differences. Turesson's theory is that out of an originally polymorphic group, in each locality only those one or two forms especially suited will survive. Craspedia is a genus crying out for similar investigation here.

In England Marsden Jones and Turrill, using Plantago major, have tried to keep all factors constant in pot cultures, except the soil, to see how much its properties affect the form of the plant. In N.Z. recently similar experiments have been undertaken, but rather to gauge the fertility of the soil, than to analyse the plant responses.

Dr. Lotsy of Holland, visiting New Zealand in 1925 was deeply impressed with the extent of wild hybridism, perhaps the most prolific cause of variability in our plants. Amongst the examples illustrated were the crosses between Ranunculus lyallii and R. buchanani, Melicope ternata and M.simplex, Hebe elliptica and H.salicifolia. Dr. Allan did not make any mention of his own artificial hybrids between Coprosma robusta and C.propinqua of which he followed the progeny through till the second generation had displayed all its wonderful variety of leaf form and fruit colour. The only other controlled hybridizations of N.Z. plants except in grasses have been in Rubus (Rubus parvus . . x R.Schmideliodes, see Allan TNZI 58, p.51, 1927) and in genus phormium about which Dr.Allan has published results in collaboration with Miss Cranwell, and with Mr. Zotov. Rubus barkeri, of which all the cultivated plants that adorn many public gardens have come vegetatively from one original piece from Westland, was thought by Dr. Cockayne to be a hybrid. It was interesting to hear that it has been known to flower in cultivation.

Hybridism has been assumed to account for much of the variability in ferns, and the experimental work being carried out on Asplenium in Auckland by Miss Crookes was mentioned.

Ferns also show heterophylly, i.e. different kinds of leaves in different parts or at different ages in the plant. Blechnum filiform is our most striking example. In flowering plants Helichrysum coralloides, Pokaka, kaikomako, Carpodetus serratus, Muehlenbeckia complexa, and the kowhais were mentioned in this connection. Flowers on reversion shoots, or even on plants with foliage entirely juvenile should always be watched for. The rejuvenation of lancewood after fire was interestingly described. The explanation of these juvenile forms is still awaited, and it is to be hoped that someone in New Zealand, even without the thousands of flower pots and acres of glasshouse that we saw in American research stations, will some day be able to tell us why or how a pokaka, after remaining for years in a tangle suddenly sends up an erect shoot that becomes the trunk of a tree.

Mr. Baddie exhibited a collection of leaves gathered from a small area in North Auckland, that illustrated very aptly both the variability within the genus Pseudopanax, and the need for careful study in the field.

## DEPARTURES.

The departure from New Zealand of Mrs. Watson Smith, formerly Miss Lucy Cranwell, is an event of moment to plant-lovers here. As botanist at the Auckland Museum, Miss Cranwell was well known for her work in popularising the study of native plants, while through her scientific papers, wide correspondence, and travels abroad, her name became familiar to botanists in all parts of the world. Some account of her interests, and a list of some of her publications are given in the latest Newsletter from the Auckland Botanical Society which she was instrumental in founding in 1937. Our Society might join with her own in wishing her good fortune in her new home in America.

Another plant-scientist to leave this country recently is Dr. Lai Yung Li, whom we had the pleasure of hearing in 1942. Dr.Li is returning to China to undertake teaching and experimental work with his own people. No news has been received since a report some weeks ago that he had reached Sydney safely. It is to be hoped that he will accomplish the rest of his perilous journey without mishap, and that it will not be long before his country is able to communicate freely with the rest of the world.