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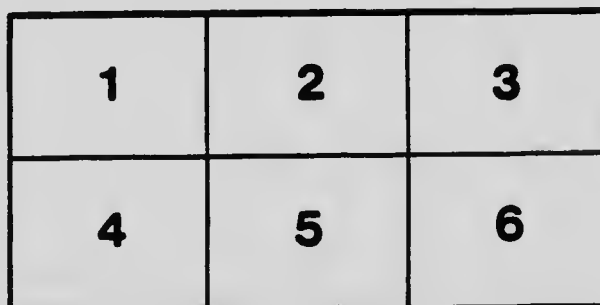
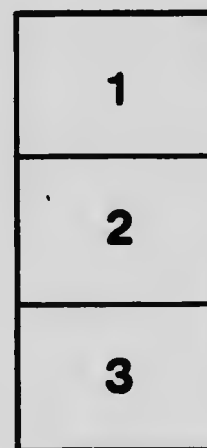
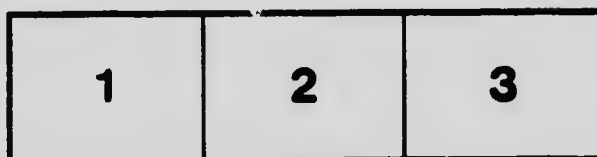
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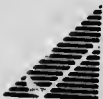
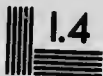
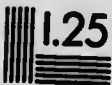
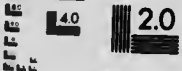
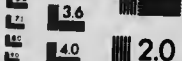
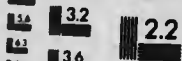
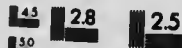
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ADDITIONS TO THE FLORA OF VANCOUVER ISLAND

By J. M. MACOUN

Reprinted from THE OTTAWA NATURALIST, VOL. XXVI, Feb. and Mar.

1931

ADDITIONS TO THE FLORA OF VANCOUVER ISLAND.*

By J. M. MACOON, Assistant Naturalist,
Geological Survey of Canada.

For nearly twenty years after the publication of Part V of the Catalogue of Canadian Plants, in 1890, very little systematic botanical work was done on Vancouver Island, except in 1893 when Prof. John Macoun spent the collecting season there. Notes on the new species and additions to the flora of Vancouver Island made in that year were published in "Contributions from the Herbarium of the Geological Survey," printed in the *Canadian Record of Science* and *The Ottawa Naturalist*.

The need of a thorough study of the flora of Vancouver Island was so pressing that in 1908 Prof. John Macoun was instructed to undertake it, and that year he worked in the vicinity of Victoria and north to Nanaimo, and the following season, 1909, on the west coast, chiefly about Ucluelet. He was assisted both years by Mr. William Spreadborough, who had also collected at Nootka in 1906. Prof. Macoun, being otherwise employed in 1910 and 1911, Mr. Spreadborough continued the work of collecting in these years, spending part of the season of 1910 on Queen Charlotte Islands and part of 1911 in the interior of Vancouver Island. In 1912 both the writer and Prof. Macoun collected on Vancouver Island, the former on the islands in the Gulf of Georgia and in Strathcona Park, the latter chiefly in the vicinity of Sidney. The manuscript for a flora of Vancouver Island is now almost ready for the press, but so many additions to the known flora have been made in the years referred to and so many are now interested in the Vancouver Island flora that it seems advisable to publish for their information a preliminary list of the additions that have been made to the flora in recent years. Where not otherwise stated, all the citations refer to collections made by members of the Geological Survey staff, and the specimens are in our herbarium.

The list that follows is by no means complete and will be supplemented by the descriptions of new species.

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THE OTTAWA NATURALIST.

1. *Asplenium viride*, Huds.
Ucluelet; Strathcona Park.
2. *Asplenium cyclosorum*, Ruprt.
Common; not separated from *A. Filix-foemina* in earlier publications.
3. *Polystichum munitum* var. *imbriica* m. (D. C. Eaton)
Maxon.
Mount Finlayson; Skirt Mountain
4. *Polystichum Andersoni*, Hopkins, N. sp. in ed.
Strathcona Park. (W. B. Anderson).
5. *Polystichum oreopteris*, Swartz.
Shawnigan Lake. (J. R. Anderson).
6. *Woodwardia spinulosa*, Mart. and Gal.
Texada Island. (J. R. Anderson).
7. *Woodsia oregana*, D. C. Eaton.
Cowichan River, alt. 4,000 ft.
8. *Equisetum litorale*, Kuhnlewein.
Shawnigan Lake.
9. *Lycopodium inundatum*, L.
Ucluelet.
10. *Selaginella Wallacei*, Hieron.
Common, recorded as *S. rupestris*.
11. *Selaginella densa*, Rydb.
Jansen's Island, Ucluelet.
12. *Selaginella selaginoides*, (L.) Link.
Ucluelet.
13. *Sparganium minimum*, Fries.
San Juan Lake. (Rosendahl).
5. *Potamogeton zosterifolius* Schumacher.
Langford Lake.
16. *Scheuchzeria palustris* L.
Cowichan Lake.
17. *Panicum pacificum*, Hitchc. and Chase.
Renfrew district. (Rosendahl). Bear Lake; Strath-
cona Park.
18. *Hierochloa odorata*, (L.) Wahl.
Courtenay River near Comox.
19. *Alopecurus californicus*, Vasey.
Head of Ucluelet Inlet.
20. *Agrostis oregonensis*, Vasey.
Renfrew district. (Rosendahl). Rare at Ucluelet.
21. *Agrostis longiligula*, Hitchc.
Departure Bay; Bear Lake.
22. *Agrostis inflata*, Scribner.
Esquimault.

23. *Agrostis aequalis*, Trin.
District of Renfrew. (Rosendahl).
Colquitz River; Ucluelet.
24. *Calamagrostis canadensis* var. *acuminata*, Vasey.
Comox; Departure Bay.
25. *Koeleria cristata*, (L.) Pers.
Burnside Road, Victoria; Bear Lake.
26. *Trisetum Nutkensis*, (Presl.) Scribn. and Merrill.
Renfrew district. (Rosendahl).
27. *Deschampsia cespitosa*, Beauv.
Comox; Strathcona Park.
28. *Deschampsia atropurpurea* (Wahl.) S. Nees.
Mount Benson; Strathcona Park.
29. *Avena fatua* var. *glabrata*, Peter.
Sooke; Victoria; Departure Bay.
30. *Beckmannia cruciformis*, (L.) Host.
Colquitz River.
31. *Distichlis spicata*, Beauv.
Ucluelet. Introduced from east with cranberry plants.
32. *Cynosurus echinatus*, L.
Oak Bay, Victoria; Nanaimo.
33. *Poa trivialis* L. var. *filiculmis*, Scribn.
Comox.
34. *Poa annua*, Presl.
West shore, Vancouver Island. (J. R. Anderson)
Long Beach below Clayoquot.
35. *Festuca subulata*, Bong.
Bear Lake, Nanaimo.
36. *Festuca latior*, L.
Comox.
37. *Bromus commutatus*, Scribn.
Victoria; Cowichan Lake.
38. *Bromus pacificus*, Shear.
Renfrew district. (Rosendahl).
39. *Bromus sterilis*, L.
Near Victoria.
40. *Bromus rubens*, L.
Nanaimo.
41. *Hordeum boreale*, Scribn.
Renfrew district. (Rosendahl).
42. *Elymus glaucus* var. *hirsutus*, A. O. Malte in ed.
Bear Lake, Cowichan L.

43. *Elymus glaucus* var. *robustus*, Davy.
Victoria; Ucluelet; Beacon Hill.
44. *Elymus borealis*, Scribn.
Renfrew district. (Rosendahl).
Ucluelet.
- NOTE.—The names of many grasses have been changed since the publication of the Catalogue of Canadian Plants. The above are all additions.
45. *Scirpus riparius*, (R. Br.) Spreng.
Victoria; Comox; Departure Bay; Ucluelet.
46. *Scirpus validus*, Vahl.
Wellington; Sidney; Beaver Lake near Victoria.
47. *Carex scoparia*, Schk.
Ucluelet. Introduced with cranberry plants from the east.
48. *Carex pratensis*, Drej.
Victoria, Mount Benson; Departure Bay; Comox.
49. *Carex ænea*, Fernald.
Departure Bay.
50. *Carex stellulata* var. *cephalantha*, Bail.
Wellington; Ucluelet.
51. *Carex Deweyana*, Schwein.
Renfrew district; Victoria.
52. *Carex pseudo-Deweyana*, Kukenthal.
Comox.
53. *Carex globosa*, Boott.
Bear Lake, Cowichan.
54. *Carex limosa*, Linn.
Near Comox.
55. *Carex flexilis*, Rudge.
Ucluelet. Introduced from the east with cranberry plants.
56. *Carex aurea*, Nutt.
Cadboro Bay; Comox.
57. *Carex vesicaria* var. *major*, Boott.
Near Victoria; Wellington.
58. *Carex physocarpa*, Presl.
Kennedy Lake near Ucluelet.
59. *Carex Bonplandii*, Kunth.
Comox; Cedar Hill.
60. *Spirodela polyrhiza* (L.) Schleid.
Victoria.

61. *Juncus balticus*, Willd.
Renfrew district. (Rosendahl). Ucluelet, Departure Bay
62. *Juncus* ~~ea~~ ^{sub} ~~sp.~~ ^{sp.} *compactus* L. and C.
Ucluelet. Introduced with cranberry plants from the east.
63. *Juncus alpinus* var. *ruscescens*, Fernald.
Strathcona Park.
64. *Juncus orthophyllus*, Coville.
Koksalah River.
65. *Juncus effusus*, L. var. *brunneus*, Engelm.
Ucluelet; Departure Bay.
66. *Juncus effusus*, L. var. *pacificus*, F. and W.
Victoria; Nanaimo; Ucluelet.
67. *Juncus effusus* var. *gracilis*, Hooker.
Sidney.
68. *Juncus falcatus* var. *alascensis*, Coville.
Renfrew district. (Rosendahl). Kennedy Lake near Ucluelet; Strathcona Park.
69. *Juncus brevicaudatus*, (Englem.) Fernald.
Ucluelet. Introduced with cranberry plants from the east.
70. *Juncus Mertensianus*, Bong.
Ucluelet; Strathcona Park.
71. *Luzula comosa*, E. Meyer.
Victoria. Only record for typical *L. comosa*.
72. *Erythronium Howellii*, Wats.?
Barklay Sound. (Hillier). Cowichan Lake. First collected by Anderson.
73. *Erythronium montanum*, Wats.?
Grand Central Lake. (Fraser).
74. *Lloydia serotina*, (L.) Swert.
Strathcona Park.
75. *Disporum Smithii*, (Hook.) Piper.
Gordon River. (Rosendahl). Cowichan Lake.
76. *Streptopus curvipes*, Vail.
Cowichan River; Strathcona Park.
77. *Clintonia uniflora*, Menzies.
Cowichan Lake; Strathcona Park.
78. *Iris versicolor*, L.
Ucluelet. Introduced with cranberry plants from the east.
79. *Sisyrinchium idahoense*, Bicknell.
Renfrew district. (Rosendahl). Victoria; Nanaimo; Shwigan Lake; Ucluelet.

80. *Sisyrinchium littorale*, Greene.
Victoria; Ucluelet; Nootka.
81. *Sisyrinchium birameum*, Piper.
Ucluelet.
82. *Sisyrinchium Macounii*, Bicknell.
Comox; Nanaimo; Beaver Hill; Ucluelet.
83. *Listera caurina*, Piper.
Cameron Lake; Mount Benson; Ucluelet.
84. *Salix macrostachya*, Nutt.
Koksilah River.
85. *Salix* sp.
A common species around Victoria. Not yet described but heretofore referred to *S. cordata*.
86. *Comandra Richardsoniana*, Fernald.
Langford Plains near Goldstream.
87. *Rumex occidentalis*, S. Wats.
Esquimault; Sidney; Nanaimo; Ucluelet.
88. *Rumex conglomeratus*, Murr.
Departure Bay.
89. *Rumex salicifolius*, Weinm.
Nanaimo; Ucluelet; Cowichan Lake.
90. *Polygonum aviculare* var. *vegetum*, Ledeb.
Near Comox; Nanaimo.
91. *Polygonum Douglasii*, Greene.
Near Duncan's.
92. *Polygonum spergulariæforme*, Meisn.
Beacon Hill; Nanaimo; Cowichan River; Campbell River.
93. *Polygonum tomentosum*, Schrank.
Near Victoria.
94. *Polygonum amphibum* var. *Hartwrightii*, (Gray) Bissell.
Colquitz River.
95. *Polygonum hydropiperoides*, Michx.
Elk Lake near Victoria.
96. *Amaranthus græcizans*, L.
Departure Bay.
97. *Amaranthus blitoides*, Wats.
Departure Bay.
98. *Abronia umbellata*, Lam.
Pachene Bay. (Geo. Fraser).
99. *Claytonia Chamissoi*, Ledeb.
Comox.
100. *Portulaca oleracea*, L.
Cowichan Station.
101. *Dianthus Armeria*, L.
Vicinity of Victoria.

102. *Silene Armeria*, L.
Raymond's Crossing.
103. *Lychnis coronaria*, (L.) Desv.
Nanaimo.
104. *Agrostemma Githago*, L.
Cowichan River (Clendenning); Victoria.
105. *Cerastium campestre*, Greene.
Most of the references to *C. arvense* in previous publications are this species.
106. *Cerastium graminifolium*, Rydb.
Cadboro Bay and Xmas Hill, Victoria; Cowichan Lake.
107. *Stellaria longifolia*, Muhl.
Newcastle Island, Departure Bay.
108. *Stellaria humifusa*, Rottb.
Newcastle Island; Ucluelet.
109. *Stellaria strictiflora*, (Rydb.)
Beaver Lake.
110. *Sagina stricta* var. *maritima*, Fries.
Langford Lake.
111. *Spergula sativa*, Boenn.
Common. Listed as *S. arvensis*.
112. *Spergularia salina* var. *leiosperma*, Kindb.
Sidney.
113. *Clematis ligusticifolia*, Nutt.
Running wild at Departure Bay.
114. *Anemone Hudsoniana*, (DC.) Richard.
Koksilah. First collected there by Mr. J. R. Anderson.
115. *Thalictrum occidentale*, Gray.
Cowichan Lake. (Glendenning; Anderson; Macoun)
Koksilah River.
116. *Batrachium Lobbii*, A. Gray.
Lost Lake.
117. *Ranunculus flammula* var. *reptans* (L.) Schlecht.
Nanaimo. (Fletcher and Anderson) Shawnigan Lake;
Cowichan River; Ucluelet; Strathcona Park.
118. *Ranunculus Eschscholtzii*, Schlecht.
Mount Arrowsmith. (J. R. Anderson). North of
Cowichan Lake; Strathcona Park.
119. *Ranunculus pennsylvanicus*, L.
Ucluelet.
120. *Ranunculus acris*, L.
Sparingly naturalized.
121. *Ranunculus platyphyllus*, (Gray) Piper.
Comox; Cadboro Bay; Cowichan Lake.

122. *Caltha asarifolia*, DC.
Comox.
123. *Trollius laxus*, Salisb.
North of Cowichan Lake; Strathcona Park.
124. *Coptis asplenifolia*, Salisb.
Renfrew district. (Rosendahl). Cumberland (W. B. Anderson); Comox; Ucluelet.
125. *Eschscholtzia californica*, Greene.
Beacon Hill.
126. *Eschscholtzia recta*, Greene.
Cameron Lake.
127. *Draba verna*, L.
Cadboro Bay.
128. *Lobularia maritima*, Desv.
Victoria.
129. *Dentaria geminata*, Wats.
Koksilah River. (R. H. Jameson).
130. *Dentaria macrocarpa*, Nutt.
Burnside Road near Victoria.
131. *Cardamine occidentalis*, S. Wats.
Kennedy Lake near Ucluelet.
132. *Cardamine intermedia*, Holm.
Victoria; Wellington; Nanaimo; Ucluelet.
133. *Cardamine kamschatika*, (Regel) Schultz.
Victoria.
134. *Arabis glabra* (L.) Benth.
Cowichan River (Glendenning); Esquimault; Nanaimo; Ucluelet; Strathcona Park.
135. *Arabis lyrata* var. *occidentalis*, S. Wats.
Cowichan Lake.
136. *Arabis Drummondii*, Hook.
North of Cowichan Lake, alt. 4,000 ft.
137. *Arabis Hookeri*, Lange.
Cowichan Lake.
138. *Radicula indica* (L.)
Nanaimo.
139. *Radicula Nuttallii*, Rydb.
Beaver Lake; Lost Lake.
140. *Barbarea americana*, Rydb.
Cowichan River. Other V. I. specimens are *B. vulgaris*.
141. *Erysimum elatum*, Nutt.
Mount Arrowsmith; Cameron Lake. (J. R. Anderson). Strathcona Park.
142. *Brassica occidentalis*, Rydb.
Victoria.

143. *Sisymbrium altissimum*, L.
Victoria; Nanaimo.
144. *Hutchinsia procumbens* (L.) DC.
Beacon Hill.
145. *Lepidium densiflorum*, Schw.
Nanaimo.
146. *Lepidium strictum*, Ruttan.
Cadboro Bay.
147. *Lepidium Draba*, L.
Victoria. (J. R. Anderson).
148. *Senebiera didyma*, Pers.
Victoria; Nanaimo.
149. *Cakile edentula*, (Bigel.) Hook.
Long Beach above Ucluelet.
150. *Sedum divergens*, S. Wats.
Mount Benson.
151. *Rhodiola alascana*, Rose.
Chatla Village, west coast.
152. *Boykinia vancouverense*, Rydb.
Goldstream; Ucluelet.
153. *Boykinia cinnatum*, Rosendahl and Rydb.
Cowichan River. *B. elata* is not rare.
154. *Leptarrhena amplexifolia* (Stenb.) Ser.
North of Cowichan Lake; Strathcona Park.
155. *Saxifraga Tolmiei*, T. & G.
Lady Mountain. (J. R. Anderson). Strathcona
Park.
156. *Saxifraga rufidula*, Small.
Type collected on Mount Finlayson. Parson's
Mountain; Mount Malahat; Cowichan Lake; Mount
Arrowsmith.
157. *Saxifraga bidens*, Small.
Cowichan Lake. (Glendenning). Type collected,
Cedar Hill. Not rare around Victoria.
158. *Saxifraga odontophylla*, Piper.
Mount Arrowsmith.
159. *Tiarella unifoliata*, Hook.
Departure Bay; Ucluelet.
160. *Mitella Breweri*, Wats.
Mts. north of Cowichan Lake.
161. *Leptaxis Menziesii* (Pursh.) Raf.
Renfrew district (Rosendahl). Common in the
Cowichan valley.
162. *Ribes laxifolium*, Pursh.
Barkley Sound; Ucluelet.

163. *Spiræa salicifolia*, L.
Ucluelet. Introduced with cranberry plants from the east.
164. *Rubus nivalis*, Dougl.
Comox. (W. B. Anderson). Beaufort Range. (J. R. Anderson). Strathcona Park.
165. *Rosa nutkana* var. *hispida*, Fernald.
Colquitz River.
166. *Potentilla monspeliensis*, L.
Wellington; Ucluelet.
167. *Potentilla gracilis*, Dougl.
Not uncommon around Victoria.
168. *Potentilla nivea*, L.
Mount Arrowsmith. (Anderson and Fletcher).
- NOTE.—Many species of *Potentilla* and *Fragaria* have been separated from those recorded in previous lists, too many for citation.
169. *Sibbaldia procumbens*, L.
Mts. north of Cowichan Lake; Strathcona Park.
170. *Geum oregonense*, Scheutze.
Not rare; confounded with *G. macrophyllum*.
- 171-2. *Amelanchier florida* Lindl. and *A. Cusickii* are both common. Referred usually to *A. alnifolia*.
173. *Pyrus occidentalis*, Greene.
Mts. north of Cowichan Lake; Strathcona Park.
174. *Pyrus sitchensis*, (Rœm.) Piper.
Mount Prevost. (J. R. Anderson). Strathcona Park.
175. *Lupinus littoralis*, Dougl.
Comox; Nanaimo.
- NOTE.—Several species of *Trifolium* have been separated from those recorded.
176. *Vicia lathyroides*, L.
Langford Plains.
177. *Lathyrus littoralis*, (Nutt.) Endl.
Ahousett. (J. R. Anderson). Ucluelet.
178. *Lathyrus pauciflorus*, Fernald.
Esquimault; Sidney; Departure Bay.
179. *Geranium Bicknellii*, Britton.
Wellington.
180. *Callitriche Bolanderi*, Hegelm.
Victoria; Elk Lake; Cowichan Lake; Ucluelet.
181. *Empetrum nigrum*, L.
Mount Whympet; Ucluelet; Strathcona Park.

182. *Rhus diversiloba*, Torr. & Gr.
Saanich Arm. (J. R. Anderson).
183. *Pachystima macrophyllum*, Farr.
Apparently the commoner species on Vancouver
Island.
184. *Malva neglecta*, Wallr.
Beacon Hill.
185. *Hypericum perforatum*, L.
Koksilah.
186. *Elodea campanulata*, Pursh.
Ucluelet. Introduced from the east with cranberry
plants.
187. *Viola ophioides*, Greene.
Victoria; Shawnigan Lake.
188. *Viola fulcrata*, Greene.
Cowichan River. (J. R. Anderson).
189. *Viola compacta*, Greene.
Shawnigan Lake; Brehm Lake. (J. R. Anderson).
Several species of violets are yet to be described.
190. *Epilobium latifolium*, L.
Renfrew district. (Rosendahl).
191. *Epilobium adenocaulon* var. *occidentale*, Trelease.
Common.
192. *Epilobium alpinum*, L.
Mts. north of Cowichan Lake; Strathcona Park.
193. *Epilobium luteum*, Pursh.
Between Buttle's Lake and Grand Central Lake.
(Mr. Wood, M.P.)
194. *Circæa pacifica*, Aschers & Magnus.
Departure Bay; Cowichan Lake; Strathcona Park.
195. *Hippuris montana*, Ledeb.
Strathcona Park.
196. *Sanicula tripartita*, Suksdorf.
Victoria Arm.
197. *Caucalis microcarpa*, Hook. & Arn.
Departure Bay.
198. *Osmorhiza Liebergi*, Coult. & Rose.
More common than *O. divaricata*.
199. *Pyrola elliptica*, Nutt.
Cowichan Lake.
200. *Arctostaphylos media*, Greene.
Nanaimo River. (J. R. Anderson). A hybrid be-
tween *A. tomentosa* and *A. Uva-ursi*.
201. *Vaccinium Vitis-Idæa*, L.
Ucluelet.

202. *Vaccinium ovalifolium* x *parvifolium*.
A hybrid between these species was found in several places in Strathcona Park.
203. *Dodecatheon* sp.
Two of the species of *Dodecatheon* growing on Vancouver Island are well known, a third found at Nootka and Ucluelet has not yet been described.
204. *Lysimachia terrestris* (L.) BSP.
Ucluelet. Introduced with cranberry plants from the east.
205. *Gentiana Douglasiana*, Bong.
Renfrew district. (Rosendahl). Ucluelet.
206. *Menyanthes crista-galli*, Menzies.
Renfrew district. (Rosendahl).
207. *Menyanthes trifoliata*, L.
Common.
208. *Gilia intertexta*, Steud.
Near Victoria.
209. *Nemophila parviflora*, Dougl.
Near Victoria; Cowichan Lake. Earlier records of *N. parviflora* are *N. pustulata* or *N. sepulata*, both of which are common around Victoria.
210. *Phacelia heterophylla*, Pursh.
Cottonwood Creek, Cowichan Lake.
211. *Romanzoffia unalascensis*, Cham.
Barkley Sound; Ucluelet; Cottonwood Creek, Cowichan Lake. *R. sitchensis* has been collected in several localities.
212. *Myosotis laxa*, Lehm.
Cowichan valley. (Glendenning). Elk Lake near Victoria; Departure Bay.
213. *Allocarya phlebeia*, Greene.
Not rare near Victoria.
214. *Mentha arvensis* (L.) var. *lanata*, Piper.
Colquitz River; Elk Lake; Wellington.
215. *Collinsia tenella*. (Pursh.)
Not rare.
216. *Chelone nemorosa*, Dougl.
Renfrew district. (Rosendahl).
217. *Mimulus Langsdorfii* var. *platyphyllus*, Greene.
Nootka; Ucluelet.
218. *Mimulus pilosus* (Benth.) S. Wats.
Swan Lake.
219. *Gratiola virginiana*, L.
Near Victoria; Comox.

220. *Veronica alpina*, L.
Mts. north of Cowichan Lake; Strathcona Park.
221. *Castilleja angustifolia*, (Nutt.) G. Don.
Cowichan Lake.
222. *Castilleja rexifolia*, Rydb.
Cottonwood Creek, Cowichan Lake.
C. miniata, *C. levisecta* and *C. angustifolia* var. *Bradburii* are common and at least two other species remain to be described.
223. *Orthocarpus* sp.
Oak Bay; Fowl Bay; Sidney.
224. *Pedicularis* sp.
An undescribed species collected in Strathcona Park, 1912.
225. *Utricularia occidentalis*, A. Gray.
Ucluelet. New to Canada.
226. *Utricularia intermedia*, Hayne.
Ucluelet.
227. *Plantago macrocarpa*, Cham. & Schl.
Ucluelet.
228. *Galium kamtschaticum* var. *oreganum*, (Britton).
Bear Lake, Cowichan Lake.
229. *Galium trifidum* var. *subbiflorum*, Wiegand.
Colquitz; Wellington; Ucluelet.
The var. *pacificum* is not rare.
230. *Viburnum pauciflorum*, Pylaie.
Comox; Cowichan Lake; Strathcona Park.
231. *Echinocystis oregana*, Torr. & Gray.
Saanich (J. R. Anderson).
232. *Heterocodon rariflorum*, Nutt.
Victoria.
233. *Solidago canadensis*, L.
Chemainus.
234. *Solidago lanceolata*, L.
Ucluelet. Introduced with cranberry plants from the east.
235. *Solidago glutinosa*, Nutt.
Mount Benson. (J. R. Anderson; Macoun).
236. *Aster occidentalis* var. *intermedius*, Gray.
Elk Lake.
237. *Aster Cusickii*, Gray.
Victoria.
238. *Aster Eatoni* (Gray) Howell.
Elk Lake.
239. *Aster microlonchus*, Greene.
Fowl Bay, Victoria.

240. *Aster* sp.
An undescribed species collected in Strathcona Park,
1912.
241. *Erigeron* sp.
An undescribed species collected in Strathcona Park,
1912.
242. *Anaphalis margaritacea* var. *subalpina*, Rydb.
Elk Lake.
243. *Anaphalis margaritacea* var. *occidentalis*, Greene.
Not rare but not so common as typical *A. margaritacea*.
244. *Gnaphalium uliginosum*, L.
Elk Lake.
245. *Antennaria erigeroides*, Greene.
Mount Benson.
246. *Antennaria eximia*, Greene.
Mount Benson.
247. *Antennaria chlorantha*, Greene.
Mount Benson; Cowichan Lake; Strathcona Park.
248. *Antennaria* sp.
An undescribed species collected in Strathcona Park.
249. *Franseria cuneifolia*, Nutt.
Ucluelet.
250. *Madia sativa*, Molina.
Victoria.
251. *Rudbeckia hirta*, L.
Cowichan valley. (Glendenning).
252. *Erigeron canadense*, L.
Cowichan valley. (Glendenning). Sidney.
253. *Achillaea borealis*, Bong
Ucluelet.
254. *Tanacetum huronense*, Hook.
Renfrew district. (Rosendahl). Clayoquot;
Ucluelet.
255. *Artemisia gnaphalodes*, Nutt.
Departure Bay.
256. *Senecio fastigiatus* var. *Macounii* (Greene) Greenman.
Langford Plains; Mount Benson; Wellington.
257. *Senecio* sp.
An undescribed species collected in Strathcona Park.

As was said in the introductory sentences, the above list of additions to the species recorded from Vancouver Island is by no means complete. Some common species and many introduced species have been omitted for want of space. Neither does the available space permit of the inclusion of synonymy.

- A few species have been included which were recorded in publications that are not accessible to the average collector. There are in the herbarium of the Geological Survey many sheets of specimens from Vancouver Island which have not yet been determined or of which the determinations are doubtful. These, when correctly named, will, with the introduced plants, add at least a hundred species to the above list.

