

Lake Taupo. These trees grow with some of their roots in the water.

Peat samples collected from one of the natural clearings in the West Taupo forest did not yield silver beech pollen in any part of the profile so it is possible that silver beech forest has not been widespread in this part of the range at least and the pocket described is purely fortuitous.

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THE DISTRIBUTION OF TOATOA

Cheeseman in his "Manual of the New Zealand Flora" (1925) gives the southern limit of toatoa (*Phyllocladus glaucus*) as Rainbow Mountain and Titiraupenga and the maximum altitude as 2,000 ft. This species, however, occurs well south of the limits Cheeseman gives and at higher elevations.

It is present in fair quantity about the Waihora Stream catchment area on the eastern slopes of the same range, the Hauhungaroas, upon which Titiraupenga rises. Here at elevations between 2,000—2,500 ft. it grows with Hall's totara and rimu, and occasional trees up to 2 ft. in diameter are being milled. The timber is sold as tanekaha. Smaller trees and seedlings of toatoa are to be found up to the top of the range, elevation 3,700 ft., at about the same latitude. There also occurs at the same elevations scattered trees of tanekaha (*Phyllocladus trichomanoides*), alpine toatoa (*Phyllocladus alpinus*), and pure stands of the last-named species surround natural clearings in the forest.

Another record, at an altitude exceeding Cheeseman's limit, was that of Adams (Trans. N.Z. Inst. XXI p. 32) who collected toatoa on the summit of Te Moehau, 2,750 ft. Growing in association with it were also tanekaha and alpine toatoa. Toatoa has since been collected on Te Moehau summit by several botanists.

N. L. Elder, R. M. Greenwood and A. P. Druce record that toatoa also grows between 2,500 and 3,000 ft. in the catchment area of the Waimarino River on the northwest slopes of Ngapuketurua in the Kaimanawa Mts. The trees were of frequent occurrence on a steep ridge in red beech forest. Other trees present in small quantities were silver beech, kamahi, Hall's totara and haumakaroa (*Nothopanax simplex*).

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NOTES ON SEEDS AND SEEDLINGS OF MATASEQUOIA GLYPTOSTROBOIDES

This species was discovered in 1945 and named in 1948 in Szechuan Province of China by Chinese botanists. The species, besides publication of its formal scientific description, has been described in several American publications under the name of the Dawn Red-