

ART. XXVIII.—*List of Phanerogamic Plants Indigenous in the Wellington Province.*

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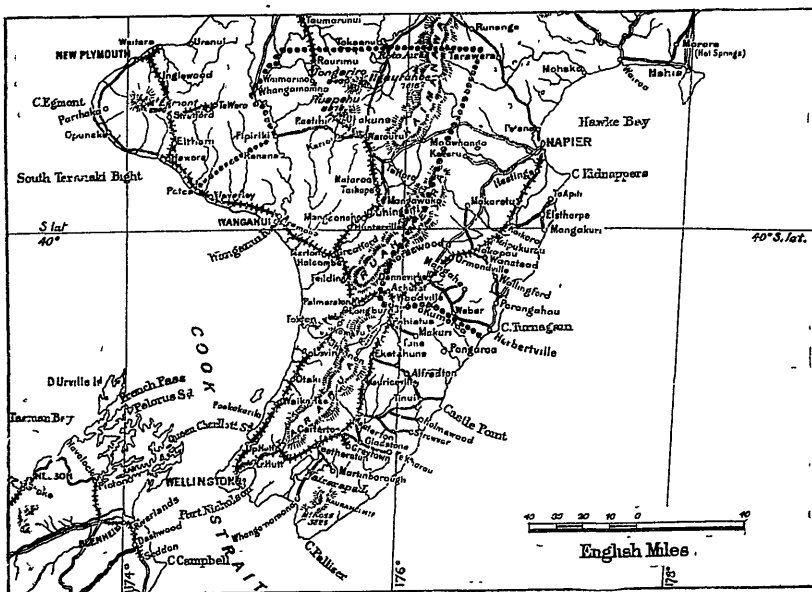
No list of Wellington indigenous flowering-plants has been published since Buchanan (Trans. N.Z. Inst., vol. 6, p. 210), in 1873, published his paper, "Notes on the Flora of the Province of Wellington." In this he gives a list of all indigenous plants known to him, including the cryptogams. In Buchanan's time the flora of the alpine portion of the province was practically unknown, and some of the alpine species included in his list were wrongly identified. Owing to the researches of the late T. Kirk, who from time to time discovered several new species; T. F. Cheeseman ("Manual of the New Zealand Flora," Wellington, 1906), who on three occasions visited the volcanic plateau; D. Petrie ("Visit to Mount Hector," Trans. N.Z. Inst., vol. 40, 1907, p. 289); L. Cockayne ("Report of a Botanical Survey of Tongariro National Park," Lands Department, Wellington, 1908); E. Phillips Turner ("Report of a Botanical Examination of the Higher Waimarino District," Lands Department, Wellington, 1909); and the writer ("Botanical Notes on a Journey across the Tararuas," Trans. N.Z. Inst., vol. 42, 1909, p. 13) the distribution of species has become better known, identifications have been corrected, new species have been described, and the ecology of certain districts has been worked out. Thus, though Buchanan enumerates only 476 species of phanerogams, the present list includes some 680, a fact which alone would warrant the publication of a revised list.

Since this paper was read, the author, with Mr. J. S. Tennant, spent in January, 1911, a week exploring the Kaimanawa Mountains, lying to the south of the volcanic plateau. As a result of this visit it has been found necessary to widen the range in altitude of a number of species. It has, for instance, been quite common to find a plant growing 1,000 ft. above its accepted habitat, a fact which would point to the climate and soil conditions of that range being much more favourable to plant-life than those of mountains of the same altitude elsewhere in the province. The results of the Kaimanawa visit have been largely embodied in this paper.

The land-boundaries of the Wellington Province as defined in a map kindly supplied to me by the Lands Department, Wellington, are as follows: A straight line is drawn from the mouth of the Patea River to Pipiriki, on the Wanganui River, which is the natural boundary from this point to the 39th parallel. Following the parallel eastward, the northern boundary stops at the Ahimanawa Range, a little to the west of the Township of Tarawera. From this point to the Manawatu Gorge the boundary runs south in almost a straight line through the Kaweka Range, but following at the southern end the axis of the Ruahine Range. From the Gorge the

boundary follows the Manawatu River eastward to its southernmost point, and then strikes off to the coast at the mouth of the Waimata River. Wellington Province consists of the country lying from the south of the boundary to the coast.

The author has made full use of the information contained in the works of Cheeseman, Petrie, Cockayne, and Turner. Where a habitat has not been verified by the author the authority for its insertion has been given. For the rarer plants the actual habitat has been given. For those less common the type of country or altitude it inhabits is recorded. For the commonest merely the names and dates of flowering are stated. The names of the months refer to the dates of flowering, which have generally been verified by the author. The term "volcanoes" refers to the volcanic



MAP OF SOUTHERN PART OF NORTH ISLAND.

(Dotted line shows the boundary of Wellington District.)

plateau, including Ruapehu (9,175 ft.), Tongariro (6,458 ft.), and Ngauruhoe (7,515 ft.). In deference to the wishes of the Publication Committee, the trivial and Maori names of species have been omitted.

Finality in any respect is, of course, impossible. The author merely wishes to place on record what is known of a flora which even in the so-called reserves is rapidly changing through the attacks of wild rabbits, pigs, horses, and cattle. It is hoped at some future date, when the northern and eastern portions of the province have been more fully explored, to correlate in some degree the quality of the soil with the quality of the flora.

The author desires to thank Dr. D. Petrie and Mr. T. F. Cheeseman for their many kindnesses, especially in identifying plants and supplying dried specimens from their herbaria, and for much valuable information.

LIST OF PHANEROGAMIC PLANTS INDIGENOUS IN THE WELLINGTON PROVINCE.

1. Ranunculaceae.

- Clematis indivisa* Willd. Aug.–Nov. Ascends to 2,500 ft.
hexasepala D. C. Sept.–Nov. Marton.
Colensoi Hook. f. Nov.–Jan. On dry hillsides. Ascends to 3,000 ft.
parviflora A. Cunn. Oct.–Nov. Ascends to 1,500 ft.
marata Armst. Sept.–Nov. Near Wanganui (Allison).
Myosurus aristatus Benth. Palliser Bay (Col.); ocean-beach, Wellington (Buch.).
Ranunculus insignis Hook. f. Dec.–Jan. Volcanoes; Tararua and Ruahine Mountains. 4,000–5,000 ft.
Monroi Hook. f. Dec.–Jan. Tararua Mountains (Buch.).
nivicola Hook. Dec.–Feb. Volcanoes; Kaimanawa Mountains. 3,000–6,000 ft.
geraniifolius Hook. f. Oct.–Dec. Ruapehu and Tararua Mountains; Tongariro (T. F. C.); Hauhangatahi (Spencer). 2,000–5,500 ft.
tenuicaulis Cheesem. Mount Holdsworth (Cock).
hirtus Banks & Sol. Oct.–Jan. Ascending to 4,000 ft.
recens T. K. Levin Beach. Coastal.
lappaceus Smith. Nov.–Mar. Ascending to 4,500 ft.
macropus Hook. f. Dec.–Jan. Wainuiomata (Buch.).
rivularis Banks & Sol. Oct.–Mar. In swamps and creeks. Ascends to 4,000 ft. in Kaimanawa Mountains and volcanoes.
acaulis Banks & Sol. Sept.–Nov. Coastal.
Caltha novae-zealandiae Hook. f. Oct.–Jan. Ruahine and Tararua Mountains. 2,500–5,500 ft.

2. Magnoliaceae.

- Drimys axillaris* Forst. Oct.–Dec. Ascending to 3,500 ft. on Kaimanawas.
colorata Raoul. Nov.–Dec. Ascending to 4,000 ft. on volcanoes.

3. Cruciferae.

- Nasturtium palustre* D. C. Nov.–Dec. Upper Wairarapa (Buch.).
Cardamine hirsuta Linn. Flowers throughout the year. Ascending to 5,000 ft.
Lepidium oleraceum Forst. Near Terawhiti, and sparingly round the coast.
obtusatum T. K. Oct.–Feb. Port Nicholson (T. K.).
tenuicaule T. K. var. *minor* Cheesem. Nov.–Jan. Titahi Bay.

4. Violaceae.

- Viola filcaulis* Hook. f. Nov.–Feb. Ascending to 4,000 ft.
Lyallii Hook. f. Oct.–Jan. Ascending to 4,000 ft.
Cunninghamii Hook. f. Oct.–Jan. Ascending to 5,000 ft.
Melicytus ramiflorus Forst. Oct.–April. Ascending to 3,000 ft.
lanceolatus Hook. f. Tararua Mountains. Ascending to 2,600 ft. a Waimarino.
micranthus Hook. f. Dec.–Feb. Upper Wairarapa (Buch.).
Hymenantha crassifolia Hook. f. July–Aug. Bluffs on Onetapu Desert, 3,500 ft.; base of Ruapehu. Usually coastal.
dentata R. Br. var. *angustifolia* Benth. Upper Rangitikei (Petrie); Turangaarere (Hamilton); volcanoes, 4,300 ft. (Cheesem.).
obovata T. K. Nov. Titahi Bay. Considered by Cheeseman to be intermediate between *H. crassifolia* and *H. obovata*.
chathamica T. K. Sept.–Oct. Patea (Hector).

5. Pittosporaceae.

- Pittosporum tenuifolium* Banks & Sol. Oct.-Nov. Ascending to 3,000 ft.
Colensoi Hook. f. Oct.-Nov. Upper Rangitikei (Buch.); base of Tongariro, Waimarino Forest (T. F. C.). Ascends to 3,500 ft. on Kaimanawas.
Buchanani Hook. f. Wellington (T. K.).
rigidum Hook. f. Dec. Ruahine and Tararua Mountains, 3,500-4,000 ft.; volcanoes (Cock.).
Ralphii T. K. Oct.-Nov. Upper Wanganui (Field); Patea (T. K.).
Kirkii Hook. f. Dec.-Jan. Ohakune, at 2,000 ft. (Turner).
cornifolium A. Cunn. June-Sept. Epiphytic. Ascending to 2,800 ft.
eugenioides A. Cunn. Sept.-Oct. Ascending to 1,000 ft. at Waimarino.

6. Caryophyllaceae.

- Gypsophila tubulosa* Boiss. Cape Palliser (Col.).
Stellaria parviflora Banks & Sol. Ascending to 4,000 ft.
Colobanthus Billardieri Fenzl. Ruahine, Kaimanawa, and Tararua Mountains. Ascends to 4,500 ft.
Muelleri T. K. Usually coastal.
Spergularia media Presl. Oct.-Feb. Coastal.

7. Portulacaceae.

- Claytonia australasica* Hook. f. Ruahine; volcanoes; Kaimanawa and Tararua Mountains. Ascending to 6,500 ft. (T. F. C.).
Montia fontana Linn. Ascending to 4,000 ft.

8. Elatinaceae.

- Elatine americana* Arn. var. *australiensis* (Benth.). Muddy places and margins of still waters.

9. Hypericaceae.

- Hypericum gramineum* Forst. Ascending to 2,000 ft.
japonicum Thunb. Ascending to 3,000 ft.

10. Malvaceae.

- Plagianthus divaricatus* Forst. Sept.-Oct. Salt marshes.
betulinus A. Cunn. Nov.-Dec. Ascending to 2,500 ft. at Waimarino.
Hoheria populnea A. Cunn. Dec.-Feb. Ascending to 2,200 ft. at Waimarino.

11. Tiliaceae.

- Entelea arborescens* R. Br. Nov. Cape Palliser and Paekakariki (T. K.).
Aristotelia racemosa Hook. f. Sept.-Dec. Fruit, January. Ascending to 3,000 ft. on Kaimanawa Mountains.
Colensoi Hook. f. Wairarapa Valley (Col.). Ascending to 2,600 ft. at Waimarino (Turner).
fruticosa Hook. f. Ascends to 4,000 ft.
Elaeocarpus dentatus Vahl. Oct.-Nov. Ascending to 2,600 ft. at Pokaka (Turner).
Hookerianus Raoul. Nov.-Jan. Ascending to 3,500 ft.

12. Linaceae.

- Linum monogynum* Forst. Oct.-Jan.

13. Geraniaceae.

- Geranium dissectum* Linn. var. *australe* Benth. Dec.—Mar.
microphyllum Hook. f. Dec. Ascends to 3,000 ft.
sessiliflorum Cav. Nov.—Dec. Ascends to 3,000 ft.
molle Linn. Nov.—Feb.
Pelargonium australe Jacq. Nov.—Feb. Ascending to 2,000 ft.
Oxalis corniculata Linn. Flowers summer months.
magellanica Forst. Nov.—Dec. Ascends to 4,000 ft.

14. Rutaceae.

- Melicope ternata* Forst. Sept.—Oct.
ternata var. *Mantellii* Kirk. Little Mukumuku.
simplex A. Cunn. Sept.—Nov. Ascending to 3,000 ft. on Tongariro.

15. Meliaceae.

- Dysoxylum spectabile* Hook. f. April—July.

16. Olacinaceae.

- Pennantia corymbosa* Forst. Nov.—Dec. Ascending to 2,600 ft. at Pokaka (Turner).

17. Stackhousiaceae.

- Stackhousia minima* Hook. f. Dec.—Jan. Waimarino, 2,700 ft. (Phillips Turner); volcanoes, 3,500 ft. (Cock., T. F. C.).

18. Rhamnaceae.

- Pomaderris phyllocaefolia* Lodd. Oct.—Jan. Pongaroa; Cape Palliser; Otaki.
Discaria toumatou Raoul. Oct.—Dec.

19. Sapindaceae.

- Dodonea viscosa* Jacq. Nov.—Dec.
Alectryon excelsum Gaertn. Nov.—Dec.

20. Anacardiaceae.

- Corynocarpus laevigata* Forst. Sept.—Nov. Fruit, February.

21. Coriariaceae.

- Coriaria ruscifolia* Linn. Oct.—Dec. Ascending to 3,500 ft.
thymifolia Humb. & Bonp. Ascending to 5,000 ft.
angustissima Hook. f. Dec.—Jan. 1,500–4,000 ft. Ascends to 4,500 ft. on Kaimanawa Mountains.

22. Leguminosae.

- Carmichaelia Enysii* T. K. Dec.—Jan. Ruapehu (T. K.). 1,500–3,000 ft.
nana Col. Ruapehu. Ascends to 2,800 ft.
odorata Col. Nov.—Jan. River-gorges of Ruahine and Tararua Mountains. Ascending to 2,500 ft.
flagelliformis Col. Nov.—Jan. Ascending to 4,000 ft. on Kaimanawas and volcanoes (T. F. C.).
Sophora tetraptera J. Mull. Aug.—Oct. Ascends to 800 ft. at Kakahi (Turner).

23. Rosaceae.

- Rubus australis* Forst. Sept.-Oct. Ascends to 4,000 ft. on Kaimanawa Mountains.
cissoides A. Cunn. Sept.-Nov. Ascends to 2,600 ft. at Waimarino.
schmidelioides A. Cunn. Oct.-Nov. Ascends to 2,600 ft. at Waimarino.
Geum urbanum Linn. var. *strictum*. Nov.-Jan. Upper Wairarapa (Buch.). Ascending to 3,000 ft.
parviflorum Sm. Dec.-Feb. Ruahine and Tararua Mountains. 4,000-5,000 ft.
Potentilla anserina Linn. Dec.-Jan.
Acaena novae-zealandiae T. K. Nov.-Jan.
Sanguisorbæ Vahl. Nov.-Feb. Ascends to 3,500 ft.
microphylla Hook. f. Nov.-Jan. Ascends to 3,500 ft.

24. Saxifragaceae.

- Donatia novae-zealandiae* Hook. f. Dec.-Mar. 4,000-5,000 ft., Mount Holdsworth (Townson).
Carpodetus serratus Forst. Nov.-Jan. Ascending to 3,000 ft.
Weinmannia racemosa Linn. f. Dec.-Jan. Ascending to 3,000 ft.

25. Crassulaceae.

- Tillaea moschata* D. C. Coastal.
diffusa T. K. Miramar (T. K.); near Seatoun. Coastal.
Sieberiana Schultz. Sept.-Jan.
debilis Col. Happy Valley Beach; Quoin, 1,000 ft.
purpurata Hook. f. Cape Palliser (Col.).

26. Droseraceae.

- Drosera stenopetala* Hook. f. Dec.-Feb. Ruahine and Tararua Mountains. 2,500-5,000 ft.
Arcturi Hook. f. Ruahine Mountains (Col.); Kaimanawa Mountains. 2,000-5,000 ft.
spatulata Labill. Nov.-Feb. Volcanoes and Kaimanawa Mountains. Ascending to 5,000 ft.
binata Labill. Nov.-Feb. Ascends to 2,500 ft.
auriculata Backh. Oct.-Jan. Ascending to 2,500 ft.

27. Haloragidaceae.

- Haloragis alata* Jacq. Nov.-Jan. Ascending to 2,000 ft.
tetragyna Hook. f.
depressa Walp. Ascending to 2,600 ft. at Pokaka.
micrantha R. Br. Ascending to 4,500 ft. on Kaimanawa Mountains and volcanoes.
Myriophyllum elatinooides Gaud. Nov.-Feb. Ascending to 3,500 ft.
intermedium D. C. Dec.-Mar. Ascending to 3,500 ft.
pedunculatum Hook. f. Dec.-Feb. Ascending to 3,000 ft.
robustum Hook. f. Dec.-Feb. Ascends to 2,000 ft., Mungaroa (T. K.).
Gunnera monoica Raoul. Nov.-Jan. Ascends to 3,500 ft.
prorrepens Hook. f. Upper Wairarapa (Buch.); volcanoes (Cock.).
dentata T. K. Dec.-Feb. Taupo (D. P.).
arenaria Cheesem. Levin Beach; Waikanae to Patea (Cock.). Coastal.
Callitriche verna Linn. Aquatic.

28. *Myrtaceae.*

- Leptospermum scoparium* Forst. Oct.—April. Ascending to 5,000 ft. on Kaimanawa Mountains.
ericoides A. Rich. Nov.—Dec. Ascending to 3,000 ft.
Metrosideros florida Sm. Feb.—June. Ascending to 2,500 ft.
lucida A. Rich. Dec.—Jan. Ascending to 3,500 ft.
hypericifolia A. Cunn. Nov.—Jan. Ascending to 2,000 ft.
Colensoi Hook. f. Dec.—Jan. Ascends to 2,000 ft. at Ohakune (Turner).
robusta A. Cunn. Dec.—Jan. Ascends to 3,000 ft.
scandens Sol. Jan.—Mar. Ascends to 2,000 ft.
Myrtus bullata Sol. Dec.—Jan. Ascends to 2,000 ft.
Ralphii Hook. f. Dec.—Jan. Ascends to 1,500 ft.
obcordata Hook. f. Dec.—Jan. Ascending to 2,000 ft.
pedunculata Hook. f. Dec.—Jan. Ascends to 3,500 ft. on Kaimanawa Mountains.
Eugenia maire A. Cunn. Mar.—May. Fruit, Jan.—Feb. Ascending to 1,500 ft.

29. *Onagraceae.*

- Epilobium pallidiflorum* Sol. Nov.—Feb. Ascending to 2,600 ft. at Pokaka (Turner).
chionanthum Haussk. Nov.—Feb. Ascending to 1,500 ft.
Billardieranum Ser. Nov.—Feb. Ascending to 2,000 ft.
erectum Petrie. Dec.—Jan. Ascends to 3,500 ft. on Kaimanawas.
junceum Sol. Oct.—Feb. Ascending to 3,500 ft.
pubens A. Rich. Oct.—Jan. Ascending to 4,000 ft.
tenuipes Hook. f. Dec.—Jan. Mount Holdsworth (Cock.); Wairarapa Valley (Col.); Ruahine Mountains (Hamilton). Ascends to 3,500 ft. on Kaimanawas.
Hectori Haussk. Dec.—Feb. Ruahine Mountains (Col.).
Cockayneianum Petrie. Tararua Mountains. 3,300–4,500 ft.
alsinoides A. Cunn. Nov.—Feb. Ascending to 3,000 ft. on volcanic plateau.
chloraefolium Haussk. Dec.—Feb. Ruahine (Col., D. P.); Kaimanawa and Tararua Mountains. Ascends to 4,500 ft.
insulare Haussk. Nov.—Feb. Ascending to 1,000 ft. at Waimarino (Turner).
rotundifolium Forst. Oct.—Feb. Ascends to 3,500 ft. at Kaimanawa Mountains.
linnaeoides Hook. f. Nov.—Feb. Ruahine Mountains (Col.); Tararua Mountains (Buch.). Ascends to 4,500 ft.
nummularifolium R. Cunn. Jan. Ascends to 3,500 ft. on Kaimanawa Mountains.
macropus Hook. Dec.—Mar. 1,500–4,500 ft., Ruahine (Petrie, Andrews); Kaimanawa and Tararua Mountains (Buch.); volcanoes (Cock.).
gracilipes T. K. Dec.—Feb. Tararua Mountains (D. P.); Ruahine Mountains (Col.).
melanocaulon Hook. Ruahine Mountains (Col.); Tauherenikau Valley; Kaimanawa Mountains, 3,000 ft.
microphyllum A. Rich. Dec.—Feb. Cape Palliser (Col.); Orongorongo River (T. K.); Kaimanawa Mountains. Ascending to 3,000 ft.
glabellum Forst. Dec.—Feb. Ascends to 5,000 ft.
glabellum var. *erubescens*. Tongariro, 5,500 ft. (T. F. C.).

Fuchsia excorticata Linn. f. Aug.-Dec. Fruit, January. Ascends to 3,500 ft. on Kaimanawas.

Colensoi Hook. f. Oct.-Feb. Ascends to 1,500 ft.

30. Passifloraceae.

Passiflora tetrandra Banks & Sol. Nov.-Jan. Ascending to 2,500 ft.

32. Ficoidaceae.

Mesembryanthemum australe Sol. Oct.-Mar. Coastal.

aequilaterale Haw. Dec.-Feb. Castlepoint (T. K.).

Tetragonia trigyna Banks & Sol. Oct.-Feb. Coastal.

33. Umbelliferae.

Hydrocotyle elongata A. Cunn. Nov.-Mar. Ascending to 2,000 ft.

tripartita R. Br. Tongariro (Col. and Cock.).

americana Linn. Oct.-Feb. Ascending to 2,000 ft.

novae-zealandiae D. C. Nov.-Mar. Ascending to 4,000 ft.

moschata Forst. Nov.-Mar. Ascending to 2,000 ft.

microphylla A. Cunn. Dec.-Feb.

asiatica Linn. Oct.-Mar. Ascending to 3,500 ft.

Azorella Haastii Benth. & Hook. Dec.-Feb. Ruahine Mountains (Hamilton). 2,000-5,000 ft.

Hookeri Drude. Nov.-Feb. Ascends to 3,500 ft. on Kaimanawas.

Eryngium vesiculosum Lab. Jan. Coastal.

Apium prostratum Lab. Nov.-Mar. Coastal.

Oreomyrrhis andicola Endl. Nov.-Feb. Ascending to 5,000 ft. on volcanoes (T. F. C.).

Crantzia lineata Nutt. Nov.-Feb. Ascends to 2,500 ft.

Aciphylla Colensoi Hook. f. Dec.-Jan. Ruahine (Howlett); Kaimanawa and Tararua Mountains. Ascending to 5,000 ft.

squarrosa Forst. Oct.-Jan. Ascends to 3,500 ft.

Munroi Hook. f. Dec.-Jan. Mount Holdsworth (D. P.). 4,000 ft.

n.s. Occurs on Quoin, Hector, Holdsworth, and Dundas. 3,500-4,000 ft.

Ligusticum dissectum T. K. Dec.-Feb. Tararuas. 3,500-4,000 ft.

aromaticum Hook. f. Nov.-Feb. 1,500-7,000 ft. on Ruapehu (Cock., T. F. C.).

Angelica Gingidium Hook. f. Nov.-Jan. Rare. Ascends to 4,000 ft. Waiouru Plain.

geniculata Hook. f. Jan.-Feb. Wellington: on dry hillside near sea, Paekakariki (H. B. Kirk).

rosaeifolia Hook. Oct.-Nov. Ruahine Mountains (Harding); Upper Rangitikei (Buch.).

Daucus brachiatus Sieb. Oct.-Dec.

34. Araliaceae.

Panax simplex Forst. Nov.-Jan. Ascends to 4,000 ft.

Edgerleyi Hook. f. Jan.-Feb. Ascends to 2,500 ft.

anomalum Hook. Dec.-Feb. Ascends to 3,500 ft. on Kaimanawa Mountains.

Sinclairii Hook. f. Jan.-Feb. Ruahine Mountains (Col.); Karioi Mountains (T. F. C.); Kaimanawa Mountains. 1,000-3,500 ft.

Colensoi Hook. f. Dec.-Feb. 1,800-4,500 ft.

arboreum Forst. June-July. Ascends to 1,500 ft.

Schefflera digitata Forst. Feb.—Mar. Ascends to 3,000 ft.

Pseudopanax crassifolium Koch. Feb.—April. Ascends to 2,600 ft. at Pokaka (Turner).

35. Cornaceae.

Corokia cotoneaster Raoul. Nov.—Jan. Ascends to 3,000 ft. on Kaimanawa Mountains; Upper Wairarapa; Taihape (P. T.); Wanganui (Cock.).

Griselinia lucida Forst. Oct.—Nov.

littoralis Raoul. Oct.—Nov. Ascends to 3,500 ft.

36. Caprifoliaceae.

Alseuosmia macrophylla A. Cunn. Sept.—Nov. Tararua Mountains (D. P.). Ascends to 3,000 ft.

quercifolia A. Cunn. Sept.—Nov. Waimarino (Turner).

37. Rubiaceae.

Coprosma grandifolia Hook. f. April—June. Ascends to 2,500 ft.

lucida Forst. Sept.—Nov. Ascends to 3,200 ft.

Baueri Endl. Sept.—Nov. Coastal.

robusta Raoul. Aug.—Oct. Ascends to 2,500 ft.

Cunninghamii Hook. f. Aug.—Sept. Ascends to 1,000 ft. at Waimarino (Turner).

tenuifolia Cheesem. Aug.—Sept. Kaimanawa and Ruahine Mountains (Col.); Upper Wanganui and Rangitikei Valleys (T. K.); volcanoes (Cock.); Upper Wanganui River (T. F. C.). 1,000—4,000 ft.

rotundifolia A. Cunn. Sept.—Oct. Ascends to 2,000 ft.

areolata Cheesem. Sept.—Oct. Fruit, January. Ascends to 1,500 ft.

tenuicaulis Hook. f. Sept.—Oct. (Buch.). Ascends to 1,000 ft.

rhamnoides A. Cunn. Aug.—Oct. Ascends to 3,000 ft.

parviflora Hook. f. Oct.—Jan. Ascends to 4,500 ft. on Kaimanawas.

ramulosa Petrie. Mount Hikurangi (D. P.); Mount Holdsworth. 2,500—5,000 ft.

Buchanani T. K. Oct. Tongue Point; Happy Valley Bay. Coastal.

crassifolia Col. Sept.—Nov. Ascends to 1,200 ft.

rigida Cheesem. Sept.—Oct.

rubra Petrie. Sept.—Nov. Maungatiriri River; foot of Mount Holdsworth (D. P.).

virescens Petrie. Sept.—Oct. Wairarapa (Col.). Ascends to 1,500 ft.

acerosa A. Cunn. Sept.—Nov. Ascending to 4,000 ft.

propinqua A. Cunn. Sept.—Oct. Fruit, April.

Kirkii Cheesem. Coastal, near Maranui.

linariifolia Hook. f. Kaimanawa Mountains. 3,000 ft.

joetidissima Forst. Aug.—Oct. Ascends to 4,500 ft.

Colensoi Hook. f. Nov.—Jan. Tararua and Kaimanawa Mountains. 1,000—3,500 ft.

cuneata Hook. f. Tararua, Kaimanawa, and Ruahine Mountains (Col.). 2,000—5,000 ft.

microcarpa Hook. f. Tararua, Kaimanawa (ascending to 3,500 ft.), and Ruahine Mountains; Day's Bay; volcanoes; Kakaramea to Waimarino (T. F. C.).

depressa Col. Dec.—Jan. Ruahine Mountains (Col.); Kaimanawa Mountains (Cock.); volcanoes. 2,500—5,000 ft.

repens Hook. f. Dec.—Jan. Tararua Mountains. Ascends to 6,500 ft. on volcanoes (T. F. C.).

Petriei Cheesem. Nov.—Jan. Volcanoes (Cock.). Ascends to 4,000 ft.

- Nertera depressa* Banks & Sol. Oct.-Jan. Ruahine Mountains (Col.); volcanoes (T. F. C.). Ascends to 4,000 ft.
Cunninghamii Hook. f. Oct.-Jan. Cook Strait (Cheesem.).
dichondraefolia Hook. f. Oct.-Dec. Ascends to 3,000 ft.
setulosa Hook. f. Nov.-Jan. Wairarapa (Buch.); Wellington (T. K.); Tongariro (Cock.).
Galium tenuicaule A. Cunn. Dec.-Mar. Ascends to 2,500 ft.
umbrosum Sol. Dec.-Mar. Ascends to 3,000 ft.
Asperula perpusilla Hook. f. Nov.-Jan. Ascends to 3,000 ft.

38. Compositae.

- Lagenophera Forsteri* D. C. Oct.-Feb. Ascends to 3,000 ft.
petiolata Hook. f. Nov.-Jan. Ascends to 4,000 ft.
Brachycome Sinclairii Hook. f. Nov.-Jan. Ascends to 4,000 ft.
odorata Hook. f. Inland Patea (Col.).
Olearia Colensoi Hook. f. Dec.-Jan. Ruahine and Tararua Mountains; Mount Matthews (Travers). 3,000-5,000 ft.
nitida Hook. f. Nov.-Jan. Ascends to 4,000 ft.
macrodonia Baker. Jan.-Feb. 1,500-4,000 ft.
ilicifolia Hook. f. Jan.-Feb. Ascends to 4,000 ft.
Cunninghamii Hook. f. Oct.-Dec. Ascends to 2,500 ft.
excorticata Buch. Dec.-Jan. Tararua Mountains. 3,700-4,200 ft.
lacunosa Hook. f. Dec.-Jan. Tararua Mountains. 3,700-4,200 ft.
alpina Buch. Dec.-Jan. Tararua Mountains. 3,700-4,200 ft. (A variety of the preceding species, Petrie).
nummularifolia Hook. f. Volcanoes and Kaimanawa Mountains. 2,000-5,000 ft.
Forsteri Hook. f. April-May. Ascends to 1,500 ft.
virgata Hook. f. Dec.-Jan. Feilding; volcanoes (Cock., Turner). Ascends to 3,000 ft.
Solandri Hook. f. Feb.-May. Ascends to 1,000 ft.
Celmisia incana Hook. f. Dec.-Jan. Tararua Mountains (Buch.); Ruahine Mountains (Col.); Waimarino (P. T.); volcanoes (T. F. C.). 2,000-5,000 ft.
spectabilis Hook. f. Dec.-Feb. Tararua and Kaimanawa Mountains; volcanoes (T. F. C.). 2,000-5,000 ft.
coriacea Hook. f. Dec.-Feb. Tararua Mountains (Buch.). 1,500-4,500 ft. (This needs confirmation, as every recent botanist notes.)
longifolia Cass. Nov.-Jan. Ascends to 5,000 ft.
Hectori Hook. f. Jan.-Feb. Tararua Mountains (Budden). 4,500-5,000 ft.
glandulosa Hook. f. Dec.-Jan. Upper Rangitikei (Buch.); Kaimanawa Mountains; volcanoes. 1,500-4,500 ft.
Vittadinia australis A. Rich. Nov.-Jan. Ascends to 3,000 ft.
Gnaphalium Lyallii Hook. f. Nov.-Jan. Ruahine Mountains (Col.); Rimutaka Mountains (T. K.). Ascends to 2,500 ft.
trinerve Forst. Nov.-Dec. Rimutaka Mountains (T. K.). Ascends to 2,000 ft.
Keriense A. Cunn. Oct.-Dec. Ascends to 3,500 ft. on Kaimanawa Mountains.
subrigidum Col. Oct.-Dec. Makuri Gorge; Wanganui. Ascends to 2,000 ft.

- Gnaphalium Traversii* Hook. f. Dec.—Feb. Tararua Mountains. 1,500–5,000 ft.
paludosum Petrie. Dec.—Jan. Ruahine Mountains (Petrie); volcanoes (T. F. C., Hill). Ascends to 4,700 ft. on Kaimanawas.
luteo-album Linn. Nov.—Mar. Ascends to 3,500 ft. on Kaimanawa Mountains.
japonicum Thunb. Nov.—Jan. Ascends to 3,500 ft. on Kaimanawa Mountains.
collinum Labill. Nov.—Mar. Ascends to 4,500 ft.
Raoulia australis Hook. f. Oct.—Jan. Ascends to 5,500 ft.
tenuicaulis Hook. f. Dec.—Jan. Rimutaka and Kaimanawa Mountains. Ascends to 5,000 ft.
glabra Hook. f. Dec.—Jan. Rimutaka and Tararua Mountains. Ascends to 4,000 ft.
grandiflora Hook. f. Dec.—Jan. 3,000–6,500 ft. All mountains, but not common on Kaimanawas.
rubra Buch. Jan. Tararua Mountains. 4,200–5,200 ft.
Helichrysum bellidioides Willd. Nov.—Feb. Ascends to 7,500 ft. on Ruapehu (Cock., T. F. C.).
filiacule Hook. f. Dec.—Feb. Ascends to 4,000 ft.
fasciculatum Buch. Tararua Mountains (Travers). 4,000–5,000 ft.
Loganii T. K. Jan. Mount Holdsworth and Mount Hector; Tararua Mountains. 4,000–4,500 ft.
Leontopodium Hook. f. Jan.—Feb. Ruahine (Col.); Tararua and Kaimanawa Mountains; Ruapehu (scarce, T. F. C.); Hauhangatahi (Spencer). 4,000–5,200 ft.
glomeratum Benth. & Hook. f. Oct.—Jan. Ascends to 3,000 ft. on Kaimanawa Mountains.
Cassinia leptophylla R. Br. Dec.—Feb.
Vauvilliersii Hook. f. Dec.—Jan. Ascends to 5,000 ft. on Kaimanawa Mountains.
fulvida Hook. f. Dec.—Feb. (Buch.). Ascends to 3,500 ft.
Craspedia uniflora, Forst. Dec.—Feb. Ascends to 5,000 ft.
Cotula coronopifolia Linn. Oct.—Feb. In wet places.
australis Hook. f. Sept.—Mar.
minor Hook. f. Nov.—Jan. ? Titahi Bay (identification uncertain, Petrie). Ascends to 2,500 ft.
pyrethrifolia Hook. f. Dec.—Feb. Mount Hector. 5,000 ft.
perpusilla Hook. f. Nov.—Feb. (Buch.). ? Kapiti Island (Cock.). Ascends to 4,500 ft.
dioica Hook. f. Nov.—Feb. Ascends to 3,000 ft.
Centipeda orbicularis Lour. Jan.—Mar. Ascends to 2,000 ft.
Abrotanella pusilla Hook. f. Ruahine Mountains (Col.); Tararua Mountains. 3,900–5,000 ft.
Erechtites prenanthoides D. C. Oct.—Jan. Ascends to 3,000 ft.
arguta D. C. Nov.—Feb. Ascends to 2,500 ft.
scaberula Hook. f. Nov.—Feb. Ascends to 1,500 ft.
quadridentata D. C. Nov.—Feb. Ascends to 3,500 ft.
diversifolia Petrie. Dec.—Jan. Base of Ruapehu (D. P.). Ascends to 3,000 ft.
glabrescens T. K. Jan.—Feb. Upper Rangitikei (D. P.); Tongariro (Cock.). Ascends to 4,500 ft.
Brachyglottis rapanda Forst. Aug.—Oct. Ascends to 3,000 ft. on Kaimanawas.
rangiora Buch. July—Sept. Shores of Cook Strait (Buch. and T. K.).

- Senecio lagopus* Raoul. Nov.-Jan. Ascends to 4,500 ft.
laetus Forst. Oct.-Nov. Ascends to 4,500 ft.
Turneri Cheesem. Nov.-Dec. Wanganui River, near Pipiriki.
latifolius Banks & Sol. Nov.-Feb. Abundant in Makuri Gorge.
 Ascends to 3,500 ft. on Kaimanawas.
Kirkii Hook. f. Oct.-Dec. Ascends to 2,500 ft.
Greyii Hook. f. Jan. On cliff-faces, Palliser Bay. Ascends to 1,500 ft.
compactus T. K. Jan.-Feb. Castlepoint (T. K.).
Adamsii Cheesem. Jan.-Feb. Mount Holdsworth, 4,000 ft.
elaegnifolius Hook. f. Dec.-Feb. Ascends to 4,500 ft.
Bidwillii Hook. f. Dec.-Jan. 2,500-5,500 ft.
Microseris Forsteri Hook. f. Dec.-Feb. Ascends to 4,000 ft.
Taraxacum officinale Wigg. Nov.-Feb. Ascends to 4,000 ft.
Sonchus asper Hill. Spring to autumn.
oleraceus Linn.

39. Stylidiaceae.

- Phyllachne Colensoi* Bergg. Dec.-Feb. 3,000-6,000 ft.
Oreostylidium subulatum Bergg. Dec.-Mar. Ruahine Mountains (Pryor);
 base of Tongariro (Kirk). Ascends to 6,000 ft.
Forstera Bidwillii Hook. f. Dec.-Mar. 2,500-6,000 ft.
tenella Hook. f. Dec.-Mar. 1,500-4,500 ft.

40. Goodeniaceae.

- Selliera radicans* Cav. Nov.-Jan. Ascends to 3,500 ft. on Kaimanawas.

41. Campanulaceae.

- Pratia angulata* Hook. f. Nov.-Feb. Ascends to 4,500 ft.
perpusilla Hook. f. Nov.-Jan. Between Rangitikei and Turakina
 Rivers (Cock.).
Lobelia anceps Linn. f. Nov.-Mar.
Wahlenbergia gracilis A. D.C. Nov.-Feb. Ascends to 6,000 ft.
saxicola A. D.C. Dec.-Feb. Ascends to 6,000 ft.

42. Ericaceae.

- Gaultheria antipoda* Forst. Ascends to 6,000 ft.
perplexa T. K. Otaki. Ascends to 5,000 ft. on Kaimanawa Mountains.
rupestris R. Br. Nov.-Feb. Ascends to 7,000 ft. on Ruapehu (Cock.).
fafifolia Hook. f. Jan. Waimarino (Turner). 1,000-2,000 ft.
oppositifolia Hook. f. Nov.-Jan. Near Wanganui (Field). 500-3,500 ft.

43. Epacridaceae.

- Pentachondra pumila* R. Br. Dec.-Feb. 2,000-5,000 ft.
Cyatnodes acerosa R. Br. Aug.-Nov. Ascends to 4,000 ft. on Kaimanawas.
empetrifolia Hook. f. Nov.-Jan. Ascends to 4,500 ft.
Colensoi Hook. f. Dec.-Jan. Volcanoes, Ruahine (Col.); Tararua and
 Kaimanawa Mountains. 2,000-5,000 ft.
pumila Hook. f. Tararua Mountains. 2,500-5,000 ft.
Leucopogon fasciculatus A. Rich. Sept.-Nov. Ascends to 3,500 ft.
Fraseri A. Cunn. Sept.-Jan. Ascends to 4,500 ft.
Epacris alpina Hook. f. Dec.-Jan. Ruahine and Kaimanawa Mountains.
 Ascends to 5,000 ft. Waimarino (P. T.); volcanoes.

- Dracophyllum recurvum* Hook. f. Ruahine Mountains (Col.); volcanoes. Ascends to 5,000 ft. on Kaimanawa Mountains.
longifolium R. Br. Ascends to 4,500 ft.
Urvilleanum A. Rich. Volcanoes; Ruahine, Tararua, and Kaimanawa Mountains. 2,500–4,500 ft.
subulatum Hook. f. Nov.–Mar. Ruahine and Kaimanawa Mountains; Waimarino (P. T.). 350–3,500 ft.
uniflorum Hook. f. Dec.–Mar. Tararua Mountains. 2,000–4,500 ft.
rosmarinifolium R. Br. Dec.–Mar. Tararua Mountains (Buch.). 2,500–5,000 ft.

44. Primulaceae.

- Samolus repens* Pers. Nov.–Jan. Usually coastal.

45. Myrsinaceae.

- Myrsine salicina* Heward. Sept.–Dec. Ascends to 2,800 ft.
Urvillei A. D. C. Mar.–April. Ascends to 3,000 ft.
montana Hook. f. Ruahine Mountains (Col.); Taihape (Cock). Ascends to 3,000 ft.
divaricata A. Cunn. Aug.–Oct. Ascends to 4,000 ft.
nummularia Hook. f. Dec.–Jan. Ruapehu (Petrie); Ruahine Mountains (Col.); Tararua and Kaimanawa Mountains. 2,000–5,000 ft.

47. Oleaceae.

- Olea Cunninghamii* Hook. f. Oct.–Nov. Ascends to 2,500 ft.
lanceolata Hook. f. Nov.–Jan. Ascends to 2,000 ft.
montana Hook. f. Nov.–Jan. Ascends to 2,500 ft.

48. Apocynaceae.

- Parsonsia heterophylla* A. Cunn. Nov.–Mar. Fruit, April. Ascends to 2,500 ft.
capsularis R. Br. Nov.–Mar. Ascends to 2,000 ft.

49. Loganiaceae.

- Logania depressa* Hook. f. Locality possibly uncertain. Between Onetapu Desert, east of Ruapehu, and towards source of Moawhango River (Col.).
Geniostoma ligustrifolium A. Cunn. Oct.–Nov.

50. Gentianaceae.

- Gentiana Grisebachii* Hook. f. Dec.–Feb. Ruahine Mountains (Col.); Tongariro (Bidwill); Tararua Mountains; Kaimanawa Mountains. Ascends to 4,500 ft.
bellidifolia Hook. f. Jan.–Mar. Tararua and Kaimanawa Mountains; volcanoes. 1,500–5,800 ft.
patula Cheesem. Jan.–Mar. Tararua Mountains (Townson). 2,500–5,000 ft.
Liparophyllum Gunnii Hook. f. Dec.–Jan. Tararua and Kaimanawa Mountains; Mount Denny; Quoin, 3,900 ft.; volcanoes (Cock., T. F. C.), 3,500–4,500 ft.

51. Boraginaceae.

- Myosotis antarctica* Hook. f. Nov.-Feb. Ascends to 4,500 ft.
Forsteri Lehm. Oct.-Feb. Ascends to 4,300 ft. on Kaimanawa Mountains.
petiolata Hook. f. Nov.-Jan. Ruahine Mountains (Hill). Ascends to 3,000 ft.
Astoni Cheesem. Dec.-Jan. Maungatiriri and Tauherenikau River valleys; Mount Holdsworth. 100-4,000 ft.

52. Convolvulaceae.

- Calystegia sepium* R. Br. Nov.-Mar.
turguriorum R. Br. Dec.-Feb.
Soldanella R. Br. Nov.-Mar. Coastal.
Convolvulus erubescens Sims. Dec.-Mar. Palliser Bay (Col., Buch.).
Dichondra repens Forst. Spring and early summer. Ascends to 2,500 ft.
brevifolia Buch. Nov.-Jan. Ascends to 3,000 ft.

53. Solanaceae.

- Solanum nigrum* Linn. Ascends to 2,000 ft.
aviculare Forst. Flowers most of the year.

54. Scrophularaceae.

- Calceolaria Sinclairii* Hook. Nov.-Feb. Ruahine Mountains. (Col., Petrie, &c.).
repens Hook. f. Dec.-Feb. Ruahine Mountains (Col.); Rimutaka Range (T. K.); Wainuiomata (Arnold); in creeks of Tararua Mountains; Makatote Gorge (T. F. C.). 250-2,000 ft.
Mazus pumilio R. Br. Nov.-Feb. Manawatu River (Col.); Otaki (Buch.); Pencarrow (T. K.); Levin Beach, Waikanae (Cah.).
radicans Cheesem. Wairarapa, Tararua Mountains (Col. and Buch.). 500-3,500 ft.
Mimulus repens R. Br. Nov.-Jan. Brackish swamps at Otaki (E. H. Atkinson).
Gratiola peruviana Linn. Nov.-Feb. Ascends to 1,500 ft.
Glossostigma elatinioides Benth. Nov.-Feb. Ascends to 2,500 ft.
Limosella tenuifolia Nutt. Nov.-Feb. Ascends to 3,000 ft.
Veronica speciosa R. Cunn. Nov.-Mar. Port Nicholson (Lyal).
macroura Hook. f. Cook Strait (Cock.). Identification doubtful (T. F. C.).
sahicifolia Forst. Dec.-Mar. Ascends to 3,500 ft.
rotundata T. K. July-Sept. Vicinity of Wellington (T. K.).
angustifolia A. Rich. Dec.-Feb. River-beds of Wangaeahu and Turakina (A. Allison).
parviflora Vahl. Dec.-Feb. Wellington.
venustula Col. East side Ruahine Mountains (Col.).
Colensoi Hook. f. Rangitikei (D. P.); Ruahine Mountains (Col.); Kaimanawa Mountains. Ascends to 3,000 ft.
laevis Benth. Dec.-Feb. Ruahine Mountains (Col.); volcanoes; Tararua and Kaimanawa Mountains. 2,500-5,000 ft.
elliptica Forst. Dec.-Feb. Titahi Bay. Coastal.

- Veronica buxifolia* Benth. Dec.—Mar. Tararua and Kaimanawa Mountains; volcanoes (Cheesem.). 2,000–5,000 ft.
tetragona Hook. Jan.—Feb. Volcanoes; Kaimanawa Mountains. 2,000–5,000 ft.
Astoni Petrie. Tararua Mountains. 4,000–5,000 ft.
catarractae Forst. Nov.—Jan. Ascends to 4,000 ft.
catarractae var. *diffusa* Hook. f. Tararua Mountains, 5,000 ft.; Tauherenikau Valley, 1,000 ft.; volcanoes (T. F. C.).
Lyallii Hook. Nov.—Mar. Ruahine and Tararua Mountains (Cheesem.); Wanganui (Buch.). Ascends to 4,500 ft.
Hookeriana Walp. Volcanoes (Cheesem., Cock., Turner). 3,000–6,000 ft.
Olseni Col. Dec.—Mar. Ruahine Mountains (Col. and Petrie). 2,000–4,000 ft.
spatulata Benth. Volcanoes; Ruahine Mountains (Hill), 3,000–7,000 ft.; on Ruapehu (Cock.).
Ourisia macrophylla Hook. Nov.—Jan. Wainuiomata (Buch.); Kaimanawa Mountains. Ascends to 4,500 ft.
Colensoi Hook. f. Nov.—Jan. Tararua and Ruahine Mountains and volcanoes, 1,500–3,500 ft. Ascends to 5,000 ft. on Kaimanawas.
caespitosa Hook. f. Dec.—Feb. Ruahine, Kaimanawa, and Tararua Mountains, and volcanoes. 3,000–6,500 ft.
Euphrasia cuneata Forst. Dec.—Mar. Ascends to 5,000 ft. on Kaimanawas.
revoluta Hook. f. Dec.—Mar. Ruahine (Col.) and Tararua and Kaimanawa Mountains. 2,500–5,500 ft.
zealandica Wetts. Dec.—Mar. Ruahine and Tararua Mountains. 2,000–6,000 ft. Northern limit, Pukeonake, west of Tongariro (T. F. C.).

55. Lentibulariaceae.

- Utricularia novae-zealandiae* Hook. f. Nov.—Jan. Palliser Bay (Col.).
monanthos Hook. f. Dec.—Mar. Rangipo Plain (Petrie); volcanoes (T. F. C.); Kaimanawa Mountains. Ascends to 4,500 ft.

56. Gesneraceae.

- Rhabdothamnus Solandri* A. Cunn. Flowers most of the year. Upper Wairarapa (Buch.); Wellington (T. F. C.); Waimarino (Turner); Wanganui (E. H. Atkinson). Ascends to 2,000 ft.

57. Myoporaceae.

- Myoporum laetum* Forst. Oct.—Jan. Usually coastal.

58. Verbenaceae.

- Teucriidium parviflorum* Hook. f. Oct.—Jan. Rare. Ascends to 800 ft. at Kakahi (Turner).

59. Labiatae.

- Mentha Cunninghamii* Benth. Ascends to 4,500 ft.

60. Plantaginaceae.

- Plantago Raoulii* Decne. Upper Rangitikei (Buch.). Ascends to 3,500 ft.
spatulata Hook. f. Between Castle Point and Cape Palliser.
Brownii Rapin. Tararua Mountains (Buch.); Ruahine Mountains (Col.). Ascends to 5,500 ft.
uniflora Hook. f. Ruahine Mountains (Col.); Tararua Mountains. 4,000–5,000 ft.

62. Illecebraceae.

Scleranthus biflorus Hook. f. Ascends to 4,000 ft.

64. Chenopodiaceae.

Rhagodia nutans R. Br. Coastal.

Chenopodium triandrum Forst. Nov.-Mar. Mostly coastal.

glaucum Linn. Nov.-Mar. Mostly coastal.

carinatum R. Br. Dec.-Mar. (Buch.).

Atriplex cinerea Poir. Palliser Bay (Col.).

patula (Linn.).

Buchananii T. K. Dec.-Mar. Wellington (Buch. and Kirk).

Salicornia australis Sol. Summer and autumn. Coastal.

Suaeda maritima Dum. Dec.-Mar. Coastal.

Salsola Kali Linn. Dec.-Mar.

65. Polygonaceae.

Polygonum aviculare Linn. Nov.-Mar. Ascends to 2,500 ft.

serrulatum Lag. Nov.-Mar. Wellington (Buch.).

Rumex flexuosus Sol. Dec.-Mar. Ascends to 4,000 ft.

neglectus T. K. Nov.-Mar. Beaches near Wellington.

Muehlenbeckia australis Meissn. Nov.-April. Ascends to 2,000 ft.

complexa Meissn. Nov.-April. Ascends to 3,500 ft. on Kaimanawa Mountains.

axillaris Walp. Dec.-Mar. Ascends to 4,500 ft.

Astoni Petrie. Wainuiomata mouth; Orongorongo.

ephedrioides Hook. f. Dec.-Mar. Upper Rangitikei (Williams, Petrie)
Ascends to 3,000 ft.

66. Piperaceae.

Piper excelsum Forst. Flowers most of the year.

Peperomia Endlicheri Miq. Titahi and Evans Bays.

67. Chloranthaceae.

Ascarina lucida Hook. f. Sept.-Nov. Wairarapa Valley (Col.).

68. Monimiaceae.

Hedycarya arborea Forst. Oct.-Nov. Ascends to 2,500 ft.

Laurelia novae-zealandiae A. Cunn. Oct.-Nov. Ascends to 2,000 ft.

69. Lauraceae.

Beilschmiedia tawa Benth & Hook. f. Nov.-Dec. Fruit, January. Ascends to 2,500 ft.

70. Proteaceae.

Knightia excelsa R. Br. Nov.-Dec. Ascends to 2,800 ft.

71. Thymelaeaceae.

Pimelia longifolia Banks & Sol. Oct.-Dec. Tararua Mountains. Ascends to 3,000 ft.

Gnidia Willd. Dec.-Jan. Ruahine Mountains (Col.); Tararua Mountains. Ascends to 4,000 ft.

- Pimelia buxifolia* Hook. f. Jan.—Mar. Ruahine Mountains (Petrie); Kaimanawa Mountains; volcanoes (T. F. C.). 1,500–5,500 ft.
virgata Vahl. Sept.—Dec. Wellington. Uncommon. Ascends to 2,000 ft.
arenaria A. Cunn. Nov.—Mar. Coastal.
laevigata Gaertn. Oct.—Mar. Ascends to 5,000 ft. on Kaimanawa Mountains.
Lyallii Hook. f. Dec.—Mar. Ruahine Mountains (Col., Tryon, Hamilton). 2,000–4,500 ft.
Drapetes Dieffenbachii Hook. Dec.—Mar. 2,000–4,500 ft.

72. Loranthaceae.

- Loranthus micranthus* Hook. f. Oct.—Nov. Ascends to 2,000 ft.
tetrapetalus Forst. Nov.—Jan. Quoin, 2,900 ft.; volcanoes. Ascends to 4,000 ft. on Kaimanawas.
Colensoi Hook. f. Dec.—Jan. Ascends to 2,000 ft.
Fieldii Buch. Base of Ruapehu (H. C. Field).
avidus Hook. f. Dec.—Feb. Ruahine Mountains (T. F. C.). Ascends to 3,500 ft. on Kaimanawas.
Tupeia antarctica Cham. & Schl. Oct.—Dec. Ascends to 3,000 ft.
Viscum Lindsayi Oliver. Oct.—Feb. Lake Wairarapa Road.
salicornioides A. Cunn. Ascends to 1,500 ft.

73. Santalaceae.

- Fusanus Cunninghamii* Benth. & Hook. f. Sept.—Oct. Fruit, March. Wai-kanae.

74. Balanophoraceae.

- Dactylanthus Taylora* Hook. f. Feb.—Mar. Waitotara, Upper Rangitikei, Upper Wanganui (T. F. C.); Kaitoke (Phillips); near Pipiriki (E. P. Turner).

75. Euphorbiaceae.

- Euphorbia glauca* Forst. Oct.—Feb. Coastal.

76. Urticaceae.

- Paratrophis heterophylla* Bl. Oct.—Feb. Sparsely distributed throughout. Ascending to 1,000 ft. at Waimarino (Turner).
Banksii Cheesem. Nov.—Feb. Cook Strait; Wainuiomata Valley.
Urtica jerox Forst. Aug.—Dec. Ascends to 1,000 ft.
incisa Poir. Flowers spring and summer. Ascends to 4,000 ft.
incisa var. *linearifolia* Hook. f. Near Levin, Lake Papaitonga, at edges of creeks.
Elatostemma rugosum A. Cunn. Middle Wellington Province (Cheesem.); Otaki (Buch.); Ohau River; Levin.
Parietaria debilis Forst. Flowers spring and summer. Ascends to 2,500 ft.
Australna pusilla Gaud. Ascends to 1,000 ft.

77. Fagaceae.

- Fagus Menziesii* Hook. f. Nov.—Jan. Ascends to 4,000 ft.
fusca Hook. f. Oct.—Dec. Ascends to 3,500 ft.
apiculata Col. Nov.—Dec. River-flats on Maungatiriri River, and Kaitoke; Day's Bay (E. H. A.).

- Fagus Blairii* T. K. Forest near source of Wanganui River (T. K.). 1,000–2,500 ft.
Solandri Hook. f. Nov.–Dec. Ascends to 2,500 ft.
clifortioides Hook. f. Dec.–Jan. Waimarino (Turner); volcanoes (Cock.); Kaimanawa Mountains. 2,000–4,000 ft.

78. Taxaceae.

- Libocedrus Bidwillii* Hook. f. 800–4,000 ft.
Podocarpus totara Don. Ascends to 2,000 ft.
Halli T. K. Ascends to 4,000 ft. on Kaimanawa Mountains.
nivalis Hook. Waimarino (Turner); Kaimanawa Mountains; Tararua Mountains (Buch.). 2,000–5,500 ft.
ferrugineus Don. Ascends to 3,000 ft.
spicatus R. Br. Ascends to 2,000 ft.
dacrydioides A. Rich. Ascends to 2,000 ft.
Dacrydium bifforme Pilger. Waimarino (Turner); Ruahine Mountains (T. F. C.). 2,000–4,500 ft.
Bidwillii Hook. f. Ruahine Mountains (Col.); volcanoes; Kaimanawas. 2,000–4,500 ft.
cupressinum Sol. Ascends to 2,500 ft.
intermedium T. K. Ruahine Mountains (Col.); Tararua Mountains. Ascends to 4,000 ft.
Colensoi Hook. f. Waimarino Forest (T. K., Turner); volcanoes (Cock.). Ascends to 3,000 ft.
laxifolium Hook. f. Ruahine Mountains (Col.); volcanoes, 2,500–4,000 ft.; Kaimanawa Mountains, to 5,000 ft.
Phyllocladus trichomanoides Don. Tararua Mountains (Buch.). Ascends to 2,500 ft.
alpinus Hook. f. Waimarino district (Turner); volcanoes (Cock.); Kaimanawa Mountains.

79. Orchidaceae.

- Dendrobium Cunninghamii* Lindl. Dec.–Feb. Ascends from sea-shore to 2,000 ft.
Bulbophyllum tuberculatum Col. April–May. Palmerston North (Hamilton).
pygmaeum Lindl. Nov.–Feb. Happy Valley Bay. Ascends to 1,500 ft.
Earina mucronata Lindl. Oct.–Dec. Ascends to 2,000 ft.
suaveolens Lindl. Mar.–June. Ascends to 2,000 ft.
Sarcochilus adversus Hook. f. Oct.–Nov.
Spiranthes australis Lindl. Jan.–Feb. Bog near Erua, 2,600 ft. (P. Turner).
Thelymitra longifolia Forst. Nov.–Dec. Ascends to 4,000 ft.
decora Cheesem. Jan. Volcanoes; Taumarunui (T. F. C.); Kaimanawas. 2,500–3,700 ft.
venosa R. Br. Mungaroa Swamp (T. K., Petrie).
uniflora Hook. f. Dec.–Jan. Volcanoes (T. F. C.). Ascends to 3,500 ft.
Orthoceras strictum R. Br. Dec.–Feb. Ascends to 2,500 ft.
Microtis porrifolia R. Br. Oct.–Dec. Ascends to 2,500 ft.
Prasophyllum Colensoi Hook. f. Nov.–Jan. Ascends to 5,000 ft. on Kaimanawas.
rufum R. Br. Feb. Day's Bay; Kaitoke; Waimarino, at 2,900 ft. (Turner).

- Pterostylis Banksii* R. Br. Oct.–Nov. Ascends to 3,500 ft.
graminea Hook. f. Sept.–Nov.
micromega Hook. f. Dec.–Jan. Murimotu (Petrie); Wairarapa (Col.).
foliata Hook. f. Dec.–Jan. Ruahine Mountains and Cape Palliser (Col.); Kaitoke. Ascends to 2,500 ft.
venosa Col. Ruahine Mountains (Olsen). 2,000–3,500 ft.
trullifolia Hook. f. Kaitoke (V. Phillips, B. C. A.).
barbata Lindl. Oct.–Nov. Kaitoke (V. Phillips, B. C. A.); Day's Bay (Atkinson, Morrison).
Acianthus Sinclairii Hook. f. May–Aug. Kapiti Island (Cock.). Ascends to 2,500 ft.
Cyrtostylis oblonga Hook. f. Aug.–Oct. Kaitoke (V. Phillips). Ascends to 2,500 ft.
Calochilus paludosus R. Br. Upper Hutt (E. H. Atkinson).
Lyperanthus antarcticus Hook. f. Dec.–Feb. Tararua Mountains. 3,000–4,000 ft.
Caladenia minor Hook. f. Sept.–Dec. Kaitoke. Ascends to 2,000 ft.
bifolia Hook. f. Dec.–Jan. Tararua Mountains; volcanoes (T. F. C.). Ascends to 4,500 ft.
Chiloglottis cornuta Hook. f. Oct.–Dec. Kaitoke; Kaimanawa Mountains. Ascends to 3,000 ft.
Adenochilus gracilis Hook. f. Nov.–Jan. Between Ohakune and Ruapehu (Turner). 500–2,500 ft.
Corysanthes rotundifolia Hook. f. Sept.–Dec. Ascends to 2,500 ft.
triloba Hook. f. July–Sept. Ascends to 4,000 ft. on Kaimanawa Mountains.
macrantha Hook. f. Oct.–Dec. Ascends to 3,500 ft. on Kaimanawa Mountains.
Gastrodia sesamoides R. Br. Dec.–Jan. Tauherenikau Valley. Ascends to 1,500 ft.
Cunninghamii Hook. f. Nov.–Jan. Ascends to 2,000 ft.
80. Iridaceae.
- Libertia ixioides* Spreng. Oct.–Dec. Ascends to 3,500 ft. on Kaimanawa Mountains.
ixioides var. *b.* Levin Beach. Coastal.
grandiflora Sweet. Oct.–Nov.
pulchella Spreng. Nov.–Jan. Ascends to 4,000 ft.
82. Liliaceae.
- Rhipogonum scandens* Forst. Nov.–Dec. Fruit, January. Ascends to 2,000 ft.
Enargia marginata Banks & Sol. Nov.–Feb. Ascends to 3,500 ft.
Cordylina Banksii Hook. f. Nov.–Dec. Ascends to 3,500 ft.
australis Hook. f. Nov.–Jan. Ascends to 2,500 ft.
indivisa Steud. Dec.–Jan. 1,500–4,000 ft.
pumihō Hook. f. Nov.–Dec. Ascends to 1,500 ft. (Buch., T. F. C.).
Astelia linearis Hook. f. Nov.–Jan. 3,000–5,000 ft.
Cunninghamii Hook. f. Dec.–Jan. Fruit, Nov.–Dec. Ascends to 2,500 ft.
trinervia T. K. Mar.–May. Fruit, Feb.–Mar. Ascends to 3,000 ft.
Solandria A. Cunn. Jan.–Feb. Ascends to 2,700 ft.
nervosa Banks & Sol. Oct.–Jan. Ascends to 4,500 ft.
Dianella intermedia Endl. Nov.–Dec. Ascends to 2,500 ft.

- Phormium tenax* Forst. Nov.-Jan. Ascends to 4,000 ft.
Cookianum Le Jolis. Nov.-Jan. Ascends to 4,000 ft.
Bulbinella Hookeri Benth. & Hook. f. Oct.-Jan. Ascends to 4,500 ft.
Arthropodium cirrhatum R. Br. Nov.-Dec.
candidum Raoul. Nov.-Jan. Ascends to 3,500 ft.
Herpotherium novae-zealandiae Hook. f. Dec.-Jan. Tararua and Kaimanawa Mountains; volcanoes.

83. Juncaceae.*

- Juncus pauciflorus* R. Br. Dec.-Feb. Ascends to 2,500 ft.
vaginatus R. Br. Dec.-Feb.
effusus Linn. Nov.-Feb. Ascends to 3,000 ft.
maritimus Lam. var. *australiensis*. Dec.-Jan.
bufonius Linn. Nov.-Jan. Ascends to 4,000 ft.
planifolius R. Br. Nov.-Jan. Ascends to 3,000 ft.
antarcticus Hook. f. Dec.-Feb. Tararua Mountains; Rangipo Plain (Petrie). 1,500-4,000 ft.
prismatocarpus R. Br. Nov.-Jan.
holoschoenus R. Br. Nov.-Feb. Ascends to 2,500 ft.
lampocarpus Ehr. Nov.-Feb. Ascends to 3,500 ft.
novae-zealandiae Hook. f. Dec.-Mar. Tararua and Kaimanawa Mountains. Ascends to 4,500 ft.
Luzula Colensoi Hook. f. Jan.-Feb. Mount Holdsworth (Townson); Ruahine Mountains (Col.); Ngauruhoe. 4,000-6,500 ft.
campestris D. C. Ascends to 5,000 ft. on Kaimanawa Mountains.

84. Palmeae.

- Rhopalostylis sapida* Wendl. & Drude. Jan.-April. Ascends to 2,000 ft.

85. Pandanaceae.

- Freycinetia Banksii* A. Cunn. Sept.-Nov. Fruit, May. Ascends to 2,500 ft.

86. Typhaceae.

- Typha angustifolia* Linn. Dec.-Mar. Ascends to 2,000 ft.
Sparganium antipodum Graeb. Dec.-Mar.

87. Lemnaceae.

- Lemna minor* Linn. Ascends to 2,000 ft.

88. Naiadaceae.

- Triglochin striatum* Ruiz & Pav. Oct.-Jan.
Potamogeton Cheesemanii A. Bennett. Nov.-Mar. Volcanoes, 4,250 ft. (T. F. C.).
natans Linn.
polygonifolius Pourr. Dec.-April. Ascends to 4,700 ft. on Kaimanawa Mountains.
ochreatus Raoul. Nov.-Mar. Turakina River mouth (Cock.).
pectinatus L. Dec.-Mar. Turakina River mouth (Cock.).
Ruppia maritima Linn. Dec.-April.
Zostera nana Roth.

* *J. scheuchzerioides* was included in my list of Tararua plants (Trans. N.Z. Inst., vol. 42, p. 13) through a clerical error.

89. **Centrolepidaceae.**

- Centrolepis pallida* Cheesem. Dec.—Mar. Ruahine Mountains (Col).
viridis T. K. Dec.—Mar. Base of Ruapehu (Petrie); Kaimanawa Mountains. 2,000–5,000 ft.

90. **Restiaceae.**

- Leptocarpus simplex* A. Rich. Sept.—Dec.
Hypolaena laterifolia Benth. Nov.—Mar. Ascends to 4,500 ft.

91. **Cyperaceae.**

- Cyperus vegetus* Willd. Nov.—Jan.
Mariscus ustulatus Clarke. Nov.—Jan. Ascends to 1,500 ft.
Eleocharis acuta R. Br. Nov.—Mar. Ascends to 3,500 ft. on Kaimanawas.
Cunninghamii Boeck. Nov.—Mar. Ascends to 4,500 ft. on volcanoes (T. F. C.).
Scirpus lenticularis Poir. Dec.—Mar. Base of Ruapehu (D. P., Hamilton). Ascends to 2,500 ft.
aucklandicus Boeck. Dec.—Mar. Ruahine (Col). Ascends to 5,000 ft.
cernuus Vahl. Nov.—Feb. Ascends to 2,000 ft.
antarcticus Linn. Nov.—Mar. Ascends to 2,000 ft.
inundatus Poir. Nov.—Mar. Ascends to 3,000 ft.
sulcatus Thouars. Nov.—Mar. Ascends to 2,000 ft.
prolifer Rottb. Nov.—Mar.
frondosus Banks & Sol. Nov.—Feb. Coastal.
americanus Pers. Nov.—Feb. Palliser Bay; Marton (Townson).
lacustris Linn. Nov.—Feb. Ascends to 1,500 ft.
maritimus Linn. Nov.—Feb.
Carpha alpina R. Br. Dec.—Feb. 2,500–5,000 ft.
Schoenus brevifolius R. Br. Dec.—Jan. Ascends to 1,500 ft.
Tendo Banks & Sol. Oct.—Jan. Ascends to 2,000 ft.
pauciflorus Hook. f. Dec.—Mar. 1,500–5,000 ft.
axillaris Poir. Nov.—Mar. Ascends to 2,500 ft.
nitens Poir. Dec.—Mar. Ascends to 2,500 ft.
nitens var. *concinuus*. Ascends to 4,500 ft. on volcanoes (T. F. C.).
Cladium Sinclairii Hook. f. Oct.—Jan. Patea (Cock.); Taihape. Ascends to 2,000 ft.
glomeratum R. Br. Nov.—Jan. Ascends to 2,000 ft.
Gunnii Hook. f. Dec.—Jan. Ascends to 2,500 ft.
juncum R. Br. Nov.—Jan. Ascends to 2,000 ft.
Vauthiera Clarke. Nov.—Jan. Ascends to 2,000 ft.
Gahnia setifolia Hook. f. Dec.—Feb. Ascends to 2,000 ft.
pauciflora T. K. Oct.—Dec. Ascends to 3,000 ft.
xanthocarpa Hook. f. Feb.—Mar. Ascends to 2,500 ft.
lacera Steud. July—Aug. Ascends to 2,000 ft.
Gaudichaudii Steud. Ascends to 2,000 ft.
Oreobolus strictus Bergg. Tararua and Kaimanawa Mountains, 3,500–5,000 ft.; Rangipo Plain (Hill).
Uncinia purpurata Petrie. Dec.—Jan. Tararua Mountains (D. P.). 1,000–4,000 ft.
compacta R. Br. Dec.—Feb. Ruahine Mountains (Cock.); Tararua Mountains (Buch.). 1,000–5,500 ft.
caespitosa Boott. Nov.—Jan. Ascends to 4,000 ft.

- Uncinia uncinata* Linn. f. Nov.-Feb. Ascends to 3,000 ft.
leptostachya Raoul. Nov.-Jan. Ascends to 3,000 ft.
riparia R. Br. Nov.-Jan. Ascends to 3,000 ft.
rubra Boott. Dec.-Feb. Waimarino (T. F. C.).
rupestris Raoul. Tararua Mountains (H. H. T.); Ruahine Mountains (Col.).
filiformis Boott. Dec.-Jan. Ruahine Mountains (Col.); Tararua Mountains. 1,000-4,500 ft.
Carex pyrenaica Whal. Dec.-Mar. Ruahine Mountains (Col.). 3,500-6,500 ft.
acicularis Boott. Dec.-Mar. Ruahine Mountains (Col.); Tararua Mountains; Tongariro (Col.). 2,500-5,000 ft.
diandra Schrank. Dec.-Mar. Ascends to 3,000 ft.
virgata Soland. Nov.-Jan. Ascends to 3,000 ft.
secta Boott. Nov.-Jan. Ascends to 2,500 ft.
inversa R. Br. Nov.-May. Ascends to 3,000 ft.
Colensoi Boott. Nov.-Mar. Ascends to 4,000 ft.
echinata Murr. Nov.-Mar. Ascends to 4,000 ft.
leporina Linn. Nov.-Jan. Ohariu Valley (T. K.). Ascends to 4,000 ft.
Gaudichaudiana Kunth. Nov.-Feb. Ascends to 4,500 ft.
subdola Boott. Nov.-Jan. Ascends to 1,500 ft.
ternaria Forst. Nov.-Feb. Ascends to 4,000 ft.
dipsacea Bergg. Nov.-Jan. Ascends to 3,000 ft.
testacea Sol. Oct.-Jan. Ascends to 3,500 ft.
lucida Boott. Oct.-Jan. Ascends to 3,000 ft.
Petriei Cheesem. Dec.-Feb. Ascends to 3,500 ft. on Kaimanawas.
dissita Sol. Oct.-Jan. Ascends to 3,500 ft.
breviculmus R. Br. Oct.-Mar. Ascends to 3,000 ft.
pumila Thunb. Oct.-Jan.
Forsteri Wahl. Nov.-Jan. Ascends to 2,000 ft.
pseudocyperus Linn. Nov.-Feb. Ascends to 3,000 ft.

92. Gramineae.

- Zoysia pungens* Willd. Ascends to 2,000 ft.
Paspalum Digitaria Poir. Sydney Street, Wellington.
Oplismenus undulatifolius Beauv.
Spinifex hirsutus Labil. Coastal.
Ehrharta Colensoi Hook. f. Ruahine and Tararua Mountains. 3,000-5,500 ft.
Microlaena stipoides R. Br. Ascends to 2,000 ft.
avenacea Hook. f. Dec.-Jan. Ascends to 3,500 ft. on Kaimanawa Mountains.
polynoda Hook. f. Dec.-Jan. Base of Ruahine Mountains (Col.). Ascends to 1,500 ft.
Hierochloa redolens R. Br. Ascends to 3,000 ft.
Fraseri Hook. f. Ascends to 5,000 ft. on volcanoes (T. F. C.).
Stipa arundinacea Benth. Wairarapa (Buch.); South Karori (Kirk). Ascends to 1,500 ft.
Echinopogon ovatus Beauv. Ascends to 2,500 ft.
Alopecurus geniculatus Linn. Wairarapa (Buch.); near Wellington (T. K.). Ascends to 3,500 ft.
Sporobolus indicus R. Br.
Simplicia laxa T. K. Lower Wairarapa (T. K.).

- Agrostis muscosa* T. K. Tararua and Kaimanawa Mountains; volcanoes. 1,500–4,500 ft.
Muelleri Benth. Ruahine Mountains (Col.). 2,500–5,500 ft.
Dyeri Petrie. Volcanoes (T. F. C.); Tararua and Kaimanawa Mountains. 1,000–5,500 ft.
Deyeuxia Forsteri Kunth.* Ascends to 3,000 ft.
Billardieri Kunth. Coastal.
setifolia Hook. f. 3,000–5,000 ft.
quadrifida Benth. Ascends to 2,500 ft.
Dichelachne crinita Hook. f. Ascends to 3,000 ft.
sciurea Hook. f.
Deschampsia caespitosa Beauv. Palliser Bay. Ascends to 3,500 ft.
tenella Petrie. Ruahine Mountains (Col.); Tararua Mountains (Travers). Ascends to 4,500 ft.
Trisetum antarcticum Trin. Ascends to 4,500 ft.
Youngii Hook. f. Tararua Mountains; volcanoes (T. F. C.). 3,000–5,000 ft.
subspicatum Beauv. Ascends to 5,000 ft.
Amphibromus fluitans T. K. Marton (Townson).
Danthonia Cunninghamii Hook. f. Ascends to 3,500 ft.
bromoides Hook. f. Near Cape Palliser (Buch.); near Wellington (Stephenson).
Raoulii Steud. Ascends to 5,000 ft.
pilosa R. Br. Ascends to 4,500 ft.
semianularis R. Br. Ascends to 7,000 ft. on Ruapehu (Cock.).
Arundo conspicua Forst. Ascends to 3,500 ft. on Kaimanawa Mountains.
fulvida Buch.
Triodia australis Petrie. Mount Hector. 3,000–5,000 ft.
Poa novae-zealandiae Hack. Tararua Mountains.
anceps Forst. Ascends to 3,500 ft.
seticulmis Petrie. Tauherenikau Valley. Ascends to 2,500 ft.
caespitosa Forst. Ascends to 4,000 ft.
Colensoi Hook. f. 1,000–5,000 ft.
Kirkii Buch. Tararua Mountains.
imbecilla Forst. Tararua Mountains. Ascends to 4,000 ft.
Atropis stricta Hack. Coastal.
Festuca littoralis Labill. Coastal.
ovina Linn. Ascends to 4,500 ft.
rubra Linn. Ascends to 4,500 ft.
Agropyrum multiflorum T. K. Day's Bay.
scabrum Beauv. Ascends to 4,500 ft.
Asperella gracilis T. K. Dannevirke (Col.); Turangaarere (Petrie). Ascends to 3,000 ft.

* By a clerical error *D. Petriei* was included in my list of Tararua plants (Trans. N.Z. Inst., vol. 42, p. 13).