

son⁵⁴ lists several hundred species from the Skagit River basin, Dryas island, Windermere, Garibaldi mountain, and other localities. Whitford and Craig⁵⁵ give a detailed description accompanied by maps of the distribution of 22 species of coniferous and 26 species of deciduous forest trees.

The outlying islands have been dealt with by Osgood,⁵⁶ who enumerates 7 species of ferns and 118 species of seed-plants as occurring on Queen Charlotte islands. From a comparatively small area of Vancouver island, Glendenning⁵⁷ has enumerated 23 species of ferns and their allies, 13 species of gymnosperms and 547 species of angiosperms. Kermode's list⁵⁸ for the two main island groups includes 57 species of ferns and allied groups and 1,359 species of seed-plants. Of the latter, 284 species were introduced. Of the total species mentioned by Kermode, 19 species of ferns and their allies and 258 species of seed-plants occurred on the Queen Charlotte group.

Section 2.—Cryptogams.

NOTE.—A brief description of the different groups of Cryptogams with their distinguishing characteristics has already been given under "Classification of Flora", pp. 35 to 37.

Ferns and Allied Groups.

There are in Canada 25 genera of ferns (in the proper sense) and 2 of water-ferns. In the two groups combined there are about 76 species. One genus with a single species, namely, Curly Grass (*Schizaea pusilla*) characteristic of the pine barrens of New Jersey, is found in the province of Nova Scotia only. Another rare species, the Hart's Tongue (*Scolopendrium vulgare*) occurs only on limestone rocks in New Brunswick and at a few places in Ontario. Three genera are confined to the Western Region and include the Deer-fern (*Lomaria spicant*), 2 species of Lip-fern (*Cheilanthes*), and the Gold-fern (*Pityrogramma triangularis*).

Several species of ferns have a range extending into the Arctic Region, such as *Cryptogramma acrostichoides*, *Polystichum Lonchitis*, *Dryopteris fragrans*, *Cystopteris fragilis*, and 3 species of *Woodsia*.

The group of water-ferns comprises 2 genera with one species in each, namely, *Azolla caroliniana* found in lake Ontario and British Columbia, and *Marsilea vestita* which occurs in the Prairie Provinces.

The horsetail group includes about 13 species, one of which, the Giant Horsetail (*Equisetum giganteum*) is confined to the coastal area of British Columbia. *Equisetum scirpoides* and 3 other species range into the Arctic Region.

The other genera of the allied groups are *Lycopodium* with 12 species, *Selaginella* with 9 species, and *Isoetes* with 8 species. *Lycopodium selago* and *L. annotinum* reach the Arctic Region.

A fuller account of the fern group will be found in the description by Macoun and Burgess.⁵⁹

Mosses.

This group of plants is well represented in the Canadian flora, the most complete account of their distribution being that of Macoun and Kindberg⁶⁰ who list the names of 1,087 Canadian species. While mosses are most abundant in the southern parts of the Dominion, a considerable number occur also in the Arctic Region. Hesselbo⁶¹ mentions 39 genera and 67 species, of which 13 species are additions to the list of Macoun and Kindberg. In reference to one of these species, *Cinclidium latifolium* Lindb., Hesselbo states that it was collected on Vansittart island where it seemed to occur abundantly but hitherto had been found only in