

Interesting news from members to pass on in this issue includes: finding an underground orchid in the Blue Mountains, an original and erudite article on our feature orchid, pertinent comments on this orchid from a Sydney member, and news on the new Queensland plant legislation as it affects us.

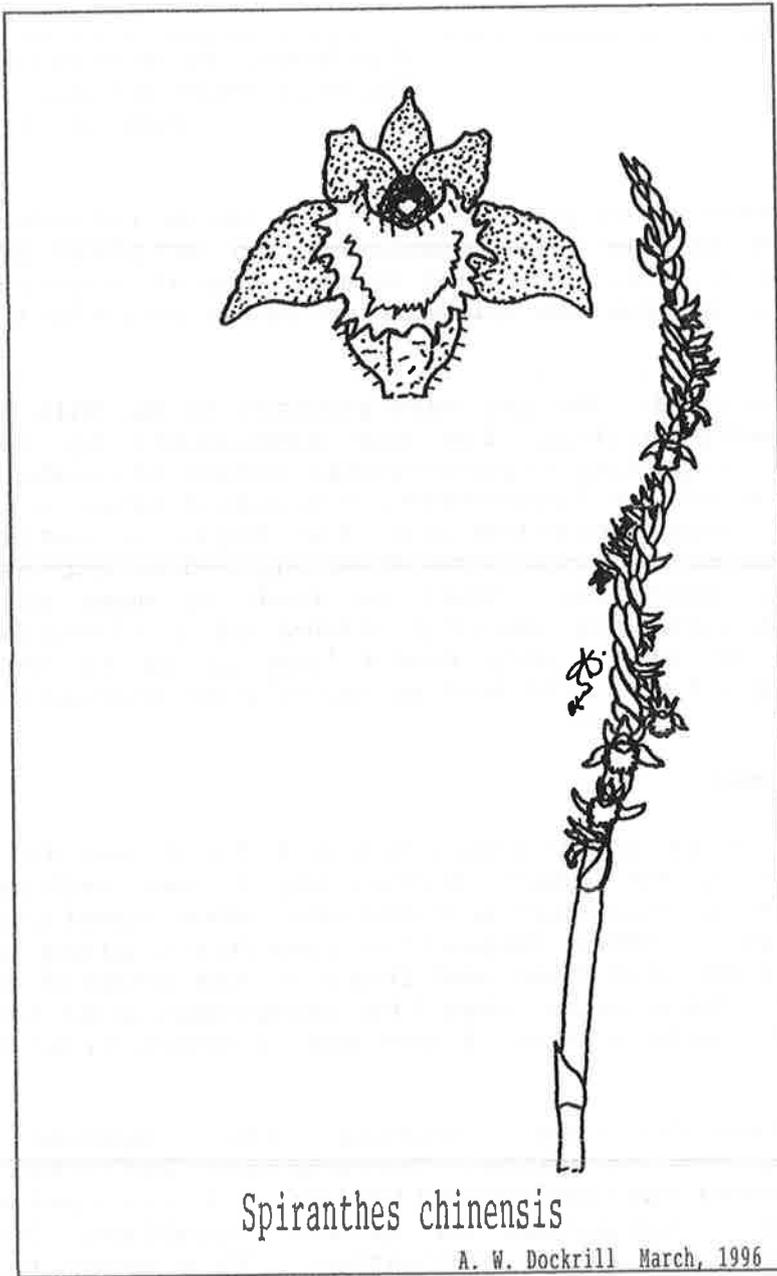
Firstly to our featured orchid. We are very pleased to be able to present this article, specially written for our newsletter by our member, Len Lawler, who is a respected orchidologist known throughout Australia. *Malaxis lawleri*, which he discovered, was named after him. To accompany his article, Len has prevailed upon the doyen of native orchids, Alick Dockrill, to pen an original line drawing, and we express our appreciation also to Mr. Dockrill. What we lack to make this article complete is some good magazine quality slides of *S. sinensis*. Do any of our members have some which they could loan to us to have copies made? They would be copied and returned as quickly as possible.

#### SPIRANTHES SINENSIS (Pers.) Ames

As near as I can reckon it is forty years since I first saw this orchid. While trout-fishing in the Snowy Mountains, I was walking through the grass at the edge of Tantangara Reservoir when something brightly coloured caught my eye. Closer inspection revealed a plant of *Spiranthes sinensis* in full flower and then and there it was adopted as my favourite orchid.\* Several years later when the championship of the Mona Vale A.N.O.S. show went to this orchid, I saw what a great display a group in flower can make.

Dressler's (1981) classification created the subfamily Spiranthoideae of two tribes, one of which, Cranichideae Endlicher, contains five subtribes including Spiranthinae Lindley. In his review of Spiranthinae, Garay (1980) recognised 44 genera totalling 340 species, 42 of which he placed in the genus *Spiranthes*. This genus for the most part occurs in northern temperate regions, with some species in tropical or subtropical areas of Asia and the Americas. It is the only genus of the subtribe, and *S. sinensis*, the only species, to occur in Australia. Kitamura (1964) proposed sub-specific status for the southern plants of *S. sinensis*, but this taxon was reduced to synonymy by Garay & Sweet (1974), and therefore the suffix subsp. *australis* is no longer used for our plant.

This orchid has a remarkable distribution within the bounds of latitude 50°N and 45°S and longitude 50°E to 170°W. It is reported from eastern Russia, across southern Asia from Iraq to Indochina, north to Japan, Korea and eastern Siberia, and throughout the Indo-Malayan region to New Guinea, New Zealand and Niue. It must surely be a candidate for the most widespread orchid.



In Australia it is recorded from all States except Western Australia and the Northern Territory. Usually it grows in, or near, wet areas, and in my experience is rather sparsely distributed, but there are reliable reports of quite large colonies in southern parts. There is little significant variation in this orchid. The pink flower colour is fairly consistent, while pure white flowers are occasionally seen. Flowers may be insect-pollinated or self-pollinated; it is said that the latter condition is more common in southern plants, and this is certainly so in New Zealand where it is classified as 'predominantly self-pollinating' (Molloy 1990).

The cooked tuber was used for food in China, and the plant was used for medicinal purposes in Szechwan and in Indochina. I have not found any report of the use of this orchid by the aboriginal Australians.

S. sinensis is readily identifiable in flower by its "lolly-pink" colour and spiral inflorescence. Jones (1988) has a description with

colour plate and cultivation notes, and Dockrill (1992) has a detailed description with line drawing. Flowering-time: south, October - March; tropics, July - September.

This orchid has been seldom recorded from north-east Queensland. On the Atherton Tableland I have failed to find it, despite several years of diligent searching of many likely areas, including the two quite different locations where it has been recorded, and to which I have been introduced by the original recorders. No doubt it will be found here again, and it could well turn up in the Kimberleys or the Top End.

So, go to it and find one!

\* It was much later that I first saw Bromheadia pulchra Schltr. flowering on Cape York Peninsula; since then these two orchids have shared my favour.

My thanks go to Alick Dockrill who prepare the drawing to accompany this article.

### References

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Some comments from a Sydney member: *S. sinensis* "is one orchid which is supposed to be fairly common in the Sydney area, but which I have been searching for unsuccessfully this season. Various people have given me a rough idea where to look, but they all comment that they have not seen it for a few years. This leads me to think that because it is an evergreen orchid, and because it is summer flowering, it could have been adversely affected or even wiped out by the January 1994 bushfires which swept our area. I have read that a single plant of *Spiranthes sinensis* can produce about 400,000 seeds but that very few germinate. I'm inclined to agree!"

If any member can tell us where to find this orchid in the Sydney area, we'll be glad to pass it on in our next newsletter, or at least you could allay the awful thought that it may have been yet another casualty of those terrible bushfires.

In his message in our Newsletter 14, Len Butt referred to his old friend Jack Wilkie as "a great orchidologist, a man famous in his district, and a veteran researcher of the great mountain behind the town." The town, of course, is Babinda (our town) and the mountain is Mount Bartle Frere, the highest in Queensland. Jack Wilkie is certainly a legend in the Babinda area. He is best known locally as the co-discoverer of the Bartle Frere goldfield in the 1930s, and for his feats of bushmanship in the wet tropical jungles of the district. Jack's accomplishments in the orchid area resulted in his having a *Dendrobium* named in his honour (unfortunately since retaxed to *mirbelianum*). Now in retirement in Townsville Jack is to be further feted.

The Australian Orchid Foundation is to present Jack Wilkie with their Award of Honour at a function in Townsville on 28th April, 1996. It is heartening to hear of a man being recognised and honoured in his life time. [My memories of Jack Wilkie go back to the late 1940s when, as a small boy, I used to enjoy cadging rides in the cabin of the steam engine of the cane train when Mr. Wilkie was driving. (If they did not feel welcome they'd just jump on the back of the rake of cane bins. P.)]

Len Butt passed on to us news sent to him by Mrs. Esme Blackmore of SGAP North Shore Group, Sydney. Mrs. Blackmore and her late husband also have a long history of interest in Native Orchids. Her report concerns the elusive underground orchid, *Rhizanthella slateri*, described (S.M.H. 15/2/96) as "one of the world's rarest and strangest living things". A specimen was unearthed from a building site during a pre-construction plant salvage operation by members of the Blue Mountains Wildplant Rescue Service. The plant had just finished flowering and was setting seed. Attempts are being made to propagate from it. This is exciting stuff since the orchid is rarely found and, to quote David Jones, "nothing is known about the cultivation requirements of *Rhizanthella slateri*". Its life cycle is enacted totally underground, except for a short time in Spring when the flower head protrudes into the surface leaf litter; it has no chlorophyll, and lives in a symbiotic relationship with a soil fungus yet to be identified.

More is known about the only other known *Rhizanthella* species, *R. gardneri*, from Western Australia, first seen in 1979 and since found to associate with a fungus which in turn has only been identified on *Melaleuca uncinata*. Pollination is performed by small flies, wasps and termites. *R. gardneri* also spends its entire life underground.

Plants of both species are usually found by chance. The Blue Mountains find underscores the importance of work being done by the Wildplant Rescue Service which has an agreement with the Blue Mountains City Council. This allows members to approach owners of building sites so as to identify and collect rare plants which would otherwise be lost to our native flora's most implacable enemy - development.

We appreciate Mrs. Blackmore's taking the trouble to send the above to Len and also his dedication in passing it on to us just as he was about to enter hospital for by-pass surgery on 27th March. We hope that all is well, Len, and that you are recovering your usual vim and energy by the time you read this.

The above example of a rare orchid being found and, with luck, being 'preserved by propagation' by native plant enthusiasts, leads us to a discussion of the new plant legislation in Queensland. Keen Queensland members will have read the latest on this in the regional Bulletin of March, 1996, but we hope that members in all other states will find it worth a mention.

The legislation centres on "The Nature Conservation (Protected Plants in Trade) Conservation Plan 1995" which came into force early this year. The legislation "aims to protect native plants and to prevent commercial trading in plants collected illegally". About 1,000 Queensland plants (of an estimated total of 8,500 species) are 'protected', and of these, 300 are restricted. Included in the Restricted List are all epiphytic orchids and most terrestrials, so the legislation is of particular applicability to our Group.

The Queensland Department of Environment and Heritage has plenty of information available and we would urge all Queensland members to contact their nearest DEH office and ask for the relevant brochures. We have found DEH in Cairns to be particularly helpful in the matter.

Our reading of the legislation leads us to the following very brief interpretation: Trading of wild collected plants is to be controlled by the issuing of collecting licences, and all restricted plants sold must carry an identifying tag to indicate their origin. Propagation of restricted plants is encouraged so as to reduce the pressure of plants imposed by wild collection. Plant enthusiasts may obtain a Propagator's Authorisation at no cost and use their own ID tags. The sale of any Restricted Plant that does not carry a tag will constitute an offence. Societies such as SGAP have favoured status and may collect and use restricted plants, but must adhere to strict guidelines. People growing restricted plants in their own gardens from their own stock need no permits, but care should be taken when plants change hands, and we strongly recommend that all Queensland members familiarise themselves with the legislation.

The basic thrust of the legislation is commendable, but enforcement will be a nightmare, especially for our many reputable native plant nurseries. We fear that the midnight cowboys will continue their depredation with little fear of either apprehension or retribution. It seems futile to add a further workload to an already honest group of nursery owners and propagators when the effort should have been expended in enforcing the legislation that already existed. A couple of raids by DEH rangers on regularly held markets would do a lot more good than checking the conscientious books of reputable native plant nurseries.

Our next featured orchid will be *Dendrobium speciosum* and we look forward to hearing of your experiences of growing this plant.