

## More *Drymoanthus adversus* (Orchidaceae) in the Waitakere Ranges

Rhys Gardner

In response to my suggestion (Gardner 2004) that this small epiphytic orchid might be uncommon in the Waitakeres, Dan Hatch and Sandra Jones have indicated that I exaggerate, slightly.

The former says (E. D. H., pers. comm. to ROG) that his 1945 Laingholm specimen (AK 24520) came from "beside a stream in the bush, growing on *Alseuosmia macrophylla*" and that "for many years, until the land [Laingholm] was subdivided, the species was abundant on puriri, flowering and fruiting and always in a moss-lichen substrate". Also it was present right there at the gate of his home, on a totara. And he notes that *D. adversus* is abundant today at the Huia end of the Parau track, on mahoe.

The latter (S. J., pers. comm. to ROG) believes *D. adversus* is widespread in the Ranges, though it might

not attain the size it does in the Hunuas or on Little Barrier Island, and supplies her records, and one of E. K. Cameron's, for locality and host:

Atkinson Park, Titirangi on puriri, kanuka, kohekohe  
Park Road, Titirangi: on kohekohe  
Summit Track, Nihotupu: on rewarewa  
Farley Track: on kauri  
Marama Stream: on rewarewa  
Omanawanui Track: on kanuka  
Marguerite Track: on *Olearia rani*  
Winstone Track: on *Myrsine salicina*, kahikatea  
Nikau Grove Walk: on nikau  
Lower Kauri Track: recorded by E. K. C.  
Matuku Reserve: on kanuka, lemonwood, puriri  
Te Aute Ridge Road: on mahoe.

### Acknowledgements

I am grateful to Dan and Sandra for their vigilance.

### Reference

Gardner, R. O. 2004: Habitat, habitat, habitat: Titirangi border home for *Drymoanthus adversus* (Orchidaceae). *Auckland Botanical Society Journal* 59: 61-62.

## Definitely knot!

Glenys Stace

On my recent visit to Chinchilla in Queensland, Australia (Oct 2003), I found an unusual piece of fossil wood while rummaging in a friend's shed. It was shaped like a cone, tapering gently to a rounded point (Figure 1). I jumped to the conclusion that it was a fossil root. This was not an unreasonable assumption but I was not entirely convinced. I told him I thought it was a very interesting fossil and to please look after it better!

Chinchilla, about five hours by car west of Brisbane, is famous for its Jurassic fossil wood. The age excludes angiosperms. Chinchilla wood has to belong to Gondwanan Jurassic flora. The wood is podocarp or araucarian. Tree fern and cycad is easily identified. There have been far too few papers written about the Chinchilla wood and almost no identification. The scientists tell me that it is too altered to tell what wood it is from the structure. My assertion (to the local community) that araucarians grew there was really no more than surmise. (I think there have been one or two araucarian cones found.)

Some araucarians, in particular *Agathis australis*, have the characteristic of dropping their branches. They can close off the supply of nutrient to the branch and it neatly drops off. The branch has a rounded end like a

plug and it leaves a neat matching indentation in the trunk of the tree.



Figure 1. Unusual piece of cone-shaped wood

On my visit to Norfolk Island I discovered an interesting characteristic of the araucarian, Norfolk pine *Araucaria heterophylla*. On the road up to the National Park there is an old hollow log (Figure 2). It is eye-catching because looking through it to the blue sky beyond, it appears to have been pierced by magician's swords! Only these swords don't go past the centre. On closer examination the swords were a circlet of cone shapes around the inside of the trunk and they corresponded with the large sawn off branches on the outside of the trunk. The symmetrical circlet of branches on a horizontal plane is characteristic of Norfolk Pines and gives them their characteristic star shape. Here, with the branches sawn off, was a hollow trunk with the inner star shape perfectly preserved.



**Figure 2. An old hollow log of Norfolk pine (*Araucaria heterophylla*) with preserved branches inside.**

A few days later I visited a wood turner. He was making little bedside clocks out of Norfolk pine branch. He particularly chose branches for this because of their dense resinous nature. He had a couple of pieces there that he showed me. The cone shaped inner branches were well known to him. They don't rot when the tree trunk rots and can sometimes be found on the forest floor.

Then, on a visit to the archeological museum I saw a slice of Norfolk pine trunk that had been cut right through the middle of the circlet of branches (Figure 3). The dark V shape of the inner branch wood contrasting with the light honey colour of the trunk wood. Beside it was an inner branch from a rotten log, about the size of a saucer at the branch end and tapering over about 18 inches to a rounded point. At last the penny dropped! My root at Chinchilla was the inner branch of a Norfolk pine type araucarian. Probably the ancestor of hoop and Norfolk Pine.

Now I have many questions.

Is it only Norfolk pine that has dense cone shaped inner branches like this?

What other characteristics do Araucarians have relating to branch attachment?

Where can I find out about Araucarian branch attachment?

Do you know of any dead and decaying Norfolk or Hoop pines I could examine?

Please let me know if you can shed any light on internal branch structure.



**Figure 3. Slice of Norfolk pine at the Chinchilla Archeological Museum (Photo: Norfolk Island Museum)**



**Figure 4. Branch (lying across the top) showing internal section, tapering. (Photo: Norfolk Island Museum)**