

PUZZLE OF THE BEECHESMrs K. WOOD

Visiting Tongariro National Park in March this year I could not help noticing that the bush in the Chateau was becoming unsightly. This was owing to the dead and dying beech trees, Nothofagus solandri (black beech) which raised their stark heads or lay broken and strewn on the ground. Apart from the beeches the rest of the forest trees seemed green and healthy enough, perhaps thriving because the loss of the canopy has allowed the sun and light to penetrate and encourage their growth.

At the National Park headquarters I asked if the reason was known why the beech trees were dying. I was told by a young woman that this had not been properly studied. She advanced the theory that about fifteen years ago a very severe winter had weakened the trees and they had become prey to insect damage and fungus.

Personally I wondered if the opposite could be the case. New Zealand is passing through a cycle of warmer temperatures and proof of this is in the melting of the great South Island glaciers. Beech being a sub antarctic tree should prefer cold to warmth and perhaps the warm dry summers have had an adverse effect. Over at Mt Egmont the chief forest trees are rimu, rata and kamahi, and beeches are absent. Could the Ruapehu forest be going through a transitional stage and imitating its neighbour? This could make a fascinating study indeed as there are many questions to be answered.

Strangely enough over at Mt Pihanga by Lake Roto-aira one does not see all these dead and dying beech trees. While on the walk round Lake Rotopounamu on the slopes of Mt Pihanga many large and healthy red beeches, Nothofagus fusca are to be seen among the rimus and other giant forest trees. We met a ranger on the track and he agreed that although black beeches are dying, red beeches are "holding their own".

My most interesting botanical find on this trip was a fair abundance of the finely fronded parsley fern, Botrychium australe var. millefolium growing beside a track on the te Pounamu road which crosses the Pihanga saddle between Turangi and National Park. This fern looks rather like a giant moss and is most attractive.

IPOMOEA PALMATA AT OPOTIKIM. HEGINBOTHAM

My search for "new" plants to record in the 'Opotiki District Wild Plants Survey' led to an interesting discovery. A friend of mine, exercising his sons dogs along Hukuwai beach a few miles from Opotiki township noticed an unusual mauve flowered vine growing in the sandhills. He brought a few leaves and a withered flower to me for an opinion as to its identity, and thus in April this year was discovered

the presence of Ipomoea palmata growing wild at Opotiki.

The following weekend I checked out the plant and found an adult vine growing beside a boxthorn (Lycium ferocissimum) with many stems growing through it. A younger seedling was nearby. The area was a foredune, some three hundred yards east of the County Council's picnic area, altitude approximately 5 - 10 feet above high tide, with associated plants mainly wire-vine (Muehlenbeckia complexa) and tree lupin (Lupinus arboreus). During spring tides, or storms, the sea could easily lash this foredune area.

The closest known planting of the vine in the district is at the late Norman Potts residence in Opotiki, some 2½ miles away as the crow flies.

I informed A.E. Esler, D.S.I.R. Botanist in Auckland of these facts and he said that he suspected that seeds are water borne around the world and are capable of establishing whenever conditions are suitable. There is a similar colony at Karekare near Piha, and it is assumed that seeds from a Piha planting were carried down a stream to the sea then cast ashore. Perhaps this occurred in Opotiki during the major flood of 1964.

For those unfamiliar with this plant... Ipomoea palmata grows indigenously in the Kermadecs, Three Kings Is. and on North Auckland coastal cliffs and foredunes down to about 35 degrees 30' latitude. It is abundant in tropical and sub-tropical regions. Related to the better known adventive Morning Glory or Blue Convolvulus, our native species is pale purple with darker throat and has leaves which are digitately 5 - 7 lobed, 4 - 8 cm diameter - a most attractive, vigorous creeper.

A FURTHER OBSERVATION ON CORDYLINAE INDIVISA ON POINT 21, MT
KOHUKOHUNUI, HUNUA RANGES

A.J. DAKIN

In 1971 I carried out a survey of the distribution and condition of a small population of toiwi (Cordylinae indivisa) on Point 21 (660 m above sea level) to the N.E. of the highest Hunua peak, Mt Kohukohunui (694 m). The results of the survey (with distribution map) were reported upon in the Botanical Society Newsletter of March 1972.

Eight plants were located in grass-fernland and regrowth shrubland around the point and these ranged in size from 10 - 15 cm high to one adult specimen with a height of 3 - 4 m and trunk diameter of 10 cm.

Plant condition was generally poor - the smaller much browsed by goats and surrounded by vigorous competing vegetation. However the largest toiwi appeared to be healthy, of good vigour and with most of its tufted head in good light.

Information from Mr J.W. St Paul (a long time resident