

## NEW ZEALAND.

At least a quarter of the New Zealand Compositæ are shrubby or arboreous, and these all belong to the Asteroideæ and Senecionideæ. In Hooker's Handbook of the New Zealand Flora, fourteen species are described as trees, namely, *Olearia (Eurybia)*, 11 species; *Senecio*, 2; and *Brachyglottis*, 1. Besides these, one species of *Cassinia* is said to grow fifteen, and another ten feet high. These numbers do not include the Chatham Islands species referred to above, as they were unknown at the date of the Handbook. Dimensions of only a few are given in the descriptions; but *Olearia dentata*, *Olearia cunninghami*, and *Brachyglottis repanda*, are all credited with a height of twenty feet. Further, Mr D. Petrie (Transactions of the New Zealand Institute, xiii. p. 327) describes *Olearia colensoi* as attaining the dimensions of a tree, often having a stem as much as a foot in diameter. In the Transactions of the New Zealand Institute, i. p. 35, we find the following dimensions of arboreous and subarboreous Compositæ, as they grow in the neighbourhood of Otago, contributed by Mr J. Buchanan: *Olearia operina*, trunk six to eight inches in diameter; *Olearia nitida*, twelve to eighteen inches in diameter; *Olearia dentata*, two to three feet in diameter; and *Olearia ilicifolia*, similar to the last. The measurements of *Olearia dentata* especially, indicate a tree of considerable size. Mr Bentham (*loc. cit.*, p. 568) remarks of the New Zealand Compositæ that "some of the genera present highly developed shrubby species, but none so arborescent as in some of the preceding more perfectly isolated island groups;" yet the dimensions we are able to give of a small proportion of the arboreous species equal at least, if they do not exceed, those of the largest in St Helena, Juan Fernandez, &c. New Zealand may be regarded as intermediate in physical conditions between those remote islands and continental areas, though still possessing more of the character of the former than the latter.

## MADAGASCAR.

Madagascar is still less insular in character than New Zealand, being both larger and much nearer to a continent; yet shrubby and arboreous Compositæ abound, some of the largest in the world inhabiting this country. During the last few years our knowledge of the Madagascar flora has been considerably increased by the publication of numerous new plants by Dr Baillon in France, and also by Mr J. G. Baker in England. Mr Baker informs us that the novelties include at least forty shrubby and arboreous Compositæ, and that about half of the Compositæ of the country are woody. It will be sufficient for our purpose to give a few examples of the truly arboreous species. Thus, *Synchodendron ramiflorum* (Inuloideæ) grows at least forty feet high, and *Vernonia fuscopilosa* (Vernoniaceæ) is described as a tree thirty to forty feet high, while several other species of the latter genus are designated trees without any dimensions being given.