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ORCHID USES: Orchids are generally regarded as items of beauty to be admired while in flower and then put aside. Utility is not a trait that orchids bring to mind, yet over the history of humanity the orchid family has been put to use in many ways. A hint of this is given in the book, *Dendrobium and its Relatives*, which we mentioned in our last newsletter; a short chapter contributed by Len Lawler is titled "Traditional Uses". In this chapter Len mentions uses of Dendrobiums as diverse as medicines, mystic powers, food, decorations, art materials, and woven objects. And that is just Dendrobiums! Many other types of orchids have been used for similar purposes, yet Vanilla is the only commercial orchid product currently in common use.

Len also says orchid use in Australia by aboriginal people was widespread. Part of the reason for longevity of rock paintings is that the ochre pigment was fixed by using the juice of *Cymbidium canaliculatum* or *Dendrobium dicuphum*. The sticky juice was also used to affix feathers to dancers' bodies for corroborees. Medicinally, all species of *Cymbidium* in Australia were used for their high stem starch content for diarrhoeal complaints. Both *Cymbidium canaliculatum* and *C. madidum* have been known as "Arrowroot Plants". Their starch can be recovered fairly easily by crushing the stems and allowing the starchy material to settle in water, to be then used as easily digestible food for infants or invalids. The fruit of *C. Canaliculatum* is reported to be edible in the raw state, and the stems can be eaten raw or cooked. The Pencil orchid, *Dendrobium teretifolium* is useful for relief of muscle pain when the bruised leaves are wrapped around the affected area.

Further information on orchid uses can be gleaned from the excellent series on Wild Plants by A.B. & J.W. Cribb, published by Fontana/Collins. For real information, Len Lawler has an article in *Orchids Australia*, June 1995, and a comprehensive article on Ethnobotany of the Orchidaceae in *Orchid Biology - Reviews and Perspectives III*, edited by Joseph Arditti, published by Cornell University Press 1984. A warning: if you can source the latter publication, don't sit down to read it if you have something to do for the next many hours; this is fascinating, gripping reading.

Of course, I wasn't satisfied to just read about orchid uses - I had to have a go at it myself. My training as a pharmaceutical chemist would have made it easy to try making some *Cymbidium* starch, but my marriage to Pauline may have been endangered if I started macerating her *madidums*, let alone the one dryland *Cymbidium* we have. We do have plenty of *Dendrobium discolor* with long golden canes, but I recoiled from chopping them and settled on an exotic *Dendrobium moschatum* which we have aplenty. I cut fresh stems about 60 cm long, sliced these in half lengthways and repeated the process until I had strips about 2mm in width and more or less uniform. I scraped off the pith until I had mostly cortex, then "broke" this by running the strips around a broom handle. So far this is the same

basic technique I use to make string and rope with *Hibiscus tiliaceus* bark by round plaiting the strips. I had an old "tourist-shop" woomera that was a bit bare, so I decorated it with my orchid bark strips, laying them while still fresh along the handle. After a week or so the brown strips began turning a pretty silver-gold colour which looks like becoming permanent. I have seen some of the very fine work done by so-called primitive people in New Guinea, and can admire the precision of their craft after my attempt to copy them. Are Australian species still used traditionally?

DENDROBIUM SPECIOSUM: We often read about the large size that specimens of this orchid can attain. We have seen photos of large clumps with hundreds of flowers, but have not been privileged to view such a sight. There is a colony of *D. speciosum* about 300m above our house but we've never seen them flower. We have a couple of bought specimens at home and they seem to be the target of every voracious insect in North Queensland. Last December we visited Brisbane to attend our daughter Helen's graduation from University, and while there we inspected our daughter Allison's newly bought home in Coorparoo. The house, about 60 years old, was bought as a "speck" deceased estate immediately before Allison and John's purchase, and the large yard had been "tidied-up". I never thought that anybody could trim a *D. speciosum* clump with a chainsaw, let alone the other, exotic orchids that once adorned the old place, but everything had been made to conform to the landscaper's plan and a pile of orchid corpses had been chucked in the corner of the lot. I now believe just how big a *D. speciosum* can get, and can only grieve for what it must have looked like just last year.

The above piece of urban vandalism, totally legal as far as I know, came to mind when I read SGAP Qld Conservation Officer, Lyn Reilly's, report in the Regional Bulletin of March 2001. Lyn spoke of preparatory work for the Tugun bypass at the Gold Coast airport: "A few days before SGAP members from various branches visited the heathland here, the entire population of *Phaius australis* (swamp orchid) was destroyed. Not just cut off to be used by a florist, these plants were dug up, ground to bits and their bulbs completely crushed. My understanding is that there are no longer these rare and endangered plants in the way of a possible road! What is the answer? What do we do to improve the system which has been set up to protect such plants?"

Reading Lyn's report made me feel very angry that such an activity can still be perpetrated in our enlightened age. The contractors could have alerted any of the plethora of Green groups about the orchid patch, a salvage permit could have been obtained, and the plants moved to a safer place. It may have slowed the work project by a few days, but time is money, so the swamp orchid patch no longer exists, along with so many other vulnerable native plants that are inexorably swallowed by 'progress' and the creeping cancer of urbanisation.

Lyn asks what can be done? The SGAP Qld region Conservation Policy is very well set out; item three states: "Educate our own members and the wider community about the intrinsic value of the native flora and the need for its conservation." Perhaps if the roadworks foreman or the bulldozer driver had been a member of SGAP, the murder may not have occurred. Should we aim a membership recruitment drive at bobcat and dozer drivers?

TAXONOMY CHANGES: A couple of new names, thanks to Jan Sked in the Qld Regional Bulletin:

<i>Habenaria</i> (new species)	<i>Habenaria chlorosepala</i>
<i>Habenaria</i> (new species)	<i>Habenaria exilis</i>
<i>Habenaria</i> sp. Cardwell now	<i>Habenaria praecox</i>
<i>Thelymitra</i> (new species)	<i>Thelymitra longiloba</i>

BLUE ORCHID: Our mention of a True Blue orchid last issue rated a couple of reactions but only one contender, and that with an interesting slant: Cherree Densley, of Killarney, Victoria says, "I think the Great Sun-Orchid on Mt Clay, *Thelymitra aristata*, is hard to beat. (They flower among the deep orange colour of clay so providing a great contrast)."

David Jones in *Native Orchids of Australia* says of *Thelymitra aristata*: "This is one of the most majestic of our orchids and a large plant in flower is an impressive sight."

Cherree has pointed out that the contrast of the flower colour with the clay in which the plant grows brings out the blue more effectively, and that was an aspect I had not considered. Here at home everything is always green, and Cherree has reminded us of our trip to the Northern Territory last August when we delighted in the riot of colours of flowering plants growing in what looked to me like dead, red gravel. I must remember the flower colour in future when I put an orchid in a pot, or even a hanging basket, and choose a colour that will best enhance the flower when it arrives. Thanks, Cherree, and thank you very much for your other kind words. We're very pleased that the publicity we are getting is paying off in new members.

LYN THOMPSON, NSW Study Group Liaison Officer, has collected for us various pieces on orchids from NSW branches and we'll be pleased to print some of these in future newsletters. Thank you too Lyn.

MARJORIE'S lovely wildflower Christmas card told us: "I've been putting a lot of work into my rainforest, and at last I have almost a dozen indigenous orchids (what else!) affixed to trees with still a few to place. It's a task scrambling through other plantings to keep things moist until they find new roots, but every stage of my my rainforest has been rewarding – now 1,500 sq.m. in area and over 300 species, mostly local." Everyone will benefit from Marjorie's hard work; she'll be able to sell carbon credits soon!

From DOREEN in Malanda: "I have felt very pleased with myself (orchid-wise, that is) during the first few months of this year. At Christmas time someone AT LAST realised what I REALLY wanted and surprised me with three well-established native orchids from a Cairns nursery. I was overjoyed.

"*Eria fitzalanii* should do well for me at elevation 700M. Even though the most common habitat is lowland moist open forest, it has been recorded in rainforest to 1,000M. I have it in a shallow pot of pure quinkan (local scoria) and will monitor its progress. As a text stated it liked to grow on trees with flakey or papery bark, I may have to rethink the mix. Do seasoned growers elsewhere have any advice on this?"

"A second plant was labelled *Dendrobium beckleri*. I could not find this in my limited book collection but Alick Dockrill's *Australian Indigenous Orchids* sorted me out. The recognised name is now *Dendrobium schoeninum* with *D. Beckleri* as a synonym (along with *D. mortii* and *D. Striolatum*). The terete leaves, which have several longitudinal grooves, are upright when young but droop as they mature."

Pauline interrupts: I'm sorry to have to do this, Doreen, but it looks as though we'll have to consult the latest *Dendrobium* book now. *Dendrobium and its Relatives* gives the name as *Dockrillia schoenina* with *Dendrobium schoeninum* as a synonym; *Dockrillia mortii* and *D. striolata* are two other separate species. I did state that I was going to stick with Dockrill's book, but the new genus of *Dockrillia* appears to have gained acceptance, so for someone who criticises the use of common names, I'll have conform and try to use the correct scientific one.

"The third plant was a *Dendrobium speciosum* var *pedunculatum* x *D. Speciosum* var *curvicauli* hybrid. If this plant does as well for me as those two varieties both do, then I will be very pleased. I have both these parents growing in a mound of rocks in full sun right out in the open and our cold wet winters do not seem to bother them very much – only the damned dendrobium beetle!!

ENVIROSPRAY: "Speaking of which, I have to tell you I feel I have finally proved the effectiveness of Enviro spray (mentioned in Newsletter 24). A friend who grows for the cut flower trade gave me a small amount a couple of years ago. It is quite expensive from the hobbyist's point of view, so she shared a purchase with others. I resolved to try it to deter the dendrobium beetle. The smell and taste apparently deters pests but it does not kill. This is such a breakthrough as most (all?) other sprays kill both friend and foe. I have used it periodically but felt I could not categorically say it deterred the dendrobium beetle. Until a few months ago, that is.

"I had an exotic orchid, *Stanhopea tigrina*, in flower in three different hanging baskets. The ones in the fernery – dappled shade – I checked vigilantly and destroyed every beetle sighted. The third basket in a more open area attracted dozens of beetles as the flowers opened. Ah-ah sez I; let's see what this Enviro spray can do now! I could not believe how effective it was. Not a beetle once I sprayed. Eureka! Whereas I had been dubious about previous spraying, this was solid proof of the matter.

"Further to that, a well-known nurseryman on the Atherton Tablelands agreed to pursue the matter for me. He has been in touch with the manufacturers and has been given trial samples. It is early days yet but he was quite impressed with initial sprayings. If continued applications convince him of its effectiveness, he will endeavour to stock it and perhaps retail it in smaller and cheaper quantities for the home hobbyist. What a find! More in future newsletters. Joy to the world!

"Have had a few salvage plants during the previous month's rain. Husband came up from the creek in our property carrying a rotten fallen branch from a camphor laurel tree there. "What's this funny looking thing growing here?" he asked. "What", said I, "You've just rescued a *Mobilabium hamatum* for me." Mind you, I first had to search through Dockrill's book to identify it; I had forgotten it as it is some time since I saw it growing naturally. It is endemic to eastern tropical Australia and is quite distinctive with rather narrow leaves having a hook at the end. That pleased him greatly so since then he looks closely at any fallen branches he sees and has also rescued some *Dendrobium linguiforme* (now *Dockrillia linguiformis*) and some *D. Lichenstrastrum* var *prenticei*?" (now *Dendrobium prenticei* to answer Doreen's question)

"I have now seen *Habenaria propinqua* for the first time. Len Lawler showed me a small (15cm) flowering plant. An article by Bill Lavarack in an old *Orchid Review* states that the range of this orchid probably extended from Noosa (in Southern Queensland) to New Guinea in predominantly coastal forests of *Melaleuca viridiflora* in areas of impeded drainage. They are in full bloom near Cardwell from about February to May. It is a most attractive ground orchid with a glistening appearance on the white flowers. A colony in flower is well worth stopping to see says Bill Lavarack. Len and I looked closely at a flower and, with imagination, could distinguish the outline of a man with his head, arms, legs (and another prominent body part)! The sighting of a colony in bloom is still a pleasure in store .

From Pauline: A visit to our place formed part of an excursion by the combined Cairns and Tablelands Branches in early January. Five of the visitors are Study Group members so orchids played a significant part in the day. We first walked a few hundred metres along the road over the hill about 1km from the house, and keen eyes found several plants high up in the trees. The recently deflasked seedlings were inspected and discussed (more on these later); most of the orchids in the trees in our garden were pointed out, and the keen orchid growers also inspected the shade house. I was pleased to show off some beautiful *Plectorrhiza brevilabris* flowers on one of the volunteer seedlings I've mentioned before, particularly as the books suggest this orchid only grows at altitude in the northern part of its range. We also had heaps of *Geodorum densiflorum* plants going begging, as a kind neighbour had gone to the trouble of digging the bulbs before her husband used herbicide on the 'weeds' growing between his rows of trees.

This would have been "totally legal" also. There was no way this farmer was going to allow these 'weeds' to stand in the way of his weedicide spraying programme when a few days fine weather presented itself. However, they knew of our orchid interests, and knew I would be prepared to go out on a limb to rescue any orchid plants. I believe the legislation is too inflexible; there's too much stick and not enough carrot. In fact, it is positively plant rescue unfriendly in my view. *Geodorum densiflorum* is in no way endangered – at this time – but to me that is no reason to allow the plants to be destroyed.

As one would expect among friends, all the orchid growers, who live within a radius of less than 100km, had lots of advice and suggestions for the best results for growing a great variety of species. I was rather surprised when someone thought I

should water the floor in my shade house to increase the humidity, while I was luxurating in a rare dry day. How much more simple it must be for you who live in areas where there are defined seasons with set temperatures, or are such places only to be found 'elsewhere'.

I get mighty irritated if I'm somewhere and need more air and ask if I may open the window, and immediately the fan is turned on too. Yet I am foolish enough to make the exact same mistake with plants. After researching the habitat of a particular orchid not happy in our too wet area, I've been guilty of potting it in road metal with no possibility of water retention whatever, then give it less water as well and expect it to immediately show its appreciation! The SGAP visit and our experience, particularly with the seedlings has only reinforced in me the belief that we must each use our own judgment with every individual plant in our own microclimate.

BOB O'NEILL, the Victorian Study Group Co-ordinator, wonders about this in his column in the March, 2001, *Growing Australian*: "For the first time we are now sharing the prolonged hot, dry weather that has affected the rest of the State over the past couple of years as the summer thunderstorms that we usually get are just not happening. Despite days of hose and bucket watering, we are losing numerous well established plants where competition is more acute than in older plantings – a kind of natural thinning out. Does one step in or am I just postponing what has to happen sooner or later anyway? I feel that I should have widely deep ripped before planting as a means to reduce this happening."

Don says that we all have had the same feelings as Bob. When change happens too rapidly we can lose a lot of our beloved plants, and orchids are notorious for this. It is all part of The Challenge...

SEEDLINGS: I was feeling rather despondent about our *Dendrobium nindii* seedlings because of the number of losses till Len Lawler reassured me; evidently substantial losses are the rule rather than the exception. Conditions have been extreme. I had been protecting them from too much moisture during a lengthy period of rain and overcast days, then we went away for a couple of days and they were scorched by exposure to full sun for a few hours in the morning. Where they had been getting filtered sun through some trees, either the top was blown out of the tree or the sun's trajectory had changed under the cover of the overcast days. (I had the plants up high out of the reach of toads, etc., on a metal table, so they would have had plenty of reflected heat too.) I then put them into the shadehouse to recover and they were promptly attacked by fungus. Mancozeb was effective. We will be planting them out onto palm trees in the next couple of weeks – as soon as we are sure that the knock-you-flat weather has passed.

The *Dendrobium stuartii* seedlings suffered worse as the pots containing these were on the outside. This does not worry me quite so much since I learned that almost every *D. stuartii* flower bears a seed pod.