

Fig. 8 The main Paleozoic rock belts of Northwest Nelson. Inset shows distribution of lower Paleozoic rocks in the South Island. (From Cooper 1984)

(Mt Olympus, in Lead Hills area, has since been determined to be of Mesozoic age - R.A. Cooper, pers. comm.)

DISTRIBUTION OF WESTERN GRANITES

Areas surveyed:

- L - Lead Hills area
- M - Mackay Downs area
- U - Gunner Downs area
- D - Domatt-Centre area (S Gouland Ra., Mt Domatt, Centre Mountain)
- H - Herbert-Allen area (Herbert Ra., Mt Kendall, Scarlett Ra., Mt Zetland, W Allen Ra., Stormy Ridge)
- G - Glasgow area (Glasgow Ra.)

WESTERN GRANITES, NW NELSON

(431)

Fieldwork in the western granite mountains totalled 56 days, mostly between 1976 and 1992. The separate areas were visited at the dates indicated below.

Head Hills area (L)

3 days in April 1966

3 days in February 1976

2 days in February 1985

Mackay Downs area (M)

4 days in March 1992

Gunner Downs area (U)

3 days in November 1979

Domett-Centre area (D)

4 days in January 1977

Herbart-Allen area (H)

3 days in May 1980

7 days in January 1981

7 days in March 1983

1 day in January 1987

9 days in February 1987

7 days in February 1986

3 days in December 1986

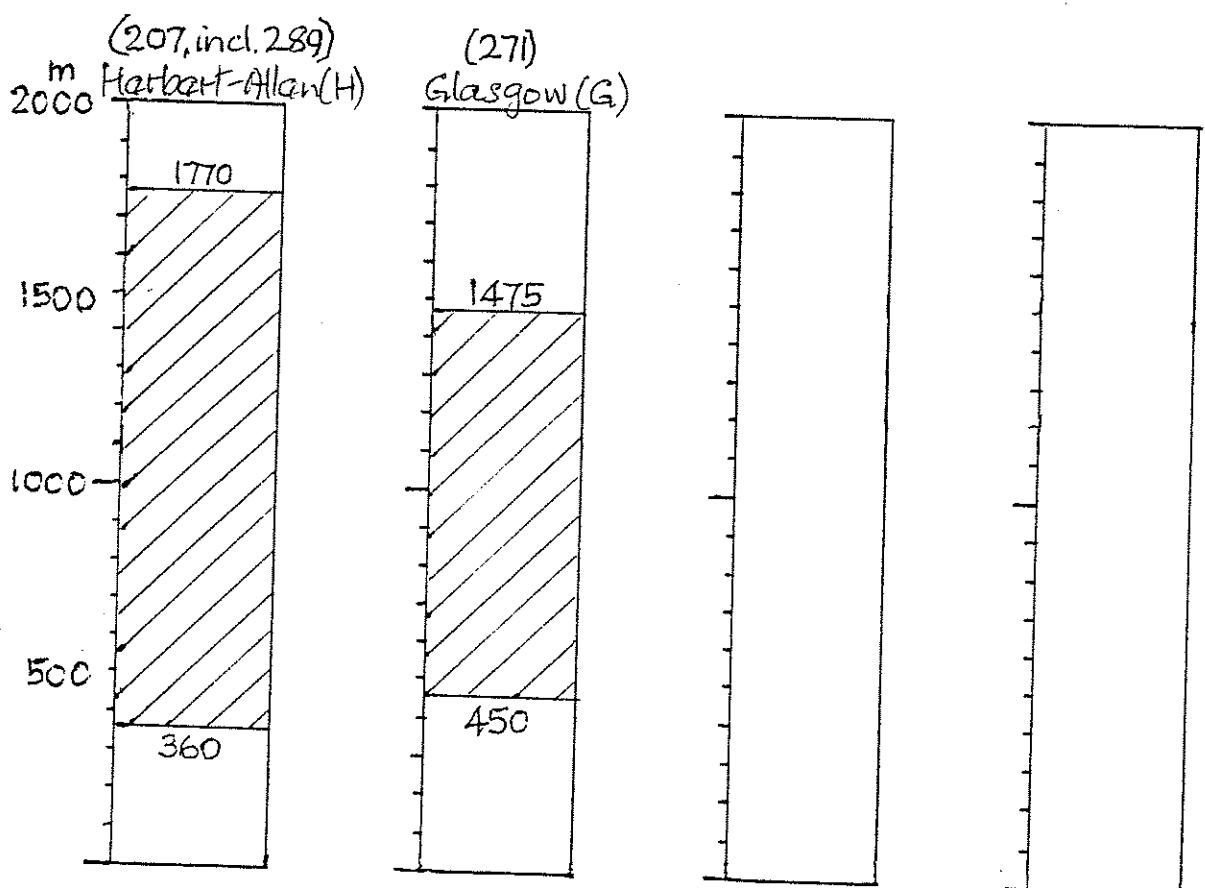
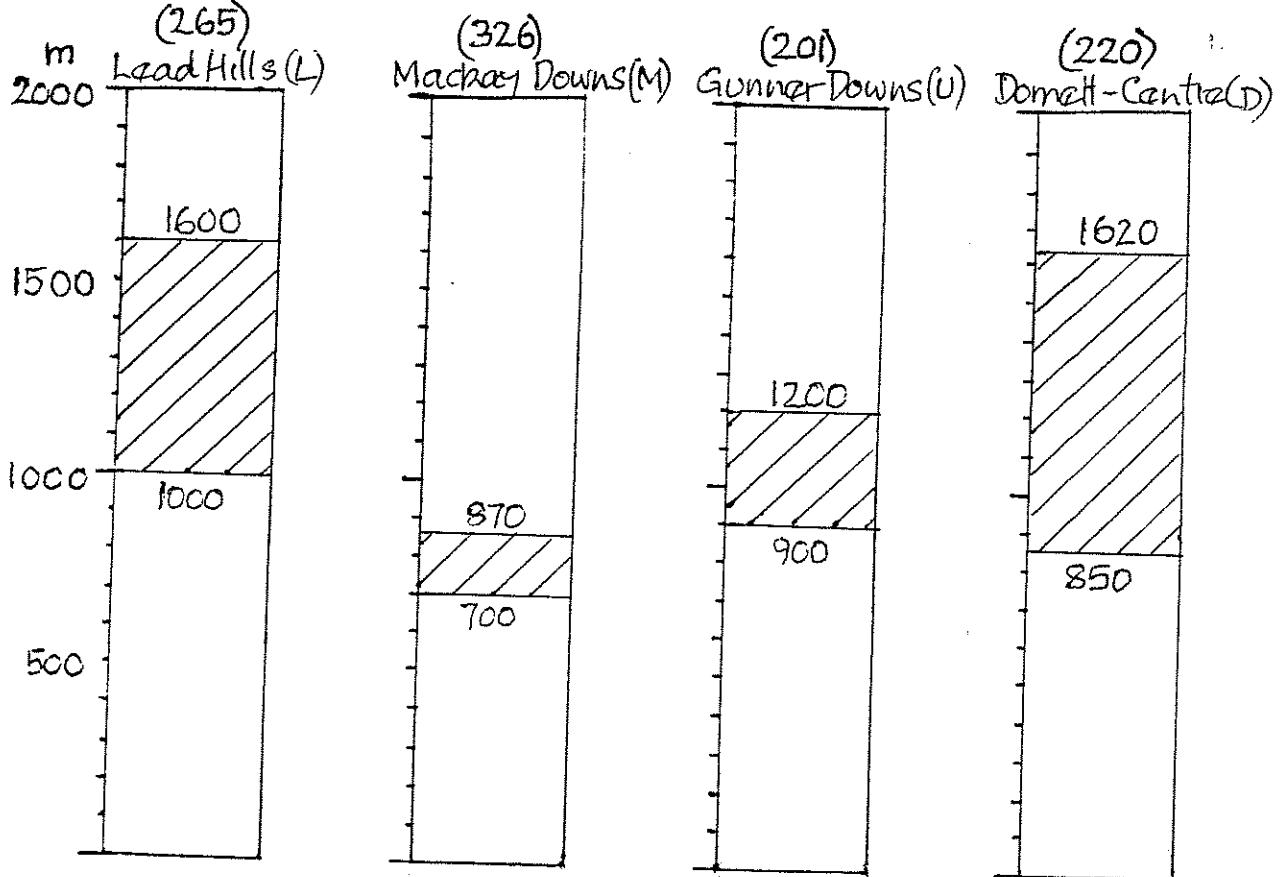
Glasgow area (G)

The following participated in the field work: John Bartlett, Elizabeth Brown, Kingsley Brown, Warren Burke, Helen Druce, Tony Druce, Allan Fife, Elsie Gibbons, Jack Hayward, Arnold Heine, Jan Heine, Roland Heine, Waveney Inch, Ruth Lincham, Les Molloy, Geoff Park, Geoff Rogers, Barbara Simpson, Neill Simpson, Barry Snaddon, Peter Williams, and members of Wellington Botanical Society.

GENERAL LOCATION AND GEOLOGY OF EACH AREA

(Grid refs on Infomap 262-9 are for the centre of each area, mountain, or range) (Geology from Cooper 1984)

Area - Location	Geology	Grid ref.
Lead Hills area (L)	Mesozoic granite	47 03
Mackay Downs area (M), WNW of Gouland Downs	Paleozoic granite	445038
Gunner Downs area (U), SE of mouth of Haaphy R.	Paleozoic granite	441020
Domatt-Centre area (D), head of Aotearo V., including:	Paleozoic granite	
Mt Domatt		452 016
Centre Mountain		456 015
S Gouland Ra.		458 028
Herbert-Allen area (H), E to SE of Karamea, including:	Paleozoic granite	
Herbert Ra.		455990
Scarlett Ra.		451984
Mt Kendall		460983
Mt Letland		450979
Western Allan Ra.		453977
Stormy Ridge		445990
Glasgow area (G), SE of Saddonville	Paleozoic granite	432955



ALTITUDINAL RANGE OVER WHICH PLANTS WERE RECORDED
IN EACH AREA

The numbers in brackets refer to lists of plants compiled for each area and filed at Landcare Research

INDIGENOUS PLANTS (573 SPECIES)

GYMNOSPERM TREES AND SHRUBS

Dacrydium cupressinum (H, G)

Halocarpus bidwillii (L, M) [Dacrydium bidwillii]

H. biformis (L, M, U, D, H, G) [Dacrydium biforme]

H. bidwillii X H. biformis (M)

Lagarostrobos colensoi (unc M) [Dacrydium colensci]

Lepidothamnus intermedius (L, unc M, D, unc G) [Dacrydium intermedium]

L. laxifolius (L, M, U, D, H, G) [Dacrydium laxifolium]

L. intermedius X L. laxifolius (L, M, unc H)

Libocedrus bidwillii (L, unc M, U, D, H, unc G)

Phyllocladus alpinus ss. / P. sp. (a) (L, M, U, D, H, G)

P. alpinus ss. (distribution uncertain)

P. sp. (a) (M, U, distribution elsewhere uncertain) (aff. P. alpinus; "lowland" ecotype of Wardle 1969) [P. alpinus in part]

Podocarpus acutifolius (D)

P. hallii (unc L; H; G)

P. nivalis (L, unc U, D, H, unc G)

P. hallii X P. nivalis (unc L, unc U)

Prumnopitys ferruginea (H, G) [Podocarpus ferrugineus]

MONOCOTYLEDONOUS TREES AND SHRUBS

Cordyline banksii (H)

C. indivisa (D, H, unc G)

DICOTYLEDONOUS TREES AND SHRUBS

Alsosmia pusilla (unc H)

Archontia traversii s.l. (incl. A. traversii var. australis) (L, M, U, D, H, G)

Aristotelia fruticosa var. (a) (L, D, unc H, unc G)

A. serrata (D, H)

Brachyglottis adam-sii (L, D) [Sonocia adamsii]

- B. bidwillii var. vitidis (L,D,H,G) [Senecio bidwillii var. vitidis]
B. hectorii (unc H) [Senecio hectorii]
B. rotundifolia var. (a) (incl. B. buchananii and B. cockaynei)
(L, unc M, U, D, H, G) [Senecio bennettii]
B. bidwillii X B. rotundifolia (unc D, unc H)
Carpodetus serratus (H, G)
Cassinia vauvillietii (L, unc M, U, D, unc H; unc G)
Coprosma cheesemanii s.s. (L, M, U, D, H, G)
C. ciliata ssp. ciliata (L, U, D, H, G)
C. colensoi s.s. (L, M, U, D, H, G) [C. colensoi and C. banksii]
C. crassula (L, U, D, H, G)
C. depressa (D, H, G)
C. foetidissima (unc L, M, U, D, H, G)
C. grandifolia (H, G) [C. australis]
C. lucida s.s. (H)
C. perpusilla ssp. perpusilla (U, D, H, G) [C. pumila in part]
C. propinqua ssp. propinqua (H, unc G)
C. pseudocuneata ssp. (a) (L, M, U, D, H, G) (Ivs narrower than
in ssp. pseudocuneata)
C. thamnoides s.l. (incl. C. polymorpha) (U, D, H, G)
C. rotundifolia (H)
C. rugosa ssp. rugosa (D, H)
C. scutulata (unc L, D, H, G)
C. sp. (a) (M, D, H) (described as C. parviflora var. dumosa by
Cheeseman 1906, non C. parviflora var. dumosa sensu
Allan 1961; lf undersurface not minutely hairy as is
usual in C. parviflora; drupes usually unpigmented,
occasionally purplish red) [C. parviflora in part]
C. sp. (b) (L, M, U, D, H, G) [C. parviflora var. dumosa sensu
Allan 1961]
C. sp. (c) (unc M) (aff. C. intertexta; prostrate or lianoid shrubs)
C. sp. (d) (L, D, H, G) (aff. C. pseudocuneata; low-growing shrubs
with small thick arcuate lvs) [C. pseudocuneata in part]

- C. sp.(e) (L, unc M, U, D, H) (aff. C. colensoi; low-growing shrubs
 with trailing branches) [C. colensoi in part]
- C. cheesemanii × C. ciliata (unc G)
- C. propinqua × C. robusta (unc H)
- Coriaria angustissima (D)
- C. arborea (H)
- C. plumosa (unc H)
- C. sarmientosa (D, unc H)
- Cyathodes dealbata (L, U, D, H, G) [C. pumila]
- C. sempervifolia (L, M, U, D, H, G)
- C. sp. (b) (L, M, H, G) (C. juniperina agg.; ls usually not less than
 1 cm x 1 mm, up to 1.5 cm x 2.5 mm)
- Dracophyllum longifolium var. (a) (incl. D. filifolium and D.
oliveri) (L, unc M, U, D, H, G)
- D. palustre (L, M, U, unc H)
- D. politum s.l. (incl. D. densum) (D, H, G)
- D. pubescens var. pubescens (L, U, D, H, G)
- D. townsonii (M, H)
- D. traversii s.l. (incl. D. pyramidalis) (L, M, U, D, H, G)
- D. uniflorum (L, U, D, H, G)
- D. sp. (a) (L) (aff. D. kitkii; low-growing shrubs; branches often
 rooting; lf blade up to 2 mm wide near sheath, slightly
 glaucous, very minutely scabrid; lf margins minutely
 serrulate; infl. of few-flowered racemes)
- D. longifolium × D. palustre (unc M)
- D. longifolium × D. uniflorum (unc U)
- D. politum × D. pubescens (unc G)
- Elaeocarpus hookerianus (unc M, unc U, D, H, G)
- Epacris alpina (L, M, unc U, D)
- Exocarpus bidwillii (L, M, D)
- Fuchsia excorticata (D, H, unc G)

Gaultheria antipoda (L, M, H)

G. crassa (L, D, H, G)

G. depressa s.s. (D, H, G)

G. macrostigma (M, U, unc H) [Pernettya macrostigma]

G. nubicola (H, unc G) [Pernettya nana in part]

G. rupestris s.l. (incl. G. subcorymbosa) (unc U, D, H)

G. sp. (a) (L, M, U, D, H, G) (described as G. depressa var. novaeseelandiae by Franklin 1962) [G. depressa in part]

G. antipoda × G. sp. (a) (unc M)

G. crassa × G. nubicola (unc H)

G. crassa × G. rupestris (unc D)

G. crassa × G. sp. (a) (unc H, G)

G. macrostigma × G. sp. (a) (unc M, unc U, unc H, unc G)

G. rupestris × G. sp. (a) (unc D)

Griselinia littoralis (L, M, unc U, D, H, G)

Hebe canterburiensis (L, U, D, H, G)

H. ciliolata (L, D, H, G)

H. cochayneana var. (a) (H, unc G)

H. gracillima (unc G)

H. haastii var. (a) (H) (aff. var. humilis; see Moore 1961, p. 940)

H. macrantha var. brachyphylla (D, H, unc G)

H. odora s.s. (U)

H. salicifolia var. salicifolia (D, H, unc G)

H. tetragona var. (a) (incl. H. coarctata) (L, D, H)

H. topiaria (L, unc U, D, H, G)

H. sp. (a) (incl. Leonohebe masoniae) (L, H, G) [H. pauciramosa var. masoniae]

H. sp. (b) (incl. Leonohebe mooreae) (L, M, U, D) [H. odora in part]

Helichrysum intermedium var. (a) (H) [H. selago var. intermedium in part]

Hohoria lyallii var.(d) (incl. H. glabrata) (D, H, unc G)

Leptospermum scoparium (L, M, unc U, D, unc H, G)

Leucopogon fasciculatus var.(a) (M, H, G) (juvenile lvs
not much broader than adult lvs) [Cyathodes
fasciculata]

L. fraseri ss. (unc U, D, H) [Cyathodes fraseri]

Melicytus lanceolatus s.l. (incl. M. lanceolatus var.
laticor) (unc H)

M. sp.(a) (unc H) (prostrate hermaphrodite shrubs;
branches up to 40cm long, often rooting; lvs
linear-oblong; fl white)

M. sp.(f) (L, unc U, D, H, G) (aff. M. alpinus; shrubs taller
than in M. alpinus, up to 2.4m; spiny shoots point in
all directions with average branch angle of c. 70°,
whereas in M. alpinus they tend to point in one
direction with an average branch angle of c. 50°;
lvs broader than in M. alpinus) [Hymenanthera alpina in part]

Metrosideros parkinsonii (G)

M. umbellata (L, M, U, D, H, G)

Myrsine divaricata s.s. (L, M, U, D, H, G)

M. nummularia (L, unc M, U, D, H, G)

M. salicina (H, G)

M. divaricata X M. salicina (unc H)

Neomyrtus pedunculata (unc M, D, H, G)

Nothofagus fusca (D, H, G)

N. menziesii (unc M, U, D, H, G)

N. solandri var. cliffortioides (L, M, U, H, D, G)

N. truncata (H, G)

N. fusca X N. solandri (unc H)

Olearia arborescens (D,H)

O. avicanniifolia (unc G)

O. colensoi var. colensoi (L,unc M,U,D,H,G)

O. ilicifolia var. (a) (D,unc H) (lvs broader than in var. ilicifolia:
laminæ up to 3cm wide compared with 1.7cm, and length/
breadth ratio 3.0-3.7 compared with 4.1-5.8)

O. lacunosa var. lacunosa (L,U,D,H,G)

O. nummulatii-folia var. (d) (L) (lvs oval, rather than suborbicular as in var. nummulatii-folia)

O. virgata var. implicata s.l. (incl. O. vitgata var. divaricata
and O. vitgata var. laxiflora) (unc M)

O. arborescens × O. ilicifolia (unc D)

O. arborescens × O. lacunosa (unc H)

O. capillaris × O. ilicifolia (unc D)

O. ilicifolia × O. lacunosa (unc D)

Pannantia corymbosa (H)

Pentachondra pumila (L,M,U,D,H,G)

Pteraxilla tetrapetala (unc L) [Elytranthe tetrapetala]

Pimelea gnidia var. gnidia (unc M)

P. longifolia (unc U,unc H)

P. oreophila (unc M,U,unc H,D) [P. pseudolyallii in part]

Pittosporum anomalum (L,M)

P. eugenioides (H)

P. rigidum var. (a) (incl. P. crassicaule) (L,M,U,D,H,G)

P. tenuifolium (H)

Pseudopanax anomalus (L,M,U,D,H,G) [Neopanax anomalum]

P. crassifolius (H)

P. linearis (L,M,U,D,H,G)

P. simplex s.l. (incl. P. simplex var. sinclairii) (unc L,M,U,D,H,G)
[Neopanax simplex]

P. sp. (a) (L,M,U,D,H,G) (described as P. colensoi var.

tetnatus by Wardle 1968) [Neopanax colensoi in part]

P. anomalus × P. simplex (unc H)

Pseudowintera colorata (U,D,H,G)

P. traversii (L,M,unc U)

Quintinia serrata s.l. (incl. Q. acutifolia and Q. elliptica)
(M,U,D,H,G)

Schefflera digitata (H)

Urtica ferox (unc H)

Wainmannia racemosa var. racemosa (unc L,M,U,D,H,G)

DICOTYLEDONOUS LIANES AND RELATED TRAILING PLANTS

Metrosideros diffusa (H)

M. fulgens (H,G)

Muehlenbeckia australis (D,H)

M. axillaris (D,unc H,unc G)

M. australis x M. axillaris (D)

Rubus cissoides var.(a) (D,H,G) ("form c" of Allan 1961; If its broader than in var. cissoides)

R. parvus (D,H)

R. schmidelioides var. schmidelioides (unc H)

PSILOPSIDS AND LYCOPODS

Tmesipteris tannensis (U,H,G)

Lycopodium australianum (L,unc M,unc U,D,H,G)

L. fastigiatum (L,M,U,D,H,G)

L. laterale s.l. (incl. L. ramulosum) (L,M,D)

L. scariosum (L,M,U,D,H,G)

L. variuum (L,unc M,U,D,H,G)

L. volubile (D,H,G)

FERNS

Asplenium bulbiferum (H)

A. flaccidum (unc M,U,H,G)

Asplenium hookerianum (unc H)

A. lyallii (unc H)

A. polyodon (H)

A. richardii (unc H)

A. terrestris ssp. terrestris (unc D)

A. bulbiferum X A. flaccidum (unc H)

Blechnum chambersii (H)

B. colensoi (H)

B. discolor (unc M, U, D, H, G)

B. fluviatile (unc M, U, D, H, G)

B. minus (H)

B. penna-martini (L, U, D, H, G)

B. procetum (L, M, U, D, H, G)

B. vulcanicum (H)

B. sp. (a) (unc M, unc U, H, G) (lowland sp.; lower pinnae reduced in length) [B. sp. 1]

B. sp. (b) (L, unc M, U, D, H, G) (mountain sp.; lower pinnae not reduced in length; "The Dunedin-Cass Variety" of Crookes 1963) [B. sp. 3]

B. procetum X B. sp. (a) (unc M)

B. procetum X B. sp. (b) (unc G)

Ctenopteris heterophylla (G)

Cyathea colensoi (unc M, D, H, G)

C. smithii (H)

Cystopteris tasmanica (unc H)

Dicksonia squarrosa (H, G)

Gleichenia dicarpa (L, M, G)

Grammitis billardiæ (L, M, U, D, H, G)

G. givenii (unc L, unc U, unc D, unc H, unc G)

G. magellanica ssp. nothofageti (L, unc M, U, D, H, G)

G. patagonica (unc H)

G. poeppigiana (L, unc M, unc U, D, H, G)

Histiopteris incisa (unc L, unc M, D, H, G)

Hymenophyllum armstrongii (M, U, D, H, G)

H. bivalve (H, G)

H. demissum (D, H, G)

H. dilatatum (H, G)

H. ferrugineum (H, G)

H. flabellatum (unc M, H, G)

H. lyallii (unc M, unc H, unc G)

H. malingii (unc M, U, unc H)

H. minimum (unc G)

H. multifidum (L, M, U, D, H, G)

H. peltatum (unc M, unc H, G)

H. pulcherrimum (H)

H. ratum (unc M, U, D, H)

H. revolutum (U, H, G)

H. rufescens (M, U, D, H, G)

H. scabrum (H)

H. villosum (L, M, U, D, H, G)

Hypolepis distans (unc G)

H. millefolium (D, H, G)

H. rufobarbata (D, H, unc G)

Leptolepia novae-zelandiae (H)

Leptopteris hymenophylloides (H)

L. superba (M, U, D, H, G)

Lindsaea trichomanoides (H)

Ophioglossum coticacum agg. (L, D, H)

Paesia scabrella (H, G)

Phymatosorus pustulatus (D, H) [P. diversifolius]

Polystichum cystostegia (D, H, unc G)

P. vestitum (L, unc M, unc U, D, M, H, G)

P. cystostegia X P. vestitum (unc H)

Pteridium esculentum (D, H, G)

Rumohra adiantiformis (H)

- Schizaea australis (L, unc M, unc D, unc H, unc G)
Sticherus cunninghamii (M)
Trichomanes elongatum (G)
T. endlicheriana (G)
T. reniforme (H, G)
T. strictum (unc H)
T. venosum (H)

MONOCOTYLEDONOUS HERBS

ORCHIDS

- Acianthus vitidis (unc H)
Adenochilus gracilis (D, unc H, unc G)
Aporostylis bifolia (L, M, U, D, H, G)
Caladenia lyallii (D, unc H)
Chiloglottis cornuta (U, H, G)
Corybas acuminatus (unc U, unc G) [Corybas rivularis]
C. macranthus (unc G)
C. trilobus s.s. (D, H, G)
Cystostylis oblonga agg. (G) [Acianthus reniformis]
Dendrobium cunninghamii (G)
Eatinia autumnalis (H, G)
E. mucronata s.s. (H, G)
Gastrodia cunninghamii (H)
Lyperanthus antarcticus (M, U, D, H, G)
Microlis unifolia (D, H, G)
Prasophyllum colensoi (L, M, U, D, H, G)
Pterostylis banksii (H)
P. itsoniana (unc D, H, unc G)
P. oliveti (unc H)
P. venosa (M, U, D, H, G)
P. sp. (c) (H) (aff. P. montana)
Thelymitra cyanea (unc L, M, unc U, D, G) [T. venosa]
T. formosa (unc M)

T. hatchii (D, H, unc G)

T. longifolia s.s. (D, H, unc G)

T. pulchella (unc G)

Townsonia deflexa (unc H) [Acaianthus vitidis]

GRASSES

Agrostis dyeri s.s. (L, U, H, G)

A. muelleriana (H) [A. subulata in part]

A. oresbia (unc D)

A. pallens (D)

A. personata (M, U, D, H, G) [A. parviflora]

A. sp. (b) (L, D, H, G) (aff. A. dyeri but panicle not contracted)
[A. dyeri in part]

Chionochloa australis (L, M, U, D, H, G) [Danthonia australis]

C. chaesemanii (D) [Danthonia raoulii var. chaesemanii]

C. conspicua ssp. conspicua (L, U, D, H, G) [Danthonia
cunninghamii]

C. oreophila (H) [Danthonia oreophila]

C. pallens ssp. pallens (L, D, H, G) [Danthonia raoulii in part]

C. rubra ssp. occulta (L, M, U, D, H, G) [Danthonia raoulii
in part]

C. sp. (a) (D, H, G) (C. flavesans auct. South Island, non

C. flavesans Zofev; If blade green on abaxial
surface, glaucous on adaxial surface, wide, strap-like,
without midrib, or with faint midrib on abaxial surface
only) [Danthonia raoulii var. flavesans in part]

C. australis X C. pallens (unc H, unc G)

C. australis X C. rubra (unc H)

C. conspicua X C. pallens (unc D)

C. conspicua X C. rubra (unc D, unc H)

C. oreophila X C. pallens (H)

C. pallens X C. rubra (D, unc H, G)

C. rubra X C. sp. (a) (unc D, unc H)

Cortaderia richardii (H)

Deschampsia novae-zelandiae (incl. D.chapmanii?) (D)

D.tenella (D, H, G)

Deyeuxia aucklandica (L, M, U, D, H, G) [D.setifolia]

D.avenoides s.l. (incl. D.avenoides var. brachyantha) (L, unc M, unc U)

Dichrolachne crinita (H)

Elymus nardusoides (H) [Asperella gracilis]

Festuca sp. @ (L, H) (slender, tufted green or glaucous green plants with setaceous lvs) [F.rubra in part]

E.sp.(b)(D)(aff. F.matthausii; plants tufted, but not tussock-forming)

Hierochloe cuprea (unc H) [H.fraseri in part]

H.novae-zelandiae (L, M, U, D, H, G) [H.fraseri in part]

H.curvata (D, unc H) [H.fraseri var. curvata]

H.tedolens (D, unc H)

Koeleria cheesemanii (H) [Trisetum cheesemanii]

Lachnagrostis lyallii s.l. (incl. L.filiformis

var. semiglabra) (L, D, H) [Deyeuxia forsteri var. semiglabra]

Microlaena avenacea (M, U, D, H, G)

M.colensoi ss. (L, U, D, H, G) [Ehrhartta colensoi]

M.thomsonii (M, unc U, H) [Ehrhartta thomsonii]

M.colensoi X M.thomsonii (unc H)

Poa breviglumis (D, H, G) [P.imbecilla var. breviglumis]

P.celsa (D, H, G) [P.kirkii in part]

P.cita ssp. cita (D, H) [P.caespitosa]

P.colensoi (L, unc M, U, D, H, G)

P.imbecilla (unc. H)

P.kirkii (D, H)

P.maia (M, D, H, G)

P.novae-zelandiae s.s. (D, H, G)

P. sp. (C) (H, unc G) (aff. P.novae-zelandiae; scree plants with narrow lvs) [P.novae-zelandiae in part]

Rytidosperma australe (D) [Triodia australis]

R.gracile (L,M,U,D,H,G) [Danthonia semiannularis in part]

R.nigricans (L,M,U,D,H,G) [Danthonia semiannularis var. nigricans]

R.setifolium [L,D,H,G] [Danthonia semiannularis var. setifolia]

R.vitide (unc D) [Danthonia semiannularis in part]

Trisetum youngii (D,H)

T. sp.(a) (D,H,unc G) (plants slender; lf sheath glabrous or nearly so; lf blade flat, up to 2.5 mm wide, margins smooth, usually with a few hairs near ligule) [T. antarcticum in part]

T. sp.(b) (unc H) (described as T.antarcticum ssp. tenellum by Pottier (1912) [T. antarcticum var. tenellum])

SEDGES

Carex acicularis s.l. (incl. C.allanii) (L,unc U,D,H,G)

C.cochyneiana (D,H,unc G)

C.comans (unc H)

C.coriacea (H)

C.dallii (M,D,unc G)

C.dipsacea var. dipsacea (H)

C.dissita s.s. (D,H,G)

C.echinata (L,M,D,H)

C.gaudichaudiana (L,M,U,unc G)

C.libera (L,U,H,G)

C.pyrenaica var. cephalotes (D,H,unc G)

C.secta s.s. (H)

C.sinclairii (D,H)

C.trachycarpa (D)

C.virgata (H)

C.wahatipu s.s. (D)

C. sp. (d) (U,D,H,G) (aff. C. cotiacea but lvs bright green, not becoming stiff and yellow-green in exposed sites; uticles similar to those of C. cotiacea, faintly to obscurely nerved; brack minute or absent) [C. geminata in part]

C. sp. (e) (unc M, U, unc G) (aff. C. dissita but plants much smaller)

Carpha alpina s.s. (L,M,U,D,H,G)

C. sp. (a) (M, unc G) (aff. C. alpina but taller and more slender, and with narrower, acute lvs; see Edgar 1970, p. 200) [C. alpina in part]

Eleocharis acuta (unc L, D, H)

Gahnia procera (L,M,U,D,H,G)

Isolepis aucklandica (unc M, U, D, H, G) [Scirpus aucklandicus]

I. caliginis (H, G) [Scirpus caliginis]

I. habra (D, H, G) [Scirpus habrus]

I. pottsii (H) [Scirpus pottsii]

I. subtilissima (unc M, D) [Scirpus subtilissimus]

Oreobolus impar (L, U, D, H, G)

O. pectinatus (unc M, L, U, D, H, G)

O. strictus (L, M, U, D, H, G)

Schoenus pauciflorus s.s. (L, U, D, H, G)

Uncinia astonii (U, H, G)

U. caespitosa (H)

U. clavata (D, H, G)

U. distans (H)

U. divaricata (D, H, G)

U. drucei (H)

U. egmontiana (H)

U. ferruginea (H)

U. filiformis (unc M, U, D, H, G)

U. fuscovaginata var. (a) (U, D, H, G) (plants glaucous)

U. gracilenta (H, G)

U. involuta (L, unc M, unc U, D, H, G)

U. longifructus (D, H, G)

U. nervosa s.s. (L, G)

U. rupestris s.l. (incl. U. angustifolia) (L, M, U, D, H, G)

U. uncinata (U, D, H, G)

U. viridis (D, H, G)

U. zotovii (L, H, G)

U. sp. (a) (M, U, unc H, G) (aff. U. nervosa but plants more slender; see Edgar 1970, p. 231) [U. nervosa in part]

U. sp. (b) (D, H) (U. affinis sensu Hamlin 1959, non U. riparia var. affinis Clarke; see Nootboom 1978)

RUSHES AND ALLIED PLANTS

Centrolepis ciliata (L, M, U, D, H, G)

C. pallida (unc G)

Empodisma minus (L, M, U, D, H, G) [Calothypus minor]

Gaimardia setacea (L, M, U, D, H, G)

Juncus antarcticus (L, U, D, H, G)

J. gregiflorus (H)

J. novae-zelandiae (L, unc M, U, D, H, G)

J. planifolius (unc M)

J. positilus (unc M, U, D, H, G)

Luzula colensoi (L, D, H, G)

L. migrata (L, unc U, D, H, G) [L. banksiana var. migrata]

L. picta ss. (D)

L. rufa ss. (unc L, H)

L. subclavata (D, H, unc G) [L. picta var. pallida]

L. sp. (a) (M, U, D, H, G) [L. picta var. limosa]

L. sp. (b) (H) [L. cernua var. petricana]

L. sp. (undetermined) (U) (plants rhizomatous, forming patches; infl at most only slightly taller than lvs; glumes straw-coloured with or without light brown keel)

L. colensoi X L. migrata (unc G)

Marsippospermum gracile (H)

MONOCOTYLEDONOUS HERBS OTHER THAN ORCHIDS, GRASSES,
SEDGES, RUSHES AND ALLIED PLANTS

Astelia fragrans (H)

A. graminea (L, M, D, H)

A. linearis s.l. (incl. A. linearis var. nova-zelandiae) (L, M, U, D, H, G)

A. nervosa s.s. (D, H)

A. nivicola s.s. (U, D, H, G)

A. petrii (D, H, G)

A. skottsbergii (L, U, D, H, G)

A. solandri (H)

A. subulata (unc M, unc D, H)

A. trinervia (H)

A. sp. (a) (M, U, H, G) [A. nivicola var. moticae]

A. sp. (b) (L, M, U, D, H, G) (aff. A. nervosa but lvs broader and
not conspicuously white adaxially) [A. nervosa in part]

Dianella nigra (G)

Herpolition nova-zelandiae (L, M, unc U, D, H, G)

Libertia peregrinans (D, H, unc G)

L. pulchella (M, U, D, H, G)

Luzuriaga parviflora (L, M, U, D, H, G)

Phormium cookianum (L, M, D, H, G)

Potamogeton cheesemanii (H)

P. suboblongus (D, H)

DICOTYLEDONOUS HERBS

COMPOSITES

Abrotanella caespitosa (L, M, U, D, H, G)

A. linearis s.s. (unc M, U, D, H, G)

A. pusilla (D, H, G)

Anaphalis Keriensis s.s. (H) [Gnaphalium keriense]

A. sp.(a) (L, M, U, D, H, G) [Helichrysum bellidoides s.s.]

- Brachyglottis sp. (a) (L, M, U, D, H, G) (included in B. bellidioides,
as var. crassa, by Nordenstam 1978) [Sencio bellidioides in part]
- Brachyscome radicata (D, H)
- Celmisia alpina s.s. (L, U, D, H, G)
- C. argentea (unc D, H, unc G)
- C. armstrongii (unc M, U, D, H, G)
- C. dallii (unc L, unc M, U, D, H, G)
- C. gibbsii (D, H, G)
- C. haastii ssp. haastii (D)
- C. hieracifolia ssp. hieracifolia (L)
- C. incana s.l. (incl. C. discolor) (L, U, D, H, G)
- C. laricifolia (L, U, D, H, G)
- C. lateralis s.l. (incl. C. lateralis var. villosa) (L, U, H, unc G)
- C. mentroi ssp. (b) (L, D, H, G) (described as C. coriacea var.
lancifolia by Cheeseman 1925)
- C. parva (L, M, U, D, H)
- C. petriei (L, D, H)
- C. sessiliflora (D, unc H, G)
- C. similis (L, M, U, H)
- C. sinclairii s.l. (incl. C. allanii and C. durietzii) (H)
- C. spectabilis ssp. spectabilis (L, D, H)
- C. traversii (D)
- C. sp. (a) (aff. C. gracilenta; plants tufted; lvs linear to linear-lanceolate, up to 45×1.2 cm) ssp. (a) (G) (upper surface
and margins of lf thinly covered in tomentum; lower
surface densely covered) [C. gracilenta in part]
- C. sp. (a) ssp. (b) (L, M, U, H) (lower surface glabrous except for
midrib)
- C. alpina X C. sp. (undetermined) (unc G)
- C. argentea X C. armstrongii (unc H)
- C. armstrongii X C. parva (unc U, unc H)

C. armstrongii × C. similis (unc U, unc H)

C. armstrongii × C. spectabilis (D)

C. similis × C. spectabilis (unc L)

Craspedia sp. (C) (D, H, G) (summer-green plants, in bogs and in moist herbfields and tussock lands; lvs green; lamina narrowing gradually to long petiole; both surfaces clad in long, multicellular non-glandular hairs, with or without cottony tips, overtopping short glandular hairs; margins faintly to distinctly white with cottony hairs; fls white)

C. sp. (d) (M, U) (small summer-green plants, usually in bogs; lvs green; lamina almost as broad as long, narrowing ± abruptly to slender petiole about as long as lamina; both surfaces clad in long multicellular non-glandular hairs, with or without cottony tips, overtopping short glandular hairs; margins not white, or very faintly so with a thin band of cottony hairs; fls white) -

C. sp. (cf. bb) (L) (summer-green plants in scarpages in tussock lands; lvs green; both surfaces clad in very short non-glandular hairs, or almost glabrous; margins without cottony hairs; fls white)

Dolichoglottis scorzoneroidea (D, H, G) [Senecio scorzoneroidea]

D. lyallii × D. scorzoneroidea (unc H)

Gnaphalium avulax (H, G) [G. collinum in part]

G. involucratum (unc G)

G. laterale (unc D, unc H, unc G) [G. paludosum in part]

G. limosum s.s. (D, H, G) [G. collinum in part]

G. mackayi s.s. (L, U, H) [G. traversii in part]

G. paludosum s.s. (U, D, H)

G. ruahinicum (H) [G. collinum in part]

G. sphaericum (unc G) [G. involucratum in part]

G. sp. (f) (H) (aff. G. limosum but lvs narrower, linear rather than narrow-oblong, oblanceolate or narrow-elliptic; see Webb 1988, p. 245) [G. collinum in part]

Helichrysum filicaule (H)

Lagenifera cuneata (D, unc H, unc G)

L. petiolata (unc H) [L. pumila var. multidentata]

L. pumila (D, H, unc G)

L. strangulata (D, H, G) [L. petiolata]

Leptinella pyrethrifolia agg. (D, H) [Cotula pyrethrifolia]

L. sp. (b) (L, M, U, D, H) (included in L. squalida, as ssp. mediana, by Lloyd and Webb, 1987) [Cotula squalida in part]

L. sp. (d) (H) (aff. L. squalida and L. sp. b but pinnae entire or almost so) [Cotula squalida in part]

Leucogenes grandiceps (D, H, unc G)

Microseris scapigera (L, D, H)

Pseudognaphalium sp. (a) (D, H) (aff. P. luteoalbum; lvs mostly linear-spathulate to linear, acute) [Gnaphalium luteoalbum in part]

Raoulia eximia s.l. (incl. R. tubra) (L, H, G)

R. glabra (unc M, D, H, unc G)

R. grandiflora var. grandiflora (L, unc M, U, D, H, G)

R. subulata (H)

R. tenuicaulis s.l. (incl. R. tenuicaulis var. dimorpha and R. tenuicaulis var. pusilla) (D, H)

Senecio minimus (H, G) [Erechtites minima var. heterophylla and E. minima var. angustata]

S. wairauensis (L, D, H, G) [Erechtites wairauensis]

DICOTYLEDONOUS HERBS OTHER THAN COMPOSITES

Acaena anserinifolia (D, H, G) [A. anserinifolia, A. pusilla, A. pusilla var. supraserrascens, and A. vitidior]

A. incurvata (H) [A. incurvata and A. microphylla var. robusta]
A. profunda (D, H, unc G) [A. anserinifolia var. seticinitans and A. anserinifolia var. paucidens]

Aciphylla anomala (H, G)

A. colensoi var. colensoi (unc U, D, H)

A. colensoi var. (a) (incl. A. indurata) (G)

A. hookeri (unc U, D, G)

A. polita var. (a) (L, D, H, G) (If segments coarser than in var. polita and stipules mostly simple; forms with particularly coarse segments, from Head Hills, Boulder L. and elsewhere in northern NW Nelson, are included here as they appear to grade into the usual form and are not separated ecologically; see Dawson and Le Comte, 1978)

A. anomala X A. colensoi var. colensoi (unc H)

A. colensoi var. colensoi X A. hookeri (unc D)

A. colensoi var. colensoi X A. polita (unc D, unc H)

A. colensoi var. (a) X A. hookeri (G)

Actinotis novaezelandiae (L, M, U, D, H, G) [Hemiphues suffocata var. novaezelandiae]

Anisotome aromatica (L, M, U, D, H, G) [A. aromatica vars. aromatica, flabellifolia, incisa, major, obtusa, and pinnatisecta]

A. deltoidea (L, unc U, D, H)

A. haastii (L, D, H, G)

A. pilifera (L, unc H)

A. sp. (a) (unc U, D, H, G) (aff. A. sp. b; plants rhizomatous but not usually forming dense mats; pinnae without hair-tip or with only a short one; infls up to 5cm, not hidden amongst the lvs)

A. sp. (b) (L, D, H, G) (described as A. imbricata var. prostrata by Dawson 1961) [A. imbricata in part]

A. haastii X A. sp. (undetermined) (unc H)

- Cardamine sp.(b) (D,H,G) (C. debilis agg.; "Long Style" of Pritchard 1957)
- C. sp.(c) (D) (C. debilis agg.; "Narrow Petal" of Pritchard 1957)
- C. sp.(d) (uncV,D,H,G) (C. debilis agg.; "Glossy leaf" of Pritchard 1957)
- C. sp.(e) (D,H) ("Tussock Race" of Pritchard 1957)
- C. sp.(f) (D,H) ("Scarce Race" of Pritchard 1957)
- Cheesemania latisiliqua s.l. (incl. C. gibbsii) (unc D,H)
- Chionochete pulvinaris (L,D) (Moore, 1961, p.872, records that "all collections seen from Lead Hill have hairs on the outer lf-surface only") [Pygmaea pulvinaris]
- Colobanthus affinis (U,D,H,uncG)
- C.apetalus s.l. (incl. C.apetalus var. alpinus) (L,uncM,H)
- C.canaliculatus s.s. (D,H)
- Coprosma talbrockiae (L,uncM)
- Donatia novae-zelandiae (L,M,U,D,H,G)
- Drosaria arcturi (L,M,U,D,H,G)
- D.binata (D)
- D.spathulata (L,M,U,D,H,G)
- D.stenopetala (L,uncM,U,D,H,G)
- Elatine gratioloides (unc G)
- Epilobium alsinoides s.s. (D,H) [E. alsinoides & E. thymifolium]
- E.brunnescens s.s. (D,H,G)
- E.chlorifolium (D,H)
- E.cochayneanum (uncM,U,D,H,G)
- E.glabellum s.s. (D,H)
- E.insulare (H)
- E.komarovianum (D,unc H)
- E.linnacoides (D,H)
- E.matthewsii (unc H)
- E.nervosoides (L,D,H)
- E.pernitans (L,uncM,U,D,H,G)
- E.pubens (H) [E. pubens and E. pubans var. strictum]
- E.tasmanicum (unc H)

E. sp. (a) (D, H, G) (included in E. brunnescens, as ssp. minutiflorum, by Raven and Engelhorn, 1971) [E. pedunculare var. minutiflorum]

Euphrasia chaesemanii (D, H)

E. dycti (D)

E. patrici (D, H)

E. revoluta (unc G)

E. townsonii ss. (L, M, U, D, H, G)

E. sp. (b) (unc H) (aff. E. townsonii; plants small, c. 2 cm tall, glabrous except for glandular-hairy calyx; lvs and calyx lobes acuminate)

E. sp. (c) (L, H) (aff. E. laingii) [E. laingii in part]

Forstera mackayi (L, unc M, U, D, H, G)

F. sedifolia s.s. (unc M, D, H, G)

F. tenella (unc M, U, D, H, G)

E. sp. (d) (L, unc G) (stems up to 35 cm long; lvs closely spaced, not recurved, persisting well down stem and becoming thin and translucent; costa not apparent)

Galium perpusillum s.s. (D, H)

Gentiana bellidifolia (D, H)

G. gracilifolia s.l. (incl. G. vetricosa) (L, D, H)

G. montana s.l. (incl. G. montana var. stolonifera, G. patula, and G. bellidifolia var. pulchella) (L, M, U, D, H)

G. spenceti (M, U, D, H, G)

G. townsonii (G)

G. sp. (a) (L, D, H) (aff. G. bellidifolia; plants perennial, forming small to large patches; stems decumbent; lvs very glossy, folded, tips deflexed; fls large, creamy white) [G. bellidifolia in part]

G. sp. (b) (G) (aff. G. montana; plants perennial, forming small to large clumps; stems tall, robust, often decumbent at base; basal lvs densely rosulate, in adult plants usually placed some distance up stem,

i.e. well above ground level; blade usually apiculate;
petiole shorter than blade; caudine lf pairs (2)-4-10; infls
umbelliform)

G. sp.(d) (H,G) (described as G. bellidiifolia var. australis by
Cheeseman 1925) [G. bellidiifolia in part]

Geranium sp.(c) (L,U,D,H,G) (aff. G. microphyllum) [G. micro-
phyllum in part]

G. leiospermum (H)

G. uniflorum (U,D,H,G)

G. sp.(a) (D,H) (G. parviflorum agg.; stock short; terminal lflt
about as long as broad; fls upto 13mm diam) [G. parviflorum in part]

G. sp.(b) (D,H) (G. parviflorum agg.; stock creeping and branch-
ing; terminal lflt slightly longer than broad; fls upto 8mm
diam) [G. parviflorum in part]

Gingidia montana (unc D) [Angelica montana]

Gonocarpus aggregatus (L,M,U,D,H,G) [Haloragis depressa]

G. micranthus ssp. micranthus (unc L,M) [Haloragis micrantha]

Guttiola nana (unc H)

Gunnera dentata var. dentata (D,unc H)

G. monoica (H,G) [G. albocarpa, G. monoica and G. stigosa]

Hydrocotyle dissecta (D)

H. heteromeria (H,unc G) [H. americana var. heteromeria]

H. microphylla (L,D,H,unc G)

H. moschata (H)

H. sulcata (D) [H. tripartita in part]

H. sp.(a) var. (a) (D,H) [H. novae-zeelandiae var. montana]

H. sp.(e) (unc U,H) (lvs (3)-4-(5) mm diam.)

Jovellana repens (H)

Kellertia dieffenbachii (unc M,U,D,H,G) [Drapetes dieffen-
bachii]

K. laxa (unc L,M,U,D,H,unc G) [Drapetes laxus]

K. multiflora (M,D,H,unc G) [Drapetes multiflorus]

K. tesselata (L) [Drapetes villosus in part]

- Lilacopsis ruthiana (D)
- Liparophyllum gunnii (L, M, unc U, D)
- Mentha cunninghamii (H)
- Mitrasacme novae-zelandiae (unc U, D, H, G)
- Montia fontana s.s. (L, U, D, H)
- Myosotis forsteri (D, H, unc G)
- M. lyallii s.l. (incl. M. lyallii var. townsonii and M. eddei) (unc D, H, unc G)
- M. sp. (b) (unc H) (M. australis agg.; fls small, white)
- M. sp. (c) (D) [M. pygmaea var. drueei]
- Myriophyllum pedunculatum ssp. novae-zelandiae (unc G)
- M. triphyllum (D, H) [M. clatinoides]
- Neopaxia sp. (b) var. (a) (L, D, H) (described as Claytonia calycina by Colenso 1896) [Claytonia australasica in part]
- Nertera balfouriana (unc M, U, D, H, G)
- N. ciliata (L, unc M, D, H, G)
- N. decressa s.l. (incl. N. cunninghamii) (D, H, G)
- N. scapanioides (L, unc G) [N. setulosa in part]
- N. sp. (a) (unc M, U, D, H, G) (aff. N. dichondrifolia but hairs present on both surfaces of lf, straight, not hooked) [N. dichondrifolia in part]
- Notothlaspi sp. (b) (H) (N. australe auct., non Thlaspi australe Hook. f.) [N. australe]
- Oreomyrtus colensoi s.s. (incl. O. colensoi var. hispida and O. colensoi var. multifida) (L, unc M, unc U, D, H, G)
- O. sp. (d) (H) (aff. O. ramosa) [O. ramosa in part]
- Oraostylidium subulatum (unc L, M, U, D, H, G)
- Oreisia caespitosa ssp. caespitosa (D, H)
- O. lactea ssp. lactea (D, H, G) [O. macrophylla var. lactea]
- O. macrophylla ssp. calycina (U, D, H)
- O. sessilifolia ssp. sessilifolia (H)
- O. simpsonii (L, U, D, H, G) [O. sessilifolia var. simpsonii]
- O. macrocarpa X O. simpsonii (unc U)

- Oxalis magellanaica (L, U, D, H, G) [O. lactea]
Parahedysia lyallii (D, H, unc G)
Phyllachne clavigera s.l. (incl. P. colensoi) (L, D, H, G)
Plantago lanigera / P. novae-zelandiae (L, U, D, H, G)
P. taoulii (D, H)
P. triandra s.s. (D, unc H)
P. uniflora (L, U, D, H, G)
P. sp.(b)(M) (aff. P. novae-zelandiae; plants small, up to 2.5 cm diam.; spike usually 2-flowered)
Pratia angulata agg. (L, unc M, U, D, H, G)
P. macrodon s.s. (H)
Psychrophila novae-zelandiae (unc M, unc U, D, H, G) [Caltha novae-zelandiae]
Ranunculus attus (D) [R. hirtus in part]
R. amphitrichus (H) [R. rivularis in part]
R. foliosus (D, H) [R. foliosus, R. insertus, and R. parrectus]
R. insignis (D, H, unc G) [R. insignis, R. lobulatus, and R. montoi]
R. membranifolius (D, H, G) [R. hirtus in part]
R. reflexus (D, H) [R. hirtus in part]
R. simulans (unc H) [R. depressus var. stewartii]
R. verticillatus (unc L, U, D, H) [R. clivalis]
Schizolema haastii s.s. (L, D, H, G)
S. nitens (U, H, unc G)
S. trifoliolatum (H)
S. sp.(a) (unc H) (described as S. haastii ssp. cyanopetalum by Domin 1908) [S. haastii var. cyanopetalum]
Stellaria decipiens s.l. (incl. S. parviflora) (D, H, G)
Urtica incisa (D, H, unc G)
Viola cunninghamii (L, M, D, H, G)
V. filicaulis (unc M, unc U, D, H, G)
V. lyallii (unc M, D, H)
Wahlenbergia albomarginata var. albomarginata s.l. (incl. W. brockiei and W. pygmaea var. laxa) (D, H)

No. of indigenous species listed for each area:

Lead Hills (L)	:	199
Mackay Downs (M)	:	181
Gunner Downs (U)	:	198
Domett-Centre (D)	:	355
Herbert-Allen (H)	:	486
Glasgow (G)	:	330

ADVENTIVE PLANTS (36 SPECIES)

MONOCOTYLEDONOUS HERBS

GRASSES

- Agrostis capillaris (H, unc G)
- Anthoxanthum odoratum (H)
- Dactylis glomerata (H)
- Festuca arundinacea (H)
- F. nigrescens (unc M, H)
- Glyceria declinata (H)
- Holcus lanatus (L, unc M)
- Poa annua (H)
- P. pratensis (H)
- Vulpia bromoides (H)

RUSHES

- Juncus articulatus (L, H)
- J. bulbosus (D)
- J. effusus (L, unc M, H)
- J. tenuis (H)

DICOTYLEDONOUS HERBS

COMPOSITES

- Cirsium palustre (H)
- C. vulgare (H)

- Hypochoeris radicata (L, H)
Mycelis muralis (H, uncG)
Senecio jacobaea (H)
Sonchus asper (H)
Taraxacum officinale s.l. (H)

DICOTYLEDONOUS HERBS OTHER THAN COMPOSITES

- Callitrichia stagnalis (H)
Carastium fontanum ssp. vulgare (L, H)
Digitalis purpurea (H)
Epilobium obscurum (L)
E. obscurum x E. hirtigeroides (uncL)
Galium palustre ssp. palustre (H)
Lotus pedunculatus (H)
Myosotis laxa ssp. caespitosa (H)
Plantago lanceolata (H)
Prunella vulgaris (H)
Ranunculus flammula (H)
R. repens (H)
Sagina procumbens (L, H)
Trifolium dubium (H)
T. repens (H)
Veronica serpyllifolia (H)

No. of adventive species listed for each area:

Lead Hills (L)	:	7
Mackay Downs (M)	:	3
Gunnat Downs (U)	:	(adventive spp. not listed)
Domatt-Centre (D)	:	(adventive spp. not listed)
Herbert-Allen (H)	:	33*
Glasgow (G)	:	2

* Most of these occurred only at low altitudes; only two were recorded from above tree line

RECORDS NOT ACCEPTED

- Brachyglottis bidwillii × Olearia arborescens (?) (Cockayne 1928, p. 316, as Senecio bidwillii × Olearia arborescens ?)
Hebe carnosula (Townson 1907, as Veronica carnosula)
H. odora (Cockayne 1928, p. 316, H. buxifolia)
H. odora × H. macrantha (Cockayne 1928, p. 316, as H. boxifolia × H. macrantha)
H. odora × H. vernicosa (Cockayne 1928, p. 316, as H. boxifolia × H. vernicosa)
H. vernicosa (Cockayne 1928, p. 316)
Melicrytus alpinus (Williams 1991)
Aciphylla crenulata (Mason 1949)
A. divisa (Williams 1991)
Euphrasia cockayneana (Wardle and Buxton, 1985)
Geranium microphyllum (Williams 1991)
Nototrichaspi australis (Williams 1991)
Oreomyrrhis ramosa (Williams 1991)
Outisia glandulosa (Mason 1949)
O. macrophylla (Cockayne 1928, p. 316)

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CONCORDANCE BETWEEN NAMES USED BY WILLIAMS (1991)
AND NAMES USED BY THE PRESENT AUTHOR

<u>Brachyglottis buchananic</u>	<u>Brachyglottis rotundifolia</u> var.(a)
<u>Cassinia leptophylla</u> var. "vauv-illiersii"	<u>Cassinia vauvilliersii</u>
<u>Coprosma taxon 1</u>	<u>Coprosma</u> sp.(d)
<u>Gaultheria depressa</u> var. <u>novae-zelandiae</u>	<u>Gaultheria</u> sp.(a)
<u>Hebe paucitamosa</u> var. <u>masoniae</u>	<u>Hebe</u> sp.(a)
<u>Leucohebe mooreae</u>	<u>H.</u> sp.(b)
<u>Melicytus alpinus</u>	<u>Melicytus</u> sp.(f)
<u>Pennatula alpina</u>	<u>Gaultheria hubicola</u>
<u>Blechnum taxon 1</u>	<u>Blechnum</u> sp.(b)
<u>Agrostis taxon 1</u>	<u>Agrostis</u> sp.(b)
<u>Chionochloa flavescens</u> ssp. <u>luteola</u>	<u>Chionochloa</u> sp.(a)
<u>Poa</u> sp. (<u>P. novae-zelandiae</u> and/or <u>P. subvestita</u>)	<u>Poa</u> <u>novae-zelandiae</u>
<u>Trisetum antarcticum</u> var. <u>tanellum</u>	<u>Trisetum</u> sp.(b)
<u>T. taxon 1</u>	<u>T.</u> sp.(a)
<u>Luzula picta</u> var. <u>limosa</u>	<u>Luzula</u> sp.(a)
<u>Astelia nivicola</u> var. <u>meticeae</u>	<u>Astelia</u> sp.(a)
<u>A. taxon 1</u>	<u>A.</u> sp.(b)
<u>Brachyglottis bellidioides</u> var. <u>crassa</u>	<u>Brachyglottis</u> sp.(a)
<u>Craspedia taxon 1</u>	<u>Craspedia</u> sp.(c)
<u>Helichrysum bellidioides</u>	<u>Anaphalis</u> sp.(a)
<u>Leptinella squalida</u> ssp. <u>mediana</u>	<u>Leptinella</u> sp.(b)
<u>Aciphylla divisa</u>	<u>Aciphylla</u> <u>polita</u> var.(a)
<u>Anisotome imbricata</u> var. <u>prostrata</u>	<u>Anisotome</u> sp.(b)

not on
page 70
version

Nardia sp. (a)

Notothlaspi sp. (b) (CHR 222855)

Oreomyrrhis sp. (d)

Plantago sp. (b) (CHR

*vouchet not from western granite areas, but from
elsewhere in NW Nelson mountains

Carex sp. (e) (CHR 387169, 395774)

Carpha sp. (a) (CHR 395749)

Uncinia fuscovaginata var. (a) (CHR 395969)

U. sp. (a) (CHR 395829)

U. sp. (b)

Luzula sp. (undetermined) (CHR 363505, 365660)

Astelia sp. (b) (CHR 170914-7, 170921, 283035)

Celmisia sp. (a) ssp. (a) (CHR 395776)

C. sp. (a) ssp. (b) (CHR 227772, 310526, 387132, 387172, 395941)

Craspedia

✓
dine w/
1

Gnaphalium sp. (f) (CHR 395957)

Leptinella sp. (d) (CHR 395944)

✗ (A. divisa) (CHR 396025-6) ✓ = Apothecium ✓ X - + - -)
(A. hookeri) (CHR 222985, 310452, 395746) - + X X X X

(A. polita) var. (a) (similar to (A. dissecta) but pinnules, narrow, usually less than 1 mm wide, divergent, not contiguous to one another) (CHR 58129, 226311, 278309, 310444, 311618, 311626, 363441, 363443, 363475, 387148, 389946, 389973, 395971) ✓ - - X X +

L H G

22762
(check) Euphrasia sp. (b) (CHR 387109)

E. sp. (d) (CHR 581201, 310585, 363472, 387509-10, 387514)

E. sp. (e)

Forstera sp. (a) (CHR 359097, 396036)

Gentiana sp. (a) (CHR 310437)

G. sp. (b) (CHR 394530, 395840)

Geranium sp. (c)

Geum sp. (a) (CHR 310468, 310580-1, 387114, 387126)

G. sp. (b) (CHR 310457, 310578-9, 387127, 387173)

Hydrocotyle sp. (a) (CHR 389180)

Myosotis sp. (b) (CHR 387140)

Blachnum sp. (a)

B. sp. (b) (CHR 310441)

Pterostylis sp. (c)

Agrostis sp. (b) (CHR 311614, 389972)

Chionochloa sp. (a) (CHR 222759)

Festuca sp. (a) (CHR 387174)

E. sp. (b) (CHR 310594)

Poa sp. (c) (CHR 389948)

Trisetum sp. (a) (CHR 310524, 387153)

Carex sp. (d)

man 630

add material
Downs sp.

APPENDIX: VOUCHER SPECIMENS FOR UNNAMED TAXA
see n p. 28

387118? A

Phyllocladus sp. (a)

Aristotelia fruticosa var. (a) (CHR 395793)

Coprosma pseudocuneata ssp. (a) (CHR

(
C. sp. (b) (CHR 310413, 358328, 363444)

C. sp. (c)

C. sp. (d) (CHR 310549, 311621-2, 363462, 394464)

C. sp. (e) (CHR 310274, 310395-6, 310399, 310414, 358331-4,
363448, 363450, 363464-5, 366141, 366145, 392236-7,
394381, 394462, 394465, 394473)

Cyathodes sp. (b) (CHR 395789)

Dracophyllum sp. (a) (CHR 369034)

Hebe cockayneana var. (a).

H. haastii var. (a) (CHR 389962)

Helichrysum intermedium var. (a) (CHR 389977)

Leucopogon fasciculatus var. (a)

Meliocytus sp. (a) (CHR 363412-3)

M. sp. (f)

Olearia ilicifolia. var. (a)

O. nummulariifolia var. (a) (CHR 283050)

Rubus cissoides var. (a)

