

ART. III.—*Moriōri Carving on the Trunks of Karaka-trees.*

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Plate III.

A RECENT paper in the "Annals of Botany" on the genus *Corynocarpus** draws attention to the remarkable character of the genus, and to the fact that up to the present time it has not been found outside certain parts of the Colony of New Zealand. Now, however, it has been found that New Caledonia and the New Hebrides have what is practically the same tree so far as the fruit is concerned, the specific differences being based on small variations in the flower.

The *Corynocarpus*, under the name of "karaka," has long been reputed to have been brought to New Zealand by one of the canoes from distant lands.† One of the earliest of these traditions, given by Mr. Shand in his valuable notes on the Chatham Islands, is to the effect that Maruroa and Kauanga brought the karaka-berry from Hawaiki in the "Rangimata" canoe and planted it all over the island, the places where it was set being named. They planted it first at a place which they called Wairarapa, that being their name for the tree (according to one statement), near Te Ika-rewa. Mr. Shand says that it is found growing plentifully not far from the sea-shore on the main island and in Pitt Island wherever the soil is at all suitable, but not in the higher parts of the southern portion of the main island. He also notes that the natives used certain incantations or spells to insure a good crop of the berries. The kernels when gathered were cooked in a native oven, or *umu*; then put into flax baskets and the outside pulp removed by trampling with the bare feet, after which they were steeped in water for not less than three weeks to remove the poisonous element—the same process as the Maoris practised.

Many years ago the late Mr. W. T. L. Travers‡ drew attention to the various marks which his son saw on the trunks of the large karaka-trees, and states, the quarrels of the Moriōris "appear to have arisen chiefly out of conflicting claims

* "On the Genus *Corynocarpus*, Forst., with Descriptions of Two New Species," by W. Botting Hemsley. Ann. Bot. 17, p. 743, 1903.

† In his account of the coming of Turi the navigator to the west coast of the North Island of New Zealand in the "Aotea" the Rev. T. G. Hammond says, "On the north bank of the [Patea] river is Papa-whero, where Turi planted the karaka-seed from Hawaiki, which grew to trees and flourished till the war with the Europeans, when the parent stock was destroyed" (Polynesian Journ., vol. x., p. 194).

‡ Trans. N.Z. Inst., 1876, vol. ix., p. 15 (see p. 22).

to the possession of valuable karaka-trees, the fruit of which was a staple and much-liked article of food, . . . nearly all the older karaka-trees on the island are marked with devices indicating their special ownership—a fact of very great interest. . . . These figures are very rude, but were evidently sufficient for the purposes of the owners.”

Captain Mair,* in the discussion which followed on the reading of the above paper, did not agree with Mr. Travers regarding the individual ownership of the karaka-trees, as these trees covered a third of the island, and their fruit must have been more abundant than the small number of the inhabitants could consume. Dr. Cockayne, who has recently explored the island botanically, draws attention to the large number of trees in the bush, and is evidently of the opinion that the karaka is indigenous; so the question as to whether the tree was indigenous to the island or was planted there by the early inhabitants is as much in doubt as ever.

Lately a number of the marked trees have been cut down, and there are now several examples of the carvings in the Christchurch and Wellington Museums, and for a photograph of one of the oldest and most characteristic I am indebted to Mr. J. J. Kinsey, of Christchurch. It represents, in the conventional manner found in old cave paintings, a human being. It has been deeply cut through the bark of the tree down to the wood. The photograph is an excellent one, and shows the rounded swelling of the new growth of bark very well. Most of the other specimens that I have seen have had the figure indicated by incised lines, and are probably much more modern than the one figured.

In connection with this marking of trees, it should not be forgotten that the Rev. R. Taylor† states that sacred trees are common on the east coast of New Zealand. In the Bay of Plenty, he says, they are generally to be discerned by being painted red, or bound round with garments, or having rags suspended from their branches. Although there is every probability that these trees were karaka-trees, it is not so stated. If they had not been “on the coast,” the usual habitat of this tree, we might have concluded that the trees were reserved, or tapued, by chiefs for the sake of their bark for tanning purposes, or for their timber, such as are still to be seen in the Urewera country.

The following extract from the first-quoted paper is an interesting part of the botanical history of the genus: “*Corynocarpus* was established by the Forsters in 1776 (Char. Gen. Pl. Ins. Mar. Aust., p. 32, t. 16), and, although the descrip-

* Trans. N.Z. Inst., 1876, vol. ix., p. 621.

† “Te Ika a Maui,” 2nd ed., p. 20.

tion is incomplete and the figures of the parts of the flower inaccurate, there can be no question about the tree intended. It was described from specimens collected in New Zealand on Cook's second voyage (1772-75), and the perfect fruit seems to have been unknown to the Forsters or they would hardly have given it a name signifying club-fruit. They were evidently unaware, too, that the fruit of *Corynocarpus* is edible, or it would have been included in G. Forster's 'De Plantis Esculentis Insularum Oceani Australis.' But Sir Joseph Banks and Dr. Solander, who were the botanists on Cook's first voyage (1768-71), also brought specimens of this tree to England, and it was described and figured by them under the name of *Merretia lucida* (in memory of Christopher Merrett, M.D., author of 'Pinax rerum naturalium Britannicarum,' 1661). The authorities of the Botanical Department of the British Museum have obligingly furnished me with a copy of the description, which is very full, and accurate in most of the details. The most important point in which it differs from what I have observed and what other authors have described or figured is the shape of the petaloid staminodes. They describe them as 'apice tricuspidata, cuspidate intermedio duplo maiore.' The staminodes of *C. similis* and *C. dissimilis* are acutely toothed at the apex, whilst those of *C. lævigata* are irregularly and minutely toothed from about the middle upwards and around the top. There can be no doubt about Banks and Solander's specimen having been brought from New Zealand, because exact localities are given, and because Cook did not visit the New Hebrides on his first voyage. On the second voyage he touched at several of the islands; but the Forsters record their *Corynocarpus* from New Zealand, and their figures and description of the staminodes convey no information whatever beyond the presence of such bodies in the flower. Banks and Solander also describe a fully developed fruit in the following terms: 'Drupa oblongo-ovalis, glaberrima, lutea, magnitudine Olivæ Hispanicæ (1½ unc.), substantia carnosa, lutea sesquilineam crassa edulis.' They further describe the 'nucleus' (seed) as 'amarissimus.' . . . In 1823 or 1824 it appears to have been introduced into English gardens. . . . A. Cunningham, in 1840. ('Flora Insularum Novæ-Zelandiæ Precursor,' in Ann. of Nat. History, iv., p. 260), gives a Latin description of all the parts except the fruit, and cites Banks and Solander's manuscript name. He is also the first, so far as I am aware, to explain the process by which the Maoris got rid of the poisonous properties of the seeds and rendered them edible."

With regard to the first notice of karaka-berries as food, Polack gives the name *kou* as "the steamed kernels of the native fruit karaka." His work was published in London in 1840.