HYPOXIS HOOKERI - NATIVE OR ADVENTIVE?

Brian Molloy and John Thompson

Healy and Edgar (1980, p 143) list Hypoxis hookeri (H. pusilla) as an adventive, stating (p.144) "Notwithstanding its original recording by Hooker, (1853) and the report of a different chromosome number for some Australian material..., we consider that H. hookeri should be treated as adventive in view of its regular association here with a range of adventives of Australian origin. It may have arrived with early imported Australian seed used for oversowing, or with Australian merinos and their fodder." Moore and Edgar (1970, p. 100) give much the same view.

Surely a first record as early as Hooker's, and a chromosome number (2n = 28) that is reportedly different from Australian material (2n = 22), are reasonable grounds for considering H. hookeri as a native of New Zealand? And we are not convinced that H. hookeri was brought to New Zealand in the manner suggested, unless there is supporting evidence. We are even less convinced by the argument that H. hookeri is an adventive because of its regular association with Australian plants in this country. After all, are Dichondra repens, D. brevifolia, Oxalis exilis (O. corniculata), Convolvulus verecundus, Geranium retrorsum, Ophioglossum coriaceum, Wahlenbergia gracilis (s.l.), Cheilanthes sieberi and C. distans also adventives, since they too grow regularly with Hypoxis hookeri?

Moore and Edgar (1970) and Healy and Edgar (1980) also make the point that H. hookeri is a summer-dormant geophyte with a corm, a growth form otherwise unknown in the native flora, and as such it is easily overlooked in the field. We agree with these points and suggest that H. hookeri may be more widespread than the few records for eastern New Zealand indicate. However, we would also point out that several native plants commonly found with H. hookeri are equally

well adapted to survive summer drought, producing two flushes of vegetative and/or reproductive growth each year, in spring and autumn, thus mimicking H. hookeri. From our observations on Banks Peninsula, Kaitorete Spit, and the Canterbury Plains the following species behave in this way: Ophioglossum coriaceum (s.l.), Cheilanthes distans, C. sieberi, Oxalis exilis, Dichondra brevifolia, Convolvulus verecundus, Geranium retrorsum and Wahlenbergia gracilis (s.l.); and there may be others. The last two species have large, fleshy, descending roots, the others have rhizomes; both effective ways of withstanding dry summers and responding to favourable spring, winter and autumn conditions. A similar case was put by Colin Burrows in No. 2 of this Journal, explaining the seasonal behaviour of some plants on Kaitorete Spit.

On the basis of these arguments we feel that Hypoxis hookeri has an equal right to be considered a native plant. But in any case how long does a species have to be resident in New Zealand to qualify as a native? And as many people are realising, the distinction between "native" and "adventive" is unscientific and the sooner we drop it the better. Fortunately the Flora of New Zealand is moving in this direction. It is time that more of the popular floras did the same.

PAPANUI BUSH MK II

Joe Cartman

Waimairi County Council recently grassed down an area of land on the east side of Grimseys Road, opposite the end of Wingate Street. This area is known as Owen Mitchell Park and is almost certain to be on or near part of the old Papanui Bush, logs were dug up during drainage operations indicating the site of ancient trees.

The next phase of development of this park is to plant