

Appendix 5:

WHANGANUI PLANT LIST NO. 25

Vascular Plants of Koitiata (Turakina Beach), including Koitiata Recreation Reserve, Manawatu Coast

Grid Ref: NZMS 260/S23/920245 to 930230 (approx)

A P Druce, Botany Division, DSIR
June 1975 (last revised July 1988)
(based on visits 1967, 1975, 1993)C C Ogle (22 Forres St Wanganui), G La Cock (Department of Conservation, Wanganui)
(additions: 5 Dec 1991, 19 April 1993, 28 June 1993, 22 Oct 1996; 1 March 2000); Wanganui Botanical
Group (30 January 1993, 5 March 1995; 2 Sep 2006); CCO, GLC, V McGlynn & Laurel Stowell (14 Sep
2007)*Last revised 2 March 2000; 23 Jan 2002; 31 Aug. 2006; 4 Sep. 2006; 24 March 07; 14 Sep 2007*

(unc) uncommon; local (in small area but may be quite common there)

(+) = seen between 1988-96; ! = addition 2.9.06; (+!) = recorded by Druce and not seen again until
2.9.06; # = addition 14.9.07; (+#) = recorded by Druce and not seen again until 14.9.07

(A) INDIGENOUS SPECIES

Monocot Trees

Cordyline australis (+) cabbage tree

Dicot Shrubs

Coprosma acerosa s.s. (+) sand coprosma
 Coprosma propinqua ssp. propinqua (incl.
 C. p. var. latiuscula)
 Coprosma repens (+) taupata
 Coprosma robusta (+) karamu
 Coprosma propinqua x C. robusta (+)
 Leptospermum scoparium (+) manuka
 Olearia solandri (+)
 Ozothamnus leptophyllus (+) tauhinu
 Pimelea arenaria sand daphne
 Pimelea sp. unnamed (P. "Turakina")

Dicot Lianes

Calystegia sepium ssp. roseum (+) convolvulus
 Calystegia soldanella (+) sand convolvulus
 Muehlenbeckia complexa (+) pohuehue
 Parsonsia heterophylla (#) (unc) NZ jasmine

Ferns

<i>Adiantum cunninghamii</i>	(+)	maidenhair fern
<i>Asplenium flabellifolium</i>	(#)	necklace fern
<i>Asplenium flaccidum</i>	(!) (unc)	hanging spleenwort
<i>Asplenium oblongifolium</i>	(+!)	shining spleenwort
<i>Asplenium polyodon</i>	(+)	sickle spleenwort
<i>Azolla filiculoides ssp. rubra</i>	(+)	floating red waterfern
<i>Blechnum fluviatile</i>	(!) (1 plant)	
<i>Blechnum minus</i> (auct. NZ)	(+)	swamp kiokio
<i>Blechnum novae-zelandiae</i>	(+)	kiokio
<i>Blechnum triangularifolium</i>	(+!)	cliff kiokio
<i>Cyathea medullaris</i>	(!) (5 seen)	mamaku
<i>Dicksonia fibrosa</i>	(+) (unc)	whekiponga
<i>Hypolepis ambigua</i>	(+!) (unc)	
<i>Microsorium pustulatum</i>	(#) (unc)	hound's tongue
<i>Paesia scaberula</i>	(#) (unc)	ring fern
<i>Pellaea rotundifolia</i>	(#) (2 plants)	button fern
<i>Pneumatopteris pennigera</i>		
<i>Polystichum neozelandicum</i>	(#) (1 plant)	shield fern
<i>Pteridium esculentum</i>	(+#)	bracken
<i>Pteris macilenta</i> (auct. NZ)	(!) (unc)	
<i>Pteris tremula</i>	(!) (unc)	shaking brake
<i>Pyrrosia eleagnifolia</i>	(+) (unc)	leatherleaf fern
<i>Rumohra adiantiformis</i>	(#) (unc)	

Orchids

<i>Corybas</i> sp. (unidentified; <i>C. rivularis</i> agg.)		spider orchid
<i>Microtis unifolia</i>	(+)	onion-leaved orchid
<i>Thelymitra longifolia</i>	(+)	sun orchid
<i>Thelymitra</i> sp. (unidentified; erect channelled leaf)	(!)	sun orchid

Grasses

<i>Cortaderia toetoe</i>	(+)	toetoe
<i>Lachnagrostis billardierei</i>	(+)	sand bent
<i>Lachnagrostis filiformis</i> s.s.		
<i>Spinifex sericeus</i>	(+)	spinifex
<i>Zoysia minima</i>	(+)	

Sedges

<i>Baumea juncea</i>	(+)	
<i>Carex buchananii</i>		
<i>Carex pumila</i>	(+)	sand carex
<i>Carex virgata</i>	(+)	
<i>Cyperus ustulatus</i>	(+)	
<i>Desmoschoenus spiralis</i>	(+)	pingao

<i>Eleocharis acuta</i>	(+)	sharp spike sedge
<i>Eleocharis gracilis</i>		slender spike sedge
<i>Isolepis basilaris</i>	(+!) ¹	
<i>Isolepis cernua</i>	(+!)	
<i>Isolepis nodosa</i>	(+)	club sedge
<i>Isolepis prolifer</i>	(!) (1 patch)	
<i>Schoenoplectus pungens</i>	(+)	3-square
<i>Schoenoplectus tabernae-montani</i>	(+)	kapungawha
<i>Schoenus nitens</i>	(+)	

Rushes

<i>Apodasmia (Leptocarpus) similis</i>	(+)	jointed rush
<i>Juncus caespiticius</i> s.s.	(+!) (unc)	
<i>Juncus kraussii</i> var. <i>australiensis</i>	(+) (unc)	sea rush
<i>Juncus edgariae</i>	(!) (unc)	

Monocot Herbs Other Than Orchids, Grasses, Sedges, Rushes

<i>Libertia peregrinans</i>	(+)(unc) ²	sand iris
<i>Phormium cookianum</i>	(+)	wharariki, mountain flax
<i>Phormium tenax</i>	(+)	harakeke, flax
<i>Potamogeton ochreatus</i> [(Cockayne 1908)]		
<i>Potamogeton pectinatus</i> [Aston 1910]	(+) ³	
<i>Triglochin striatum</i>	(+)	arrow-grass
<i>Typha orientalis</i>	(+)	raupo

Composite Herbs

<i>Centipeda minima</i> (?) ⁴	(+) (unc)	sneezeweed
<i>Cotula coronopifolia</i>	(+)	bachelor's button
<i>Euchiton (Gnaphalium) audax</i>		cudweed
<i>Lagenifera pumila</i>	(+!) (local)	
<i>Pseudognaphalium</i> sp. (<i>P. luteoalbum</i> agg)	(+)	cudweed
<i>Senecio glomeratus?</i> (only juv. seen)	(!) (unc)	native fireweed
<i>Senecio hispidulus</i>	(+) (unc)	native fireweed
<i>Senecio quadridentatus</i>		silver fireweed

¹ Scattered along 100 m or so of damp sand beside vehicle track on sea-ward side of pines on 2.9.06

² Recorded by Druce; 1 plant found by A King in 1993 or 1995; many dozens of tillers found 2.9.06 among *Apodasmia* and along vehicle track near pines – perhaps area 200 m diameter or more. Not (unc); better described as 'local'.

³ Rediscovered in water supply pond in pine forest, Jan. 1993 (pond beside forestry road behind village)

⁴ As recorded by Druce. Needs re-finding to check which of the 3 indigenous species it is, as defined by Walsh (2001)

Dicot herbs (other than composites)

Acaena sp.) A. anserinifolia or A. nz.)	(#)	bidibid/piripiri
Apium sp (A. filiforme auct NZ)	(+) (unc)	slender sea celery
Chenopodium glaucum var. ambiguum		
Crassula sieberiana (incl. C. tetramera)	(+) (unc)	
Epilobium billardioreanum s.s.	(+!)	willow-herb
Epilobium nerteroides		"
Epilobium pallidiflorum		"
Gunnera dentata var. (G. arenaria)		sand gunnera
Haloragis erecta	(#) (1 plant)	
Hydrocotyle novae-zeelandiae s.s.	(+)	swamp pennywort
Lilaeopsis novae-zelandiae	(+)	tape-measure plant
Limosella lineata	(+)	
Lobelia anceps	(+)	NZ lobelia
Mazus novaezeelandiae ssp. impolitus.	(+) (unc)	
Mentha cunninghamii	(+!) (unc)	NZ mint
Myriophyllum pedunculatum ssp. novae-zelandiae		
M. votschii		
Oxalis rubens	(+)	wiry oxalis
Polygonum salicifolium	(+)	NZ willow-weed
Potentilla anserinoides	(+)	silverweed
Pratia perpusilla [between Rangitikei & Turakina Rivers; Aston 1910: 236] ⁵		
Ranunculus acaulis	(+)	sand buttercup
Samolus repens var. repens		sea primrose
Sarcocornia quinqueflora	(+)	glasswort
Sebaea ovata		
Selliera rotundifolia ⁶	(+)(unc)	half-star
Viola cunninghamii [Cockayne 1908]		

Number of Species

98 species (+ 1 hybrid)

References

Aston B C, 1910. Trans NZ Inst. 43: 225-47

Cockayne L, 1908: Trans. NZ Inst. 41:309

Walsh, N.G. (2001). A revision of *Centipeda* (Asteraceae). *Muelleria* 15: 33-65.

⁵ This sp. was found & vouchered on 5 March 1995 in damp pasture beside dune lake/swamp in "Tunnel Hill" farm - may have been Aston's location?

⁶ Druce recorded *Selliera radicans*, but the publication since of *S. rotundifolia*, characteristic of dune flats between about Patea and Levin, suggests that it was the latter species. On 2.9.06 we found a small patch of *S. rotundifolia*

(B) ADVENTIVE SPECIES (all seen on or after 21 November 1990)

Gymnosperms

<i>Pinus pinaster</i>	(!) (unc)	maritime pine
<i>Pinus radiata</i>	(!)	

Dicot shrubs and lianes

<i>Acacia sophorae</i>		sand wattle
<i>Artemisia arborescens</i>	(unc)	hedge artemisia
<i>Chrysanthemoides monilifera</i>		boneseed
<i>Cotoneaster lacteus</i>	(! -seen but no ID earlier)	
<i>Crataegus monogyna</i>	(unc)	hawthorn
<i>Echium candicans</i>	(!) (local)	pride of Madeira
<i>Erica lusitanica</i>		Spanish heath
<i>Euonymus japonicus</i>	(#) (1 plant)	spindle tree
<i>Juglans ailantifolia</i> [seedlings]	(unc)	Japanese walnut
<i>Lavandula dentata</i>		lavender
<i>Lavatera arborea</i>		tree mallow
<i>Lupinus arboreus</i>		tree lupin
<i>Lycium ferocissimum</i>		boxthorn
<i>Pelargonium X asperum?</i>	(#) (1)	
<i>Pelargonium X hortorum</i>	(!) (2)	
<i>Pelargonium vitifolium?</i>	(#) (1)	zonal pelargonium
<i>Pittosporum crassifolium</i>	(unc)	karo
<i>Populus alba</i>		silver poplar
<i>Prunus seracifera</i> (cv. <i>atropurpurea</i>)	(!) (1 seen)	cherry plum
<i>Rosa rubiginosa</i>		sweet brier
<i>Rumex sagittatus</i>	(#)	climbing dock
<i>Salix cinerea</i>		grey willow
<i>Salix fragilis</i>		crack willow
<i>Salix matsudana</i> CHR	(unc; 2)	tortured willow
<i>Senecio angulatus</i>		Cape ivy
<i>Senecio mikanioides</i>	(!) (local)	German ivy
<i>Senna multiglandulosa</i>	(! 1 plant)	cassia
<i>Teline monspessulana</i>	(#) (3-4 plants)	Montpellier broom
<i>Ulex europaeus</i>		gorse

Monocot 'shrubs'

<i>Aloe arborescens</i>	(!) (1 patch)	
<i>Yucca gloriosa</i>		yucca

Dicot herbs

<i>Acanthus mollis</i> (seedlings only)	(#) (1 patch)	bear's breeches
<i>Aeonium</i> (arboreum?)	(#) (3 plants)	
<i>Apium nodiflorum</i>		water celery
<i>Anagallis arvensis</i>		scarlet pimpernel
<i>Aptenia cordifolia</i>	(#) (1 plant)	

<i>Arctotheca calendula</i>	(!)	Cape daisy
<i>Arctotis stoechadifolia</i>	(#)	arctotis
<i>Aster subulatus</i>	(!)	sea aster
<i>Atriplex prostrata</i>		orache
<i>Bellis perennis</i>	(!)	lawn daisy
<i>Beta vulgaris</i>	(unc)	silverbeet
<i>Bidens frondosa</i>	(unc)	beggar's ticks
<i>Carpobrotus</i> sp.		iceplant
<i>Centaureum erythraea</i>		centaury
<i>Cerastium glomeratum</i>	(#)	annual mouse-eared chickweed
<i>Cerastium tomentosum</i>	(#) (3 patches)	snow-in-summer
? <i>Cereus</i> sp.	(#) (1 plant)	a cactus
<i>Chrysanthemum segetem</i>	(! 1 plant)	corn marigold
<i>Cirsium arvense</i>	(unc)	Californian thistle
<i>Cirsium vulgare</i>		Scotch thistle
<i>Conyza sumatrensis</i> (syn. <i>C. albida</i>)		fleabane
<i>Coronopus didymus</i>		twin cress
<i>Cotyledon orbiculata</i>	(!) (unc)	
<i>Crassula multicava</i>	(#) (local)	fairy crassula
<i>Crepis capillaris</i>		hawkbit
<i>Fumaria muralis</i>	(!)	scrambling fumitory
<i>Galium aparine</i>	(#)	cleavers
<i>Galium palustre</i>	(#)	marsh bedstraw
<i>Gazania rigens</i>	(!)	
<i>Geranium molle</i>		soft dovesfoot
<i>Helleborus foetidus</i> ⁷ CHR	(!) (unc)	winter rose
<i>Helminthotheca (Picris) echioides</i>		ox-tongue
<i>Hypochoeris radicata</i>		catsear
<i>Lactuca</i> sp.		wild lettuce
<i>Leontodon saxatilis</i> (syn. <i>L. taraxacoides</i>)		hawkbit
<i>Linum bienne</i>		pale flax
<i>Lobularia maritima</i>	(unc)	alyssum
<i>Lotus pedunculatus</i>		lotus major
<i>Lotus tenuis</i> CHR		
<i>Lythrum hyssopifolia</i>	(!) (unc)	hyssop loosestrife
<i>Medicago lupulina</i>		black medick
<i>Medicago nigra</i>	(#)	burr medick
<i>Melanoselinum decipiens</i>	(!) (unc)	parsnip palm
<i>Melilotus indica</i>		King Island melilot
<i>Mentha pulegium</i>		pennyroyal
<i>Myosotis laxa</i>		water forget-me-not
<i>Myosotis sylvatica</i>	(#) (1 patch)	garden forget-me-not
<i>Myriophyllum aquaticum</i> CHR	(unc)	parrot's feather
<i>Oenothera stricta</i>		evening primrose
<i>Orobanche minor</i>		broom-rape
<i>Osteospermum jucundum</i>	(#) (local)	
<i>Oxalis articulata</i>	(!) (unc)	sourgrass
<i>Oxalis incarnata</i>	(#)	lilac oxalis

⁷ 1st NZ record of this plant in the wild (found by G La Cock: collected 4.9.06)

<i>Oxalis pes-caprae</i>	(!)	Bermuda buttercup
<i>Parentucellia viscosa</i>		tarweed
<i>Plantago australis?</i>		swamp plantain
<i>Plantago major</i>		broad-leaved plantain
<i>Polygonum hydropiper</i>		water pepper
<i>Ranunculus repens</i>		creeping buttercup
<i>Ranunculus sceleratus</i>		celery-leaved buttercup
<i>Ranunculus trichophyllus</i>		water buttercup
<i>Raphanus raphanistrum</i>		wild radish
<i>Rorippa nasturtium-aquaticum</i> (?)		watercress
<i>Rumex conglomeratus</i>		clustered dock
<i>Rumex crispus</i>		curled dock
<i>Rumex obtusifolius</i>		broad-leaved dock
<i>Salpichroa organifolia</i>	(!)	lily of the valley vine
<i>Sedum praealtum</i>	(!) (unc)	shrubby stonecrop
<i>Sedum spectabile</i>	(#) (2)	
<i>Senecio elegans</i>		purple groundsel
<i>Senecio glastifolius</i>		pink ragwort (holly-leaved senecio)
<i>Senecio jacobaea</i>		ragwort
<i>Sisymbrium officinale</i>		hedge mustard
<i>Solanum chenopodioides</i>		velvety nightshade
<i>Solanum nigrum</i>		black nightshade
<i>Solanum tuberosum</i>	(!) (local)	potato
<i>Sonchus asper</i>		prickly sowthistle
<i>Sonchus oleraceus</i>		puwaha
<i>Spergularia rubra</i>		sand spurrey
<i>Stachys palustris</i> ⁸ CHR		marsh woundwort
<i>Stellaria media</i>	(!)	chickweed
<i>Trifolium arvense</i>		haresfoot trefoil
<i>Trifolium dubium</i>		suckling clover
<i>Trifolium repens</i>		white clover
<i>Trifolium subterraneum</i>	(#)	subterranean clover
<i>Tropaeolum majus</i>	(!) (unc)	nasturtium
<i>Verbascum thapsus</i>	(#) (1)	woolly mullein
<i>Veronica persica</i>	(!) (unc)	scrambling speedwell
<i>Vicia sativa</i>		vetch
<i>Vicia</i> sp. (unidentified; maybe <i>V. tetrasperma</i>)	(!)	vetch
<i>Viola odorata</i>	(#) (1 patch)	
Monocot herbs		
Grasses		
<i>Agrostis stolonifera</i>		creeping bent
<i>Aira caryophylla</i>		silvery hair grass
<i>Ammophila arenaria</i>		marram grass
<i>Anthoxanthum odoratum</i>		sweet vernal
<i>Briza minor</i>		quaking grass

⁸ Marsh woundwort is recorded in NZ from only 2 locations, viz. "mainly near Turakina R" and "Hokoi estuary (near Levin)" (Flora of NZ Vol 4. P 796. 1988)

Bromus diandrus		ripgut brome
Cortaderia selloana		pampas grass
Cynodon dactylon		Indian doab
Dactylis glomerata		cocksfoot
Ehrharta erecta	(!) (local)	veld grass
Ehrharta villosa CHR (& other NZ herbaria)		pyp grass
Elytrigia repens	(!) (local)	couch
Festuca rubra ssp. commutata	(!)	Chewings fescue
Glyceria declinata		floating sweetgrass
Holcus lanatus		Yorkshire fog
Lagurus ovatus		haretail
Lolium perenne		
Paspalum dilatatum		paspalum
Paspalum distichum		Mercer grass
Pennisetum clandestinum		kikuyu grass
Poa annua	(#)	annual poa
Polypogon monspeliensis		beard grass
Schedonorus phoenix (=Festuca arundinacea)		tall fescue
Sporobolus africanus		ratstail
Vulpia bromoides		vulpia hair gras

Monocot herbs other than grasses

Agapanthus orientalis	(unc)	agapanthus
Alisma lanceolatum	(unc)	water plantain
Allium cepa	(!)	onion
Allium triquetrum	(!)	3-cornered garlic
Alstroemeria sp. [pink flowers]	(#)	Peruvian lily
Canna sp.	(!) (unc)	canna lily
Chasmanthe floribunda	(#) (1 patch)	
Crocasmia x crocosmiiflora		montbretia
Cyperus albobstriatus	(!) (1 clump)	
Cyperus eragrostis	(unc)	
Freesia refracta cv. (pink fl.)	(!)	freesia
Hyacinthus orientalis (?) CHR	(!) (unc)	hyacinth
Juncus articulatus		jointed-leaved rush
Juncus bufonius		toad rush
Juncus subnodulosus ⁹	(unc)	
Muscari armeniacum	(#) (unc)	grape hyacinth
Narcissus tazeta	(!) (unc)	jonquil
Potamogeton crispus		curled pondweed
Sparaxis ¹⁰ (2 spp.?)	(#)	
Tradescantia sillamontana?	(#) (1 patch)	
Watsonia aletroides	(#) (1 clump)	watsonia
Watsonia bulbifera (?)	(!)	watsonia
Zantedeschia aethiopica	(#) (1 patch)	arum

⁹ Recorded in Flora of NZ Vol.3 as being only in Canterbury and Otago

¹⁰ two flower colour forms on 14.9.07, one orange, one white inside with red outside

Species of Note

A	<u>Indigenous</u>		<u>National Status</u> ¹¹
	Centipeda minima ¹²	:	Nationally Critical
	Pimelea 'Turakina'	:	Nationally Critical
	Sebaea ovata	:	Nationally Critical
	Mazus novaezeelandiae		
	subsp. impolitus	:	Serious Decline
	Isolepis basilaris	:	Serious Decline
	Pimelea arenaria		
	"southern"	:	Serious Decline
	Selliera rotundifolia	:	Gradual Decline
	Libertia peregrinans	:	Gradual Decline

B Adventive

Ehrharta villosa: the only location in NZ for this South African grass; spreading from plantings by Ministry of Works (Plant Materials section) in (?) 1960s.

Helleborus foetida: the first NZ record as an adventive plant

Juncus subnodulosus: first North Island record, 30 January 1993.

Stachys palustris: (see footnote, p. 5)

Lotus tenuis: only a few recorded sites in NZ (*Flora of NZ Vol. 4*)

¹¹ de Lange, P. J.; Norton, D. A.; Heenan, P. B.; Courtney, S. P.; Molloy, B. P. J.; Ogle, C. C.; Rance, B. D.; Johnson, P. N.; Hitchmough, R. (2004): Threatened and uncommon plants of New Zealand. *NZ Journal of Botany* 42: 45-76

¹² As recorded by Druce. Needs refinding to check which of the 3 indigenous species it is, as defined by Walsh (2001) (See footnote #3).