

*Weinmannia sylvicola* (Tawhero or Towai).—Kirk\* states that this tree has long been famous for its bark, which contains from 10 to 13 per cent. of tannin, and was formerly used to a large extent in the Auckland tanneries. The supply was, however, obtained in a most wasteful manner, the bark being peeled as high as a man could reach, the branches and upper portions being left untouched, so that the supply in the immediate vicinity of the settlements soon became exhausted. Cheeseman† also states that the bark is largely used in tanning.

*Weinmannia racemosa* (Towai or Tawhero in the North, Kamahi in the South Island).—This tree is closely allied to the preceding species, which only occurs in the North Island. Buchanan‡ (1868) states that the bark is valuable in tanning. Skey§ (1868) gives an analysis of extract of towai-bark furnished by Mr. Grayling, of Taranaki, as follows: Water, 21.5 per cent.; catechuic acid, 42.5 per cent.; tannic acid, 31.1 per cent.; lignin, 1.8 per cent.; gum and undetermined, 3.1 per cent. Kirk|| (1886) states that Grayling was awarded a certificate of merit for this extract at the United States International Exhibition, Philadelphia, 1876-79. Kirk\* states that the bark is of great value for tanning, as it contains 13 per cent. of tannin. He suggests that it might be made into an extract, as it can be obtained in vast quantities. Skey¶ (1899), reporting on sample 8049 of kamahi-bark from Rataville, Ratanui, reports that as received it contained 5.6 per cent. of tannin and 9.2 per cent. of extractive matter, and was much inferior to oak or wattle bark as a tanning-material. Mr. Kingsland\*\* (1916), managing director of a large firm of tanners in the South Island, made an exhaustive trial of this and other native barks for years, but in the end discarded them altogether in favour of Australian and Tasmanian wattle, finding that even at a greater cost wattle was better and cheaper for their purpose. It is now thirty years since this firm manufactured any of these barks grown in New Zealand, and it has used only wattle-bark since. The tanning with native barks was slow compared with wattle; but one of the worst features of the native barks was the large proportion of dye and acid they contained—substances detrimental to the colour and appearance of the leather when manu-

\* "Forest Flora of New Zealand." † "Manual of the New Zealand Flora."

‡ "Sketch of the Botany of Otago." Trans. N.Z. Inst., Vol. i. § Trans. N.Z. Inst., Vol. i, 2nd ed. || "New Zealand Timbers, Bark, and Secondary Forest Products."

Parliamentary Report by T. Kirk, Chief Conservator of State Forests. C.-3B. This report gives the analysis of a number of indigenous barks assayed for tannin in the Colonial Laboratory, and therefore by Skey. The discrepancy in the amount of tannin in the bark of the same tree by the same analyst may be due to the difference of the season of the year in which they were collected.

¶ Thirty-second Col. Lab. Report.

\*\* Personal communication.