

Mr. Stirling had kept his brightest spot to the last. In the native plantation above the fern-house, the passion-vine (Tetrapathaea tetrandra) spreads its shining leaves over a bank of tree tops. Its gay orange fruits, each nearly an inch across, hung in clusters of a dozen or more, and there must have been scores of clusters, making a brave show in the late winter light.

. . . . .  
A NOTE ON PITTOSPORUM POLLINATION.

In the first week in January 1938, plants matching fairly well Cheeseman's description of Pittosporum plumeloides var reflexum were collected at Fairburns, Mongonui County, Far North Auckland. They were growing on the side of a steepish track on a semi-cleared ridge of kauri bush. They were planted in tins in a mixture of sand and leaf mould and set out in a sheltered sunny position. One was given away early in 1942. The remaining one, in a tin 5" wide and 8" tall is flourishing, and increasing by suckers. It does not seem to be growing any taller. It is now 8½" high and has 26 stems, seven of these "main" stems, as it were, the rest new thin growth.

The first flowers came in 1940, the flowering season being April-May, with a few stragglers in June. The flowers are unisexual, female flowers being smaller, slightly later than the main lot of bloom.

Up till 1942 I had never seen a capsule, so wondered about pollination. I noted that at night the flowers have a very strong sweet scent, and that the plant is literally swarming with tiny moths seeking the nectar. Pollen must be transferred by this means. To make sure I picked some male flowers and transferred some of their pollen to stigmas of female flowers by means of a fine paint brush, marking the branches done with cotton.

When no seeds were formed I concluded that the plant requires cross-pollination. I had no second plant of this kind and it was too early for flowers of other species obtainable here. Then, in the first week in June, I had a trip to Whangaruru on the coast and found there some P. cornifolium flowers which I brought home. By this time there were only four flowers left on my plant. I hand-pollinated as before and got two "takes", one of which withered almost immediately. The other one made a little capsule which ripened and was just beginning to split open when the plant was knocked over and the capsule lost.

In 1943 and 1944 there were good shows of flowers, but no other pollen was obtained. The plant as before failed to self-pollinate.

E.K. Pickmere, Whangarei.

. . . . .  
"SPORTING" FERNS.

Prompted by the Presidential Address on variability in plants, Mrs. Duguid, Secretary of the Levin Flora Club, brought along to our July meeting an exhibit of fronds of ferns that had been growing in her garden for about 5 years.

An Asplenium which most people would agree had affinities with A. lucidum came originally, as small plants, from among boulders on the face of Cape Turnagain. Two plants were represented, one less, one more "abnormal". Mrs. Duguid's note about the latter says "It has very mixed fronds, about a quarter of them having the rhachis divided towards the tip into two or three. Many of the pinnae are cut into deep lobes, and most have a sharp saw-like edge."

Pellaea falcata from Herbertville is now a well-established clump about a foot across. "This autumn (1944) it has developed fronds with divided pinnae. Normal fronds are also present. The ones which are abnormal have a twist, making the pinnae stand at a tilted angle in relation to the rhachis instead of being flat." A normal leaf from the same clump was shown for contrast.

With the added note that Blechnum fluviatile (usually a well-behaved plant) growing in the same garden produces fronds with tufted tips during the period of greatest growth in spring, one cannot help wondering if there is some local condition inducing this sort of growth. An extract of autumn crocus root (colchicine) has far-reaching effects on the mechanism of growth in plants and it is not impossible that "abnormalities" of this kind may some day be traced to similar chemical influences.

ANNUAL SUBSCRIPTION to the Society: In Wellington 7s.6d, reduced to 5s.0d. if paid by November 30th.

Acting Hon. Sec.: Miss J. Hillary,  
Marsden School,

Beyond Wellington: 2s.6d.  
Editor: T. R. Moore.

410  
page 84/87