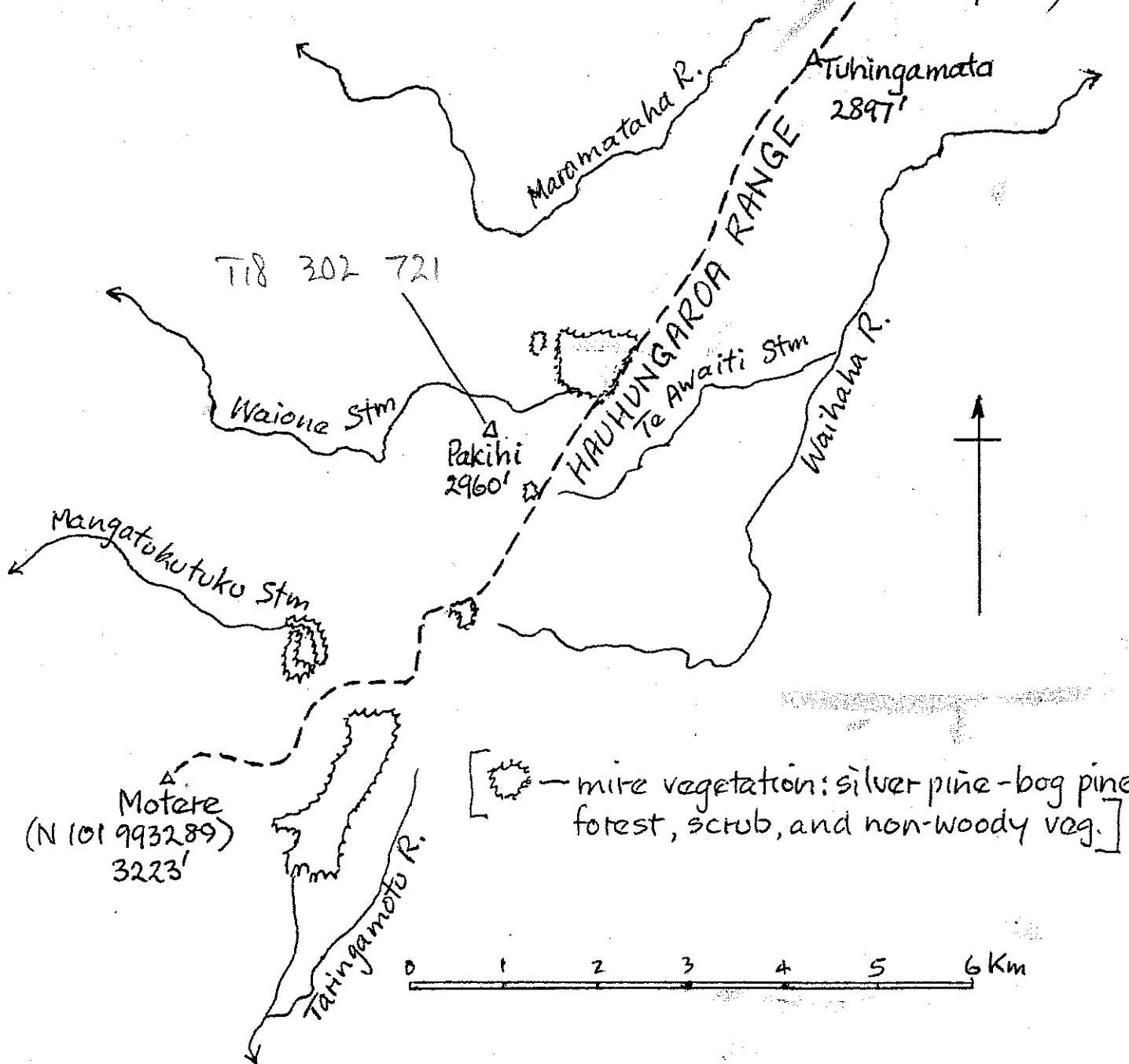


HIGHER PLANTS (PSILOPSIDS, LYCOPODS, FERNS, GYMNOSPERMS
FLOWERING PLANTS) OF CENTRAL HAUHUNGAROA RANGE,
WEST TAupo, 700-980 M (2300-3223 FT)

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Rotorua, April 1984 (revised April 1985,
Aug. 1990,
June 1991,
July 1992)
Based on visits April 1984 & April 1985.



(T) - seen only in southern mites (Taringamotu and Manga-tukutuku catchments)

(M) - seen only in northern mites (Waione catchment)

f - present in forest (other than silver pine-bog pine forest)

m - present in mire vegetation (silver pine-bog pine forest, scrub, and non-woody vegetation)

f/m - seen only at mite margins

() - only juvenile plants present

(unc) - uncommon

INDIGENOUS SPECIES

GYMNOSPERMS

f *Dactydiium cupressinum* (adults to 800m, juv. to summit, 950m)

m *Halocarpus bidwillii*

m *Lagarostrobos colensoi*

f/m *Phyllocladus alpinus* ss.

f *P. glaucus* (unc)

f(m) *Podocarpus hallii*

f *Prumnopitys ferruginea*

(f/m) *P. taxifolia* (unc)

(f) *Melicytus lanceolatus* (incl. M.i. var. latior) (unc)

f *M. ramiflorus* ssp. *ramiflorus* (to 800m) (unc)

f *Myrsine australis* (to 725m) (unc)

f *M. salicina*

(f) *Nestegis cunninghamii* (unc)

(f) *N. lanceolata* (unc)

(f/m) *Pseudopanax colensoi* ss. (unc)

MONOCOT TREES

f *Cordyline indivisa* (unc)

DICOT TREES

f *Aristotelia serrata*

f *Baileya media tawa* (to 800m) (unc)

f *Carpodetus serratus*

f *Elaeocarpus dentatus* (incl. E.d. var. *obovatus*) (to 800m)

f(m) *E. hookerianus*

f *Fuchsia excorticata* (unc)

f(m) *Griselinia littoralis*

(f) *P. crassifolius* (unc)

f *P. edgerleyi* (unc)

f(m) *P. simplex* (incl. P.s. var. *sinclairii*)

f *Quintinia serrata* (incl. Q. *acutifolia* and Q. *elliptica*)

f *Schefflera digitata* (unc)

f *Weinmannia racemosa* var. *racemosa*

DICOT SHRUBS

f *Alseuosmia pusilla*

f *A. turneri* (unc)

f *Brachyglottis repanda* ss. (unc)

fm *Coprosma foetidissima*

f *C. grandifolia* (unc)

m *C. rugosa* ssp. *rugosa* (M) (unc) (f) *Muehlenbeckia australis*

fm *C. tenuifolia*

fm *C. sp.* (unnamed; included in *C.*) f *Parsonsia capsularis* var. (unc)

parviflora by Oliver, 1935, and f *Rubus cissoides* var. (leaflets
others) (If undersurface not
densely hairy as in *C. parvi-
flora*; drupes vs. unpigment-
ed, occ. purplish red)

m *Cyathodes ampetifolia*

m *Diacophyllum subulatum*

m *Gaultheria antipoda*

m *G. sp.* (unnamed; included in
G. depressa, as var. *novae-
zealandiae*, by Franklin 1962)
(unc)

m *G. antipoda* X *G. sp.* (unnamed)
(unc)

m *Hebe macrocarpa* var. (*H.*
cotiganii)

m *Leptospermum scoparium*

f *Leucopogon fasciculatus* var.

m *Myrsine divaricata* s.s.

fm *Neomyrtus pedunculata*

m *Olearia ilicifolia*

f *Pseudopanax anomalous* (unc)

f *Pseudowintera colorata*

DICOT LIANES

(f) *Clematis paniculata*

(f) *Muehlenbeckia australis*

f *Parsonsia capsularis* var. (unc)

f *Rubus cissoides* var. (leaflets
narrower than in var. *cissoides*)

PSILOPSIDS AND LYCOPODS

f *Tmesipteris elongata* (incl.
T. e. ssp. *robusta*) (unc)

f *T. taunensis* (unc)

m *Lycopodium fastigiatum*

m *L. laterale* (incl. *L. ramulosum*?)

m *L. scariosum* (M) (unc)

f *L. variuum* (incl. *L. billardierei*
and *L. novae-zelandicum*)
(unc)

L. volubile

FERNS

f *Asplenium bulbiferum*

f *A. flaccidum*

f *A. oblongifolium* (unc)

f *A. polyodon*

f *Blechnum colensoi* (unc)

f *B. discolor*

f *B. fluviatile* agg.

m *B. minus*

m *B. penna-marina*

fm *B. procerum*

MONOCOT LIANES

f *Ripogonum scandens* (to
725 m) (unc)

- f *B. vulcanicum* (unc)
 m *B. sp.* (unnamed) common lowland
 sp.; lower pinnae reduced in length (unc)
 f *Ctenopteris heterophylla* (unc)
 f *Cyathea dealbata* (unc)
 f *C. smilacis*
 f *Dicksonia fibrosa* (unc)
 f *D. lanata* s.s. (unc)
 f *D. squarrosa*
 m *Glaichenia dicarpa*
 f *Grammitis billardierei*
 fm *G. magellanica* ssp. *nottofagi*
 f *Histiopteris incisa*
 fm *Hymenophyllum armstrongii*
 f *H. demissum* (unc)
 m *H. dilatatum* (unc)
 f *H. flabellatum*
 fm *H. multifidum*
 m *H. peltatum* (M) (unc)
 f *H. pulcherrimum*
 fm *H. ratum*
 f *H. revolutum*
 fm *H. sanguinolentum* agg.
 f *H. scabrum* (unc)
 f *Hypolepis rufobarbata*
 f *Leptolepia novae-zelandiae* (unc)
 f *Leptopteris hymenophylloides* (unc)
 f *L. superba*
 f *L. hymenophylloides* × *L. superba* (unc)

- f *Lindsaea trichomanoides* (unc)
 f *Paesia scaberula* (unc)
 f *Phymatosorus novae-zelandiae* (unc)
 f *P. pustulatus*
 f *Polystichum vestitum*
 f *Rumohra adiantiformis* (unc)
 m *Schizaea australis* (M)

- m *Sticherus cunninghamii*
 f *Trichomanes teniforme*

ORCHIDS

- fm *Aporostylis bifolia*
 f *Chiloglottis cornuta* (unc)
 m *Corybas oblongus* (T) (unc)
 f/m *C. trilobus* s.s. (M) (unc)
 f *Dendrobium cunninghamii*
 f *Earina autumnalis*
 f *E. mucronata* s.s.
 m *Microtis oligantha* (unc)
 m *Prasophyllum colensoi* (unc)
 fm *Pterostylis banksii* (unc)

- m *Thelymitra cyanea*

GRASSES

- m *Cortaderia fulvida* (T) (unc)
 m *Decauxia* sp. (*D. quadriflora* agg.)
 m *Hierochloe redolens* (unc)
 m *Lachnagrostis* sp. (unnamed;
 included in *L. filiformis*, as
 var. *semiglabra*, by Zofov
 1965) (M)

- f *Microlaena avenacea*
 fm *Poa breviglumis*
 m *Rytidosperma gracile*

SEDGES

- m *Baumea rubiginosa* (T)
 m *B. tenax* (T)
 m *Carex dissita* ss.
 m *C. echinata* var. (*C. stellulata*
 var. *australis*)
 m *C. lessoniana*
 m *C. secta* ss.
 m *C. testacea* ss. (T) (unc)
 m *Carpha alpina* s.s.
 m *Eleocharis gracilis*
 m *E. sphacelata* (T) (unc)
 f *Gahnia pauciflora*
 fm *G. procera*
 m *Isolepis crassiussula*
 m *I. fluitans* (T)
 m *I. habra*
 f *I. polystachya* (unc)
 m *I. subtilissima* (M) (unc)
 m *I. distigmatosa*

 m *Lepidosperma australe*
 m *Oreobolus pectinatus*
 m *Schoenus maschalinus*
 f *Uncinia gracilenta*
 f *U. rupestris* (incl. *U. angustifolia*)
 f *U. uncinata*
 f *U. zotovii*

RUSHES AND ALLIED PLANTS

- m *Centrolepis ciliata*
 m *Empodium minus* (M)
 m *Juncus gregiflorus*
 m *J. novae-zelandiae* (unc)
 m *J. planifolius*
 fm *Luzula subclavata* (unc)
 m L.sp. (unnamed; included in
 L. picta, as var. *limosa*, by
 Edgar 1966) (M) (unc)

MONOCOT HERBS OTHER THAN

ORCHIDS, GRASSES, SEDGES,

RUSHES AND ALLIED PLANTS

- f *Astelia fragrans*
 mA. *grandis* (M)
 fm A.sp. (unnamed; aff. *A. nervosa*)
 (lvs not conspicuously white
 adaxially as in *A. nervosa*)
 f *Collospermum microspermum*
 f *Dianella nigra* (unc)
 fm *Luzuriaga parviflora*
 m *Potamogeton suboblongus*
 m *Triglochin striata*

COMPOSITE HERBS

- m *Celmisia* sp. (plants rhizomatous)
 m *Gnaphalium limosum* ss.
 m *Lagenifera pumila*
 f *Sanecio minimus*
 m *S. rufiglandulosus* var. (M) (unc)

DICOT HERBS OTHER THAN

COMPOSITES

- f *Cardamine* sp. (*C. debilis* agg.) f *Urtica incisa*
("Long Style" of Pritchard 1957) m *Utricularia novae-zelandiae*
- m *Centella uniflora* (M)(unc) m *Viola cunninghamii*
f *Dactylanthus taylorii*(unc) f *V.filicaulis*
- m *Drosera arcturi* (T)
m *D. binata*
m *D.spathulata*
- m *Epilobium insulare*
- f/m *E.linnaeoides* (M)(unc)
- m *Gonocarpus micranthus* ssp.
micranthus
- fm *Gratiola nana* (M)(unc)
- m *G.sexdentata* (M)(unc)
- f *Hydrocotyle heteromeria*
m *H.microphylla* (unc)
- fm *H.moschata*
- m *Hypericum japonicum* agg. (M)(unc)
- m *Liparophyllum gunnii* (unc)
- m *Nertera scapanioides*
- f *N.sp.* (unnamed; aff. *N.dichondrifolia*)
(hairs present on both surfaces of lf, straight,
not hooked as in *N.dichondrifolia*)
- m *Oreamyrrhis* sp. (unnamed; aff. *O.ramosa*) (M)(unc)
- fm *Pratia angulata* agg.
- m *Ranunculus amphitrichus*
- m *R.reflexus*
- f *Stellaria decipiens* (incl. s.
parriflora)

No. of indigenous species: 197.

ADVENTIVE SPECIES

DICOT SHRUBS

m *Salix* sp. (*S. cinerea*?) (unc)

GRASSES

m *Holcus lanatus* (unc)

RUSHES

m *Juncus articulatus* (unc)

COMPOSITE HERBS

f *Cirsium arvense* (unc)

fm *C. vulgare* (unc)

m *Hypochaeris radicata* (unc)

f *Mycelis muralis* (unc)

m *Senecio jacobaea* (unc)

DICOT HERBS OTHER THAN COMPOSITES

fm *Callitrichia stagnalis*

m *Epilobium ciliatum* (unc)

m *Sagina procumbens* (unc)

No. of adventive species: 11.

REFERENCES

Oliver, W.R.B. 1935: The genus *Correa*. Bishop Mus. Bull 132. 207 pp.

Edgar, E. 1966: *Luzula* in New Zealand. N.Z. J. Bot. 4: 159-84.

Franklin, D.A. 1962: The Ericaceae in New Zealand (*Gaultheria* and *Pernettya*). Trans. Roy. Soc. N.Z. Bot. 1: 155-73.

Pritchard, G.G. 1957: Experimental taxonomic studies on species of *Cardamine* Linn. in New Zealand. Trans. Roy. Soc. N.Z. 85: 75-89.

Zotov, V.D. 1965: Grases of the subantarctic islands of the New Zealand region. Rec. Dom. Mus. Wellington 5: 101-46.

