

(in flower), ningimingi, Astelia trinervia with reddish purple leaves, Gahnia species, bracken and umbrella fern. Lycopodium deuterodensum, cernuum and volubile are present, Drosera auriculata and binata, Thelymitra and numerous lichens and mosses. Persoonia toru is here a tree of some size. The area was surprisingly dry, but showed obvious signs of becoming a bog at times. From the heath the track descends into the forest again, and passes back through the kauri-tarairé association, finally coming out on to the highway. One notices the great mounds of reddish-brown humus round the trunks of the kauri, formed by decaying fallen bark and building up to a considerable height. Numerous seedlings grow in it, and there is always the hopeful climber, which is however, soon shed with the bark.

This is but a brief summary of what was observed, for in an area so diversified it is impossible to list everything.

On the highway we joined forces with the first group and were soon back in the bus and on the return journey to Dargaville. Next day we stopped again at Matakōhe, where Mr. Stirling showed us the Centennial Museum, which has a very fine collection of photographs illustrating the history and growth of the district in general, and the kauri timber industry in particular. Tools and implements ranging from Maori artifacts to early household utensils, once part and parcel of the life of the early settlers, are tangible evidence of the changes the years have brought. After a visit to the Coates Memorial Church and lunch at the Memorial Hall, we spent a brief half hour in Stirling Park which contains kauri, rimu, tanekaha, totara, mapau, Mida and other trees of some size. Undergrowth is already regenerating now that the area has been enclosed, and it will be interesting to note the development within the next few years. Our thanks are due to Mr. Stirling for his kindness in showing us so much of the district

All too soon we were back in Auckland with vivid memories of the great groves of cabbage trees seen so frequently along the northern roads where they descend to level land; the little pockets of bush left here and there in the fields and valleys; the totaras large and small, that are so much a feature of northern farmlands; the vivid colours of the leaves of mairehau, toru and Quintinia on the heath; the lovely white flowers of Metrosideros albiflora; the dappled blue-grey of the kauri trunks and the intense silence that pervades the depths of the forest.

Mr. Warren tells me he also found Decrydium colensoi near the group of D.kirkii mentioned by Miss Davis above. E.D.H.

MEETING - 6 NOVEMBER 1963 - - - E. D. H.

In the event Mr. Gudex was ill and unable to come from Hamilton, which was a disappointment. But he very decently sent up his slides and an annotated list. Mr. Lediard showed the slides while Mrs. Hynes gave a commentary and the whole proved most interesting. There was much mountain-cum-forest and one or two nostalgic scenes of past Bot. Soc. adventures. Among the more strictly botanical shots were several plants not often met with. Northasella salicornioides, a mistletoe parasitic on manuka. Cyathea cunninghamii, a magnificently picturesque tree fern (on one of which I noted some epiphytic Earina). Ophioglossum pedunculatum, one of the least fernlike of ferns, a yellow-flowered Pittosporum and several colourful fungi. Another that caused some comment showed a fascinating geological squiggle that reminded me of Maori rock carvings.

And then came supper. To celebrate the last meeting of the year Mrs. Lediard and her friends put on a special show. As Susan said, it truly was a super supper.

Finally a run of slides showing the upper Waimakariri area where the Bot. Soc. intend to go in January. Mostly taken in the winter, with the snow very white and the sky very blue, and the hillsides very vertical. Some absolutely perfect scenery about which we shall undoubtedly hear more later.

FERTILISATION OF HIBISCUS TRIONUM Linn.

I have grown Hibiscus trionum at home here for upwards of 20 years and have often wondered how it managed to set so much seed, seeing that the flowers last only for one day. The answer is easily come by - the flowers fertilise themselves - by the stigmas going to the pollen, instead of the usual method of taking the pollen to the stigmas. The yellow anthers are pin-cushioned round the ovary and the whole is topped by the dark velvety 5-fid stigma with its rather long styles. When the flower opens in the morning these styles are closely erect, but as the day wears they move outward and downward until by nightfall they have bent themselves double and buried their stigmas well in among the pollen. There is of course nothing to stop insects cross-pollinating the flowers and this does frequently happen, but in the absence of insects the flowers are fertilised just the same. E. D. H.