

with in the earliest stage of such an insular flora are *Portulaca*, *Sesuvium*, *Canavalia obtusifolia*, and *Ipomœa biloba* (*Ipomœa pes-capræ*); all of which seem to possess an unlimited power of colonisation. Moreover, they provide the conditions necessary for other plants to be able to establish themselves. Among the early shrubby occupants, *Suriana maritima*, *Pemphis acidula*, *Scævola kœnigii*, and *Tournefortia argentea* are prominent, being found on the most remote islets of the Pacific and Indian Oceans, within the tropical and subtropical zones. Where there are muddy shores, there the various mangroves (*Rhizophora*, *Bruguiera*, *Avicennia*, *Vitex*, &c.) take possession. Among the first real trees are, *Heritiera littoralis*, *Hibiscus tiliaceus*, and *Barringtonia speciosa*, together with screw pines. After this nucleus of a flora has been formed, it is comparatively easy for other arrivals to establish themselves; and every addition, in a measure, helps to provide the conditions for a still more varied vegetation. It may be safely assumed, therefore, that if oceanic currents and birds have not been the means of dispersing a large number of species of plants, and it is not certain that they have not, they are certainly the most important agents in stocking islands, for without their action the numerous remote coral islands, at least, would still be utterly devoid of phanerogamic vegetation, and consequently uninhabitable.

Even such plants as epiphytic orchids may owe their presence in an island to the action of the waves, as Mr Moseley observed of one in Little Ki Island (see Part III., p. 306); and in the Philippines he found a young sago-palm that had been washed up growing vigorously just above the ordinary beach-line. Granting that such occurrences may be comparatively rare, still the results in thousands of years might be very great. If an epiphytic orchid survive a sea voyage, why not almost any other plant in the large accumulations of vegetable drift that are carried out to sea by ordinary currents, and driven hither and thither by extraordinary storms?

Broadly speaking, the more remote the island, the fewer and the commoner the species that would be likely to reach it, and such we find to be the case.

As a further example of a flora that owes its existence mainly, if not wholly, as far its phanerogamic element is concerned at least, to oceanic currents and birds, the Bermudan may be named. In Part I., p. 9, will be found a tabular view of the geographical distribution of the vascular plants, probably indigenous, in the Bermudas. Assuming that several of the plants which we have included as probably indigenous owe their presence to the agency of man, there would still remain a considerable number to be accounted for in other ways. We have attempted to classify them according to the most probable means by which they may have reached the islands. Of course there are some fruits and seeds adapted for transport in a variety of ways. There is one possible means by which some of the plants may have reached the islands, concerning which, however, too little is known for us to be able to judge of the extent it has operated, if at all. Like other creatures, birds doubtless sometimes pass portions of their digestible food