

posites and epacrids, wiry shrubs with densely entangled twigs (mainly species of *Coprosma*), species of *Hebe*, *Phormium Colensoi*, various podocarps, and giant spaniards. On river-terraces scrubs with species of *Hebe* dominant are frequent, and fringing stony river-beds there is often an open scrub of wild-irishman (*Discaria toumatou*)—one of the few spinous plants in the flora.

Rock-vegetation is always of interest, and this is particularly so in the high mountains. The number of species occurring on rocks is about 190 (families, 36; genera, 74). About 44 species are virtually confined to rocks, and such include a dwarf fern (*Polypodium pumilum*), certain rosette plants at present referred to the genus *Nasturtium*, one or two dwarf spaniards and a few forget-me-nots, hebes, celmisias, and raoulias.

Outlying Groups of Islands.

The floras of the following groups of islands, far distant from the mainland, are distinctly part of that of New Zealand. The Kermadecs contain 117 species of ferns, fern-allies, and seed-plants, 16 of which are endemic, while 89 belong also to New Zealand proper. The largest island (Sunday Island) is covered with forest in which a variety of *Metrosideros collina*, a near relative of the pohutukawa, is the principal tree. The Chatham Islands possess at least 257 species, of which 36 are endemic, though several of the latter are trivial varieties merely, while the remainder of the flora is, with one exception, found on the mainland. Forest, moor, and heath are the principal plant communities. The leading tree is the karaka, but by the Moriori called kopi. On the moors are great thickets of a lovely purple-flowered shrub, *Olearia semidentata*. There are two remarkable endemic genera, *Coxella* and *Myosotidium*, the former belonging to the carrot family, and the latter a huge forget-me-not, now nearly extinct. The subantarctic islands (Snares, Auckland, Campbell, Antipodes, Macquarie) have a dense vegetation made up of 193 species, no fewer than 60 of which are endemic, the remainder being found in New Zealand, but chiefly in the mountains. Forest is found only on the Snares and the Auckland, with a species of *Olearia* and the southern-rata as the dominant trees respectively. Extremely dense scrubs occur on the Auckland and Campbell Islands, and moor, sometimes with huge tussocks, is a characteristic feature of all the islands, thanks to the enormous peat deposits and the frequent rain. Several herbaceous plants of stately form (species of *Pleurophyllum*, *Anistome*, *Stilbocarpa*, and *Celmisia*) and with flowers of extreme beauty—some of them purple in colour—occur in great profusion.

The Cook Islands, though a part of the Dominion, possess a Polynesian flora quite distinct from that of New Zealand, and are excluded from this notice, while, on the contrary, the flora of the Macquarie Islands (belonging to Tasmania) is a portion of that of New Zealand.

Besides the indigenous, an important introduced element, consisting of about 630 species, mostly European, has followed in the wake of settlement. These aliens are in more or less active competition with the true natives. There is a widespread but quite erroneous