

But it is at elevations of 6000 to 10,000 feet that the enormous pine-forests of Mexico chiefly exist*. For fuller details of the distribution of the Coniferæ the reader is referred to the writings of Beinling, Brown, and Hildebrand enumerated in our Bibliography.

Cycadaceæ.

The number of described genera and species of this order affords only a very inadequate idea of the prominent feature cycads form in the vegetation of the districts where they grow; and as they are not readily reduced to herbarium specimens the particulars usually accompanying such are to a great extent wanting for this order. Nine genera and about seventy-five species are known, many of them imperfectly, and they are thinly scattered over the tropics, South Africa, and Australia; and *Cycas revoluta* is a native of Japan. No species has been found in the dry regions of Chili. The genera of the Old World and America are all different, and the majority of the species are local; *Cycas circinalis* is, however, an exception, being widely spread in the tropics of the Old World, especially in littoral districts. Within our districts there are three genera, two of them endemic in Mexico, and one general in tropical America; and the number of species is twenty-one, whereof fifteen are endemic; three extend to South America, and three to the West Indies. Altogether sixteen species are recorded from Mexico, but several of them are doubtful, and more complete material is needed of almost all of them. *Stangeria* in South Africa and *Bowenia* in Eastern Australia are very remarkable monotypic genera of this order.

Orchideæ.

Orchids are generally diffused in all regions, and very nearly reach the extreme altitudinal and latitudinal limits of phanerogamic plants; yet they are either absent or exceedingly rare in oceanic islands†. With the exception of the terrestrial genera of north temperate regions, and a few others, the genera are mostly restricted to the eastern or western hemisphere, and largely to single continents. This holds good both for tropical genera and the terrestrial genera of the southern hemisphere, where totally different genera inhabit the three great areas. The same remarks are applicable to species in a greater degree, a large proportion of which are comparatively local. The greatest concentration of orchids is in America, from South Mexico to Colombia.

Mexico and Central America are pre-eminently rich, and, although Nicaragua and Costa Rica have been very little explored, and many of the small-flowered Mexican ones doubtless overlooked, yet orchids have probably been quite as fully collected as any class of plants; therefore future investigations are likely to lower rather than raise the proportion of orchids to the rest of the flora. Orchideæ in Mexico, so far as our present knowledge goes, stands third in the list of orders according to number of

* C. B. Heller, *Reisen in Mexico*, pp. 171, 182, &c.

† See Voyage of the 'Challenger' Expedition, Botany, i. Introd. p. 27.