

eastward to Amsterdam and the Macdonald group. The Bermudas possess three; Falklands, seven; Juan Fernandez, two; the Galapagos, three; and the proportion is small in most insular groups. Orchids are singularly scarce in insular floras; yet they are so widely dispersed, nearly reaching the polar limits of flowering plants, and occupy such a variety of soils and situations, that their rarity in oceanic islands would seem to be due rather to secondary than primary causes.¹ In illustration of this phenomenon, we append a table showing the absence, or number of species inhabiting various islands.

ORCHIDEÆ IN INSULAR FLORAS.

	Number of Species.		Number of Species.		Number of Species.
I. ARCTIC OCEAN :		Tristan da Cunha group	0	V. NORTH PACIFIC OCEAN :	
Nova Zembla . . .	0	South Georgia . . .	0	Sandwich . . .	3
Spitzbergen . . .	0	South Orkney . . .	0	Guadalupe . . .	0
II. NORTH ATLANTIC OCEAN :		Falklands . . .	4	VI. SOUTH PACIFIC OCEAN :	
Iceland ² . . .	13	IV. INDIAN OCEAN :		Galapagos . . .	2
Azores . . .	3	Socotra . . .	1	Tahiti . . .	19
Bermudas . . .	1	Seychelles . . .	10	Juan Fernandez . . .	0
Madeira . . .	4	Rodriguez . . .	5	Masafuera . . .	0
Canaries . . .	6	Keeling . . .	0	Norfolk Island . . .	5
Cape Verde group . . .	1	Marion . . .	0	Kermadec . . .	1
III. SOUTH ATLANTIC OCEAN :		Crozets . . .	0	Chatham . . .	10
Fernando Noronha . . .	0	Kerguelen . . .	0	Aucklands . . .	9
Ascension . . .	0	Heard . . .	0	Campbell . . .	2
St Helena . . .	0	Amsterdam . . .	0	Macquarie . . .	0
South Trinidad . . .	0	St Paul . . .	0		

The foregoing selection of islands and islets covers a wide area of the globe, and

¹ How far the absence, or rarity, of Leguminosæ, Gymnospermeæ, and Petaliferous Monocotyledons in oceanic islands, and of the first in the Antarctic regions, may be accidental or due to climatal conditions, is conjectural; the concomitant rarity of insects, however, is a very probable reason so far as the first and last are concerned; but we know too little of the interdependence of plants and insects generally. From the observations of Darwin, Delpino, H. and F. Mueller, and others, it appears certain that fertilisation without insect agency is impossible in many plants, and especially so in a large number of the Leguminosæ and Orchideæ. Gymnospermeæ, on the other hand, are anemophilous. Further, if the seeds of any flowering plants be transportable very long distances by winds, it is those of orchids, for they are most exceedingly minute and light; and they are produced in astonishing numbers. Darwin (Ann. and Mag. Nat. Hist., ser. 4, vol. iv. p. 158) mentions that it had been calculated that a single plant of *Acropera* probably sometimes produced as many as seventy-four millions of seeds in one year; and Fritz Mueller estimated the number of seeds in one capsule of a *Maxillaria* at 1,756,440!

² Groenlund (Botanisk Tidsskrift, 2, iv. p. 57) places the sign of doubt before seven of the species recorded by various authors, and suggests that some of them at least have been wrongly named, or erroneously attributed to Iceland. He is most likely right in some instances; but with regard to *Listera ovata*, which he questions, the specimen authenticated by Paulsen exists in the Kew Herbarium. Martins records seven species from the Færœs.