

SOME SURPRISES IN GROWING *CARMICHAELIA WILLIAMSII*

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A chance opportunity to collect seed from *Carmichaelia williamsii* before a friend shifted house on 1st December 1993 was at first disappointing as there was only one pod on the plant and that did not appear ripe as it was light brown. Allan (1961) described ripe pods as very dark brown to black. My imminent departure on a week's tramp encouraged me to inspect the seeds in the pod. Moore and Irwin (1978) state that 'as the pod ripens its walls drop off but the orange seeds remain attached to one side of the rim that is left'. This had not occurred in the pod I collected. Although the seeds did not appear dry they looked in good condition. They were orange with brown spots. I planted them in seed-raising mix and put the pot in a sheltered position inside a plastic bag. When I returned after one week, three of the four seeds had germinated. As I had never previously grown *C. williamsii* from seed I was surprised that:

- (a) the seeds germinated well before they appeared dry and before the pod had split;
- (b) the seedlings all developed quite large trifoliate leaves.
- (c) the plant continued to produce trifoliate leaves until the plants had reached 32 cm, at which stage they retained the leaves on the lower 17 cm and the growing leafless stems began to flatten and flattened subsidiary stems also developed.

Wilson and Given (1989) say 'leaves only on young plants or plants growing in shady sites'. In none of the references consulted (Metcalf, Moore, Wilson) was there a drawing of the leaves or their placement on the plant.

I checked with Peter Heenan of Landcare Research whether my observations were unusual. he told me that in Christchurch *C. williamsii* flowers over a long period from about March to November, usually with peak flowering occurring during mid-winter. Seed pods are produced over this time. The Landcare Research Experimental Nursery usually collects *C. williamsii* seed when relatively ripe and they are treated with boiling water and left to soak approximately two hours before sowing in 50:50 peat/fine river gravel mix. If the seed is fresh it usually germinates in about a week.

It would appear from my results that the pods of *C. williamsii* do not have to be completely dark brown and opened before the seeds are developed sufficiently to allow germination, given adequate growing conditions.

Although some normally leafless plants such as gorse are leafy in the early developmental stage, the relatively large size of the leaves of *C. williamsii* and the height to which they are produced before bare stems develop seemed an unusual feature of this plant.

REFERENCES

- Allan, H.H. 1961. *Flora of New Zealand* Vol. 1. Govt Printer, Wellington.
- Metcalf, L.J. 1972. *The Cultivation of NZ Trees and Shrubs*. Reed, Wellington.
- Moore, L.B., Irwin, J.B. 1978. *The Oxford Book of NZ Plants*. Oxford University Press, Wellington.
- Wilson, C.M., Given, D.R. 1989. *Threatened Plants of New Zealand*. DSIR Publishing, Wellington.

[Everyone knows that ripe kowhai (*Sophora* spp.) seeds are difficult to germinate unless the hard seed coats are nicked. However, nearly ripe but still green kowhai seeds can be germinated quite easily. Perhaps nicking the *C. williamsi* seeds would enable them to germinate quickly also. Ed.]

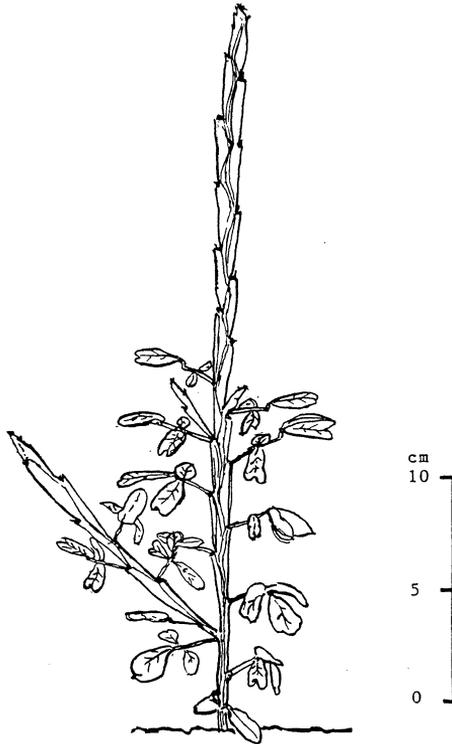


Fig. 1. Seedling *Carmichaelia williamsii* at three months from germination.