

NATIVE ORCHID
SOCIETY
of
SOUTH AUSTRALIA



*Orthoceras
strictum*

Orthoceras strictum



Volume 2, No. 10 November, 1978

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NEXT MEETING

When: Tuesday, 28 November, 1978, at 8.00 p.m.

Where: Goodwood Boys High School, Hardy Street, Goodwood.

Why: Mr Bob Bates is to speak on the topic "Tripping Around South Australia Looking at Native Orchids".

Potting demonstrations by Les Nesbitt, Jim Simmons and Audrey Howe.
Trading Table, Library, Plant Display and Popular Vote, Raffle.
Please bring along any orchids in flower as flowers are scarce at this time of year. This is our last meeting for 1978.

LAST MEETING Attendance 57

Our patron Mr Noel Lothian gave a very interesting talk on the history and functions of the Adelaide Botanic Gardens from its early somewhat insecure beginnings until today when the Gardens are found in three locations: on North Terrace, Mount Lofty and Wittunga. Some of the older members recognised slides of the glasshouses and earlier buildings which no longer exist. Wittunga is famous for the collections of erica, azalea and rhododendron.

Raffle prizes were *Caladenia menziesii*, *Den. speciosum* and *Microtis unifolia*.

Mrs R.M. Hayden, Iron Bank
Mrs J.M. Dawson, Cherry Gardens
Mr K. Ingham, Para Hills

Mr (L.K. Watson, GamPt2ellt Own
Mr and Mrs R.N. Meyer, Flagstaff Hill
Mr and Mrs R.H. Emmerson, Mount Barker

NOSSA CULTURAL CERTIFICATE No. 1 - *Dendrobium speciosum*

At their October meeting the Committee decided to award the first NOSSA cultural certificate to the specimen plant of *Dendrobium speciosum* grown by Ray Haese and exhibited in the NOSSA display at the South Coast Orchid Club of South Australia Spring Show in the Marion Shopping Centre.

The plant had 65 spikes and was a mass of bloom 1½ metres in diameter. An average spike carried 113 flowers so it is estimated that there were over 7000 flowers on the plant. The majority of the growths bore flower spikes and many had more than one spike. The plant was potted in a 35 cm plastic tub of rotted red gum wood. It is grown in a shadehouse all year round and is watered daily in summer. A handful of blood and bone is sprinkled on the pot in October. It is a tall thin cane form of *Dendrobium speciosum*. The flowers were a light cream colour.

NOTICE

Next meeting we will have available for sale 12 seedlings of *Dendrobium Ellen* x *D. falcorostrum*. These have recently been planted out from a community pot donated to our group by ANOS and brought down from Sydney by Les Nesbitt.

This particular cross - which can be grown cold in a shadehouse - was pollinated and flaked by Phill Spence, one of the leading native hybridists in Sydney.

It is proposed that the seedlings, which are numbered 1-12, be sold for \$1 each on the basis of a numbered draw, and the Society will give a prize of \$10.00 for the first plant that can be benched in flower. The seedlings are currently growing in 3" clay pots in charcoal, but there are no restrictions on repotting, growing mix etc.

To maintain interest we would ask that the plants be brought to a meeting every 3 or 4 months to check comparative growth and the skills in cultivation of the contestants.

THIS MONTHS COVER

The cover of the journal this month features the monotypic genus, *Orthoceras*, where the name comes from the Greek words "ortho" (meaning right) correct or straight) and "keras" (meaning horned or podded) a name based on the way the long narrow sepals spread out straight. The species epithet comes from the Latin for rigid, stiff, or tight - presumably a reference to the way the flower stem stands erect like a stem of wheat, standing out as it does at this dry time of the year, when its background mat of vegetation has often dried, decayed and collapsed. It was named by Robert Brown in 1810. However, it has a wide distribution, and this, coupled with the resemblance of its flower to the donkey orchids, gave rise to the alternative name of *Diuris Novae-Zeelandiae*, on the basis of specimens found in New Zealand. Because *Orthoceras strictum* was historically antecedent, this is the name by which it is now known.

ORCHIDS ON DISPLAY -- 24 October 1978 "J.W."

The sudden spate of hot weather brought home the fact that our native orchids have passed their peak for this year. Even so, we still saw a spectacular display, especially with the terrestrials, the most striking of which were the two examples of *Phaius tancarvilleae*. The one that won the popular vote was a specimen with pink and white flowers, contrasted by the other whose flowers had similar pink colouration but merging to a rich cream at the base of, the labellum "trumpet" instead of white.

Similar in size, but understandably less impressive at that time of the evening, was a pot of four great specimens of *Thelymitra aristata*, some of which were quite pink compared to the more usual blue colour. The *Thelymitras* this month were displaced by *Prasophyllums* including *P. fitzgeraldii*, and *P. odoratum*, its delightful scent compensating for its lack of inches. Finally, there was the locally endemic *P. validum*, with large green flowers known only from the vicinity of Mount Remarkable Conservation Park.

Diuris were well represented, with generally larger plants on show including *D. aurea* the big, mainly yellow, "donkey" from the eastern states, while from the other side of the continent we saw the dainty *D. emarginata*, found only in Western Australia. The other two were both hybrids: *D. pedunculata* x *longifolia* (large plants with the shape favouring the former parent but colouration. from the latter); and *D. palachila* x *longifolia* (where the roles were reversed). Finally there was an odd-looking specimen in the form of a cut flower entered for identification. Did anyone hazard a guess as to what it was?

We had a solitary specimen of *Microtis unifolia*, a plant also offered as a raffle prize this month, and a couple of big pots of *Caladenia dilatata*. One of these was quite interesting since it also contained a selection of one and two-year-old seedlings. Another tall species was *Calochilus gracillimus* from New South Wales, while side contrast was provided by two pots of *Chiloglottis gunnii* from Victoria, both of which only had a small percentage of plants flowering.

The most numerous genus on display was *Pterostylis*, including *P. x ingens* at the end of its flowering season while the remainder were all "rufa" types, including *P. rufa* itself with delightful russet colouration. Other species came from the drier regions of southern Queensland, while one was from the Flinders Ranges.

The speaker for the evening was our patron, Mr Lothian, and he said the Botanic Gardens had exhibited specimens of *Phaius tancarvilleae* and *Calanthe triplicata*, though both proved to be "walking" specimens. Because of this the Gardens decided instead to display more sedentary species! Perhaps that was why one of the *Phaius* this evening shared its pot with a cactus plant. It would certainly be more of a deterrent than the *Drosera* that shared the pot with the *Thelymitra aristata*.

The epiphytes contained mainly examples of the *Dendrobium* genus, including a showy *D. linguiforme* which was a mass of flowers. The three *D. beckleri* were good flowering specimens in their own right, but the species is by no means noteworthy in this respect; a quite small *D. teretifolium* put on a far better display.

While many species are at or near the end of their flowering period, the big *D. monophyllum* we saw was only just starting to flower. Finally there were three examples of *D. kingianum*, two with deep pink flowers, while the third was very near to being a specimen plant.

Then we saw several hybrids including *D. ruppianum* x *fleckeri*, with big yellow flowers, and *D. "Star of Gold"* (*D. falcorostrum* x *tetragonum*), also yellow, but with an attractive flecked labellum. Finally there were three

Orchids on Display (contd.)

examples of Ella V. Leaney, showing a range, of colours from deep pink to an open, much paler pink specimen with long strong canes.

There were two examples of *Sarcochilus falcatus* and one of *S. hartmanii*. This latter is a vandaceous type which does much better in a pot. (The Orchid Club of S.A. recently gave a Cultural Certificate for *S. hartmanii* for a plant having 110 spikes, with 750 flowers and 480 buds.) On the other hand *S. falcatus* does better mounted on blocks, such as tree-fern or cork.

Two Cymbidiums were shown: *C. madidum*, a big plant in a pot with delightful green flowers. The commentator for this evening, Neil Christoff, mentioned how it is becoming increasingly popular as a parent for mini-Cymbidium hybrids. Second was a specimen of the pale-flowering form of *C. canaliculatum* (not the var. *sparkesii* for a change) flowering quite well from a surprisingly small pot. Then there was the smallest offering for the evening in the form of *Peristeranthus hillii* with its sprays of tiny flowers.

As a footnote: The anglophiles amongst us were treated to the sight of a "foreign job" in the form of a European native - *Orchis morio* - one of the very first orchids to be so classified. What a pretty plant it was, with its deep purple flowers. It was one of the orchids mentioned by Nicky Zurcher during his talk at the August meeting.

Popular vote

Epiphytes:	1 st	<i>Sarcochilus hartmanii</i>	grown by Mr and Mrs Auliciems
	Equal 2 nd	<i>Cymbidium canaliculatum</i>	grown by Jim Simmons
		<i>Cymbidium madidum</i>	grown by Jim Simmons

Terrestrials:	1 st	<i>Phaius tancarvilleae</i>	grown by Les Nesbitt
	2 nd	<i>Thelymitra aristata</i>	grown by Bob Bates

FIELD TRIP

"Southern Swamps"

Saturday, 25 November, 1978,

Meet at the Meadows Hotel at 10.00 a.m. This is an all day trip, so don't forget your lunch. This is the last field trip for the year, and we will be led by Bob Bates. It is likely to be wet, underfoot, so make sure you have appropriate footwear.

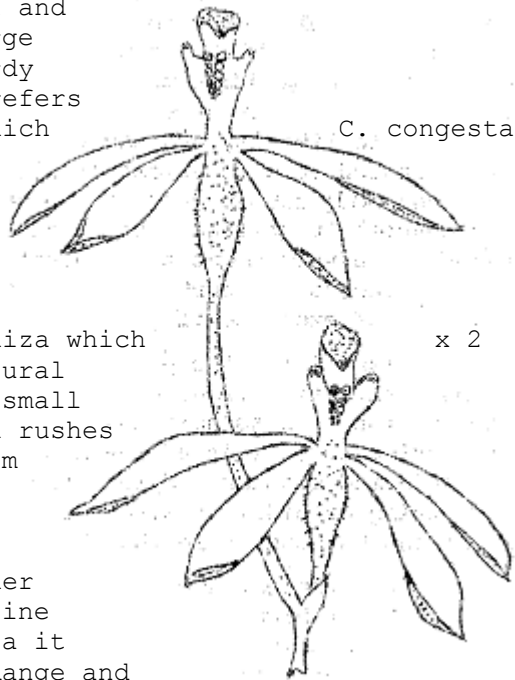
BADGES AND BOOKS

The following publications are available: "Orchids from Seed" (\$3.00); "Orchids of the Mallee" (.60c). Club badges are also available for \$2.00.

Caladenia congesta R. Br. is a delightful and distinctive species with two or three large crimson or pink shining flowers on a sturdy stem to 40 cm tall. The name "congesta" refers to the two rows of crowded black calli which completely cover the midlobe of the labellum. Flowers open in November and last for about eight weeks.

The "terrestrial" growers would love this one: unfortunately *C. congesta* is associated with a very fussy soil mycorrhiza which doesn't seem to survive away from its natural swamp margin habitat. The narrow, rather small leaf of this species is usually hidden in rushes and sedges of the swamps and does not seem to provide as much food for the plant as does its symbiont fungus:

C. congesta is also uncommon in the other States and seems to have been on the decline even before settlement. In South Australia it is confined to swamps near the Mt. Burr Range and even there is seldom seen except when bushfires open up the dense thickets.



FIELD TRIPS 1979

The provisional schedule of field trips for 1979 is as follows (there may be alterations nearer the time):

January	Sunday 14	Tooperang Swamp	afternoon
April	Saturday 28	Scott Conservation Park	all day
June	Saturday 9	Para Wirra Recreation Park	afternoon
July	Friday 28 to Sunday 20	Parrakie	weekend.
August	Sunday 19	Ferries McDonald Conservation Park (Leader: Harry Wright, Longwood)	all day
September	Saturday 8	Spring Gully	all day
September	Saturday 22 to Sunday 23	Yorke Peninsula	weekend
October	Monday 8	Warren Conservation Park	all day
November	Saturday 10	Belair Recreation Park	afternoon

Make a note in your diaries for the first field trip in mid-January.

The meeting point is at the turn off from the Ashborne-Goolwa Road, 10 kms south of Ashborne where the signpost (turn right) indicates Mount Compass 13 km, and Nangkita 6 km. We will meet just off the main road. It is likely to be wet underfoot, so make sure you have appropriate footwear.

Spring is the best time of the year to repot or mount epiphytic orchids (those which normally grow on trees). As new roots are developing now, the plants establish quickly. We have seen a wide range of Australian native epiphytes at recent meetings mounted on logs or slabs of wood, bark or tree-fern. In the last year or so mounts of cork have become popular and the orchids seem to like it, sending roots over the surface and into the cork itself. Pressed cork in bricks or slabs or cork tubes as peeled from the trees can be easily sawn or cut to any size or shape to suit the orchid. I have mounted several Australian species plus a cattleya on cork slabs recently after seeing the healthy growth of plants mounted last year by other members. One or two growers say cork slabs are difficult to wet and won't use them. It is a matter of experimenting to find what best suits you and your orchids.

To mount a plant I lay the plant on the slab and cover the roots, but not the bulbs with a few pieces of hills moss. Then I wind thin nylon fishing line around the slab to hold the moss and the plant firmly to the slab. I keep the nylon line clear of any new growths to prevent breaking them or causing deformed growths. Nylon stocking cut into thin strips are also good for tying orchids. A wire hook is firmly fixed to the slab so that the plant can be hung up in the shade house.

Dendrobium aemulum*	Dendrobium linguiforme*
Dendrobium tetragonum*	Dendrobium teretifolium*
Dendrobium speciosum	Dendrobium beckleri
Rhinerrhiza divitiflora*	

Those marked (*) flower regularly each year. The other two are small plants which I expect (hope) will bloom in due course. One plant of *Dendrobium linguiforme* is growing on a grapevine near the backdoor.

These tree orchids are watered daily in hot weather but in winter they survive happily on normal rainfall. They are given a spray with soluble fertiliser once a month in summer. Although you can't bring these orchids to a meeting they certainly add interest to your garden.

MY EXPERIENCES WITH NATIVE CYMBIDIUMS R. Herraman

There are three *Cymbidium* species indigenous to Australia. *C. madidum*, probably the easiest of the three to cultivate, is found on the east coast of the Continent from the central New South Wales coast to Cape York Peninsula.

I have found *madidum* to be no more demanding in cultivation than any exotic *cymbidium* hybrid. Clay pots appear to be more suitable than plastic for growing this species as *madidum* likes to be kept a little dryer in winter than our hybrids. Normal *cymbidium* compost with a little charcoal or fir bark added is an adequate potting medium. Fertilising and watering should be the same as for all other *cymbidiums*. Flowering time is usually January to February in Adelaide (August to September in their natural habitat).

The flowers are relatively small compared with the size of the plant, rarely more than 2 cm across but are delightfully green in colour with a yellow lip, occasionally marked with red. Flower spikes often carry 30 to 40 widely spread flowers and a flowering bulb will often produce two spikes simultaneously, a habit common to all three native species, I have seen it growing atop tall rain forest trees in huge clumps near Kuranda on the

My Experiences With Native Cymbidiums (contd.)
Atherton Tablelands in Queensland.

Cymbidium canaliculatum is found over a similar range of the east coast as *madidum* but extending inland for a considerably greater distance (up to 480 kms). It also occurs in Arnhem Land (Northern Territory) and the extreme north of Western Australia. In my view, these habitats underline this species most important requirement, that of relative dryness during our colder months. It has thick, leathery, and deeply channelled grey-green leaves, which act as a water trap during the growing period, and one look at the plant will tell you that it is able to withstand long periods of dryness. In fact it is essential to successful culture. In its natural habitat it prefers to grow on the ends of dead or dying branches of trees often completely exposed to the full sun all year round. Growing like this its roots are able to penetrate the rotting heartwood of their host and often reach 4.5 to 6.0 metres in length.

Probably the surest way of establishing a clump of this species (we are rarely able to obtain already established pieces) is to pot up in a reasonably long hollow log (say about .6 metre (2 feet)) and use a compost of very old pine bark chips, charcoal and leaf mould. This will imitate as near as practicable its natural growing conditions. If you obtain a piece during the cooler months and keep it relatively dry until late spring then treat it the same as other cymbidiums as regards watering and feeding. This species flowers around November in Adelaide and colour is mainly green with brown and purple markings on the petals and sepals. Several spikes will be produced from one bulb when grown well and usually up to 30 flowers per spike may be expected.

(to be continued in the next: journal)

SOUTH AUSTRALIAN NATIVE ORCHIDS CULTURAL NOTES Les Nesbitt
Another growing season is almost over and it is time to start preparing for next season. But first a few reflections on 1978 so that we don't make the same mistakes again.

The 1978 winter was long and wet. Poorly drained pots became waterlogged. Some species can handle such swampy conditions but most prefer a potting soil which drains quickly after rain. I use an open sandy, peat moss soil mix which drains excess water quickly, yet retains some moisture. If tuber rot occurred amongst your plants then a more open mix or a sunnier, better ventilated growing area may help reduce the problem next year.

Spring 1978 was about average with some cold wet periods and some warm dry times. Hand watering was necessary during the dry spells and this is often accompanied by leaf rot. As long as part of each leaf remains healthy the new tubers are not greatly affected. Sun orchids (*Thelymitra*) are always the first to show signs of leaf rot in my collection but this year it also appeared in *Caladenia dilatata* and several very crowded pots of *Pterostylis*. Perhaps I should use tank water, or spray with fungicides, but my usual solution is to give my plants more growing space.

Seedling germination and growth was excellent in those pots in which seedlings appeared. Some of the rarer species, however, cause much frustration when there is no sign of even a single seedling as first winter and then spring passes by.

Cultural Notes (contd.)

Virtually all seedpods on the terrestrials will have ripened by the end of November and the seed should have either been sown on top of the pots or stored away in paper envelopes in a dry place for sowing in autumn. Germination will not commence until next winter.

Repotting

All of the colony-forming terrestrial orchids benefit from repotting during the dormant period each year. Seedling types are best left undisturbed for 3-4 years unless new seedlings are very crowded in the pot. Wait until all top growth is completely dead and dry before repotting. Let the soil in the pot get bone dry to dry up last years tubers and harden the new ones. Water the pot a few days before repotting to soften the soil and keep down the dust. Knock out the pot and separate the tubers from the soil. Tubers of colony types will be concentrated around the outside of the pot. I tip the soil into a sieve with 5 mm holes and gently crush the lumps so that the soil falls through and leaves the larger tubers behind. This speeds up the job considerably. I add a small amount of blood and bone manure and sieved peat moss to the old soil and reuse it, provided all the plants in it were healthy.

Fill the pots with soil to within 2 cms of the top and replant the desired number of tubers on top of the soil. Imagine the pot in full flower next season when spacing the tubers. Large tubers will need more room than small ones and will produce taller flower stems which bloom earlier. If tuber multiplication has been good (2-4 times), then larger or additional pots will be necessary to accommodate them all. You may even like to try a few in the garden if you have a spot free of weeds and slugs and snails. Mr and Mrs Auliciems have proved that it can be done in suburban Adelaide. After arranging the tubers in the pot, fill the pot with soil and tamp down firmly. No space needs to be left for watering as the little watering that will be required is done at a slow rate so that it soaks in without disturbing the surface soil. Cover the soil with chopped pine needles 1-3 cms long to prevent erosion. Water immediately to settle the soil and pine needles.

Store the pots in a cool place if you can. My pots have to exist through the summer in the shade house and get very hot and dry. The local species can stand this treatment but some of the Queensland species such as *Pterostylis baptistii*, which have a short dormancy, shrivel badly and should be placed in a shady cool place if possible. Covering the pots may be the answer for you.

If there were small seedlings in the pot these will have produced tiny tubers about as big as a pin's head in the top 2 cms of soil. Keep this top 2 cm of soil separate when repotting because it is too tedious to find these tiny tubers. After replanting the larger tubers, which will be deeper in the pot, the top soil can be crushed gently by hand and replaced in the top 2 cms of the pot. In this way the seedlings are not replanted too deeply. The top-soil can be mixed with extra soil and used on more than one pot. I do this to carry the helpful micorrhiza which aid in seed germination from a successful pot to new pots of the same species. With *Caladenia* spp. I always leave 1-2 cm of the old hairy stem attached to the tuber as I believe this material harbours the helpful micorrhiza. One such tuber planted in a potful of fresh soil mix often produces a crop of seedlings the following year provided seed is sown on top of the pot before winter in too far advanced.

My soil mix is 40% loam, 40% sand, and 20% peat moss, which is all put through the 5 mm sieve before use. A handful of blood and bone is added per bucket of soil mix. Repotting should be completed by the end of January because by then the tubers are beginning to shoot and these new shoots are easily damaged.