

This species differs from its congeners in being a diminutive annual.

W. gracilentia Lothian

Plant annual, with a slender taproot, single or few-stemmed, the stems to c. 35 cm tall (but often only 5-10 cm tall); lower leaves us. opposite, obovate-elliptic, hirsute; sepals narrowly oblong; corolla us. blue (occ. whitish or pinkish), campanulate, the tube to 4 mm long, the lobes to 5 mm long, style to 5.5 mm long, considerably expanded in the pollen-collecting zone (distal 1/4-1/2 of style), with or without a gland below the cleft between each stigma; capsules us. subglobose, to c. 7 mm long, us. hirsute; us. in open dry sites, in southern Australia incl. Tasmania, and in N.Z. (apparently as a recent adventive).

Wahlenbergia is a difficult genus in the herbarium because there are a fairly large number of closely related species (25 in Australia) whose best differential characters are found in the corolla and style (see above description). Not only are these awkward features to observe in dried material but in a great number of specimens the open flowers and often the buds too have been completely chewed away by herbarium pests such as psocids. Collectors could help by noting the relevant floral details (at least the colour and proportions of the corolla), and also by adding to any packeted flowers an insect-repellent, such as thymol crystals.

Reference

Smith, P.J. 1992 A revision of the genus *Wahlenbergia* (Campanulaceae) in Australia. *Telopea* 5: 91-175.

**Trip to Pukekaroro Scenic Reserve
20 November 1993**

Alistair MacArthur

ABS members gathered in spite of an uncertain forecast and dark skies, to be rewarded by a pleasant sunny outing as the day progressed. About twenty five people, including two children, made their way up one side of the imposing hill just north-east of Kaiwaka, and after lunch on the summit went down a ridge on the other side. Besides seeing many plant species, we had a remarkable opportunity to see well preserved evidence of the past history, when many Maori people must have lived there.

It was good to see a strong, high fence around the forest as we started up the hill. Progress up the next few hundred metres was slow as members spread out among the regenerating kauri to look at many species close to the ground, as well as interesting trees and shrubs among the kauris. Orchid enthusiasts were evidently delighted by the surroundings. In a few minutes a *Caladenia* in flower was found, and soon afterwards flowers on a *Thelymitra* species, *Pterostylis rubricaulis* and *P. banksii*. *Drymoanthus adversus* (in flower) was seen on the way down and a group of flowering *Pterostylis banksii* again. There was ample evidence that a number of other genera including *Corybas* would be seen in due season.

Toatoa, *Phyllocladus glaucus* trees were present in many places on both sides of the mountain. One displayed very large cladodes. Fairly high up the track, just at the left and growing on the ground, there is a fine specimen of *Pittosporum cornifolium*, more usually seen as an epiphyte. This also displayed large leaves for its kind, or at least they seemed so to this observer. On the way down the eastern side we went just off the ridge to look at one of several large kauris of the original forest, which has a *Metrosideros albiflora* climbing up to its lower limbs.

Some mention must be made of the fortification trenches and storage pits which are such a marked feature of the high parts of the mountain. They are astonishing in size, number and their

state of preservation. It was necessary to walk around the end of the fortification trenches in some places to avoid climbing or descending banks two and even three times the height of a person. Some trenches seemed as deep as twentieth century tank traps. We had our lunch among these trenches, and enjoyed a splendid view of highway SH1 far below, and a nearby rocky hill to the north. We were surrounded by a quite wide range of species, and the one pampas grass clump among them seemed to be the only invasive plant to cause comment along the route we took. As we rose to move on there was some excitement in the fungal field when someone noticed a spectacular red fructification of *Aseroa rubra*, in spite of fairly dry conditions.

As we made our way out of the forest on the east side, there were many tall *Coprosma areolata*. Thanks to our having a guide who knew the district our attention was drawn to some plants among these with a very similar habit but distinct foliage. We were informed that these were *Coprosma rigida*. Alongside the farm cow race where we had permission to come out, this observer thought there was an adventive fireweed. A plant taken to Ewen Cameron turned out to be a native species, *Senecio minimus*.

Though we climbed to 301 metres at the summit, the trip was easy and pleasant, and it promised much more interest if it was followed again or a variant taken on other ridges or gullies nearby. Many thanks to Maureen Young and Frank Hudson for leading us in this remarkable place so close to the modern highway where we could gain so much insight into things belonging to an older Northland. No doubt many of us would feel confident of learning much more if we returned.

Pukekaroro Scenic Reserve, near Kaiwaka ABS field trip 20 November 1993

Sandra Jones

A species list was compiled during the ABS field trip of 12 April 1986 and published in the ABS Newsletter 41 (2), 1986, with further additions recorded by Maureen Young in Newsletter 42(1), 1987. The following are additions (to the previously published 1986 & 1987 lists), recorded by Nigel Clunie / Alan Esler (April 1982) (NC), Maureen Young (October 1986) (MY) and during the ABS field trip on 20 November 1993 (ABS).

Gymnosperms

Podocarpus hallii (NC, as *P. cunninghamii*)

Ferns and fern allies

Deparia petersenii (NC)

Diplazium australe (NC)

Doodia media (NC)

Gleichenia microphylla (NC)

Grammitis ciliata (ABS)

Grammitis aff. *pseudociliata* (MY), voucher specimen in AK

Hymenophyllum revolutum (MY)

Lycopodium cernuum (MY)

Paesia scaberula (NC)

Pteris tremula (NC)

Sticherus cunninghamii (MY)

Tmesipteris tannensis (MY)

GRASSES

Rytidosperma gracile (NC)

Dicotyledons

Alectryon excelsus (NC)

Alseuosmia x quercifolia (NC)

Gonocarpus incanus (NC, as *G. montanus*)

Litsea calicularis (ABS)