachne inaequiglumis</i>	0.5	0.4	Meadow-like grass	Elegant species with waving flowerheads; self-seeds freely
<i>Dichondra brevifolia</i> *	0.02	0.8	Turf-forming herb	The best species of Mercury Bay weed for cultivation
<i>Doodia australis</i>	0.4	0.4	Ground fern	Occurs in degraded pasture in northern NZ; reddish new fronds
<i>Elymus solandri</i>	0.1	0.4	Grass	Beautiful blue grass which self seeds very freely
<i>Geranium solanderi</i>	0.4	1	Spreading herb	Has survived within the Penrose industrial area within Auckland
<i>Haloragis erecta - bronze form</i> *	0.6	0.8	Herb / subshrub	Commonly cultivated; especially in England; beautiful foliage
<i>Hebe stricta</i>	2	1.4	Large shrub	Pioneer species with several worthwhile forms
<i>Hibiscus richardsonii</i>	0.6	0.6	Subshrub	Extremely attractive flowers; associated with disturbed sites
<i>Hydrocotyle dissecta</i> *	0.02	0.6	Turf-forming herb	Very elegant groundcover for shade; dark foliage
<i>Kunzea ericoides</i> *	8	5	Tree	Kanuka; historically considered as an agricultural weed
<i>Leptinella dioica</i> *	0.04	1.2	Turf-forming herb	Coastal groundcover; commonly used for bowling greens
<i>Leptospermum scoparium</i> *	4	3	Shrub / small tree	Manuka; perhaps our most ubiquitous native 'weed'
<i>Linum monogynum</i>	0.5	0.5	Subshrub	Beautiful white flowers on a compact small subshrub
<i>Lobelia (syn. Pratia) angulata</i>	0.02	1	Turf-forming herb	Commonly planted species; beautiful white flowers
<i>Lobelia (syn. Pratia) perpusilla</i>	0.02	0.8	Turf-forming herb	Less well-known species of Pratia; better for open areas.
<i>Macropiper excelsum</i>	3	2	Shrub	Kawakawa readily occurs as a garden weed in northern NZ



name	h <sub>(m)</sub>	w <sub>(m)</sub>	form	notes
<i>Meliclytus alpinus</i>	1	1.5	Sprawling shrub	Endures within degraded pasture in southern areas; very useful
<i>Metrosideros excelsa</i>	12	10	Large tree	The consummate opportunist; specialises in marginal ground
<i>Microlaena stipoides</i>	0.2	0.3	Turf / meadow grass	Remains as dominant lawn turf on several of Auckland's volcanoes
<i>Microsorium pustulatum</i>	0.3	0.6	Creeping fern	Hound's tongue fern; grows within the centre of Auckland City
<i>Muehlenbeckia complexa</i>	1	6	Scrambling liane	Utilised to interesting sculptural effect by some designers
<i>Oplismenus hirtellus</i> ssp. <i>hirtellus</i>	0.02	0.8	Creeping grass	Basket grass; spreading species; tolerates considerable shade
<i>Ozothamnus leptophyllus</i> *	1	1.2	Small shrub	Tauhinu; major pioneer species in dry southern areas
<i>Paesia scaberula</i> *	0.4	2	Creeping fern	Beautiful spreading fern; bright green foliage
<i>Pelargonium inodorum</i> *	0.4	0.6	Subshrub	Our native pelargonium; selection of good forms would yield results
<i>Pimelea tomentosa</i>	0.8	1	Small shrub	Elegant scrub species; threatened within the wild; white flowers
<i>Pomaderris amoena</i>	1.5	1	Spreading shrub	Lovely cream-flowered shrub of disturbed areas in northern NZ
<i>Pomaderris kumeraho</i>	2.5	1.7	Shrub	Golden tainui; one of our most spectacular flowering species
<i>Pomaderris rugosa</i>	2	1.4	Shrub	Beautiful bronzy foliage; occupies disturbed ground
<i>Pseudopanax lessonii</i>	4	1.6	Small tree	Coastal shrub/tree; houpara; extremely tough and useful
<i>Pteris macilentata</i>	1	1	Fern	Beautiful dissected foliage; tolerates considerable shade
<i>Pyrosia eleagnifolia</i>	0.1	0.5	Creeping fern	Present within the centre of Auckland City; intriguing epiphyte
<i>Schizaelema trifoliolatum</i>	0.01	0.5	Turf-forming herb	Beautiful little turf weed which becomes dominant in heavy shade
<i>Senecio banksii</i>	0.3	0.6	Spreading herb	Attractive silver-leaved herb with bright yellow flowers
<i>Senecio radiolatus</i>	0.4	0.25	Herb	Attractive plant; potential as native alternative for annual borders
<i>Solanum aviculare</i>	3.5	3	Small tree	Poroporo; very vigorous pioneer species
<i>Sonchus kirkii</i>	0.8	0.6	Stout herb	For those with a specialist interest; native puha
<i>Tetragonia implexicoma</i>	0.25	1.8	Spreading subshrub	Native spinach; a very effective, drought-tolerant groundcover
<i>Wahlenbergia albomarginata</i>	0.25	0.2	Herb	Elegant little herb with beautiful flowers; endures in pasture
* = Plants marked with an asterisk were included within the 1985 publication, <i>A Guide to the Identification of New Zealand Common Weeds in Colour</i> , Upritchard, E.A.; New Zealand Weed and Pest Control Society.				
BELOW, FAR LEFT TO RIGHT: <i>Pyrosia</i> ; Pohutukawa; <i>Pseudopanax</i> ; <i>Microsorium</i> in basalt.				

