

Disphyma australe, *Parapholis incurva*, *Sarcocornia quinqueflora*, *Senecio lautus*, *Spergularia tasmanica* (with pink flowers) and *Tetragonia implexicoma*.

We then preceded south, part-way along Sandy Bay on the west coast and then headed inland to intercept the loop track. As we climbed, bamboo sedge (*Gahnia lacera*) became a rather dense ground cover and slowed our progress. In a small opening over-topped by pohutukawa, Maureen spotted a small sterile pea, which Ewen later identified as white clover (*Trifolium repens*) – a reflection of when the island was more open. We eventually stumbled onto the track and proceeded through the forest back down to the bach. There was time for afternoon tea, and a bit more botanising, before departing on time from the east-facing beach, Clara's Cove, which was sheltered from the SW wind that had freshened during the day.

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Trip participants (26 Nov 2016): Jenny Andrew, Michelle Boulle, Ewen Cameron (leader), Janeen Collings, Frances Duff, Qing Hai Fan, Jacqui Geux, Shelley Heiss-Dunlop, Dongmei Li, Wendy John, Bill Kirby, Richard Mairs, Peter Moosberger, Mark Paterson, Dhahara Ranatunga, Josh Salter, Jenni Shanks, Sam Sutherland, Joe Tang, Liz Walker, Maureen Young and Zengqi Zhao. Sadly none of the owners were able to join us on the day.

Acknowledgments

I thank: the Neureuter family for supporting the Bot Soc visit to Otata Island; DoC for supplying boat transport, Steve Benham for helping with boat arrangements, and skipper Jason Coles and crewman Rob Boss for assisting us; and Jacqui Geux, Mark Paterson, Dhahara Ranatunga and Joshua Salter for images.

Botany of Maungauika / North Head, Devonport: End-of-year gathering, 17 December 2016

Mike Wilcox and Steve Benham

Introduction

North Head (Fig. 1) is a prominent volcanic scoria cone rising to 65 m a.s.l. overlying a tuff cone at the northern entrance to Waitemata Harbour (Hayward et al. 2011). It is one of Auckland's oldest volcanoes, erupting over 50,000 years ago. Tuff beds are well preserved and exposed on the southern side. Almost two thirds of the reserve is bordered by the coast where erosion of the tuff cone has formed a rocky shore and 10 m-high cliffs on the eastern seaboard. It is officially known as Maungauika/North Head, an 8.6 ha Historic Reserve (Department of Conservation 1999).

North Head has had a long history of pre-European occupation with a large urupa sited below a cliff over-hang. A fort was set up in 1885 to guard Auckland from invasions (which never came). World War II saw further military installations (Department of Conservation 2007). The Department of Conservation has used the old military buildings as its Auckland Area base since 1996. The Historic



Fig. 1. North Head. Photo: Jonathan Boow, 10 Feb 2005.

Reserve is one of the most popular recreation sites within the Auckland region for tourists and Aucklanders with an estimated 400,000 visitors annually.

Botanically, North Head's main claim to fame is being one of the known Auckland sites of *Lepidium flexicaule*, a native cress. It was collected from there by Thomas Kirk (T. Kirk 342, Waitemata, North

Head, no date, WELT SP030081), and named by him in 1881 (Kirk 1981), but has not been seen in Auckland for many years.

Our group

A perfect day attracted 39 people to the gathering at the 1885 Barracks Building on the summit, as follows: *Jenny Andrew and Peter Moosberger, Steve Benham, Duncan Benzie and Mei Nee Lee, Michelle Boule, Warren Brewer and Colleen Brewer, Jan Butcher, Bruce Calvert, Ewen Cameron and Cheryl Taylor, Barbara Clulow (visitor), Louise Cotterall, Brian Cumber, Geoff Davidson and Bev Davidson, Anne Dudley and Bryan Dudley, Frances Duff, Eva Glendenning (visitor, Auckland Botanic Gardens), Ben Goodwin, Sharen Graham, Peter Hutton, Alistair MacArthur, Philip Moll, Joshua Salter, Doug Shaw, Doug Sheppard, Vijay Soma, Claire Stevens, Val Tomlinson, Elizabeth Walker, Mike Wilcox, Maureen Young, Zhao Zeng and Li Dongmei* and Dongmei's parents. There was much comment about the breath-taking views of Auckland and the Hauraki Gulf.

An enjoyable pot-luck-lunch with BBQ chicken, ham and sausages started at 1.30 pm (special thanks to Vijay Soma for organising this), preceded by a guided tour with Steve Benham of the threatened plants garden (Fig. 2), and followed by a walk around the coastal track to check out the plant life.



Fig. 2. Visiting the Threatened Native Plants Display Garden with Steve Benham. Photo: Philip Moll, 17 Dec 2016.

Threatened Native Plants Display Garden

The concept behind this garden was to bring together for advocacy and education a range of regionally threatened plant species as well as lesser known and currently non-threatened species e.g. *Pittosporum kirkii*, *Pelargonium inodorum* from the broader Auckland region. Steve Benham (DOC Biodiversity Ranger – Flora) set this up two years after joining the Department of Conservation in 2007 before which he was involved with the establishment of the threatened native plants garden at the Auckland Botanic Gardens. The Garden is situated

on terraced land, previously covered in kikuyu grass (*Cenchrus clandestinus*), just to the west of historic building # 5, and covers 90 sq. m. A combination of extremely harsh site conditions and limited space has meant that only a small percentage of the current 110 regionally threatened taxa can be cultivated.

The species represented in the garden are (a) **monocots** – *Astelia* aff. *fragrans*, *Astelia grandis*, *Libertia ixioides*, *Libertia peregrinans* and *Paspalum orbiculare*; (b) **woody dicots** – *Carmichaelia williamsii*, *Clianthus puniceus*, *Coprosma propinqua* (host for *Ileostylus micranthus*), *Myrsine divaricata*, *Pimelea tomentosa*, *Pimelea urvilleana* subsp. *nesica*, *Pittosporum kirkii*, *Pomaderris hamiltonii*, *Pomaderris phyllicifolia*, *Pseudopanax ferox*, *Pseudowintera colorata*, *Scandia rosifolia*, *Streblus banksii*, *Veronica* “Hikurangi Swamp”, *Veronica obtusata*, *Veronica saxicola* and *Veronica bishopiana*; (c) **herbaceous dicots** – *Epilobium hirtigerum*, *Euphorbia glauca*, *Geranium retrorsum*, *Geranium solanderi*, *Lepidium oleraceum*, *Myosotis pansa* subsp. *pansa*, *Pelargonium inodorum*, *Picris burbridgeae*, *Senecio scaberulus*, *Sicyos mawhai*, *Sonchus kirkii*, *Tetragonia tetragonioides* and *Veronica jovellanoides*.

Considering their scarcity in the wild it was interesting to see some of these species regenerating profusely from seed with a preference for growing through cracks in the surrounding tarmac (e.g. *Epilobium hirtigerum*, *Picris burbridgeae* and *Sonchus kirkii*), and the rank growth of others (e.g. *Sicyos mawhai*). *Pomaderris hamiltonii* has also successfully naturalised but within the confines of the garden. All the plants were sourced from *ex-situ* cultivation collections *viz.* Auckland Botanic Gardens, Jeff McCauley and Geoff Davidson with the exception of *Ileostylus micranthus* which was sourced from the Miranda wild population.

Planted trees

The only planted exotic tree species of note here is an attractive grove of Bishop pine (*Pinus muricata*), but there are numerous planted native trees scattered about on the slopes of which pohutukawa (*Metrosideros excelsa*) is the commonest. There are also plantings of kohekohe (*Dysoxylum spectabile*), broadleaf (*Griselinia littoralis*), *Kunzea linearis* * (ex Northcote – type locality), hybrid kanuka (*Kunzea robusta* × *K. linearis*)*, wharangi (*Melicope ternata*), mahoe (*Melicytus ramiflorus*), and puriri (*Vitex lucens*). Plantings of *Pittosporum ralphii* have naturalised. In the past 10 years 1740 eco-sourced trees and shrubs have been grown and planted on Maungauika, of which 356 were pohutukawa.

North Head's wild vegetation

Highly modified would be an understatement to describe North Head's vegetation. Esler (1974)



Fig. 3. Pinwheel (*Aeonium haworthii*), a succulent native to the Canary Islands, is abundantly naturalised on the steep southern cliff faces of North Head. Photo: Mike Wilcox, 17 Dec 2016.

described North Head as “the richest reservoir of weeds in Metropolitan Auckland”. Since 2007 The Department of Conservation has invested \$30,000 in controlling a suite of environmental weeds some of which have the capability of reaching nearby Rangitoto e.g. *Elaeagnus* × *reflexa*, *Rhamnus alaternus*, *Ligustrum lucidum*, *Araujia hortorum*, *Phoenix canariensis* and *Arundo donax*. Many staff and volunteer hours have gone into controlling *Agapanthus praecox*, *Paraserianthes lophantha*, *Ligustrum lucidum* and *L. sinense*. There are nevertheless plenty of habitats and plants there. The dominant vegetation on the slopes is grassland, and the most abundant grasses in evidence during our visit were tall oat grass (*Arrhenatherum elatius*) and kikuyu grass.

Vertical coastal cliffs on the southern side support the most varied assemblage of plants, both native and naturalised. The combined effect of porous tuff beds, freshwater seepage and shade has enabled a strange but interesting vegetation to develop. Native species there are *Apium prostratum*, *Arthropodium cirratum*, *Astelia banksii*, *Ficinia nodosa*, *Isolepis cernua*, *Lachnagrostis billardierei*, *Lobelia anceps*, *Poa anceps* and *Pseudognaphalium luteo-album*, and in damp places just above the high-tide mark, the moss *Bryum clavatum*. Exotic species were in abundance, and included the succulents *Aeonium haworthii* (Fig. 3) and *Crassula multicava*; the shrubs Japanese spindle tree (*Euonymus japonicus*), boxthorn (*Lycium ferocissimum*), boobialla (*Myoporum insulare*), evergreen buckthorn (*Rhamnus alaternus*), *Tecomaria capensis*; the herbs *Cymbalaria muralis*, *Pericallis* × *hybrida* and *Sonchus oleraceus*; the grasses *Parapholis incurva*, *Parapholis strigosa*, *Polypogon monspeliensis* and *Polypogon viridis*; and smilax (*Asparagus asparagoides*). Ferns present were two exotic maidenhair ferns (*Adiantum capillus-veneris* and *Adiantum raddianum*) and the native maidenhair fern *Adiantum cunninghamii*. On the cliffs near Torpedo Wharf there are several naturalised trees of *Wigandia urens* var. *caracasana* (Fig. 4).



Fig. 4. *Wigandia urens* var. *caracasana* (Boraginaceae), a small tree from Central America, which is naturalised on North Head near Torpedo Wharf. Photo: Philip Moll, 17 Dec 2016.

Climbers & creepers

North Head has a good many climbers and creepers, most of them exotic weeds. The only native ones there are *Calystegia tuguriorum*, *Ipomoea cairica* and *Muehlenbeckia complexa*. Exotic ones of note are blue passionfruit (*Passiflora caerulea*), honeysuckle (*Lonicera japonica*), blue morning glory (*Ipomoea indica*), climbing jasmine (*Jasminum polyanthum*), elaeagnus (*Elaeagnus* × *reflexa*), Madeira vine (*Anredera cordifolia*), Cape ivy (*Delairea odorata*), moth plant (*Araujia hortorum*), periwinkle (*Vinca major*) and climbing dock (*Rumex sagittatus*). To complete the picture, there is a large patch of mile-a-minute (*Dipogon lignosus*) on the cliffs near Torpedo Wharf, and a rampant scrambling vetch prominent on the open slopes – *Vicia disperma*.

Acknowledgements

The Auckland Museum made available an unpublished plant species list “North Head, Devonport, 7 April 1971, A.E. Esler & S.J. Astridge, rewritten 24 June 1987” – part of the Esler archive donated to the Museum.

* In response to a lively discussion by ABS members on the identification of two kanuka specimens the co-author Steve Benham sent samples to Peter de Lange for a positive identification in February 2017. Peter de Lange replied: “The one you have identified as *K. ?linearis* is *K. linearis* – the linear pherophylls, spiciform racemes, barrel-shaped capsules with acute tipped, forward projecting calyx lobes are typical of that species, and, in fact ‘Sulphur Point’ is part of the Ahatawapa Settlement where Kirk described this species from as *Leptospermum ericoides* var. *linearis*. The second sample you labelled as *K. ?robusta* is a *K. linearis* × *K. robusta* – a very common hybrid from Sulphur Point west to Greenhithe. It’s hard for me to explain why it’s that hybrid – showing is better than telling. However, that hybrid is common on the cliff faces and foreshore of this part of Auckland (pure *K. linearis* is very uncommon) whilst inland you will find plenty of *K. robusta* and very little hybrid and *K. linearis*. I often wondered, but could not prove that *K. linearis* was introduced into Auckland by Maori by accident as firewood. It is really a plant of sandy soils, peat bogs, and podzols. North of the Waitemata you don’t see it again until you hit the sand country north of Pakiri and around Mangawhai”.

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Appendix: Plants of North Head (Maungauika), Devonport, Auckland

List compiled by Mike Wilcox and Steve Benham, with several additions by the ABS group on 17 Dec 2016, and inclusion of 43 additional species recorded by Esler & Astridge in April 1971, and three additional herbarium specimens. * = introduced; cult. = planted; TNPDG = threatened native plants display garden.

ALGAE

Blue-green algae (Cyanobacteria)

Entophysalis deusta

Lyngbya majuscula

Brown algae

Acinetospora crinita

Bachelotia antillarum

Carpophyllum maschalocarpum

Dictyota dichotoma

Dictyota kunthii

Ecklonia radiata

Ectocarpus siliculosus

Feldmannia mitchelliae

Halopteris paniculata

Hormosira banksii

Petalonia binghamiae

Scytothamnus australis

Splachnidium rugosum

Undaria pinnatifida *

Green algae

Acrocladus herpesticus

Blidingia minima

Chaetomorpha aerea

Chaetomorpha brachyгона

Chaetomorpha linum

Cladophora sp. B

Cladophora sp. G.

Codium convolutum

Codium fragile subsp. *fragile* *

Codium spongiosum

Microdictyon mutabile

Rhizoclonium riparium

Ulva clathrata

Ulva intestinalis

Ulva procera

Wittrockiella salina

Yellow-green algae

Vaucheria bursata

Red algae

Acrosorium ciliolatum

Aeodes nitidissima

Callithamnion sp.

Capreolia implexa

Chondracanthus chapmanii

Corallina officinalis

Gelidium hommersandii

Gracilaria truncata

Hymenena variolosa

Jania rosea

Laurencia thyrsoifera

Pterocladia capillacea

Stylonema alsidii

LICHENS

Dufourea ligulata

Xanthoparmelia scabrosa

LIVERWORTS

Chiloscyphus semiteres

Lunularia cruciata

MOSSES

Bryum clavatum

Funaria hygrometrica

FERNS

Adiantum capillus-veneris *

Adiantum cunninghamii

Adiantum hispidulum

Adiantum raddianum *

Asplenium oblongifolium

Cyathea medullaris (Esler & Astridge 1971)

Cyrtomium falcatum *

Doodia australis (*Blechnum parrisiae*)

Microsorium pustulatum

Nephrolepis cordifolia *

Parablechnum novae-zelandiae (*Blechnum novae-zelandiae*)
(Esler & Astridge 1971)

Polystichum neozelandicum

Pteridium esculentum

Pteris macilenta

Pteris saxatilis

Pteris tremula

Pyrrosia eleagnifolia

CONIFERS

Cupressus macrocarpa * (cult.)

Pinus muricata * (cult.)

MONOCOTS - Grasses

Agrostis stolonifera *
Aira caryophylla *
Anthoxanthum odoratum *
Arrhenatherum elatius *
Arundo donax *
Avena fatua *
Briza minor *
Bromus diandrus *
Bromus hordeaceus *
Bromus catharticus var. *catharticus* * (*Bromus willdenowii*)
Catopodium rigidum *
Cenchrus clandestinus *
Cenchrus macrourus *
Cortaderia selloana subsp. *jubata* * (Esler & Astridge 1971)
Cortaderia selloana subsp. *selloana* * (Esler & Astridge 1971)
Critesion murinum *
Cynodon dactylon * (Esler & Astridge 1971)
Dactylis glomerata *
Dichelachne crinita (Esler & Astridge 1971)
Digitaria sanguinalis *
Ehrharta erecta *
Eleusine indica * (Esler & Astridge 1971)
Holcus lanatus * (Esler & Astridge 1971)
Lachnagrostis billardierei
Lachnagrostis littoralis
Lagurus ovatus *
Lolium rigidum *
Lolium perenne *
Microlaena stipoides
Oplismenus hirtellus (Esler & Astridge 1971)
Parapholis incurva *
Parapholis strigosa *
Paspalum dilatatum *
Paspalum orbiculare (cult., TNPDG)
Piptatherum miliaceum (Esler & Astridge 1971,
as *Oryzopsis miliacea*)
Poa anceps
Poa annua *
Poa trivialis *
Polypogon monspeliensis *
Polypogon viridis *
Rytidosperma biannulare (Esler & Astridge 1971)
Rytidosperma racemosum *
Schedonorus arundinaceus * (Esler & Astridge 1971)
Sporobolus africanus *
Stenotaphrum secundatum *
Vulpia bromoides *

MONOCOTS - Sedges & rushes

Carex dissita *
Carex divulsa *
Carex flagellifera
Cyperus eragrostis *
Cyperus ustulatus
Ficinia nodosa
Isolepis cernua
Juncus australis (Esler & Astridge 1971)

Juncus bufonius var. *bufonius* *
Juncus pallidus (Esler & Astridge 1971)

OTHER MONOCOTS

Agapanthus praecox subsp. *orientalis* *
Alocasia brisbanensis *
Allium neapolitanum * (*Nothoscordum inodorum*)
Allium triquetrum *
Amaryllis belladonna *
Archontophoenix cunninghamiana *
Arthropodium cirratum
Asparagus aethiopicus *
Asparagus asparagoides *
Astelia banksii
Astelia aff. *fragrans* (cult., TNPDG)
Astelia grandis (cult., TNPDG)
Canna indica *
Chasmanthe bicolor *
Chlorophytum comosum *
Clivia miniata *
Cordyline australis (cult.)
Cordyline rubra *
Crocasmia ×crocosmiiflora * (Esler & Astridge 1971)
Gladiolus dalenii *
Iris foetidissima *
Kniphofia uvaria *
Libertia ixioides (cult., TNPDG)
Libertia peregrinans (cult., TNPDG)
Phoenix canariensis *
Phormium cookianum (cult.)
Phormium tenax
Rhopalostylis sapida (cult.)
Sparaxis bulbifera *
Tradescantia fluminensis *
Watsonia borbonica subsp. *ardernei* *
Zantedeschia aethiopica *

DICOTS - Trees, shrubs & climbers

Abutilon grandifolium *
Aeonium haworthii *
Anredera cordifolia *
Araujia hortorum *
Carmichaelia williamsii (cult., TNPDG)
Chamaecytisus palmensis *
Chrysanthemoides monilifera *
Clianthus puniceus (cult., TNPDG)
Coprosma grandifolia (Esler & Astridge 1971)
Coprosma macrocarpa
Coprosma propinqua (cult., TNPDG)
Coprosma repens (cult.)
Corynocarpus laevigatus
Cotoneaster glaucophyllus *
Crassula multicava *
Dipogon lignosus *
Dodonaea viscosa (cult.)
Dysoxylum spectabile (cult.)
Elaeagnus ×reflexa *
Entelea arborescens (cult.)

Euonymus japonicus *
Ficus carica *
Geniostoma ligustrifolium
Genista stenopetala *
Griselinia littoralis (cult.)
Hedera canariensis *
Hedera helix *
Hedycarya arborea
Hoheria populnea
Idesia polycarpa * (naturalised seedlings)
Ileostylus micranthus (cult., TNPDG)
Ipomoea cairica
Ipomoea indica *
Jasminum polyanthum *
Kunzea linearis (cult.)
Kunzea linearis × *K. robusta* (cult.)
Kunzea robusta (cult.)
Lantana camara *
Leucopogon fasciculatus (cult., TNPDG)
Ligustrum lucidum *
Ligustrum sinense *
Lonicera japonica *
Lycium barbarum * (AK 128676, K.M.Wood, 1971)
Lycium ferocissimum *
Melicope ternata (cult.)
Melicytus ramiflorus (natural and cult.)
Metrosideros excelsa (natural and cult.)
Metrosideros × *subtomentosa*
(a *M. excelsa* × *M. robusta* cultivar, cult.)
Muehlenbeckia complexa (cult.)
Myoporum insulare *
Myoporum laetum (cult.)
Myrsine australis (cult.)
Myrsine divaricata (cult., TNPDG)
Olea europaea subsp. *Europaea* * (cult.)
Olearia albida (cult.)
Olearia paniculata (cult.)
Paraserianthes lophantha *
Passiflora caerulea *
Pimelea tomentosa (cult., TNPDG)
Pimelea urvilleana subsp. *nesica* (cult., TNPDG)
Piper excelsum
Pittosporum crassifolium
Pittosporum eugenioides
Pittosporum kirkii (cult., TNPDG)
Pittosporum ralphii (cult. & naturalised)
Plagianthus divaricatus (cult.)
Polygala myrtifolia *
Pomaderris hamiltonii (cult., TNPDG)
Pomaderris phyllicifolia (cult., TNPDG)
Pseudopanax ferox (cult., TNPDG)
Pseudopanax lessonii
Pseudowintera colorata (cult.)
Rhamnus alaternus *
Scandia rosifolia (cult., TNPDG)
Senecio mikanioides *
Solanum aviculare (AK 7600, T.F.Cheeseman, no date)

Solanum mauritianum *
Sophora microphylla
Sophora tetraptera (cult.)
Streblus banksii (cult., TNPDG)
Tecomaria capensis *
Ulex europaeus * (Esler & Astridge 1971)
Veronica 'Hikurangi Swamp' (cult., TNPDG)
Veronica bishopiana (cult., TNPDG)
Veronica macrocarpa var. *macrocarpa* (cult.)
Veronica obtusata (cult., TNPDG)
Veronica saxicola (cult., TNPDG)
Vinca major *
Vitex lucens (cult.)
Wigandia urens var. *caracasana* *

DICOTS - Herbs

Acanthus mollis *
Amaranthus powellii * (Esler & Astridge 1971)
Anagallis arvensis *
Atriplex prostrata *
Bellis perennis *
Brassica oleracea *
Brassica rapa subsp. *sylvestris* (Esler & Astridge 1971)
Calystegia sepium
Calystegia soldanella
Calystegia tuguriorum
Carduus pycnocephalus *
Chenopodiastrum murale * (Esler & Astridge 1971)
Chenopodium album * (Esler & Astridge 1971)
Chenopodium trigonon (AK 218594, T.F.Cheeseman 1883)
Cirsium vulgare * (Esler & Astridge 1971)
Conium maculatum * (Esler & Astridge 1971)
Cotula coronopifolia *
Crassula mexicana *
Crassula sieberiana
Crepis capillaris * (Esler & Astridge 1971)
Cymbalaria muralis *
Dichondra repens (Esler & Astridge 1971)
Dysphania chenopodioides *
Disphyma australe (Esler & Astridge 1971)
Epilobium hirtigerum (cult., TNPDG)
Epilobium nummulariifolium
Erodium cicutarium *
Erigeron karvinskianus *
Erigeron sumatrensis *
Euphorbia amygdaloides *
Euphorbia glauca (cult., TNPDG)
Euphorbia lathyris *
Euphorbia peplus *
Foeniculum vulgare *
Fumaria muralis *
Galium aparine *
Galium divaricatum
Gamochaeta coarctata * (Esler & Astridge 1971,
as *Gnaphalium spicatum*)
Geranium gardneri
Geranium homeanum (Esler & Astridge 1971)
Geranium molle *

Geranium purpureum *
Geranium retrorsum (cult., TNPDG)
Geranium robertianum *
Geranium solanderi (Ann's Creek) (cult., TNPDG)
Haloragis erecta
Helminthotheca echioides *
Hypochaeris radicata * (Esler & Astridge 1971)
Lamium purpureum *
Lapsana communis *
Lathyrus tingitanus *
Lepidium didymum *
Lepidium oleraceum (cult., TNPDG)
Leucanthemum vulgare *
Linaria purpurea *
Lobelia anceps
Lotus angustissima *
Malva arborea * (*Malva dendromorpha*,
Lavatera arborea)
Malva parviflora *
Malva pseudolavatera * (*Lavatera cretica*, *Malva linnaei*)
Marrubium vulgare * (Esler & Astridge 1971)
Medicago arabica * (Esler & Astridge 1971)
Medicago lupulina *
Medicago nigra * (Esler & Astridge 1971,
as *Medicago polymorpha*)
Melanoselinum decipiens *
Melilotus indica *
Modiola caroliniana *
Myosotis pansa var. *pansa* (cult., TNPDG)
Orobanche minor *
Osteospermum fruticosum *
Oxalis articulata *
Oxalis corniculata * (Esler & Astridge 1971)
Oxalis exilis (Esler & Astridge 1971)
Oxalis incarnata *
Oxalis pes-caprae *
Pelargonium inodorum (cult., TNPDG)
Pericallis × hybrida *
Persicaria capitata *
Phytolacca octandra * (Esler & Astridge 1971)
Picris burbridgeae (cult., TNPDG)
Plantago lanceolata *
Plantago major * (A.E. Esler & Astridge 1971)
Polycarpon tetraphyllum *
Polygonum aviculare * (Esler & Astridge 1971)
Portulaca oleracea * (Esler & Astridge 1971)
Potentilla indica *
Pseudognaphalium luteoalbum

Raphanus raphanistrum *
Rapistrum rugosum *
Rumex crispus *
Rumex obtusifolius *
Rumex pulcher *
Rumex sagittatus *
Sagina procumbens *
Samolus repens
Sarcocornia quinqueflora
Sedum mexicanum *
Senecio lautus
Senecio scaberulus (cult., TNPDG)
Senecio skirrhodon * (Esler & Astridge 1971,
as *Senecio spathulatus*)
Senecio vulgaris *
Sherardia arvensis *
Sicyos mawhai (cult., TNPDG)
Silene gallica *
Sisymbrium officinale * (Esler & Astridge 1971)
Solanum nigrum *
Solanum tuberosum * (Esler & Astridge 1971)
Soliva anthemifolia *
Sonchus asper *
Sonchus kirkii (cult., TNPDG)
Sonchus oleraceus *
Spergularia media *
Symphotrichum subulatus * (Esler & Astridge 1971,
as *Aster subulata*)
Taraxacum officinale *
Tetragonia tetragonioides (TNPDG and wild)
Torilis arvensis *
Trifolium dubium *
Trifolium glomeratum *
Trifolium pratense *
Trifolium repens *
Trifolium subterraneum *
Tropaeolum majus *
Verbascum thapsus *
Verbena officinalis * (Esler & Astridge 1971)
Veronica arvensis *
Veronica jovellanoides (cult., TNPDG)
Veronica persica *
Vicia disperma *
Vicia sativa *
Vinca major *
Viola odorata *
Xanthium spinosum * (Esler & Astridge 1971)