

## A Preliminary Catalogue of New Zealand Plants Cultivated in Britain.

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For convenience of reference the plants are grouped in genera, in alphabetical order, and the species within each genus are also in this order. Attention is concentrated upon those plants which are grown in the open. A preliminary attempt has been made to make the list of such plants exhaustive, but the plants grown in houses are certainly not all included here. New things are constantly coming in and new arrivals may or may not succeed, so that no list of this kind can be quite certainly completely comprehensive. The references to all plants grown at Kew are given on the authority of the published hand-lists and some of these plants have not been actually seen by myself. A note of interrogation is added whenever I have had reason to doubt the accuracy of the determination, whether my own or that of others. I shall be greatly obliged to growers into whose hands this list may come for any information about plants which have been overlooked here. Address:

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The following abbreviations have been used:

Ald.	...	Aldenham House, Elstree, Herts: Hon. Vicary Gibbs.
Camla	....	Garden of F. W. Millard, Esq., East Grinstead, Sussex.
Edin.	....	Botanic Gardens, Edinburgh.
Gen.	.	Plant in general cultivation, seen in many gardens, parks, etc.
Guern.	..	Guernsey, Channel Islands, generally the Nursery Gardens of Mr. de Putron (formerly Smith's).
Hid.	.....	Garden of Hidcote Manor, Gloucestershire: Major L. Johnson.
(House)	....	denotes that the plant is grown under protection, but in some cases it is only temporarily in house or frame and may be hardy in the open.
Icomb.	.....	Garden of Icomb. Place, Gloucestershire: Capt. Simpson Hayward.
Ing.	....	Garden of Mr. Ingwerson, East Grinstead, Sussex.
Kew	...	Royal Botanic Gardens, Kew, near London.
Ludg.	.....	Garden of Ludgvan Rectory, near Penzance, Cornwall: Rev. A. T. Boscawen.
Nurs.	.....	implies that the plant is stocked by nurserymen (but not necessarily by all nurserymen).
S. & S. W.	....	implies that the plant is grown in the South and South-West of England and is not hardy elsewhere. Most of these can also be grown, and many are grown, in Western Scotland and in Ireland.
Tres.	.....	Gardens of Tresco Abbey, Isles of Scilly: Major Dorrien-Smith.
Truro	.....	Nursery Gardens of Messrs. Treseder and Co. Truro, Cornwall. (Given on the authority of their catalogue).

- Wake. .... Garden of Wakehurst Place, Ardingly, Sussex: G. W. C. Loder, Esq.  
 Wis. .... Gardens of the Royal Horticultural Society, Wisley, Surrey.

References to Robinson: "The English Flower Garden" are made.

A note on the climatic conditions is appended.

For the sake of clearness authorities have been put in brackets.

- Acaena saccaticupula* (Bitter.) Kew, Ing., Truro, Nurs., Edin., Icomb.  
 — *Buchanani* (Hook. f.) Kew, Ing., Edin., I. of Wight, Nurs., Ald.  
 — *fissistipula* (Bitter.) Edin.  
 — *glabra* (Buch.) Kew.  
 — *microphylla* (Hook. f.) Gen., Nurs.  
 — — var. *inermis* (T. Kirk) Gen., Nurs.  
 — *novae-zelandiae* (T. Kirk) Kew, Edin.  
 — *sanguisorbae* (Vahl.) Kew, Wis. Edin.  
 — — var. *pilosa* (T. Kirk) Ing., Edin., Ald.  
*Aciphylla Colensoi* (Hook. f.) Wake., Edin.  
 — *squarrosa* (Forst.) Kew, Edin. (house).  
*Adiantum aethiopicum* (Linn.) Ludg.  
*Agathis australis* (Salisb.) Kew (house), Tres.  
*Agropyrum scabrum* (Beauv.) Edin.  
*Alectryon excelsum* (Caertn.) Wake. (house).  
*Alseuosmia macrophylla* (A. Cunn.) Wake. (house).  
*Angelica rosaefolia* (Hook.) Edin. (house).  
*Anisotome pilifera* (Cockayne, R. M. Laing) Wake. (house).  
*Apium prostratum* (Labill.) Edin. (house).  
*Aristotelia fruticosa* (Hook. f.) Wake., Edin., Ald.  
 — *serrata* (W. R. B. Oliv.) (= *A. racemosa* Hook. f.), Kew (house) Wake., Ludg., Tres.  
*Arthropodium cirrhatum* (R. Br.) Wake., Tres.  
*Arundo conspicua* (Forst.) Kew, Truro, Nurs., Wake., Edin.  
*Astelia linearis* (Hook. f.) Edin (house).  
 — *Cockaynei*, Wake.  
 — *nervosa* (Banks & Soland.) Ludg., Tres.  
 — *Petriei* (Cockayne) Wake. (house)  
 — *trinervia* (T. Kirk) Edin.  
*Beilschmiedia Tawa* (Benth & Hook. f.) Wake. (house), Edin. (house) Tres.  
*Blechnum penna-marina* (Kuhn.) Camla.  
 — *fluviale* (Salom.) Ludg.  
*Brachycome Sinclairii* (Hook. f.) Edin. (house)  
*Brachyglottis Rangiora* (Buch.) Wake. (house) Tres.  
 — *repanda* (Forst.) Truro, Nurs., Dudg., Tres.  
*Carex Buchanani* (Berggr.) Kew, Edin., Ald.  
 — *comans* (Berggr.) Kew.  
 — *pseudo-cyperus* (Linn.) Kew.  
 — *secta* (Boott.) Icomb.  
 — *ternaria* (Forst.) Edin.  
*Carmichaelia australis* (R. Br.) Kew, Truro, Nurs., Guern. Ald. (house)

- Carmichaelia Enysii* (T. Kirk.) Kew, Camla., Wake., Edin., Ald.
- *flagelliformis* (Col.) Kew, Wake., Edin., Guern., Ald. (house).
- *grandiflora* (Hook. f.) Edin.?
- *odorata* (Col.) Kew.
- *Petriei* (T. Kirk.) Guern., Ald.
- *Williamsii* (T. Kirk.) Ludg., Tres., Guern.
- Carpodetus serratus* (Forst.) Wake. (house) Ludg., Tres., Hid.  
(house)
- Cassinia fulvida* (Hook. f.) Gen., Nurs.
- *leptophylla* (R. Br.) Kew, Truro, Nurs., Ald.
- *Vauvilliersii* (Hook. f.) Kew (house)
- Celmisia Armstrongii* (Petrie.) Camla. ?
- *coriacea* (Hook. f.) Kew, Wake., Edin., Ludg., Hid.
- *densiflora* (Hook. f.) Kew, Camla., Edin.
- *discolor* (Hook. f.) Kew.
- *hieracifolia* (Hook. f.) Kew.
- *holosericea* (Hook. f.) Kew, Edin., Ludg., Tres.
- *Hookeri* (Cockayne) Kew, Camla., Edin., Tres., Icomb.
- *incana* (Hook. f.) Kew.
- *Lindsayi* (Hook. f.) Kew, Edin., Hid.
- *longifolia* (Hook. f.) Kew, Wake., Edin., Hid.
- *Lyallii* (Hook. f.) Kew
- *Mackayi* (Raoul.) Camla., Tres.
- *major*, Edin.
- *Monroi* (Hook. f.) Kew, Camla., Tres.
- *novae-zelandiae* (Cheesem.) Edin. ?
- *petiolata* (Hook. f.) Camla., Kew, Edin.
- *Petriei* (Cheesem.) Kew
- *prorepens* (Petrie) Kew, Camla., Edin.
- *sessiliflora* (Hook. f.) Edin. (house).
- *Sinclairii* (?) (Hook. f.) Kew
- *spectabilis* (Hook. f.) Kew, Edin., Hid.
- *Traversii* (Hook. f.) Camla.
- *verbascifolia* = *C. Hookeri* (Cockayne ?) Kew, Edin., Tres.
- *viscosa* (Hook. f.) Edin.
- Chrysobactron Hookeri* (Col.) Kew, Edin.
- Chordospartium Stevensonii* (Cheesem.) Kew, Ludg.
- Claytonia australasica* (Hook. f.) Kew.
- Clematis afoliata* (Buch.) Kew.
- *Colensoi* (Hook. f.) Wake.
- *indivisa* (Willd.) Wake. (house) Ludg.
- Clianthus puniceus* (Banks & Soland.) Wake., Truro, Nurs., Ludg.,  
Guern. (and hybrids ?)
- var. *alba*, Truro, Nurs.
- Colobanthus acicularis* (Hook. f.) Kew.
- Convolvulus erubescens* (Sims.) Tres.
- Coprosma acerosa* (A. Cunn.) Kew, Camla., Guern.
- *Baueri* (Endl.) Wake. (house) Truro, Nurs., Tres.
- *Cunninghamii* (Hook. f.) Wake., Ludg., Tres.
- *grandifolia* (Hook. f.) Tres.
- *lucida* (Forst.) Tres. (and hybrid).
- *parviflora* (Hook. f.) Wake., Edin., Tres. (vars.)

- Coprosma Petriei* (Cheesem.) Kew, Ing., Wake., Edin., Guern., Ald.  
 — *ramulosa* (Petrie) Wake.  
 — *robusta* (Raoul.) Wake., Ludg., Tres.  
 — *rotundifolia* (A. Cunn.) Wake.  
 — *rugosa* (Cheesem.) Wake., Edin., Ald.  
 — *serrulata* (Hook. f.) Wake.  
*Corallospartium crassicaule* (Armst.) Edin. (house).  
*Cordyline australis* (Hook. f.) Gen. S. & S. W., Nurs., Wake. (cut: 1927-8) Edin. (not fig.) Tres. (and vars.)  
 — *Banksii* (Hook. f.) Tres., Truro, Nurs., Ludg. (vars.) Tres. (and hybrid) Guern.  
 — *indivisa* (Steud.) Wake. (house), Ludg., Guern.  
 — *pumilio* (Hook. f.) Edin (house).  
*Coriaria lurida*, Edin. (house) (= *C. Thymifolia*).  
 — *ruscifolia* (Linn.) Wake. (cut 1927-8) Edin. (house).  
 — *thymifolia* (Humb. & Boupl.) Wake., Edin. (house), Ludg.  
*Corokia buddleoides* (A. Cunn.) Ludg., Guern., Hid., Ald.  
 — *Cotoneaster* (Raoul.) Kew (house) Camla., Wis., Ing., Truro, Nurs., Ludg., Guern., Ald.  
 — *macrocarpa* (T. Kirk) Kew (house), Truro, Nurs., Ludg., Guern.  
 — *virgata* (Tarrill.) Kew (house), Wake., Ludg.  
*Corynocarpus laevigata* (Forst.) Tres., Truro, Nurs.  
*Cotula dioica* (Hook. f.) Kew, Edin., Icomb.  
 — *minor* (Hook. f.) Edin. ?  
 — *pyrethrifolia* (Hook. f.) Kew, Edin.  
 — *squalida* (Hook. f.) Kew, Wis., Truro, Nurs., Edin., S.W., Nurs., Icomb., Ald.  
*Craspedia uniflora* (Forst.) Kew, Edin. (house).  
*Cyathodes Colensoi* (Hook. f.) Wake. (house) Edin.  
*Cyathea medullaris* (Swartz.) Tres.  
 — *Cunninghamii* (Hook. f.) Tres.  
 — *dealbata* (Swartz.) Tres.  
*Dacrydium cupressinum* (Soland.) Kew (house); Wake. (house), Ludg.  
*Danthonia Cunninghamii* (Hook. f.) Tres., Icomb.  
*Deschampsia caespitosa* (Beauv.) Edin.  
*Dianella intermedia* (Endl.) Wake., Tres.  
*Dichelachne crinita* (Hook. f.) Edin.  
*Dicksonia fibrosa* (Col.) Gen., S.W., Nurs., Ludg., Tres.  
 — *squarrosa* (Swartz.) Gen., S.W., Nurs., Tres.  
*Discaria Toumatou* (Raoul.) Kew (house), Wis., Wake. (house), Ald.  
*Dodonaea viscosa* (Jacq.) Wake. (house), Ludg., Tres.  
*Donatia novae-zelandiae* (Hook. f.) Edin. (house).  
*Dracophyllum longifolium* (R. Br.) Wake. (house), Edin. (house), Ludg.  
 — *Traversii* (Hook. f.) Penzance.  
*Drimys colorata* (Raoul.) Wake., Ludg., Tres.  
*Dysoxylon spectabile*, Tres.  
*Ehrharta Thomsoni* (Blume.) Edin. (house)  
*Elaeocarpus dentatus* (Vahl.) Wake., Ludg., Tres.  
 — *Hookerianus* (Raoul.) Wake., Tres.

- Elatostema rugosum* (A. Cunn.) Edin. (house).  
*Enargea parviflora* (Skottaburg) Wake. (house).  
*Entelea arborescens* (R. Br.) Truro, Nurs., Tres.  
*Epilobium Billardierianum* (Ser.) Kew  
 — *chloraeifolium* (Haussk.) Camla., Wis., Ing., Edin. (house).  
 — — var. *Kaikourense* (Cockayne) Camla.? Wake. (house),  
 Edin.  
 — *crassum* (Hook. f.) Kew.  
 — *glabellum* (Forst.) Kew, Camla.  
 — *Hectori* (Kaussk.) Thuro, Nurs.  
 — *linnaeoides* (Hook. f.) Kew, Ing.  
 — *macropus* (Hook. f.) Kew, Ing.  
 — *melanocaulon* (Hook.) Edin.  
 — *nerteriodes* (A. Cunn.) Edin.  
 — *nummularifolium* (R. Cunn.) Kew.  
 — *pedunculare* (A. Cunn.) Kew, Wake., Icomb., Edin.  
 — *pictum* (Petrie) Edin.  
*Erechtites glabrescens* (T. Kirk) Edin.  
*Festuca rubra* (Linn.) Edin.  
*Fuchsia excorticata* (Linn. f.) Kew, Wake., Ludg., Guern.  
 — *procumbens* (Hook. f.) Truro, Nurs., Wake., Edin. (house),  
 Ludg., Icomb., Hid., Ald.  
*Gaultheria antipoda* (Forst.) Kew, Wake.  
 — *oppositifolia* (Hook. f.) Wake.  
 — *perplexa* (T. Kirk) Wake.  
 — *rupestris* (R. Br.) Wake.  
*Gentiana novae-zelandiae* (Cheesem.) (= *G. Grisebachii* Hook. f. var.)  
 Wake.  
*Geranium Traversii* (Hook. f.) Kew  
*Geum parviflorum* (Smith) Edin.  
*Gnaphalium Trinerve* (Forst.) Camla. Ing., Edin. (house)  
*Griselinia littoralis* (Raoul.) Gen., S. & S.W., Nurs., Wake., Tres.  
 (and hybrid ?) Ald.  
 — *lucida* (Forst.) Kew (house), Wake. (house), Ludg., Tres.,  
 Guern.  
*Gunnera arenaria* (Cheesem.) Edin. (house).  
 — *densiflora* (Hook. f.) Kew.  
 — *prorepens* (Hook. f.) Edin. (house), Kew.  
 — *monoica* (Raoul.) Kew.  
*Haloragis erecta* (Schindler) Wake., Edin. (house).  
*Hebe albicans* (Petrie) Kew, Wake., Edin., Ludg.? Guern., Hid.  
 — *Allanii* (Cockayne) Edin.? Name used, but plant not seen.  
 — *amplexicaulis* (Arnst.) Kew, Wis., Wake., Edin., Ald.  
 — *angustifolia* (H. Rich.) Gen., S. & S.W., Nurs., Icomb., Ald.,  
 Wake.  
 — *anomala* (Arnst.) Kew, Wake. ?  
 — *arborea* Kew, Edin., Tres. (= *H. parviflora* Vahl.)  
 — *Armstrongii* (Johns.) Kew, Camla., Wis., Ing., Edin., Ludg.,  
 Guern.  
 — *Astoni* (Petrie) Kew, Camla., Ing., Edin., Ludg.  
 — *Balfouriana* (Hook. f.) Kew, Edin., Ald.  
 — *Barkeri* (Cockayne) Wake. ?, Tres. ?, Ludg. ?

- Hebe Bidwillii* (Hook.) Kew, Camla., Ing., Truro, Nurs., Icomb.,  
 Hid., Ald.  
 — *Biggarii* (Cockayne) Kew, Wake.  
 — *Bollonsii* (Cockayne) Kew, Tres.  
 — *Buchanani* (Hook. f.) Kew, Camla., Ing., Edin., Ludg., Icomb.,  
 Ald.  
 — — var. *major* (Cheesem.) Ald.?  
 — *buxifolia* (Benth.) Gen., Nurs., many forms.  
 — *canescens* (T. Kirk) Kew, Camla., Edin., Icomb.  
 — *carnea* (Arnst.) Kew, Truro, Nurs., Ludg.  
 — *carnosula* (Hook. f.) Kew, Truro, Nurs., Edin.  
 — *cassinoides*, Kew, Camla., Wake., Ald.  
 — *catarractae* (Forst.) Kew, Camla., Wis., Ing., Wake., Edin.,  
 Guern., Hid., Ald. ?  
 — — var. *minor*, ? Kew, Camla.  
 — — var. *compacta*, ? Edin.  
 — — var. *congesta*, ? Kew, Edin.  
 — *Chathamica* (Buch.) Kew, Ing., Wake. (house) Edin.  
 — *Colensoi* (Hook. f.) Kew, Ing., Truro, Nurs., Edin., Ald.  
 — *cupressoides* (Hook. f.) Gen. Nurs.  
 — *Darwiniana* (Col.) Kew, Camla., Edin., Ald.  
 — *decumbens* (Arnst.) Kew, ? Truro, Nurs., Edin., Tres.  
 — *Dieffenbachii* (Benth.) Kew, Ludg., Tres.  
 — *diosmaefolia* (R. Cunn.) Kew (house), Edin., Ludg.  
 — — var. *trisejala* (T. Kirk) Kew (house).  
 — *Dorrien Smithii* (Cockayne) Kew, Tres, Guern.  
 — *elliptica* (Forst.) Kew, Wake., Edin., Tres.  
 — — var. *glauca*. ? Ludg.  
 — *epacridea* (Hook. f.) Kew, Wake., Edin.  
 — *Fairfieldii* (Hook. f.) (hybrid) Camla.  
 — *Gibbsii* (T. Kirk.) Kew, ? Ald. ? Name used, but plant not  
 seen  
 — *gigantea* (Cockayne) Kew, Truro, Nurs.  
 — *gracillima* (Cheesem.) Edin.  
 — *glaucophylla* Kew, Tres., Guern. (= *V. Darwiniana* Col)  
 — *Guthrieana*, Kew, Camla., Ald. (garden hybrid ?)  
 — *Haastii* (Hook. f.) Kew ? Name seen here and there, not the  
 plant  
 — *Hectori*, Gen.  
 — *Hillii* (Col.) Kew ?  
 — *Hulkeana* (Misell.) Kew (house) Camla., Wis., Truro, Nurs.,  
 Edin., Guern., Icomb.  
 — *Kirkii* (Arnst.) Kew, Ald.  
 — *laevis* (Benth.) Kew, Tres.  
 — *Lavaudiana* (Raoul.) Kew, Camla., Ing., Edin. (house)  
 — *leiophylla* (Cheesem.) Kew, Wake., Edin., Ald.  
 — *Lewisii* (Armst.) Kew, Ludg., Tres.  
 — *ligustrifolia* (A. Cunn.) Kew.  
 — *Lindsayi*, Kew, Truro, Nurs., Edin. (garden hybrid)  
 — *linifolia* (Hook. f.) Kew, Edin.  
 — *loganioides* (Arnst.) Kew, Camla., Wis., Ing., Wake., Edin.,  
 Guern., Ald.

- Hebe lycopodioides* (Hook. f.) Kew, Southsea, Nurs. ?  
 — *Lyallii* (Hook. f.) Kew, Wis., Ing., Tres., Guern., Icomb., Ald.  
 — *macrantha* (Hook. f.) Edin.  
 — *macrocarpa* (Vahl.) Kew (house), Truro, Nurs., Tres. and vars.  
 — *macrooura* (Hook. f.) Kew, Ing.  
 — *Matthewsii* (Cheesem.) Kew, Wis. ? Wake., Ald.  
 — *Menziesii* (Benth.) Ing., Edin.  
 — *monticola* (Armst.) Kew, Edin., Ald. (various forms).  
 — *obovata* (T. Kirk) Kew? Camla., Wis.? Edin.  
 — *Olsenii* (Col.) Kew.  
 — *parviflora* (Vahl.) Kew, Truro, Nurs.  
 — *pimeleoides* (Hook. f.) Kew, Camla., Wis., Ing., Ald.  
 — — var. *major* (?) Kew.  
 — — var. *minor* (Hook. f.) Kew, Edin.  
 — — var. *glauco-caerulea* (Cheesem.) Edin.  
 — *pinguifolia* (Hook. f.) Gen., Nurs. Many forms.  
 — *propinqua* (Cheesem.) Kew, Camla., Edin., Ald.  
 — *Rakaiensis* (J. B. Armst.) Kew, Edin.  
 — *rupicola* (Cheesem.) Kew, Camla., Edin.  
 — *salicifolia* (Forst.) Gen.  
 — — var. *gracilis* (T. Kirk) Kew (= *V. amabilis*).  
 — *salicornioides* (Hook. f.). Name seen, not the plant.  
 — *speciosa* (R. Cunn.) Kew.  
 — *subalpina* (Cockayne) Kew, Edin. ?  
 — *tetragona* (Hook.) Kew, Edin.  
 — *tetrasticha* (Hook. f.) Kew, Edin.  
 — *Traversii* (Hook. f.) Gen., Nurs.  
 — *Townsonii* (Cheesem.) Kew, Wake.  
 — *vernucosa* (Hook. f.) Kew, Wake., Edin., Guern., Icomb., Ald.  
 — — var. *Canterburiensis* Kew, Wake., Hid.  
 — *Willcoxii* (Petrie) Kew? Camla. ? Edin.  
*Helichrysum bellidioides* (Willd.) Gen.  
 — *dimorphum* (Cockayne) Edin.  
 — *glomeratum* (Benth. and Hook. f.) Kew (house).  
 — *microphyllum* (Benth. and Hook. f.) Edin.  
 — *Selago* (Benth. and Hook. f.) Camla., Ing., Wake., Hid., Ald.  
*Hoheria angustifolia* (Raoul.) Wake. (house).  
 — *glabrata* (Sprague & Summerhayes) (= *Gaya Lyallii* J. E. Baker) Kew, Nurs., Gen., Edin. (house), Ludg. (and vars.), Guern., Icomb., Hid., Ald.  
 — *Lyallii* (J. E. Baker) Wake., Ludg., Hid., Ald.  
 — *populnea* (A. Cunn.) Wake., Truro, Nurs., Edin. (house), Ludg., Hid.  
 — — var. *lanceolata* (Hook. f.) Truro, Nurs., Ludg., Tres.  
*Hydrocotyle americana* (Linn.) Wake.  
 — *moschata* (Forst.) Ing., Edin.  
*Hymenantha crassifolia* (Hook. f.) Kew, Wake., Edin., Guern., Ald. (cut 1928).  
 — *dentata*.  
 — — var. *angustifolia* (Benth.) Ald. (cut 1927-8).  
*Hypolepis millefolium* (Hook.) Edin. ?  
 — *tenuifolia* (Bernh.) Edin. ?

- Ixerba brexioides* (A. Cunn.) Edin. (house).  
*Jovellana repens* (Kranz.) Wake. (house), Edin. (house).  
 — *Sinclairii* (Kranz.) Wake. (house).  
*Juncus novae-zelandiae* (Hook. f.) Edin.  
*Knightsia excelsa* (R. Br.) Wake. (house), Ludg.  
*Laurelia novae-zelandiae* (A. Cunn.) Tres.  
*Lepidium obtusatum* (T. Kirk) Kew.  
 — *oleraceum* (Forst.) Kew.  
*Leptospermum Chapmanii* (A. Rich) Ludg.  
 — *ericoides* Wake., Tres., Ludg., Guern.  
 — *Nichollsii* Truro, Nurs., Ludg., Tres.  
 — *scoparium* (Forst.) Wake., Truro, Nurs., Ludg. (and hybrids),  
 Guern., Ald.  
*Leucopogon Fraseri* (A. Cunn.) Camla., Wake., Edin., Ludg., Ald.  
*Libertia grandiflora* (Sweet.) Kew, Wake.  
 — *ixioides* (Spring.) Kew, Camla., Truro, Nurs., Edin., Ludg.  
*Linum monogynum* (Forst.) Kew, Truro, Nurs. A var. *candidissimum* is mentioned by Robinson.  
*Lobelia linnaeoides* (Petrie) Camla., Edin. (house), Kew.  
*Macropiper excelsum* (Miq.) Edin. (house), Tres.  
*Mazus pumilio* (R. Br.) Kew.  
*Melicope ternata* (Forst.) Truro, Nurs. Tres.  
*Melicytus ramiflorus* (Forst.), Truro, Nurs., Ludg., Tres.  
 — *lanceolatus* (Hook. f.) Ludg.  
*Meryta Sinclairii* (Seem.) Tres.  
*Metrosideros diffusa* (Smith) Truro, Nurs., Ludg., Tres.  
 — *florida* (Smith) Wake.?  
 — *hypericifolia* (A. Cunn.) Wake., Edin. (house), Ludg.  
 — *lucida* (A. Rich.) Wake. (house), Ludg., Tres.  
 — *robusta* (A. Cunn.) Wake. (house), Ludg., Tres.  
 — *scandens* (Soland.) Tres.  
 — *tomentosa* (A. Rich.) Ludg. (cut 1927-8), Tres. (fig.).  
*Mimulus radicans?* Kew, Edin. = *M. repens?*  
 — *repens* (R. Br.) Kew, Camla., Ing., Icomb.  
*Muehlenbeckia australis* (Meissn.) Wis., Ald.  
 — *axillaris* (Walp.) Kew, Wake., Truro, Nurs., Edin., Hid., Ald.  
 — *complexa* (Meissn.) Gen., Nurs.  
 — *ephedrioides* (Hook. f.) Kew, Edin.  
*Myoporum laetum* (Forst.) Wake. (house), Truro, Nurs., Tres., Ald.  
*Myosotidium nobile* (Hook.). According to Robinson has been flowered  
 at St. Albans, at Hull, and in Cornwall.  
*Myosotis alba* (Cheesem.) Kew.  
 — *decora* (T. Kirk) Camla., Ing.  
 — *pygmaea* (Col.) Kew.  
 — *spathulata* (Forst.) Edin.  
 — *Traversii* (Hook. f.) Kew, Edin.  
*Myrtus bullata* (Soland.) Wake., Ludg., Tres., Hid. (house).  
 — *obcordata* (Hook. f.) Kew (house), Wake., Ludg., Guern.  
 — *pedunculata* (Hook. f.) Wake.  
 — *Ralphii* (Hook. f.) Kew (house), Ludg.  
*Nertera Balfouriana* (Cockayne). Name seen here and there; identity doubtful.



- Nertera depressa* (Banks and Soland.) Truro, Nurs., Camla., Edin. (house), W. Scotland (turf of lawns), Ludg.
- Nothofagus cliffortioides* (Oerst.) Wake., Ludg., Tres., Edin.
- *fusca* (Oerst.) Wake., Ludg., Tres., Edin.
- *Menziesii* (Oerst.) Wake., Edin., Ludg., Tres., Guern., Edin.
- *Solanderi* (Oerst.) Wake., Tres., Edin.
- Nothopanax arboreum* (Seem.) Wake., Edin. (house), Ludg., Tres.
- Notospartium Carmichaeliae* (Hook. f.) Kew, Wake., Guern.
- Olea montana* (Hook. f.) Edin. (house).
- Olearia albida* (Hook. f.) Kew (house).
- *angustifolia* (Hook. f.) Ludg., Tres., Guern.
- *arborescens* (Cockayne and R. M. Laing) Wake., Truro, Nurs., Edin. (house), Ludg., Tres., Guern., Hid., Ald.
- — var. *capillaris?* Tres.?
- *avicenniaefolia* (Hook. f.) Wake., Gen., S. & S.W., Nurs., Edin., Tres., Guern., Ald.
- *Chathamica* (T. Kirk.) Ludg., Guern.
- *Colensoi* (Hook. f.) Ludg., Tres.
- *coriacea* (T. Kirk) Edin.
- *cymbifolia* (Cheesem.) Camla., Ing., Wake., Ludg., Tres. Guern., Hid., Ald.
- *fragrantissima* (Petrie) Edin. (house).
- *furfuracea* (Hook. f.) Kew (house, Ludg., Tres. (two vars.), Guern., Ald.
- *Haastii* (Hook. f.) Gen., Nurs.
- *ilicifolia* (Hook. f.) Wake., Edin., Ludg., Tres., Guern.
- *lacunosa* (Hook. f.) Wake., Edin. (house), Ludg.
- *Lyallii* (Hook. f.) Ludg.
- *macrodonta* (Bak.) Gen., S. and S.W., Nurs., Kew (house), Wake., Guern. (vars. and hybrids).
- — var. *minor* Edin., Ludg., Tres., Ald. (= *Olearia nitida* var. *capillaris?*)
- *moschata* (Hook. f.) Ing., Edin., Ludg., Tres., Guern.
- *nummularifolia* (Hook. f.) Kew (house), Truro, Nurs., Ludg., Icomb.
- *odorata* (Petrie) Kew (house), Wake., Guern., Ald.
- *oleifolia* (T. Kirk) Wake., Ludg., Tres., Guern.
- *paniculata* (Cheesem.) Gen., Nurs. Various forms.
- *semidentata* (Decaisne) Wake., Truro, Nurs., Ludg., Guern.
- *Solanderi* (Hook. f.) Kew (house), Wake., Truro, Nurs., Ludg., Tres., Guern.
- *Traversii* (Hook. f.) Kew (house), Truro, Nurs., Ludg.
- *virgata* (Hook. f.) Wake., Edin., Tres., Guern., Hid.
- Orcomyrrhis andicola* (Endl.) Wake., Edin. (house).
- Ourisa caespitosa* (Hook. f.) Kew.
- *macrocarpa* (Hook. f.) Ing., Edin.
- *macrophylla* (Hook.) Kew, Edin. (house).
- Oxalis lactea* (Hook.) Camla.
- Pachystegia insignis* (Cheesem.) Wake., Gen., S. and S.W., Nurs., Edin. (house), Ludg., Tres., Guern.
- Paratrophis opaca* (Brittain and Rendle.) Tres.

- Parsonsia heterophylla* (A. Cunn.) Wake., Tres.  
 — *capsularis* (R. Br.) var. *rosea* (Cockayne) Tres.?  
*Pennantia corymbosa* (Forst.) Edin. (house).  
*Phyllachne clavigera* (F. Muell.) Edin. (house).  
 — *Colensoi* (Berggr.) Tres.  
*Phormium Colensoi* (Hook. f.) Wake., Tres. (and vars.)  
 — *tenax* (Forst.) Gen., S. and S.W., Nurs., Wis., Ald., etc., not  
 flowering. Edin. Several vars. stocked by nurserymen, S.  
 and S.W., Wake. (fig.).  
*Phyllocladus alpinus* (Hook. f.) Kew, Wake., Edin. (house), Ludg.  
 — *trichomanoides* (D. Don.) Kew, Wake., Edin. (house), Ludg.  
 (lost now).  
*Pimelea longifolia* (Banks and Soland.) Edin.  
 — *prostrata* (Wild.) Tres.  
 — *Urvilleana* (A. Rich.)? Edin.  
*Pittosporum Colensoi* (Hook. f.) Ludg., Tres., Guern.)  
 — *crassifolium* (A. Cunn.) Kew (house), Wake., Ludg., Tres.  
 (shelter belts), Guern.  
 — *Dallii* (Cheesem.) Wake., Ludg., Tres., Ald.  
 — *eugenioides* (A. Cunn.) Wake., Gen., S. and S.W., Tres., Ludg.  
 — *Fairchildii* (Cheesem.) Ludg., Guern.  
 — *Kirkii* (Hook. f.) Ludg.  
 — *patulum* (Hook. f.) Wake., Edin. (house) Ludg.  
 — *Ralphii* (T. Kirk.) Wake., Truro, Nurs., Ludg., Guern.  
 — *rigidum* (Hook. f.) Kew (house), Edin. (house).  
 — *tenuifolium* (Banks and Soland.) Gen., Nurs. (various forms).  
 — *Turneri* (Cheesem.) Ludg.  
*Plagianthus betulinus* (A. Cunn.) Kew (house), Truro, Nurs., Ludg.,  
 Tres., Icomb.  
 — *divaricatus* (Forst.) Kew (house).  
*Plantago Raoulii* (Decne.) Kew.  
 — *spathulata* (Hook. f.) Edin.  
*Poa Astoni* (Petrie) Wake.? Edin.?  
 — *caespitosa* (Forst.) Kew.  
 — *intermedia* Edin. (= *Poa Colensoi* Hook. f. var. *intermedia*).  
 — *Maniototo* (Petrie) Edin.  
*Podocarpus acutifolius* (T. Kirk) Kew (house), Tres.  
 — *dacrydioides* (A. Rich.) Kew (house), Edin. (house).  
 — *ferrugineus* (D. Don.) Kew (house).  
 — *nivalis* (Hook.) Kew (house).  
 — *spicatus* (R. Br.) Kew (house), Edin. (house).  
 — *Totara* (D. Don.) Kew (house) Truro, Nurs., Ludg., Tres.,  
 Guern., Ald.  
*Pomadereis elliptica* (Labill.) Truro, Nurs., Edin., Ludg.  
*Pratia arenaria* (Hook. f.) Edin. (?) (= *P. angulata* Hook. f. var.  
*arenaria* Hook. f.?).  
 — *angulata* (Hook. f.) Kew, Wake. (house), Edin. (turf of  
 lawns), Icomb., Ald.  
 — *macrodon* (Hook. f.) Kew.  
*Pseudopanax crassifolium* (C. Koch.) Wake., Ludg., Tres., Nurs.  
 — *ferox* (T. Kirk.) Ludg., Tres. (all stages), Guern., Icomb.  
 (house).

- Pseudopanax Lessonii* (C. Koch.) Ludg.  
*Ranunculus insignis* (Hook. f.) Wake. (house).  
 — *Lyallii* (Hook. f.) Kew, Camla (not fig.), Wake. (house, fig.),  
 Edin.  
 — *acaulis* Kew.  
*Raoulia australis* (Hook. f.) Gen., Nurs.  
 — — var. *apice nigra* (T. Kirk)? Kew, etc.  
 — *glabra* (Hook. f.) Kew, Camla., Wake., Edin.  
 — *subsericea* (Hook. f.) Kew, Camla., Ing., Wake., Edin.  
*Rhabdothamnus Solandri* (A. Cunn.) Wake. (house), Edin. (house),  
 Tres.  
*Rhopalostylis sapida* (Wendl. and Drude.) Tres.  
*Rubia australis* (Forst.) Kew.  
 — *cissoides* (A. Cunn.) Ald.  
 — — var. *pauperatus* (T. Kirk) Tres., Guern., Icomb.  
 — *parvus* (Buch.) Kew.  
*Rumex flexuosus* (Soland.) Kew, Ald.  
*Samolus repens* (Pers.). Has been grown in England according to  
 Robinson. Not seen.  
*Schizaea fistulosa* (Labill.) Edin. (house).  
*Scleranthus biflorus* (Hook. f.) Edin. Ing.  
*Selliera radicans* (Cav.) Kew (from Australia).  
*Senecio bellidioides* (Hook. f.) Edin.  
 — *Bidwillii* (Hook. f.) Wake. (house) Edin.  
 — *compactus* (T. Kirk) Gen.  
 — *elaeagnifolius* (Hook. f.) Kew, Tres. (and var.), Ald.  
 — — var. *Buchanani* (T. Kirk) Tres.  
 — *Greyii* (Hook. f.) Gen. Nurs.  
 — *Hectori* (Buch.) Wake., Ludg., Tres., Guern.  
 — *Huntii* (E. Muell.) Wake., Ludg., Tres.  
 — *Kirkii* (Hook. f.) Ludg.  
 — *laxifolius* (Buch.) Kew (house), Edin., Guern. Gardens in  
 Somerset, Southsea, Nurs.?  
 — *Monroi* (Hook. f.) Gen.  
 — *perdicoides* (Hook. f.) Truro, Nurs.  
 — *rotundifolius* (Hook. f.) Ing., Edin., Tres.  
 — *Southlandicus* (Cockayne) Edin.  
 — *Stewartiae* (Armst.) Edin.  
*Sideroxylon novo-zelandicum* (Hemsl.) Tres.  
*Solanum aviculare* (Forst.) Truro, Nurs., Tres.  
*Sophora tetraptera* (J. Mill.) Kew, Wake., S. and S.W., Gen., Nurs.,  
 Edin., Ludg.  
 — — var. *microphylla* (Hook. f.) Kew, Ludg.  
*Stipa arundinacea* (Benth.) Kew, Truro, Nurs.  
*Suttonia australis* (A. Rich.) Wake. (house), Ludg., Tres., Guern.  
 (= *Myrsine urvillei*).  
 — *divaricata* (Hook. f.) Tres.  
 — *nummularia* (Hook. f.) Kew, Wake. (house), Edin. (= *Myrsine*  
*n.*).  
 — *salicina* (Hook. f.) Wake. (house), Tres. (= *Myrsine S.*).  
*Tetrapathaea tetrandra* (Cheesem.) Edin. (house), Tres.  
*Uncinia compacta* (R. Br.) Edin.

*Veronica*, see *Hebe*.

*Vitex lucens* (T. Kirk) Tres.

*Vittadinia australis* (A. Rich.) Kew.

*Wahlenbergia albo-marginata* (Hook.) Kew, Camla., Ing.

— *gracilis* (A.D.C.) Kew.

— *vincaefolia* (Dene.) Kew.

*Weinmannia racemosa* (Linn. f.) Wake. (house).

— *silvicola* (Soland.) Tres.

### Note on Climatic Conditions.

*South Eastern Counties, neighbourhood of London.*

This includes Aldenham (Herts), Kew, Wisley (Surrey) and the gardens at Wakehurst, and East Grinstead (Sussex). Annual rainfall about 24 inches. Temperature down to 12° Fahr. may be expected. At Aldenham in January, 1895, a frost of 3° below zero killed all the New Zealand plants. In December, 1927, and early in 1928 the Sussex gardens experienced a temperature of 6° Fahr. Late spring frost is more hurtful than a much lower temperature in winter. For instance, at Aldenham in 1928, *Gaya Lyallii*, after weathering the frosts of 6° Fahr., was killed outright by one of 18° in May. Results are curiously uneven and puzzling. At Wakehurst in 1928 practically all the *Celmisias* out-of-doors were killed, while at East Grinstead, where the degree of cold was approximately the same, they came through successfully.

### Particular Cases.

*Aldenham.*—No *Nothofagus* is hardy here. *Hymenanthera dentata* var. *angustifolia* was cut in 1928, so also was *Hymenanthera crassifolia*. *Sophora tetraptera* is only hardy on a wall. *Leptospermum* in general is not hardy, but *L. scoparium* is so. *Carmichaelia australis* and *C. flagelliformis* are not hardy. *Phormium tenax* grows tall and strong but does not flower. *Discaria Toumatou* is only hardy on a wall. *Griselinia littoralis* is only just able to survive.

*Kew.*—No *Nothofagus* is hardy. Dr. Hill thinks that this is because the seeds tried have come from the warmer parts of New Zealand only, and those from colder quarters are to be tried. As elsewhere, some New Zealand plants are only hardy against a wall, such as *Clematis afoliata*.

*Wakehurst.*—In spite of the great cold *Clianthus puniceus*, *Myrtus bullata*, and *Arthropodium cirrhatum* (against the house) have wintered out-of-doors. It is found here in general that New Zealand plants thrive best where exposed to the wind. Several trees and shrubs were severely cut, but not killed, during the winter of 1927-8. Among these are *Hoheria populnea* (one was killed), *Sophora tetraptera*, *Nothopanax arboreum*, *Veronica elliptica*, *Cordylina australis*, and *Coriaria ruscifolia*. Plants which had done well till this date but succumbed to the exceptional cold were *Olearia semidentata*, *Senecio Hectori*, and the *Celmisias* generally. *Phormium*

*tenax* and *P. Cookianum* are hardy and flower well. Among the plants which cannot winter here are: *Weinmannia racemosa*, *Myoporum laetum*, *Alectryon excelsum*, *Dodonaea viscosa*, *Metrosideros lucida* and *M. robusta*. The *Leptosperma* are hardy, so also are *Gaultheria oppositifolia*, various species of *Nothofagus*, *Griselinia littoralis*, and *Clematis Colensoi*, while *Clematis indivisa* can only be grown indoors.

*South Western Districts and the Islands.*—The coastal counties from Cornwall to Hampshire enjoy a comparatively mild climate with a greater rainfall than the Eastern, so that most of the South Island plants are grown out-of-doors; many of them, such as *Cordylina australis* and *Phormium tenax* are great favourites. In Cornwall and the Isles of Scilly many North Island and even sub-tropical plants are grown.

*Ludgvan*, near Penzance, Cornwall.—This is typical of the Cornish climate and possibilities. Rainfall about 35 inches. Temperature down to 20° Fahr. has been experienced, but this is exceptional. In an average winter nothing like this is to be expected. Alpines do not thrive very well. The severe winter of 1927-8 cut *Metrosideros tomentosa* to the ground; it had lived long and flowered well. *Metrosideros* in general is quite hardy. *Aristotelia racemosa* also suffered in this frost but was not killed. Among the comparatively "soft" plants which flourish here will be noted: *Knightia excelsa*, *Dodonaea viscosa*, *Cordylina indivisa*, *Senecio Hectori*, and various treeferns.

*Tresco, Isles of Scilly.*—Rainfall about 34 inches. Frost very light and infrequent. The months of May, June and July are usually very dry, with an average of about 4 inches of rain only for three months. Alpines generally cannot stand this. The danger here is from the high winds, laden with salt spray, which penetrate everywhere as the islands are so small. The wonderful results have been achieved by the patient and skilful building up of great shelter plantations during a long period of time. Forest trees thrive best and practically all seed themselves freely.

Seedlings of *Metrosideros tomentosa* spring up everywhere. Those of the other species of *Metrosideros* and of *Corynocarpus laevigata* are practically weeds here also. The climate has been found too dry for *Dracophyllum* generally and two plants of *D. Traversii* were transferred to a garden near Penzance where they have done well. The Catalogue shows that all the most remarkable and handsome trees and shrubs of Northern New Zealand are acclimatised here, among them will especially be noted, besides those already mentioned: *Rhopalostylis sapida*, *Sideroxylon costatum*, *Meryta Sinclairii*, *Dysoxylon spectabile*, *Brachyglottis repanda*, and *Vitex lucens*.

*Guernsey.*—Rainfall about 35 inches. Frost in general not lower than 26° Fahr. but in 1927-8 a temperature of 16° was recorded. The island is open to east winds and these are often impregnated with salt. Most of the softer New Zealand plants are grown. Alpines do not seem so happy. Notable among the New Zealand plants grown in

de Putron's Nursery are: *Clianthus puniceus*, *Senecio Hectori*, *Olearia angustifolia*, and *Cordyline indivisa*.

Most of the plants mentioned in this section are also grown in the West of Scotland, and many in Ireland, where the conditions as regards rainfall and frost are very similar, but the Isles of Scilly are, of course, specially favoured.

*Edinburgh.*—Rainfall about 20 inches. Temperature of 16° Fahr. to be expected but as low as 10° Fahr. has been experienced. The rainfall is well distributed over the year, so that, though the total amount is small, drought is not to be feared, and *Ranunculus Lyallii*, which is rarely flowered in England, does excellently here. The chief enemy is the very piercing dry east wind which prevails during the spring, and this is found very deadly.

Conditions generally so closely resemble those of the East Coast of the South Island that most of the hardier New Zealand plants are successfully grown. Alpines do very well indeed, but some of them, notably *Carmichaelia Enysii*, *Myosotis Traversii*, *Poa Maniototo* and *Muehlenbeckia ephedrioides*, are a good deal modified in form in the general direction of increased laxity or leafiness, or both.

*Phormium tenax* is hardy and flowers well. *Cordyline australis*, however, will not flower out-of-doors, owing, it is thought, to the effect of the dry east winds of spring. *Nothofagus Menziesii* is hardy and so, probably, are the others. *Arundo conspicua* is grown, but apparently does not flower. All *Celmisias* and *Veronicas* thrive and flower well. *Sophora tetraptera* flowers well, but only against a wall.

#### Notes on the Winter of 1928-9.

This winter has been even more destructive to New Zealand plants in English gardens than that of 1927-8. Mr. G. W. C. Loder, of Wakehurst Place, Ardingly, Sussex, writes as follows: "Sad as were the effects of the winter of 1927-8, they were trifling as compared with the disasters we have suffered this year. It is safe to say that not since the winter of 1894-5 have gardens suffered so severely, and I am sorry to say that the New Zealand plants have suffered most. . . . The winter was not really a very severe one measured by either the length or intensity of frost—but the damage to vegetation was nevertheless very great, possibly owing to the prevalence of very bitter East wind, and (odd as it may appear) absence of snow. My belief is that there is something particularly pernicious in an East wind in N.W. Europe. . . . Broadly speaking, the *Leptospermums* suffered most; I doubt whether any will recover. Next to them the *Olearias* and *Senecios*; most of them are injured but I expect most of them will recover. The *Veronicas* have suffered, but not so severely as I should have expected. . . . To refer to individual plants—the large plant of *Olearia macrodonta* (which you mention in your paper) has been badly "scorched," and the leaves are falling off, but the plant is quite alive. *O. ilicifolia* seems more tender—also *O. nitida*—but both will survive. *Fuchsia excorticata*, badly cut, but will break low down. *Panax arborea*: several plants severely injured, but all will, I think, recover

though disfigured. . . The only *Nothofagus* to suffer at all severely is *N. Solanderi*. . . . *Podocarpus Totara* uninjured, also *Phylloctadus trichomanoides*. *Senecio Monroi* has come through best of the *Senecios*; *S. Greyii*, *S. laxifolius*, and *S. compactus* all look as if they had succumbed, but may break.

“Our severest frost here was 21 in the screen (i.e. 11 Fahr.). It went lower in the winter of 1916-17, but not so much damage was done that winter. Broadly speaking, it seems that New Zealand plants will stand about 10 degrees of frost in Sussex, but when it comes to 20 degrees we must expect losses, especially if accompanied by exceptionally cold East winds.”

Dr. A. H. Williams, whose garden is also in Sussex, near Horsa-sham, writes as follows: “We are just emerging from the most destructive winter that I remember. . . . I have lost I should think four-fifths of my New Zealand things. . . . At Tresco (Isles of Scilly) they have had no frost. . . . all looking very happy and well; but on the mainland in Cornwall and Devon I saw great *Cordylines* of considerable age quite ruined and cut to the ground.

“Of my *Veronicas*, *H. buxifolia*, *H. vernicosa*, *H. cupressoides*, *H. Allanii* have come through untouched; but all the others have been hit hard and the subtender ones like hybrids of *H. speciosa* that have survived hitherto were killed outright—even *H. Traversii* was badly hit. Of *Olearias*, *Colensoi*, *macrodonta*, *Solanderi*, *Forsteri*, and *arborescens* have been killed outright. *O. ilicifolia*, *semidentata*, and *moschata* had been killed in the previous winter, but *O. Haastii*, *aviccenniaefolia*, *oleifolia*, and *nummularifolia* were untouched. *Pittosporums*, *Colensoi*, *eugeniioides* and *tenuifolium* (and vars.) have been cut to the ground or killed outright, but *Buchanani* (?), *crassifolium*, *Ralphii* and *Dallii* have stood it fairly well and may recover. It is odd that *crassifolium* and *Dallii* should appear to be the hardiest of them. *Senecios*, *S. compactus* killed outright. Most of the plants of *Huntii* killed and *laxifolius* and *Monroi* badly hit. The *Carmichaelias*—all except *C. nana*—very badly hit or killed. All my *Manukas* and many of the *Cassinias* seem to be dead. . . . As to the cause of all this: In January we had about a fortnight of frost of about 20 degrees. As a rule our severe frosts end with a real thaw and rain. But when this frost broke we had no real thaw, but warm days with bright sunshine alternating with frost nearly every night of from 5 to 10 degrees and no rain. This sort of thing has continued from January to the end of April. . . . With this dry alternation of hot days and cold nights one by one the plants seem to have given out.”

The total number of plants included in this list is about 480 out of the total of 1571 (Cheeseman, 1925). The orders which are least well represented are *Gramineae*, *Filices*, *Orchidaceae* and *Cyperaceae*. Among the larger genera *Gentiana*, *Myosotis*, *Ranunculus*, *Aciphylla* and *Epilobium* are poorly represented.

Many of our plants, especially of the Northern species, are unsuitable for climatic reasons; others, such as the *Juncaceous* and *Cyperaceous* plants, are unattractive; others, such as the shingle plants and some of the alpine, are very hard to grow; and some have been neglected owing to their rarity here.