

The remainder of the paper deals with the relationship between the *Podocarpineae* and the *Araucarineae*. The authoress brings together the available facts from the different publications bearing on the subject. She comes to the conclusion that the *Podocarpineae* and *Araucarineae* are very primitive, and that they are probably related; but the question is by no means settled. There are various gaps in our knowledge, especially regarding the *Araucarineae*, the female gametophyte of which is little known, while of the embryo we know virtually nothing. In the *Podocarpineae*, too, adequate knowledge is wanted of the female gametophyte, embryo, and the development of ovulate structures. Wanting the above knowledge, "we should be hardly justified in coming to a definite decision in regard to relationships, and at present it seems best to hold *Taxineae*, *Podocarpineae*, and *Araucarineae* apart as separate tribes, leaving open the question of larger grouping amongst conifers." L. C.

7. Trees and Shrubs of New Zealand. By L. S. Gibbs. (*The Gardener's Chronicle*, vol. 47, pp. 91, 98, 118, 131. February, 1910.)

An account of New Zealand trees and shrubs with regard to their value as plants for cultivation in English gardens, for which purpose the authoress recommends a number highly. The statement is made, "that beyond *Cordyline australis* and tree-ferns it is rare to see a native shrub or tree in a New Zealand garden." With the exception of *Piptosporum Kirkii*, the other species of the genus are described as "uninteresting." L. C.

8. *Pratia angulata* Hook. f., and *Lobelia linnaeoides* Petrie. By J. B[ayley] B[alfour]. (*The Gardener's Chronicle*, vol. 47, p. 98. February, 1910.)

Both the above plants are hardy in the Edinburgh Botanic Garden. *Pratia angulata*, although growing in damp situations in New Zealand, and noted by Cockayne as a bog-plant in Stewart Island, when grown in dry sandy soil in the full sun in Edinburgh forms a close carpet on the soil, and every leaf-axil sends up a short-stemmed flower, making during the summer a perfect sheet of white blossom. If the plant be grown in the shade, or where the soil is heavier and moister, the stems arch from the soil, forming more or less of a cushion, grow freely, and the flowers, which are produced in fair abundance, are concealed amongst the greenery and make little show. L. C.

9. Deforestation in New Zealand. By L. S. Gibbs. (*The Gardener's Chronicle*, vol. 44, pp. 355-56; November, 1908: and vol. 45, pp. 225-26 and 243-44; April, 1909.)

The authoress, who spent six months in New Zealand, gives, in three articles, her views regarding the wholesale destruction of forest in the Dominion, and the methods pursued. The observations were made chiefly from the most frequented tourist routes. The following extracts show the scope of the articles:—
 "The results of deforestation everywhere to be witnessed in the country between Auckland and the Bluff were such as to create an impression as painful as it was indelible. Past and present evidences of the effect of the destruction haunt me everywhere, from the barren plains and barren hills of the older 'settled' districts in the one case, to the miles of blackened tree-stumps, even on much-advertised tourist routes, in the other." "These results are caused by the requirements of the settlers; for, unfortunately, they and devastating bush-fires always go hand-in-hand. Once the fire has done its worst, English grass-seed is immediately sown, and cattle and horses are turned loose amongst the standing and prostrate logs, which are left to rot on the ground. A little homestead will be run up amidst the *débris*, a couple of rectangular paddocks will be, perhaps, cleared of the roots of the trees and enclosed by a hedge of *Pinus pinaster* (erroneously called *P. insignis*) and *Cupressus macrocarpus* respectively as wind-screens, and the result is a typical New Zealand landscape. To have the pine-wood without the cupressus would be wanting in imagination and taste." "The remaining forest land is generally Government property, and is leased in 'sections,' which, when large areas are opened up, are put up to auction. This land may be covered with the most splendid forest-growth, such as the Waimarina Bush, now being cut up by the Main Trunk Railway from Wellington to Auckland,