

Out of a total of thirty vascular plants, six, or one-fifth, are endemic in these islands; seven are American and not found in New Zealand or any of the neighbouring islands, though two of them also occur in Amsterdam Island; two are found in New Zealand or the neighbouring islands, but not in South America or in any of the islands adjacent thereto; while fifteen are common to the American and New Zealand regions. The solitary species yet to be accounted for is *Polypodium vulgare*, the distribution of which is peculiar, and not specially American. It has a wide range in the north temperate zone, and also exists in the Sandwich Islands and South Africa, but we are not aware that it has been recorded from any other part of the southern hemisphere, except Kerguelen Island, and the form which occurs there is only known elsewhere from the Sandwich Islands. Numerically, then, there is a preponderance of Fuegian forms represented in Kerguelen and the other islands under consideration, as opposed to what may be termed New Zealand forms. The Antarctic flora may have spread from America; but with all the facts before us there does not seem to be a special affinity between the floras of Kerguelen, &c., and Fuegia, as distinguished from the flora of the zone generally. Taking the New Zealand flora as a whole, and the Fuegian flora as a whole, the former is as strongly represented in these islands by the same and allied species as the latter, indicating a former flora of the same elements spread all round a southern zone, which included a part of New Zealand and the extreme south of America as well as the present isolated spots of dry land in the same latitudes. Assuming the correctness of this view, the former Antarctic flora resembled the present Arctic flora in being composed of the same elements throughout; though the survivors of that flora offer a larger endemic element in each region, which may be attributed to their long separation.

Excluding the two endemic genera in the above table, all the others are represented both in New Zealand and Fuegia. On the other hand, the endemic species exhibit, perhaps, a closer affinity with Fuegian than with New Zealand species. The endemic genus *Pringlea* is more nearly related to the northern *Cochlearia* than to any southern genus; while *Lyallia* is allied to the Andean *Pycnophyllum*. Of course the existence of a former continuous Antarctic flora, composed of essentially the same elements throughout its whole area, does not exclude the possibility of that flora having been derived from the Andean region; yet the contrary may have been the case so far as the Antarctic element in the latter is concerned. The eminently Antarctic genera *Colobanthus*, *Acæna*, and *Uncinia* extend northward through the Andes to Mexico, yet they are not entirely restricted to the Andes and the Antarctic regions, or even to the countries nearest to them. Thus *Uncinia*, independently of the doubtful *Uncinia microglochis* (syn. *Carex microglochis*), is represented in the Sandwich Islands, and *Acæna* in Polynesia, as well as in South Africa. In a restricted sense *Azorella* is only American and Antarctic; but since Sir Joseph Hooker published his later analysis of the flora of Kerguelen, *Azorella selago* has been collected in Macquarie Island, which we regard as being within the New Zealand region. Still the New