

VASCULAR (HIGHER) PLANTS (LYOPODS, FERNS, GYMNOSPERMS, FLOWERING PLANTS) OF S. ARTHUR RA., FROM HOUGH SADDLE TO FOOT OF MT PATRIARCH<sup>1</sup>, BUT EXCLUDING MT SODOM<sup>2</sup>, MT BALDY<sup>2</sup>, AND MT GOMORRAH<sup>3</sup> AREAS

1150-1566 M

A.P. Druce, Botany Division, D.S.I.R., May 1982

(revised Sept 1982, June 1983, June 1984, July 1986, Aug. 1986, June 1988, Nov. 1988)

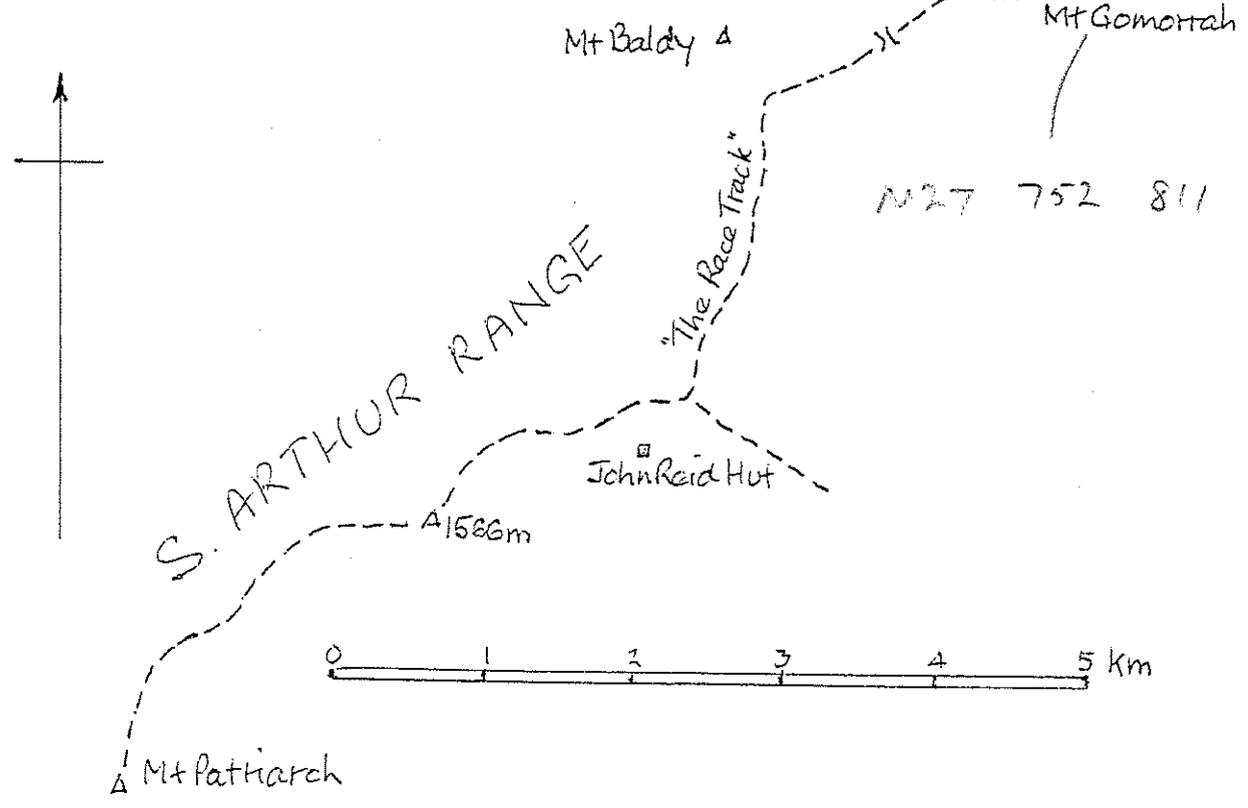
(area covered by list redefined, and list rewritten, June 1990, revised June 1991, Aug. 1992,

(Based on visits Jan. 1974, March 1982, Feb. 1990)

Rocks: calcareous siltstone and fine sandstone (Patriarch Formation)  
siliceous sandstone, with minor thin-bedded and calcareous sequences (Anatoki Formation)



- <sup>1</sup> For list of plants from Mt Patriarch see List 223
- <sup>2</sup> For list of plants from Mts Sodom and Baldy see List 226
- <sup>3</sup> For list of plants from Mt Gomorrhah see List 318



## INDIGENOUS PLANTS

(unc) - uncommon or local

(P) - seen in area of calcareous rocks (Patriarch Formation)

(A) - seen in area of predominantly siliceous rocks  
(Anatoki Formation)

### GYMNOSPERM TREES AND SHRUBS

*Lepidothamnus laxifolius* (P, A)

*Phyllocladus alpinus* agg. (A)

*Podocarpus nivalis* (P, A)

*P. hallii* x *P. nivalis* (unc A)

### DICOT TREES

*Diacophyllum traversii* (incl. *D. pyramidale*) (P, unc A)

*Griselinia littoralis* (seedlings only) (unc P)

*Holheria lyallii* var. (*H. glaberrima*) (unc P, unc A)

*Nothofagus menziesii* (P, A)

*Pseudopanax simplex* (incl. *P. s. var. sinclairii*) (unc A)

*P. sp.* (unnamed; included in *P. colensei*, as var. *fiordensis* and as var. *ternatus*, by Wardle 1968) (unc P, unc A)

### DICOT SHRUBS

*Atcheria traversii* (incl. *A. t. var. australis*) (unc A)

*Aristotelia fruticosa* var. (P, A)

*Brachyglottis bidwillii* var. *viridis* (P, A)

*B. rotundifolia* var. (incl. *B. buchananii* and *B. coekaynei*) (unc A)

*B. bidwillii* x *B. rotundifolia* (unc A)

*Cassinia vauvilliersii* (P)

*Coprosma atropurpurea* (P)

*C. cheesemani* s.s. (P, A)

*C. ciliata* ssp. *ciliata* (P, A)

*C. crenulata* (unc A)

*C. depressa* (P, A)

*C. foetidissima* (unc A)

*C. perpusilla* ssp. *perpusilla* (P)

*C. propinqua* ssp. *propinqua* (unc P, unc A)

*C. pseudocuneata* ssp. (P, A)

*C. serrulata* (unc A)

*C. sp. (i)* (unnamed) (*C. parviflora* var. *dumosa* sensu Allan 1961, non *C. p. var. dumosa* Cheeseman) (A)

*C. sp. (ii)* (unnamed; aff. *C. pseudocuneata*) (low-growing shrubs with small, thick, arcuate lvs) (P, A)

*C. cheesemani* x *C. ciliata* (unc A)

*Ceriatia plumosa* (unc A)

*Cyathodes dealbata* (incl. *C. pumila*) (A)

*Dracophyllum longifolium* var.  
(incl. *D. filifolium* and *D. oliveri*)  
(A)

*D. uniflorum* (P, A)

*Gaulltheria crassa* (A)

*G. depressa* s.s. (P, A)

*G. sp.* (unnamed; included in *G. depressa*, as var. *novae-zelandiae*, by Franklin 1962) (P, A)

*G. crassa* X *G. sp.* (unnamed) (unc A)

*Hebe canterburiensis* (P, A)

*H. ciliolata* (P, A)

*H. cockayneana* var. (A)

*H. haastii* var. (aff. var. *humilis*;  
see Moore 1961, p. 940) (P, A)

*H. mactantha* var. *brachyphylla* (A)

*H. tetragona* var. (*H. coarctata*) (P, A)

*H. topiaria* (P, A)

*H. vernicosa* (P)

*H. sp.* (aff. *H. glaucophylla*) (unc P, unc A)

*Helichrysum intermedium* var.  
(P, A)

*Leucopogon fraseri* s.s. (P, A)

*L. suaveolens* (incl. *Cyathodes colensoi*) (A)

*Meliclytus sp.* (unnamed) (P, A)

*Myrsine divaricata* s.s. (A)

*M. nummularia* (P, A)

*Olearia lacunosa* var. *lacunosa*  
(P, A)

*O. nummularifolia* var. (lvs  
distinctly longer than broad,

rather than suborbicular as in var.  
*nummularifolia*) (unc A)

*Pentachondra pumila* (P, A)

*Pimelea oreophila*

(form with very hairy lvs) (A)

*Pittosporum anomalum* (unc P)

*Pseudowintera colorata* (unc A)

*Traversia baccharoides* (unc P)

## DICOT LIANES AND RELATED TRAILING

### PLANTS

*Muehlenbeckia axillaris* (P, A)

### LYCOPODS

*Lycopodium australicum* (P, A)

*L. fastigiatum* (P, A)

*L. scamosum* (P, A)

### FERNS

*Asplenium flaccidum* (unc A)

*A. richardii* (unc P)

*Blechnum fluviatile* agg. (A)

*B. penna-marina* (P, A)

*B. procerum* (P, A)

*B. sp.* (unnamed) (mountain sp.;  
lower pinnae not reduced in

length) ("The Dunedin-Cass Variety"  
of Crookes 1963) (A)

*Cyathea colensoi* (unc A)

*Cystopteris tasmanica* (P, A)

*Grammitis billardierei* (A)

*G. magellanica* ssp. *holkofagei*  
(unc A)

- G. patagonica* (unc P)
- G. poa-pigiana* (unc A)
- Histiopteris incisa* (unc A)
- Hymenophyllum multifidum* (P,A)
- H. villosum* (A)
- Hypolepis millefolium* (P,A)
- Polystichum vestitum* (P,A)

- Festuca* sp. (aff. *F. matthewsii*) (plants tufted but not tussock-forming, glaucous) (P,A)
- Microchloa novae-zelandiae* (P,A)
- Koeleria cheesemanii* (P,A)
- Laehnagrostis lyallii* s.s. (incl. *L. filiformis* var. *semiglabra*) (P,A)

**ORCHIDS**

- Aporostylis bifolia* (A)
- Caladenia lyallii* (unc A)
- Corybas trilobus* s.s. (A)
- Chiloglottis cornuta* (A)
- Prasophyllum colensoi* (A)

- Microlaena avenacea* (unc A)
- M. colensoi* s.s. (P,A)
- Poa breviglumis* (A)
- P. celsa* (unc P)
- P. cita* ssp. *cita* (P,A)
- P. colensoi* (P,A)
- P. kirku* (P,A)
- P. maia* (P,A)
- P. subvestita* (P,A)
- P. sp.* (unnamed, aff. *P. n. 3.*) (unc P)

**GRASSES**

- Agrostis dyeri* s.s. (P,A)
- A. personata* (P,A)
- A. sp.* (unnamed; aff. *A. dyeri*) (panicle not contracted as in *A. dyeri*) (A)
- Chionochoa australis* (P,A)
- C. conspicua* ssp. *conspicua* (P,A)
- C. pallens* ssp. *pallens* (P,A)
- C. sp.* (unnamed) (*C. flavescens* auct. South Island, non *C. flavescens* Zetou) (P,A)
- Deschampsia tenella* (P,A)
- Deyeuxia aucklandica* (A)
- Elymus enysii* (P,A)
- E. sp.* (aff. *E. rectisetus*) (plants ± glaucous; awns 4-6 cm long) (P,A)

- Rytidosperma gracile* (A)
- R. setifolium* (P,A)
- Trisetum youngii* (P,A)
- T. sp.* (i) (unnamed) (plants slender; lf sheath glabrous or nearly so) (P)
- T. sp.* (ii) (unnamed; included in *T. antarcticum*, as ssp. *tenellum*, by Petrie 1912) (P,A)
- T. sp.* (iii) (unnamed; aff. *T. antarcticum*) (plants robust; lf blade up to 7mm wide, margins scabrid, with some long hairs near ligule) (unc A)

**SEDGES**

- Carex acicularis* (A)

- C. cochayneana* (unc P)
- C. anysii* (unc A)
- C. libera* (unc P)
- C. trachycarpa* (unc P, unc A)
- C. wakatipu* s.s. (P, A)
- C. sp. (i)* (unnamed; aff. *C. testacea*)  
(lvs broader than in *C. testacea*, usually reddish; utricle margins not scabrid) (P)
- C. sp. (ii)* (unnamed; aff. *C. coriacea*)  
(lvs slender, bright green, not becoming stiff and yellow-green in exposed sites) (P, A)
- Carpha alpina* s.s. (P, A)
- Isolepis aucklandica* (A)
- I. caligenis* (unc P)
- I. habra* (unc P)
- Oreobolus pectinatus* (A)
- O. strictus* (P, A)
- Schoenus pauciflorus* s.s. (= "stand-er var." of Edgar 1970, p. 194) (P, A)
- Uncinia astonii* (unc P)
- U. caespitosa* (P, A)
- U. clavata* (P, A)
- U. divaricata* (P, A)
- U. filiformis* (P, A)
- U. fuscovaginata* var. (plants glaucous) (P, A)
- U. involuta* (P, A)
- U. longiflorus* (unc A)
- U. nervosa* s.s. (A)
- U. rupestris* (incl. *U. angustifolia*) (P)

- U. silvestris* (incl. *U. affinis*) (A)
- U. viridis* (unc A)
- U. sp. (unnamed)* (*U. affinis* sensu Hamlin 1959, non *U. hiparia* var. *affinis* Col. ex Clarke; see Nooteboom 1978) (unc P, unc A)

RUSHES AND ALLIED PLANTS

- Juncus novae-zelandiae* (P, A)
- Luzula migrata* (P, A)
- L. tufa* s.s. (unc A)
- L. sp. (i)* (unnamed; included in *L. crinita*, as var. *petricana*, by Edgar 1966) (P, A)
- L. sp. (ii)* (unnamed; included in *L. picta*, as var. *limosa*, by Edgar 1966) (P, A)

MONOCOT HERBS OTHER THAN  
ORCHIDS, GRASSES, SEDGES, RUSHES

- Astelia linearis* var. *linearis* (A)
- A. nervosa* s.s. (unc P, A)
- A. nivicola* s.s. (P, A)
- A. petrici* (P, A)
- A. sp. (i)* (unnamed; included in *A. nivicola*, as var. *moriceae*, by Moore 1966) (P, A)
- A. sp. (ii)* (unnamed; aff. *A. nervosa*)  
(lvs broad, not conspicuously white adaxially as in *A. nervosa*) (P, A)
- Bulbinella hookeri* (P, A)
- Phormium cookianum* (P, A)

## COMPOSITE HERBS

- Abrotanella linearis* (P,A)  
*Anaphalis* sp. (*Helichrysum bellidioides* ss.) (P,A)  
*Brachyglottis* sp. (unnamed; included in *B. bellidioides*, as var. *crassa*, by Nordenstam 1978) (P,A)  
*Celmisia bellidioides* (P)  
  
*C. dallii* (P,A)  
*C. incana* (incl. *C. discolor*) (A)  
*C. laticifolia* (A)  
*C. montoi* ssp. (*C. coriacea* var. *lancifolia*) (unc P, unc A)  
*C. petriei* (P,A)  
*C. sinclairii* (incl. *C. allanii* & *C. dunetzi*) (P,A)  
*C. spectabilis* ssp. (A)  
*C. traversii* (P,A)  
*C. sp.* (unnamed; aff. *C. gracilentia*) (plants tufted; lvs linear to linear-lanceolate; upper surface and margins thinly covered in tomentum; lower surface densely covered) (P,A)  
*Craspedia* sp.(i) (unnamed; included in *C. lanata*, as var. *elongata*, by Allan 1961) (P,A)  
*C. sp.*(ii) (unnamed) (lvs narrowly elliptic spatulate, green, margins ± white, both surfaces densely clad in short glandular hairs; fls white) (P,A)  
*C. sp.*(iii) (unnamed) (lvs narrowly elliptic-spatulate, green, margins ± white, both surfaces densely

- clad in multicellular, non-glandular hairs with cottony tips; fls white) (P,A)  
*Dolichoglottis lyallii* (P, unc A)  
*Gnaphalium audax* (unc A)  
*G. mackayi* s.s. (A)  
*G. tahinicum* (unc P, A)  
*Lagenifera cuneata* (unc P)  
*L. pinnatifida* (unc A)  
*L. pumila* (unc A)  
*L. strangulata* (A)  
*Leptinella pyrothrifolia* agg. (unc P)  
*L. sp.* (unnamed; included in *L. squalida*, as ssp. *mediana*, by Lloyd and Webb, 1987) (P,A)  
*Leucogenes grandiceps* (unc A)  
*Microseris scapigera* var. (P)  
*Raoulia glabra* (P,A)  
*R. grandiflora* var. *grandiflora* (A)  
*Senecio glaucophyllus* ssp. *glaucophyllus* (P)  
*S. warawensis* (P,A)  
*Taraxacum magellanicum* (P)

## DICOT HERBS OTHER THAN COMPOSITES

- Acaena anserinifolia* (P,A)  
*A. fissistipula* (unc P)  
*A. profunde incisa* (P,A)  
*Aciphylla anomala* (P,A)  
*A. ferox* (P,A)  
*Anemone tenuicaulis* (P, unc A)  
*Anisotome aromatica* (P,A)  
*A. deltaidea* (P,A)

- A. filifolia* (P)  
*A. haastii* (P, A)  
*A. pilifera* (A)  
*A. haastii* X *Aciphylla ferox* (unc A)  
*Cardamine* sp. (i) (*C. debilis* agg.)  
 (cf. "Long Style" of Pritchard 1957) (P, A)  
*C.* sp. (ii) (lvs mostly simple; blade  
 ± reniform) (P, A)  
*C.* sp. (iii) (*C. debilis* agg.) (P)  
*Cheesemania latifolia* (incl.  
*C. gibbsii*) (unc P)  
*Colobanthus affinis* (P, A)  
*C. canaliculatus* (unc P, A)  
*C. strictus* (unc P, unc A)  
*Epilobium atriplicifolium* ss. (unc P)  
*E. chlorifolium* (P, A)  
*E. cochayneanum* (P, A)  
*E. elegans* (unc P, unc A)  
~~*E. cochayneanum* (P, A)~~  
*E. glabellum* s.s. (A)  
*E. gracilipes* (P)  
*E. macropus* (unc P)  
*E. matthewsii* (P, A)  
*E. pernitens* (A)  
*E. pubens* (unc P)  
*E. pycnostachyum* (P, unc A)  
*E.* sp. (unnamed; included in *E.*  
*brunnescens*, as ssp *minuti-*  
*florum*, by Raven and Engelman,  
 1971) (P, A)  
*Euphrasia cheesemani* (P)  
*E. townsonii* s.s. (unc A)  
*E. zelandica* agg. (corolla 4-5 mm  
 wide) (P, A)
- E.* sp. (i) (unnamed; aff. *E. laingii* (A))  
*E.* sp. (ii) (unnamed; aff. *E. petriei*)  
 (calyx with glandular hairs; corolla  
 pure white; lobes orientated to  
 form a flat surface) (P, unc A)  
*Forstera machayi* (P, A)  
*F. sedifolia* s.s. (A)  
*F. tenella* (A)  
*Galium perpusillum* s.s. (P, A)  
*Gentiana bellidifolia* (P, A)  
*G. filipes* (P)  
*G. gracilifolia* (incl. *G. vernicosa*)  
 (P, A)  
*G.* sp. (unnamed; aff. *G. corymbifera*) (P, A)  
*Geranium* sp. (aff. *G. microphyllum*) (P, A)  
*G. sessiliflorum* (P, unc A)  
*Geum leiospermum* (P, unc A)  
*G. uniflorum* (A)  
*G.* sp. (*G. parviflorum* agg.) (stock  
 short; terminal leaflet about as  
 long as broad; fls up to 13 mm  
 diam.) (unc P, A)  
*Gingidia decipiens* (P, A)  
*Gonocarpus aggregatus* (P, A)  
*Gunnera monoica* (unc P)  
*Hydrocotyle* sp. (unnamed;  
 included in *H. novae-zeeland-*  
*iae*, as var. *montana*, by Kirk  
 1899) (P, A)  
*Kalleria dieffenbachii* (P, A)  
*K. laxa* (unc P)  
*K. multiflora* (A)  
*Mentha cunninghamii* (P)

Myosotis forsteri (unc A)  
 M. sp. (i) (M. australis agg.) (fls small,  
 white) (unc P)  
 M. sp. (ii) (M. australis agg.) (fls  
 yellow) (unc P)  
 M. sp. (iii) (unnamed; included in  
 M. pygmaea, as var. drocei, by  
 Moore 1961) (P, A)

Neopaxia sp. (incl. Montia calycina  
 and Claytonia australasica var.  
 biflora) (P, A)

Nertera ciliata (P, A)

N. sp. (unnamed; aff. N.  
 dichondrifolia) (hairs present  
 on both surfaces of lf, straight,  
 not hooked as in N. dichondri-  
 folia) (P, A)

Notothlaspi sp. (unnamed) (N. australe  
 auct., non Thlaspi australe Hook. f.)

Oreomyza colensoi s.s. (incl.  
 O.c. var. hispida and O.c. var.  
 multifida) (P)

Ourisia caespitosa ssp. caespitosa  
 (A)

O. lactea ssp. lactea (P, A)

O. simpsonii (A)

Oxalis magellanica (P, A)

Parahebe linifolia ssp. linifolia  
 (P, unc A)

P. lyallii (P, A)

Phyllachne clavigera (A)

Plantago lanigera (P, A)

P. raoulii (P, A)

P. uniflora (P)

Pratia angulata agg. (P, A)

Psychrophila novae-zealandiae  
 (P, A)

Ranunculus altus (P)

R. foliosus (unc P)

R. insignis (P, A)

R. membranifolius (unc A)

R. mirus (P, unc A)

R. verticillatus (P, A)

Schizilema sp. (unnamed; included  
 in S. haastii, as ssp. cyanopetalum,  
 by Domin 1908) (unc A)

Scleranthus uniflorus (P, A)

Stellaria decipiens (incl. S. parvi-  
 flora) (A)

S. gracilentia (P, A)

Urtica incisa (P, A)

Viola cunninghamii (P, A)

V. filicaulis (A)

V. lyallii (P, A)

Wahlenbergia albomarginata  
 var. albomarginata (incl. W. pyg-  
 maea var. laxa <sup>and</sup> W. brackleyi) (P, A)

## ADVENTIVE PLANTS

### GRASSES

Agrostis capillaris (P, A)

Anthoxanthum odoratum (H)

Holcus lanatus (H)

Lolium perenne (H)

Poa annua (P)

P. pratensis (P)

(H) - seen near hut only

RUSHES

*Juncus conglomeratus* (P)  
*J. tenuis* (H)

*Mycelis muralis* (P, A)  
*Taraxacum officinale* (unc P)

COMPOSITE HERBS

*Cirsium arvense* (P, A)  
*C. vulgare* (P)  
*Hieracium pilosella* (P)  
*Hypochoeris radicata* (P, A)

DICOT HERBS OTHER THAN COMPOSITES

*Digitalis purpurea* (P)  
*Mimulus moschatus* (P)  
*Trifolium repens* (P)  
*Veronica serpyllifolia* (P)

No. of indigenous species: 279.

No. of adventive species: 18.

REFERENCES

- Allan, H.H. 1961: "Flora of N.Z." Vol. 1.  
 Crookes, M. 1963: "Ferns of N.Z."  
 Domin, K. 1908: Engl. Bot. Jb 40: 573-85  
 Edgar, E. 1966: N.Z. J. Bot. 4: 159-84.  
 ——— 1970: In "Flora of N.Z." Vol. 1.  
 Franklin, D.A. 1962: T.R.S.N.Z. Bot. 1: 155-73  
 Hamlin, B.G. 1959: Dom. Mus. Bull. 19.  
 Kirk, T. 1899: "The Students' Flora of N.Z."  
 Lloyd, D.G.; Webb, C.J. 1987: N.Z. J. Bot. 25: 99-105.  
 Moore, L.B. 1961: In "Flora of N.Z." Vol. 1.  
 ——— 1966: N.Z. J. Bot. 4: 201-40.  
 Nootboom, H.P. 1978: Blumea 24: 511-20  
 Nordenstam, B. 1978: Opera Bot. 44: 1-84.  
 Petrie, D. 1912: T. N. Z. Inst 44: 179-87.  
 Pritchard, G.G. 1957: T.R.S.N.Z. 85: 75-89.  
 Raven, P.H.; Engelman, T. 1971: N.Z. J. Bot. 9: 345-50  
 Wardle, P. 1968: N.Z. J. Bot. 6: 226-36  
 Zotov, V.D. 1965: Rev. Dom. Mus. Ljstn. 5: 101-46.

