

*rupicolus*, *Gnaphalium insulare*, and *Polypodium masafueræ*, but from the descriptions they are not markedly distinct from Juan Fernandez forms. Of the remarkable *Eryngium sarcophyllum*, there are only Cuming's specimens at Kew.

#### CONCLUDING REMARKS ON THE FLORA OF JUAN FERNANDEZ AND MASAFUERA.

Although there is a disproportionately large endemic element, both generic and specific, in the vegetation of this island, its general affinities are decidedly Chilian, as an examination of the table (pp. 20, 21) will prove; and the number of genera common to the Tasmanian and New Zealand region and South America, represented in the island, strengthens the opinion, advanced elsewhere, that formerly the vegetation of each of the southern cold and temperate zones was essentially of the same composition throughout. Numerous other facts might be adduced in support of this theory, and there is one that strikes us as being strongly conclusive—namely, the generic identity of the principal trees of the existing colder forests of the two regions. Beech (*Fagus*) forests of different, though closely allied species, are as characteristic of New Zealand, Tasmania, and some parts of the mountains of temperate Australia as they are of Southern Chili and Patagonia. Furthermore, the Coniferous genera are the same in the two regions. Thus, the essential characters of the *Diselma* of Tasmania and *Fitzroya* of South America are said to be the same in the latest revision of the genera in Bentham and Hooker's *Genera Plantarum*, where the former is merged in the latter. Further, *Libocedrus*, *Dacrydium*, and *Araucaria* are all three represented in the Australasian and South American regions.

But in Juan Fernandez, as in St Helena, it is the endemic genera that offer the greatest difficulties to the botanical geographer; indeed, there are strong features of resemblance in the endemic genera as well as some of the species of the two islands—the genera of *Compositæ* and the species of *Wahlenbergia* are examples. We propose discussing the affinities and distribution of arboreous *Compositæ* in our general introduction; therefore we shall not enter into full particulars here, and only repeat what we have said of the St Helena arboreous plants belonging to this and other natural orders, that they are not specially insular, though they form so large a proportion of the floras of St Helena, Juan Fernandez, the Sandwich Islands, and some other islands. There are scores of them in South America, Africa, Madagascar, India, and Australia, from twenty to forty feet high, and more truly arboreous than the insular ones; and there are a few even taller. It is noteworthy that there are arboreous representatives of nearly every tribe or suborder of the *Compositæ*. Like the South African arboreous genera *Turchonanthus* and *Brachylæna*, *Rhetinodendron* and *Robinsonia* are apparently dioecious, but the former are referred to the *Inuloideæ*, and the latter to the *Senecionideæ*. In habit, *Dubautia* (*Helianthoideæ*) of the Sandwich Islands is quite like the Juan Fernandez genera just named; while *Dendroseris* is in a manner repeated by the subarboreous species of *Sonchus* in the Canary Islands.

One peculiarity observed in dried specimens of some species of *Robinsonia* may be