

**A.S.G.A.P. INDIGENOUS ORCHID STUDY GROUP****ISSN 1036-9651**Newsletter 33 December, 2000Group Leaders: Don and Pauline Lawie,  
P.O. Box 230, Babinda, Queensland 4861  
Phone: 07 40 071 577

We have just endured a climatically difficult month of November here in the Lowland Wet Tropics. The max/min thermometer in Pauline's shade house registered a high of 43 and a low of 23 degrees in the third week of the month, and the humidity hovered at 99%. An acquaintance told me that he had plotted these figures on something and had deduced that human life is unsustainable in such conditions. After all, this used to be called The White Man's Graveyard! We had a total of 30 inches of rain for the month, bringing our total for the year so far to 260 inches.

Conditions in the shadehouse were tough for the humans, but our endemic orchids thrive in this steaming hot-house. Our exotic *Dendrobium moschatum* plants threw out hundreds of beautiful flowers, and the orchids native to the area have given us a remarkable show. A *Cymbidium madidum* which had some hundreds of flowers a few months ago and had already set many fruit had a late inflorescence - the temperature dropped to 16 degrees overnight on the 3rd; *Bulbophyllum baileyi*, which is very widespread along the Russell River, has had two flowerings, delighting us with its fascinating hinged labellum. Pauline was able to practice her macro photography on the tiny flowers of the fern-like *Appendicula australiensis*, and the terrestrials, *Zeuxine oblonga* and *Spathoglottis paulinae* flowered in their reliable fashion. A *Plectorrhiza tridentata* which germinated on one of our garden trees is in bud, and we hope to see the flowers this time - the bugs which also love this weather destroyed the first flowering of this plant.

**BLUE ORCHID:** A report in the South Australian A.P.S. Journal of November, 2000, mentions an outing in which members saw *Caladenia deformis*, "the only true blue orchid". I had always regarded a local species *Dendrobium nindii* as THE Blue Orchid, and so this claim from South Australia caused me to consult some of our orchid references. Dockrill's index doesn't trouble with such common expressions, but Jones' Native Orchids of Australia lists Blue Caladenia, Blue China Orchid, Blue Fairies, Blue Lady Orchid, and just plain Blue Orchid. This last is *D. nindii*, and Jones describes the flowers as "white with mauve or violet suffusions". Hardly a True Blue, so first round to *Caladenia deformis*, the flower of which Jones describes as "solitary, bright blue (rarely pinkish, white or yellow)". Second round to *C. deformis* but, its cousin, *Caladenia caerulea* must be a contender because of its specific name. Stearn's Botanical Latin defines "caeruleus" as: "blue, esp. the deep blue of the Mediterranean sky at midday". Jones describes the flower as "a solitary bright blue (rarely white)". Finally, the September, 2000, issue of *The Orchadian* has some beautiful photographs by Margaret Bradhurst of natural hybrids of *Caladenia* and *Glossodia*, and the picture of a *Glossodia minor* will do me for a Blue Orchid. (NB Margaret agrees that for proper identification we should avoid common names.)

The above dissertation stands as evidence that this is The Silly Season. Correspondence on the matter is welcome - do you have a nomination for THE Blue, or Red, or White Orchid?

There is a very wide range of literature available to orchid enthusiasts worldwide, and we in Australia are well served with general books on native orchids such as those by Dockrill and Jones, and a number of locality-specialised books such as the relatively inexpensive, fully illustrated Australian Tropical Orchids by Bill Lavarack & Bruce Gray.

A new orchid book has just been published. *Dendrobium and its Relatives* by Bill Lavarack, Wayne Harris and Geoff Stocker was officially 'launched' in the lush tropical surrounds of the Cairns Botanic Gardens on 25th November by the Mayor of Cairns, Kevin Byrne. The three authors were present as also was the "fourth man", Len Lawler, who wrote one chapter of the book, dealing with Traditional Uses of Dendrobiums. Also present was Gerald McCraith, the doyen of orchids in Australia. This gentleman is an inspiration to we sexagenarians who occasionally feel a bit elderly. Gerald is a sprightly 92 going on 50 odd; he spoke without notes and kept the audience rapt with his recounting of recent trips to Chile, China and Florida, and details of the Australian Orchid Foundation. He mentioned that there are about 225 orchid societies in Australia, and that although we have around 1,000 species of Native Orchids none of them has any real commercial value.

Each of the authors also spoke about the book, which has been gestating since about 1996. They have used the most up to date classification and naming of the Dendrobium-type orchids, but emphasised that both old and new names can be used - it is a matter of general usage as to which names emerge as the accepted ones.

The first part of the book contains a great deal of material relevant to Dendrobiums and orchids in general. Chapters include Classification, Distribution, Conservation, Biology and Ecology, Cultivation and Hybrids. These are written in a language understandable by the layman and designed to lead the reader on to the next subject. Numerous tables and illustrations support the authors' findings, and we may quote from some of these in future newsletters.

The second part of the book is devoted to the Dendrobium plants with two or three species per page. Accompanying each photograph is comprehensive text giving name/s, origin, plant and flower description, flowering times and cultivation notes. Of course there are many exotic Dendrobiums, but our natives get equal billing, and the back cover has a beautiful close-up photo of the Bottlebrush Orchid, *D. smillieae*.

*Dendrobium and its Relatives* is published by Kangaroo Press, and sells for about \$ 70. It is a worthwhile addition to the orchid literature, and we were fortunate to get our copy autographed by the authors.

A.S.G.A.P. CONFERENCE - CANBERRA OCTOBER, 2001: Study Groups will be given considerable prominence at the Conference, and we were asked to attend and make a "presentation" of about 15 minutes on behalf of the Orchid Study Group. We have decided, for various reasons, that we will be unable to attend the conference. If any of our study group members will be attending and would like to make the study group presentation, I am sure that they will be made most welcome. Any volunteers should contact us for more details of what is required.

Questionnaire: Included with this newsletter is a questionnaire from Matt Pearson which the Study Group Coordinator has asked us to send to members. Please note the return address on the questionnaire - it is not to be returned to us. Matt is a former study group leader - Australian Grass & Sedge and Native Plant Regeneration.

### DEFLASKING ORCHID SEEDLINGS

This item could well have been headed "*Dendrobium Nindii*" or "Conservation of Species" as these two are equally important to this deflasking exercise. A few years ago I deflasked some *Dendrobium teretifolium* after getting sketchy verbal instructions, and later some *D. nindii*, thinking I knew just what to do. The former almost all survived and the latter all died. I now have some idea why. The method I used for the *D. teretifolium* is not suitable for *D. nindii*. Although how we deflasked these seedlings is probably suitable for many species, these instructions are species and locality specific.

On 7th September, 1998, I collected some *D. nindii* seed pods. One I hung in a tree in our garden and some I gave to Len Lawler. Len arranged for a mate of his to germinate some seeds and then to replant them into daughter flasks. These he brought down to our place a few weeks ago - with Doreen to work and learn too - and gave us some hands-on experience after detailed instructions and a demonstration. (I also had some *D. stuartii* flasks and was I ever lucky that they were ready at just the right time.) In my ignorance I knew nothing about community pots. I thought they were only used by commercial nurserymen as a stop-gap till they had time to handle the plants individually.

In preparation I had sieved, washed and sterilised some very small, up to 5mm, quinkan (volcanic scoria). Although we had new 3½" pots, we soaked them in a 1:20 solution of White King while we had smoko, then rinsed them in clean water before use. We also prepared a solution of Envy which coats the plants with a thin protective film to minimise respiration and fungal infection.

The daughter flask is a glass jar with a metal lid through which a piece of plastic tube has been sealed to allow air movement. The tube is filled with a filter of cotton wool, and on this occasion, wrapped with foil, the whole lot being kept in sterile conditions in a controlled atmosphere. (Len says sealing the hole with tape works just as well but old habits die hard.) The medium in this flask has all the nutrients the germinated seedlings from the mother flask need for growth. Each flask contained

about 25 seedlings, some up to 8cm tall, of lush green growth though there were a few brown leaves. The plants in one flask were considerably smaller as they had been replanted later than the others to replace a flask which had not remained sterile.

Explaining each step, Len spooned damp quinkan into a pot to about 5cm from the top and made a slight depression in the centre. He then unscrewed the lid from a flask and carefully teased out the raft of plants in one piece. After washing off all the agar in a bucket of water (when most of the brown leaves fell off), he swished the plants around in the Envy solution to cover them thoroughly before placing them into the pot and spooning more quinkan over the exposed roots. He tapped the pot on the table to settle the quinkan and watered it.

We then followed suit with varying degrees of success. One lot had to be repotted as they finished up too high in the pot after it was tapped too often before the quinkan had been fully topped up. I chose the small plants as they were in a straight sided jar and looked easier to extract. These plants were not uniform in size and when I washed them the raft fell to pieces as the shorter roots were not so entangled. I was supposed to get as many as possible of the roots and as few of the leaves under the quinkan. On reflection, I also made the depression too deep as the larger plants on the outside finished up with a lot of roots above the medium.

Don and I were then instructed to give the plants as much light as possible but no sun whatever for a week. Also, they were supposed not to be watered for a week, but as the weather was so hot, dry and windy, Len conceded that we could mist the plants. After a week they could be watered and gradually introduced to direct sun. After two weeks they could be given half strength Aquasol fortnightly. I felt the responsibility of keeping such highly desirable plants alive, but Len said it was important for a coastal lowland species to be introduced to the world in its chosen coastal lowland habitat.

I don't think any plants would have chosen the weather which immediately followed the deflasking of these seedlings. I carefully misted them, around the pots and left water in a tray nearby. After six days when the heat was getting to us I decided they needed to be watered so sat them in a bath (so as not to wet the leaves too much) for 15 minutes. Some were in longer due to distractions. As it made me feel better to do this, I was sure it suited them too. Most of the plants appear to have appreciated this treatment, but the small plants all drowned. Now almost three weeks later the strongest plants are getting new stems. If only we can keep all these happy. The sunshine bit we have not been able to arrange as we've hardly seen it for the last week.

The seedlings will stay in the community pots until the secondary growths reach about 20cm, by which time they will be very crowded. We will then have to get them out onto mounts or trees.

The grand plan for these plants is to reintroduce them into their natural habitat along the Russell River valley. I'm sure we'll have no trouble securing the co-operation of the owners of the neighbouring properties, from one of whom the seed pods came.

This is a rather exciting project for all of those involved. However, we are still very much in the egg stage and won't get too excited until we at least have 'chickens'.

*Dendrobium nindii* is commonly described as one of Australia's most attractive orchids. Lavarack and Gray say: "The flowers are large (up to six centimetres across) and long-lasting... It is now rated as vulnerable as it suffers from the twin threats of collecting and habitat clearing. Once relatively common in mangroves and palm swamps...it is now hard to locate plants there, although some survive high in the treetops." *D. nindii* is popular with hybridisers as the large colourful lip remains dominant.

From entries in *Spinifex & Wattle*, being the experiences of Robert Arthur Johnstone, and *Hurricane Lamps and Blue Umbrellas*, the story of Innisfail and the Shire of Johnstone, North Queensland, by Dorothy Jones, it appears that Mr. P. H. Nind discovered a new orchid, in full bloom, with stems 'some 7 ft. long' on 3rd October, 1873. Mr. P. H. Nind was travelling with his own boat and a party of people in search of sugar lands when they met up with an expedition under the charge of G. Elphinstone Dalrymple. This expedition included Sub-Inspector R. A. Johnstone in charge of native mounted police and also Government Botanist, Walter Hill. Dorothy Jones says: "...Nind found a beautiful new orchid in bloom. Subsequently named and described by Walter Hill as *Dendrobium nindii* it later suffered the apparent vagaries - to a layman - of scientific nomenclature and was re-described by Bailey some ten years later and named *D. toftii*. Recent [1973] reappraisal has officially re-instated Walter Hill's priority. It is one of the more spectacular of the native orchids."

MULTIPEST: In Newsletter 29 Doreen credited the successful flowering of *Dendrobium smilleae* with having used Multipest on the forming buds. Following her success, I have used this pesticide/fungicide/miticide on my plants. The new stems on my *D. smilleae* seem to have developed without fungus, but other plants have suffered badly and I am inclined to blame the Multipest. Particularly badly affected are keikis of *D. bigibbum*, and other soft, new growths. It is possible that this formulation is dangerous to use in hot weather, but I don't think I'll be game to test that theory. Has anyone else had any experience with this product?

