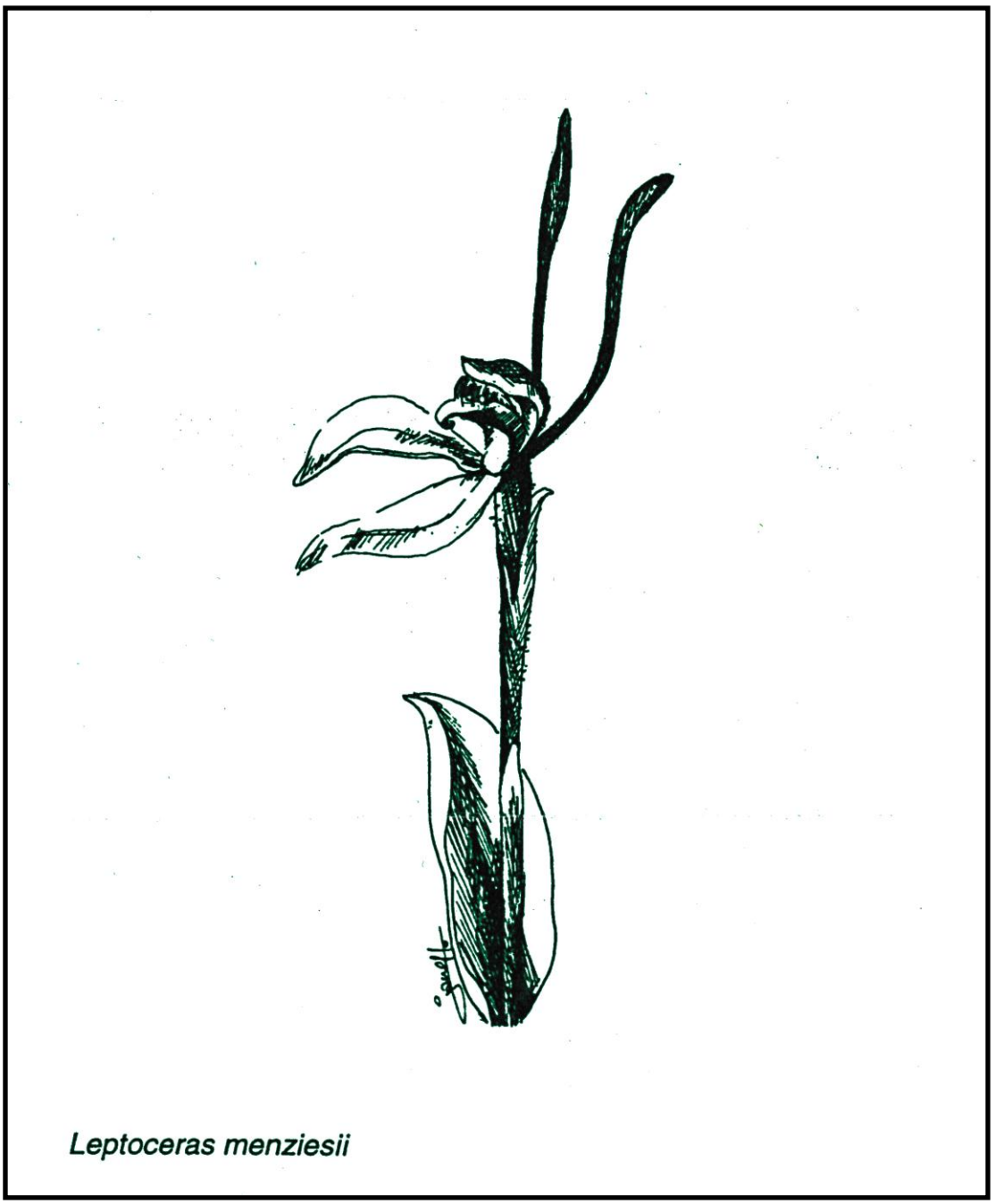
Journal of the Native Orchid Society of South Australia Inc



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NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through cultivation. Except with the documented official representation from the Management Committee no person is authorised to represent the society on any matter. All native orchids are protected plants in the wild. Their collection without written Government permit is illegal.

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JOURNAL OF THE NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

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NEXT MEETING 27 MAY 2003

Tuesday, 27 May, St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library. Bring your plants for the display table. This will be a mixed evening with a Dendrobium kingianum donated by Ted & Marjorie Chance to be split up by Graham Zerbe assisted by Noel Oliver with pieces being sold to members; a potting demo of terrestrials by Les Burgess and if time permits a Q & A session.

DIARY DATES
30 May Annual Dinner
10 June Weeding at Wongalere
18 June Weeding on Leighton Road, Clare area.
24 June Halbury working bee
16-21 Sept. 16th Australian Orchid Council Conference Adelaide.
7 December Annual BBQ

NEXT COMMITTEE MEETING
Wed., 4th June at the home of David & Rosemary Hirst. Meeting commences at 7:30 p.m.

APRIL MEETING

PLANTS BENCHED

Terrestrial species: *Eriochilus cucullatus* (S.A.) (2 plants); *E. dilitata* (W.A.); *Pterostylis collina; P. laxa; P. metcalfii; P. obtusa; P. ophioglossa* (2 plants); *P. torquata; P. truncata* (2 plants).
Terrestrial Hybrids: *Pterostylis* x *furcillata* (2 plants);. *P. revoluta* x Rogoff;. *Pterostylis* x Sentinel.

Epiphyte species and hybrids: *Dendrobium* Virginia Jupp x *racemosum* (2 plants); *Den. schneiderae*; *Den*. Janine Banks; *Dockrillia bowmanii; Dock. rigidum* and *Liparis reflexa*.

Judging results

Epiphyte species
1st *Dendrobium schneiderae* grown by Noel Oliver
2"d *Dockrillia bowmanii* grown by R & G Shooter
3rd *Liparis reflexa* grown by Les Nesbitt

Epiphyte Hybrid
1st *Dendrobium* Virginia Jupp x *racemosum* grown by Noel Oliver
2nd Dendrobium Virginia Jupp x *racemosum* grown by Bill Dear
3rd *Dendrobium* Janine Banks grown by G & P Edwards

Terrestrial Species
1st *Pterostylis* spp. aff. *obtusa* grown by Malcolm Guy
2nd *Eriochilus cucullatus* grown by David Pettifor
3rd *Pterostylis truncata* grown by Malcolm Guy

Terrestrial Hybrid
1st *Pterostylis* Sentinel grown by Les Nesbitt
2nd *Pterostylis* X *furcillata* grown by Malcolm Guy
3rd *Pterostylis* X *furcillata* grown by Malcolm Guy

Orchid of the Night
Dendrobium Virginia Jupp x *racemosum* grown by Noel Oliver

Popular Vote
Epiphytic Hybrid
Dendrobium Virginia Jupp x *racemosum* grown by Noel Oliver
Epiphytic Species
Dendrobium schneiderae grown by Noel Oliver
Terrestrial Species
Eriochilus cucullatus grown by David Pettifor
Terrestrial Hybrid
Ptst. X *furcillata* grown by Malcolm Guy

Commentary on Epiphytes given by Noel Oliver, on terrestrials by Les Nesbitt.

APRIL SPEAKER

Sue Ellen Cordon, who runs an independent fertiliser business, spoke on mineral fertilisers made from rocks such as basalt, granites and dolomites. They work in the ground through micro-organism activity and do not leach out with heavy rain. Liquid fertilisers involving silicates are also available. The fertilisers had been trialled on Cymbidiums but not native orchids. Members were encouraged to take a sample to try with the caution to reduce dosage by half.

FOR YOUR INFORMATION - NOSSA NEWS

CONSERVATION FIELD TRIPS FOR JUNE

Tues 10th June; Weeding at Wongalere
Meet: 9:30am at SA Water South Para depot on Kersbrook Road. After crossing the corner of the reservoir heading towards Williamstown, first left through the large gates.

Wed. 18th June Weeding on Leighton Road, Clare area
Meet: 10am at Sevenhill crossroads.

Sat. 24th June: Attaching fencing skirt at Halbury
Meet: 10am at the phone box in Halbury. The site for the working bee is Block 706 where NOSSA has weeded bridal creeper frequently in the past. Please ring Thelma 8384 4174 for further details if needed.

ANNUAL DINNER

The Native Orchid Society's Annual Dinner will be held at the Buckingham Arms on Friday the 30th May at 6:30pm. Cost is $20 per person. Deposits of $5.00 will still be taken at the May meeting.

5th ANOS Conference & Show .2004

The 5th ANOS Conference & Show will be held at the Campbelltown (NSW) RSL Club 15th to 19th September 2004
The complete show schedule is available on the ANOS website. The Conference is being organised by the Macarthur & District ANOS Group, Terry Cooke and John Riley.
NOSSA is sponsoring two sections; Champion Caladenia/ Glossodia Species and Champion Section with Parentage Dendrocoryne Hybrid Predominantly White/ Cream/ Yellow/ Orange.

Next NOSSA Judges meeting Saturday, June 14th

HOW IT IS DONE Reg Shooter

Both Noel Oliver and Bill Dear exhibited plants of *Dendrobium* Virginia Jupp x *D. racemosum* at the April meeting. Virginia Jupp is a crossing of *Dockrillia linguiformis* x *Dock. teretifolia*. Now with the crossing consisting of three species from the 'New' genus *Dockrillia*, (i.e. racemosa, *teretifolia* & *linguiformis*) one would surmise that the resulting progeny would be a *Dockrillia* i.e. *Dockrillia* Virginia Jupp x *racemosum*, but whilst the RHS recognises the genus *Dockrillia* as a valid genus for botanical purposes it does not do so for hybrid registration purposes. Should one wish to register this cross it would have to be as a *Dendrobium*.

This is just one example of the mess we are getting into with the recent rapid name changes of many genera and species. Whilst I recognise the work being done by botanists, taxonomists, et al., is important, I think it would serve everybody, hobbyists as well as the professionals, if it were done at a slower pace and with more consultation between the bodies concerned. I get the feeling that there is some kind of race to see who can be first to make and publish new findings. Every such change creates difficulties particularly to nurseries who have to amend and change labels, catalogues and educate the public only to find further changes a few short time later requiring more amendments.
But what's in a name? As Shakespeare said "A rose by any other name would smell as sweet".

Both Bill's and Noel's plants were mounted. Bill's orchid was on a slab of bark whilst Noel's was on a length of Melaleuca branch. Because of the scrambling and pendulous nature of this orchid this is really the only way to grow this plant, (this applies to the majority of the Dockrillia's). They do not take kindly to pot culture. The natural habitat of all the species involved in this cross is from along the eastern ranges from northern NSW to north-eastern Queensland. In cultivation they require good strong light, cool humid conditions with ample air movement. Given this environment they are easy to grow and flower.

Taking Stock 2002-3 Les Nesbitt

The terrestrial repotting season is over and at last there is time to rest and reflect on the 2002 growing season. It was a dry year and flowering was not as good as usual even in pots that were hand watered. Is our salty tap water to blame? I have found over the years that if I grow deciduous terrestrials under cover in Adelaide, like they do in Melbourne, the plants grow well until midwinter and then rot away below ground. Plants grown under shade cloth that get the winter rain are much healthier and few are lost to rot.

First the bad news. Since the back neighbour built a tall house on my northern boundary and stole the winter sun from my Adelaide terrestrial house, half my orchids have gone backwards. Pots got only 2-3 hours of sunlight on winter mornings. Specimen pots of greenhoods and caladenias when knocked out had no tubers at all. What a disaster. As well as repotting this past summer I have had to rebuild my benching to make the best use of the sunny areas that remain. The benches near the back fence in the building shadow were removed and replaced

by a row of 4 rectangular rain water tanks. The new benches were made higher and 1.8m wide so that I can easily reach each pot.

I now have a lot less bench space than before but I still can't repot everything. Another contributing factor I believe is the loss of humus in the soil that I use at home. The past 2 years I have been using reconstituted palm peat blocks as a 5% additive to my soil mix. It doesn't seem to help terrestrials so I have stopped using it and reverted to scrub rubbish from my bush block as the humus additive.

About three years ago I built a temporary shade house on my hills block and made it a rule that no soil from home would be taken there. I have thoroughly washed the tubers taken there and used the local soil for potting them. The results have been amazing. The shade house is too dark with 75% shade cloth and extra shade from the surrounding trees so the plants are too floppy and won't stand up. Greenhoods and *Corybas* do not mind the shade whilst *Diuris* and *Thelymitra* are affected the most. The amazing thing is the rate of tuber increase and the large tubers produced. The leaves are also much healthier and not prone to dieback. The climate is wetter, colder and windier than the Adelaide plains. I am relearning some of the lessons of the 70's when in SA we had a group of experimenting collaborators trying all sorts of things and in the process learning to grow terrestrials well.

The result of all this is that more of my terrestrials have been moved to the hills this past summer. The risk is that a bushfire will wipe them out. To reduce the risk I am growing a representative sample of all species at home, storing seed, flasking seed, increasing the plants in the ground and storing some dormant tubers in my shed at home over summer.

Stage 1 of a new 50% shade house on the bush block is almost complete and is full of terrestrials in preparation for the coming AOC Conference in September. Leaves are appearing everywhere so the signs are good at present. Like any good farmer who plants a crop I am praying for a kind season.

Midge Orchids: their history in South Australia (1802-2002)
Which genus?

Bob Bates

The two hundred years of recorded history of these tiny autumn flowered orchids goes back to early March 1802 when botanist Robert Brown, on the Investigator with Matthew Flinders (during the very first circumnavigation of Australia) found plants at Port Lincoln. The very first South Australian orchid to be recognised.

It took eight years before he named these *Prasophyllum nigricans* (the name nigricans - 'dark or black'). Presumably because the flowers were dark or dried black. Quite apt when one considers Brown would have been in mourning for shipmates recently lost at Cape Catastrophe.

The name *Prasophyllum* means leek like leaf so from the very start, since they did not have leek-like leaves, midge orchids could not have been *Prasophyllum*! Notes with the collection (now at Kew) indicate that Brown had thought of placing them in a different genus to the larger Spring flowered species. Pity he hadn't

because even the general public called them Midge orchids while they referred to the larger prasophylls as Leek orchids! He did however place one of the smaller NSW species with weird flowers and swollen roots in his separate genus *Genoplesium*.

Eighty years later orchidologist, artist and surveyor R D Fitzgerald labelled a painting of one rather odd midge orchid as *Corunastylis*. No-one seems to have taken much notice of this name but recognised that his *Corunastylis* was just a self pollinating Midge orchid! Roll on another 100 years (to 1989) and botanists in Canberra decided. that since most people had long regarded the 'Midges' and the 'Leeks' as separate genera that the taxonomy should be straightened out. Would they accept *Corunastylis* as valid or would they coin a new name. They did neither they simply placed all the midges with Brown's monotypic *Genoplesium*. In hindsight not a good idea.... if the great botanist Brown thought *Genoplesium* a different genus from the other midges (yet placed the rest of the midges with the Leek orchids), surely putting them all in Genoplesium was asking for trouble. Now, just 12 years later all the midges have become *Corunastylis* Fitzg. Yes it has taken 120 years for the name to be accepted and not the way Fitzgerald intended! (see Jones and Clements in last years Orchadian).

The species:
Until the 1890's SA had just the one species (*P. nigricans*). But in the 1880's German born botanist and orchid lover Otto Tepper was sending SA orchids to F. von Mueller. Mueller wrote back and said he was naming a new one from Ardrossan after Tepper (this plant was in fact one of the Leek orchids) but Tepper was mistaken and in a Proc. Royal Soc. S.A. paper he referred to this *Prasophyllum tepperi*, and implied that it was one of the local midge orchids. In any case few considered it validly named. Today we can not be sure which midge was *P. tepperi* because there are three of them around Ardrossan!
The second midge genuinely recorded for SA was in 1898 when Fred Reader named his *P. fuscoviride* from the Victorian mallee. South Australians quickly realised that this pretty maroon and green species was the most common midge in the SA mallee too and since it was not dark when fresh and dried a yellowish colour it could not be Brown's *P. nigricans*. So we had two species.
Soon after, RS Rogers (and others) found a third species in swamps at Mount Compass (it was in fact a new species but it seemed close to the Tasmanian *P. archeri* so that was the name Rogers used and it stuck!)
It was 60 years before another species was added, the tiny *P. despectans* from north of Mt Gambier, recognised by some time NOSSA member Ray Nash. Soon after hybrids were found between the *P. 'archeri'* and the *P. despectans* so we had 4 species and a hybrid by 1980.

By 1990 when Orchids of SA was published we had added the hairy lipped *Genoplesium morrisii* collected by the author near the Glenelg River. We also listed *'G. rufum'* as our common Adelaide Hills species. We were up to 5 species but it should have been 6. The author had made the mistake of including *P. fuscoviride* under *G. nigricans*. Not a good idea as one presses pale, the other dark and *P. fuscoviride* starts flowering in mid March, yet Brown had collected his *P. nigricans* in early March! Clearly they were separate species.

By 1995 it was realised that the name *Genoplesium rufum* could only be applied to a species from eastern NSW and that there were several similar taxa in SA that

were actually undescribed. The Bayleys sent one of these to DL Jones from Halbury and it was reported in the NOSSA. It was soon realised that the plants from our South East were not the same as the ones in the Adelaide Hills. Indeed even in the Mt Lofty Ranges itself there were at least three species. We were up to nine species!

Or should it be ten as *G. nudum* (also known as *P. beaugleholei*) has been collected only a few kms from the SA borderin the Glenelg River area on the edge of a redgum swamp (Beauglehole 1967, Bates 1975)....and as there were once a hundred such swamps in our South East it is highly likely that the species extended to SA. By then the SA plants of *'P. archeri* had been correctly identified as *G. ciliatum.*.

By 2000 there was just one question to be answered...What did the true *G. nigricans* look like? David Jones had collected specimens around Port Lincoln which were not *P. fuscoviride* and the author in March -April 2002 collected specimens of a dark, early flowered midge orchid both on Kangaroo Island and near Port Lincoln which actually dries almost black. The riddle of *P. nigricans* was surely solved. Reader's *P. fuscoviride* and perhaps the Bayleys Halbury species (with white petals) are not *P. nigricans*.

Today we recognise ten SA species and one hybrid *Corunastylis* in South Australia. Discovery of further species is however unlikely even though they may have been here before European settlement. The swamps and grassland they would have frequented are now gone.
All we need now is for the undescribed ones to be named and for *P. fuscoviride* to be formally made a *Corunastylis*!

ORCHID GRID

Les Nesbitt

Last growing season on my bush block I marked out an area 10m x 5m into fifty 1m squares with the aim of growing Adelaide Hill's orchid species in the ground. The area is native grassland and has a fire track on either side so any orchids can be seen easily. Wooden pegs were driven into the ground around the perimeter 1 metre apart with crisscrossing strings defining the 1m grids. One square metre is taken up by a gum tree and another by a pine tree. Two native cherries are growing within the grid also. When a bushfire goes through, as it inevitably will, these orchids should survive.
I found three orchid species already growing within the grid lines. These were *Diuris corymbosa, Ptst. pedunculata* & *Thelymitra pauciflora*. I planted out several community pots in spring and deflasked several species direct into the ground. Over summer a number of dormant tubers were introduced taking the species count to 20 if all survive. The location and spread of each species is being recorded on computer.
At Easter 2 plants of *Eriochilus cucullatus* were in flower and leaves of *Ptst. curta, nutans* & *pedunculata* were showing. I deflasked *Thel. antennifera* and put several clumps of seedlings into one of the grids. Now I can't wait for winter to see what comes up. So far the season is looking good with 110 mm rain this year of which 45mm fell in the 2 weeks before Easter.

CONSERVATION REPORT - SPRING GULLY CONSERVATION PARK
12/4/03 Thelma Bridle

The saying 'many hands make light work' certainly rang true on April 12th. A total of 20 volunteers nearly filled the carpark with vehicles at Blue Gum Lookout in Spring Gully Conservation Park. Almost half the number of volunteers comprised NOSSA members. TPAG (Threatened Plants Action Group) was represented, the, Government Department Park Ranger organised proceedings and of course a good number of Friends of Spring Gully CP were all prepared for hard work.

With a forecast weather change due, we were keen to begin. Wheelbarrow loads of leaf litter were collected from the 'new' track to be spread over the existing route to the Cascades. There were plenty of fallen branches lying around to use as edging to mark the 'new' track. It was just as well we had marked the route last year and staked vulnerable populations of orchids. There was no sign of *Arachnorchis* tensa or *Diplodium robustum* leaves, only a few *Thelymitra* sp. with leaves beginning to shoot. *Arachnorchis argocalla* leaves were visible. This colony, the main focus of the re-route is now well away from the track. Topped lavender, which the Friends group has worked really hard to clear from the area was beginning to make a comeback. We pulled out many small plants from the slightly damp soil and a Green Corps contingent will soon be working in the area to further reduce numbers of this farm escapee.

After 1.5hrs work we had produced a clearly defined pathway through open woodland and it was hard to see the route of the previous track. So, surprised the job had been completed so quickly, we congratulated ourselves and returned to the carpark for lunch as we watched the clouds building up from the West.

The rain did not amount to much so Phil and I spent the afternoon looking around the region. We found several hundred *Eriochilus cucullatus* flowering at Emu Flat Reserve and startled a pair of tawny frogmouths who had been sleeping in the casuarinas. There were just a few *E. cucullatus* flowers seen on Neagles Rock and no sign of other orchid species.

Dendrobium canaliculatum R.Br. 1810 by Len Field

Common names, Onion orchid, Tea tree orchid, Antelope orchid. *Dendrobium canaliculatum* was once a plant of four varieties that have been changed in recent years.
Dendrobium canaliculatum var *canaliculatum = Dendrobium canaliculatum* var. *canaliculatum*
Dendrobium canaliculatum var. *nigrescens = Dendrobium canaliculatum* var. *canaliculatum*
Dendrobium canaliculatum var. *pallidum = D. canaliculatum* var. *pallidum*
Dendrobium canaliculatum var. *foelschei = Dendrobium foelschei*. The synonym *Dendrobium tattonianum* has now been raised to species status.

Originally collected in 1770 by Banks sailing on H.M.S. Endeavour and these plants attracted attention when the ill fated Kennedy expedition was entangled in swamps at Rockingham Bay North Queensland.
An attractive but smallish plant that grows almost exclusively on the *Melaleuca* species with *Melaleuca viridiflora* being the main host with *Melaleuca symphiocarpa, Melaleuca argentea, Melaleuca dealbata* and *Melaleuca leucadendron* also host trees. These species have an extensive range and found from the Fitzroy River near Rockhampton, North to Cape York Peninsula and on through the Torres Strait Isles, into New Guinea and West through the Northern Territory into Western Australia. Found from sea level up to 700 metres they can live in swampland to dry interior where it can be subject to high light intensity and can withstand low temperature in the flat country that it grows during early morning but needs to and does warm up very quickly after sunrise where they then have to withstand very high temperature and full sun. These orchids can be found where no other epiphytic orchid could withstand the harsh climate. Plants can also become deciduous during prolonged dry periods. The growing season is late spring to early autumn. They are closely related to *Dendrobium carronii.*

Dendrobium canaliculatum var. *canaliculatum* R Brown 1810
This is the form previously referred to as *Dendrobium canaliculatum* var. *nigrescens* and grows on the coast and inland swamps north of Cairns on Cape York. The form we previously referred to as *Dendrobium canaliculatum* that grows on paper barks on the coast between Cairns and Rockhampton is now *Dendrobium tattonianum*. In 1968 plants were found near the Fly River in New Guinea that were identified as *Dendrobium canaliculatum* var. *canaliculatum*, while in 1972 and 1973 plants were found in another area that did not fit any of the known varieties. These orchids can be found growing anywhere on its host tree where the roots like to burrow into the paper bark. I can recall some of my first sightings of this orchid where the Melaleucas had been cut down and the *Dendrobium canaliculatum* now *Dendrobium tattonianum* plants in full flower were poking out of the *Melaleuca* heaps waiting to be burnt and in another area on the road between Mareeba and Cooktown, where hundreds of Hectares of *Melaleuca* scrub had been stripped of there orchids in such a large scale by what could only be for commercial interests. Even after such vast areas have been cleared mainly for sugar and banana plantations these orchids can still be found in nature with reasonable ease.
Culture. While I would be the first to admit no great success in growing these orchids, many people in this area have no great difficulty growing them as long as the Winter temperature is not allowed to fall no lower than at least ten degrees

Celsius, so some heat would be required in our area, also good fresh air movement is a must and in nature it endures monsoon conditions so plenty of water in Summer and very little in Winter. In Summer watering should be done in the late afternoon and slowly tapering off as the dry period nears to copy nature and in Winter any watering should be done in the early morning to allow the roots to dry out by nightfall and no more than once a fortnight so never water in the afternoon in Winter. Fertilising should also be very light and done with care. While it will endure high temperature it does not like very high humidity and favours growing in a North East aspect so that the early morning sun can warm them and reduce the time they are subject to the cold mornings. The pseudo bulbs can split during the growing period but this does not seem to have any adverse effect on the plant. Slab culture is the usual way to grow this plant and the plant should be removed from its original host as soon as possible and placed very firmly on its new slab and if grown in pots they should be well drained with a very coarse mix. This would apply to all the different species and variety.
Flowering time is August to early November and the flowers are a darker, greenish cream with very dark coloured tips. The lip is white with purple markings. Flowers are long lasting with five or more (usually more) to a raceme.

Dendrobium canaliculatum var. *nigrescens* Nicholls 1942
Now a synonym of *Dendrobium canaliculatum* var. *canaliculatum*
Named from the Latin nigrescent (becoming black)
Found in Cape York Peninsular North of the Mitchell River and extends to the Torres Strait Isles. Can also be found further inland than other varieties but the habitat is similar.

Dendrobium canaliculatum var. *pallidum* Dockrill 1956
Named from the Latin pallidus (pale coloured)
C. Leroy collected original plant on Cape York in 1954. Plant similar to type variety the difference being colour of the flowers these being almost pure white with yellow to green tips on the segments. Petals are untwisted which is different to all the other similar type species and varieties. Its habitat is the River flats and open forests of Eastern Cape York.
Culture would be as for the type variety.

Dendrobium canaliculatum var. *foelschei* (F. Mueller) Rupp and T.E. Hunt 1948)
Now named *Dendrobium foelschei* F.Mueller 1882
Also named *Callista foelschei* Rev.Kuntze 1891.
Named after Paul Foelshe
Similar to *Dendrobium tattonianum* but with smaller flowers coloured white to yellow with mauve or brown tips on the segments. The flowers do not open very wide. Flowering period is from August to November. Leaves are also very different being more slender to almost terete.
Found in the Gulf country across the Northern Territory and into Western Australia. During the big wet plants can be submerged under five metres of water and at the end of the wet season when the water drops the plants emerge and completely dry out with no ill effects. A swamp dweller and found over a wide area on the *Melaleuca* trees.
Culture would be similar to *Dendrobium canaliculatum.*