ASGAP INDIGENOUS ORCHID STUDY GROUP **ISSN 1036-9651**

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ORCHIDS OF WESTERN AUSTRALIA – A CORRECTION

Don

Our articles on Western Australian orchids in the last issue resulted in a number of comments, but I must point out that I was in error in one statement.

Margaret Bradhurst, who wrote the major article on WA orchids, has written to say: "At a presentation at an APS meeting recently, in question time I was asked whether there were any lithophytes or epiphytes in the SW of Western Australia. I was able to say that there were none in the SW, but I thought that there were some further north in the Kalbarri or Kimberley area. On reading Don's comments that WA orchids are all terrestrials, I thought that I had better check it out in my new *Orchids of Western Australia* volume. There is a section on the orchids of the Kimberley region which includes just two – *Cymbidium canaliculatum* and *Dendrobium dicuphum*. It makes one wonder why this is so, considering the large number on the eastern side of the country? Why aren't there so many in the West? It would have to be climate, humidity, rainfall etc. ..."

On the day Margaret's letter arrived we happened to be having a chat to the Guru of Tropical orchids, Len Lawler. Len is of course familiar with both the species mentioned and has spent some time in researching the geographical extent of *C canaliculatum,* a widespread epiphyte of the drier areas of northern Australia. This orchid has a variety of flower colours but there has (so far) been no attempt to split the species. It is known from The Kimberley region, across the top to Northern Queensland and inland, and south to at least the Hunter River region in Central New South Wales. Len says that the most norherly occurrence in Queensland is near Trevethan Creek just south of Cooktown and we plan to search for it there during a flowering period. *C canaliculatum* can grow to a very large size with hundreds of flowers, a perfect adornment to some otherwise dull bush areas. It prefers large gum trees, where the seed likes to germinate in the fork or a broken branch and from there the orchid roots make their way to the ground along termite-drilled passageways. For this reason most *C canaliculatum* plants plucked from the bush eventually die as their root system has been left behind.

Dendrobium dicuphum can be epiphytic or lithophytic. In appearance it is a typical Dendrobium with ridged stems to 60 cm long with leaves towards the end, and up to 20 flowers also towards the stem end. *D dicuphum* occurs in WA and the Northern Territory in monsoon thickets and paperbark swamps. It is closely related to the Cooktown Orchid, *D bigibbum,* which occurs only in the northern parts of Queensland. This brings us to Margaret's query as to why WA has so few epiphytes – one also occurs in North Queensland and the other is a close relative of a NQ species. Why is this so?

A partial answer may lie in the etymology and distribution of *D dicuphum.* The accepted name is now *Dendrobium affine,* having been so named in 1844 by Lindley from a New Guinea area specimen. There have been a number of other names (including a version of *D bigibbum*). The *dicuphum* specific appellation appears to have been bestowed by Mueller from an Australian specimen in 1873 and was continued by such luminaries as Gardner, Rupp, Nichols and Dockrill until the plant was found to be identical with *affine* and so according to protocol it reverted to the earlier name.

D affine occurs in the South Molucca Islands of Indonesia and Timor, principally in the Aru Islands south of what used to be Dutch New Guinea. The name Aru Islands conjured up a memory for me: I sailed past these jewels of Paradise in 1966 and admired the tall palms, the green foreshore, crystal-white beaches and malachite seas. The sirens of Aru called to me, but I was unable to land. The people use their endemic palm for almost all of their needs from housing and shelter, fuel, food and alcoholic drinks used for barter. Perhaps they have devised a use for their orchids also?

Could *D affine* have made its way from the Moluccas to Australia, and could *D bigibbum* have evolved from an ancestral form in New Guinea that produced both *affine* and *bigibbum*? If *affine* moved south why didn't the many other orchids of that area also migrate? Readers' comments will be received with interest.

MORE ON SALOUP ORCHIDS

Don

A while back we wrote about Saloup, an anti-scorbutic orchid concoction trialled by Lieutenant Cook during his voyage in which he discovered the east coast of Australia. In our last newsletter we printed a photo of a beautiful blue terrestrial orchid in flower, photographed by our correspondent in Folkestone, England.

Margaret writes further: I have a wonderful book on the orchids of Sussex, England and I had no trouble identifying the orchid your son saw recently at Folkestone. It is *Dactylorhiza fuchsii*, the Common Spotted-Orchid. It was previously *Orchis fuchsii* and *Orchis maculata* – a saloup orchid! I am fascinated by English/European native orchids, mainly I think because they are so different from ours. I don't know whether you want to get involved with orchids from other lands but ... just for interests sake ...

Dactylorhiza means 'finger-rooted', since the tubers bear some resemblance to a hand with fingers. The stem is 15-45 cm high with numerous narrow pointed basal spotted or blotched leaves and three to five clasping stem leaves. The flower spike is long and tapering and densely packed with many lilac-coloured flowers which are marked with lines and dots. The labellum is well marked with symmetrical double loops of lines and dots. Seed dispersal accounts for most new plants which take from five to six years to reach flowering maturity. It flowers from mid-May to the end of July and is very common across Sussex (and into Kent as well).

Thank you for that extra information Margaret. We are always interested in receiving feedback about our newsletters, particularly if we may have made a mistake somewhere.

IF ALL ELSE FAILS READ THE DIRECTIONS

Pauline

We have compiled a rather long list of what I term Orchid Foes. Most of them come like thieves in the night and ruin the nascent inflorescence. This is particularly frustrating when I am sweating on a first flower to make a positive identification of a plant. I have had plants take up to 25 years to settle into a new spot well enough to flower, even local species. I am mostly quite sanguine about orchid damage and have merely been vigilant and removed insects and their eggs. Recently I have had so many occasions of losing flowers "at a minute to midnight" that I called in the big gun – Confidor – and started shooting.

Orchids are not specifically mentioned on the label, not that you can read it before buying, but the product was recommended by a friend and also an entomologist. I noticed the words: "Avoid spraying blooms or flowers in full sun as slight petal marking may occur", and considered this a very small price to pay.

Success was limited, probably by how often it was used; it isn't cheap locally. Opportunities during the first five months of the year were few because of frequent rain (about 4,175 mm) and I preferred to use those opportunities to fertilise. In the last four months it has been extremely dry for us (92 mm) and some exotic orchids were promising a good display. I decided to bury the miser deep within and go for broke. Before doing so I read the label properly and realised that I should spray at least three times at two weekly intervals. None of the plants targetted was in soil so I paid little attention to the warning that it should not be used "when the soil is dry and plants are suffering from moisture stress".

Perhaps some plants in pots or those with roots deep inside cracks in wood mounts were too dry, or maybe there is some other explanation, but... I have concluded that Confidor needs to be used on orchids with considerable caution. A new inflorescence on my *Dendrobium semifuscum* withered in its tracks. My *Schoenorchis micrantha* looks very ill indeed. Another species, *Plectorrhiza brevilabris,* sprayed in desperation when only the thin, wiry roots remained, has recovered.

I shall continue to use it on large stems and roots only – my exotic Phalaenopsis are most rewarding – but be very wary with the smaller, more delicate species. After making sure it is neither dry nor in the sun, I MAY try it on another tiny species, *Saccolabiopsis armitii*. I have been conducting, quite unwillingly, an experiment to see how often this poor little thing can regrow after having every skerrick of green eaten off. I have three, if they all recover again, tiny plants on the one mount; they have all recovered at least three times so far. What wouldn't I give to have three larger plants with their gift of many beautiful minute flowers, so I MAY go for all or nothing!

Recently, I was able to buy Confidor granules, 5g sachets in a reasonably small pack, which is far more economical and with the help of sensitive digital scales I was able to make a litre. I understand that freshly mixed chemicals are far more effective.

A DPI entomologist working from my photographs of my newest orchid foe said "my best guess is that it belongs to the family Lymantriidae" and suggested that if the grubs were feeding on the orchids externally she "would recommend an insecticide that is a pyrethroid or fipronil based. More environmentally friendly options would suggest Neem oil. If internal feeding then something systemic like Confidor may be a goer." I had Confidor. I've yet to establish whether I have defeated it or not. When I have done a little more research on this creature, I shall write a full run down.

Being a slow learner, I am just beginning to realise I should have read all the directions on another product, Associate. We have a wicked weed called Singapore Daisy which is very difficult to eradicate. The retailer recommended that we add it to our usual weedicide, Roundup. This combo is most effect, so much so that I decided to use it on Oxalis in my vegetable garden. It sure kills it, but unlike Roundup, Associate does not degrade when it reaches the soil, and subsequent watering appears to spread it through the soil so it acts like a pre-emergent herbicide. Looks like I'll be buying beans this season! But to something more positive.

MAJOR'S MOUNTAIN AND LITTLE MILLSTREAM FALLS

In August we had the pleasure of visiting these two spots on the Atherton Tablelands (or the Cairns Highlands as some people want to call it). We chose to meet a Victorian couple and a Cairns couple, members of the Study Group, at Ravenshoe, the highest town in Queensland, to make what became an unforgetable excursion to Major's Mountain. We decided to stay in camp and have smoko to give the early morning fog and drizzle a chance to lift. When a little weak sun broke through we set off prepared for anything which was just as well – I have never seen so many leeches; they were inching their way up trouser legs in their dozens whenever we stopped to examine a plant or for Linda to take a photograph.

We found most of the species we knew were present but it was too early for flowers on all but the *Sarcochilus falcatus*. Many buds were present on the *Dendrobium speciosum* but they needed a couple of weeks to make the mighty show we have seen at other times. We sat down at the top of the 900 m almost vertical climb and it was fascinating to watch the drifts of mist being blown along the valley below us. Between gusts we could just make out some of the large "stems" of the windmill farm a short distance away but had to rely on memory for the emerald-green grass and the grazing black and white milkers. My leech-bloodied socks were no problem, but the red mud sticking to my boots gave me an insight into some of the joys of dairy farming in that rich volcanic soil.

The following day Don and I went to Little Millstream Falls a short distance from Ravenshoe on a beautiful winter day and to my delight I was able to find some Greenhoods – only because Linda had told me where to look. I had seen a Greenhood once years before so am really pleased that I now have *Pteostylus stricta* represented in my photo library. We also found *Acianthus borealis* which was not yet in flower.

FINANCIAL STATEMENT 2008-2009

BALANCE BROUGHT FORWARD 1/7/08			$832 05
INCOME: Subscriptions, grants, donations	265 00		
Bank Interest	47	265 47	1,097 52
EXPENDITURE: Printing	60 45		
Postage	88 10		
Stationery	81 75	230 30	
BALANCE CARRIED FORWARD 30/6/09 (As per Bank Book)			$867 22

Bendigo Community Bank a/c No. 114 030 240 in the name of SGAP Indigenous Orchid Study Group with the signatures of Donald C Lawie and Pauline M Lawie, one to sign.

ASSETS: The assets of the Indigenous Orchid Study Group consist of $867 22, three 55c stamps, a reasonable ballpoint pen and some DL envelopes.

Other assets are the drawings of Kate Vlcek held in trust for the Study Group.

I expect this newsletter will be the last under the ASGAP heading. The name of Australia-wide body has been changed to Australian Native Plant Society (Australia). We have kept the original heading because of the ISSN number, but we expect some clarification on this before our next newsletter due out in December.

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