New Zealand Tree Broom

How Chordospartium Stevensoni Was Discovered

By George Stevenson

I FIRST saw *Chordospartium stevensoni*—a nameless tree at that time—in December, 1904, when my neighbour and a fencing contractor and I were following the surveyed line for the boundary fence on the sheep run I had just taken up in the Clarence valley. The exact spot, in case anyone should wish to take the same strenuous walk, was the face of a small terrace at the junction of Calf and Cuckoo creeks on the north eastern slopes of the seaward Kaikouras, with the water-shed sloping north-west towards the inner Clarence.

Any moderately detailed map of the South Island shows the Clarence river flowing north-east between the seaward and the inland Kaikouras till it makes two sharp bends to turn first east and then south-east for the sea. The south-west oblong thus enclosed embraces the sheep runs Glen Alton and Waiau-toa, the Chordospartium area with which I am dealing.

This first tree I saw was just past blooming and was thick with pods which at that time I did not examine closely. It was a fine tree about 20 feet with the spread and habit of a weeping willow without leaves and with stringy stems. The fencing contractor established his camp near it and I came to know its shape well by the end of the autumn.

I was not a botanist and still am not; but I noticed that the seed pods were round and invariably had only one seed each, unlike the seed pods of the pink brooms that grew near the comparative civilisation of the homestead site. These pink brooms (Carmichaelia) had longer pods containing anything from one to twelve seeds. But the real moment of interest came during the November mustering in 1905 when my tree turned itself into a huge umbrella of light purple. The following autumn, March, 1906, I took some seed pods to Christchurch to my brother who had been collecting pods from the pink brooms at Upcot in the Awatere for a naturalist friend, the late Mr. T. Keir, of Boyd and Keir, Rangiora. Mr. Keir was greatly excited and got me to send seeds to Mr. Cheesman, who pronounced that this was an entirely new species. Mr. Cheesman and also Mr. Petrie, of Auckland, asked me for flowers and seeds in the next season, and so, too, did a Dunedin man whose name I have forgotten.

By the time the next flowering season came round, November, 1906, I had learnt enough about Notospartium and Carmichaelia to know that in a particular area in Calf creek there were *five* distinct kinds, including the one I understand is now known as *Carmichaelia Petriei*, and at least two, perhaps three, not at that time named. It was evident that although one *Carmichaelia* had a weeping habit it commonly grew to one side and therefore did not form a canopy or umbrella. But I have seen fair sized trees of good shape of several of the different kinds;

New Zealand Tree Broom in a natural setting.

and near the McLean saddle in a patch of scrub I saw one variety of upright habit 15 feet high and well shaped. I sent flowering branches and seed pods from all of these, but lost track of their later recorded history. It would be interesting to see an authoritative classification, with brief descriptions of the various species.

The next big find was during the vember muster of 1907, when I had tne luck to have to chase after some sheep over a fence that had been flattened by snow. About half a mile from my original tree, in a sheltered basin above the source of Cuckoo creek, I came on a grove of more than 50 trees in full bloom, some of them 25 feet high and magnificently proportioned. This basin was well known to the musterers as it had a small spring where they could usually find cool water; but that particular November I had to go thirsty as the spring was dry.

Later in the month I made another trip there specially to look for a *white* broom that a musterer reported to me. But all I found were the same trees of Chordospartium, purple weeping broom as I called it, but bleached to a light greyish lavender in the unusually hot and dry weather of that month and year. These Cuckoo creek trees were the only ones I ever saw growing on the higher hills of Waiau-toa and Glen Alton—these basins were about a couple of hundred yards above the stream bed and about 3000 feet above sea level. You can see whole cliff faces along the inner Clarence glowing pink and lilac with different species of Carmichaelia, and a most spectacular sight they are; but you will find most of the Chordospartium trees of Marlborough on the open terraces and river flats where the soil is gravelly and the root-run free.

I should be interested to hear if anyone who knows the localities of

Chordospartium stevensoni in the Jordan, Swale, and Avon valleys or anywhere else in Marlborough has ever seen them growing on the hillsides above the river flats and terraces.

By 1910 there were several dozen plants from the Glen Alton and Waiau-toa seed growing in gardens from Queenstown to Auckland. My brother had his first plant flowering at our old home at Flaxton, near Christchurch, about 1912 or 1913, and many gardeners have since been supplied with seed from this original tree, a fine specimen 20 feet high with a spread of about 16 feet and a wonderful canopied shape. Like so many members of its family this old broom was attacked by borer near the ground and was lately blown over, aged 45 years. Fortunately it has many successors in that garden at all stages from seedlings to good sized trees.

I have always found it a good plan to cut the hard shell of the pod to allow for quicker germination of the seed. But according to Mr. W. B. Brockie of the Otari Native Plant Museum in Wellington the quickest and simplest way is to place the seeds *on top of* damp sand in a pot and cover with a jam jar. Do not cover the seeds with soil or sand. The seed is ripe in the early autumn after flowering. It has been said that *Chordospartium* flowers only once in every two years; but in my experience it flowers every year though in some years less profusely than in others. For instance, in the season after a very heavy flowering it may flower lightly, as is the case with many other plants. I have not known of plants flowering under six years from the time of sowing the seed. But from first-stage seedling onwards the plant is always interesting to watch through its unusual changes.

If I had a second lifetime I could perhaps have some fun with a helicopter and scientific gear tracing the narrow track of *Chordospartium* from the Clarence bridge across the inland Kaikouras through Marlborough; perhaps I would become a kind of geo-botanist with a theory about the ancient age of this old-looking plant of broom and the ancient river it grew beside in the centuries when this country had a different shape. Or perhaps I would just put on a pair of mustering boots and take my manuka stick to climb about the Marlborough hills a gullies looking for something that as nameless now as *Chordospartium* was fifty years ago.

But as things are I had better put on my gardening boots and make sure that my new young one, which is still at the stage at which it looks like a posy of straw-coloured raffia, is going ahead in a healthy way to prove that *Chordospartium* can be successfully grown in Redcliffs sand as well as in the varied soils in which it is already growing and flowering in areas about Queenstown, Dunedin, Oamaru, Christchurch, Wellington and New Plymouth. I believe it also grows in Kew Gardens, London.

A new race of delphiniums known as the Astolots has been evolved in America; they are dwarf plants in colours ranging from pink to wine. Seed of the new type has reach New Zealand and many commer growers are now raising their first batch of seedlings. Selected plants will be available to the home gardener in a year or two, and should be worth trying.

When preparing composted matter for use in conjunction with acid-tolerant plants, it is a good idea to add spent tea leaves to the heap. They have a high tannin content which rhododendrons and similar plants appreciate.