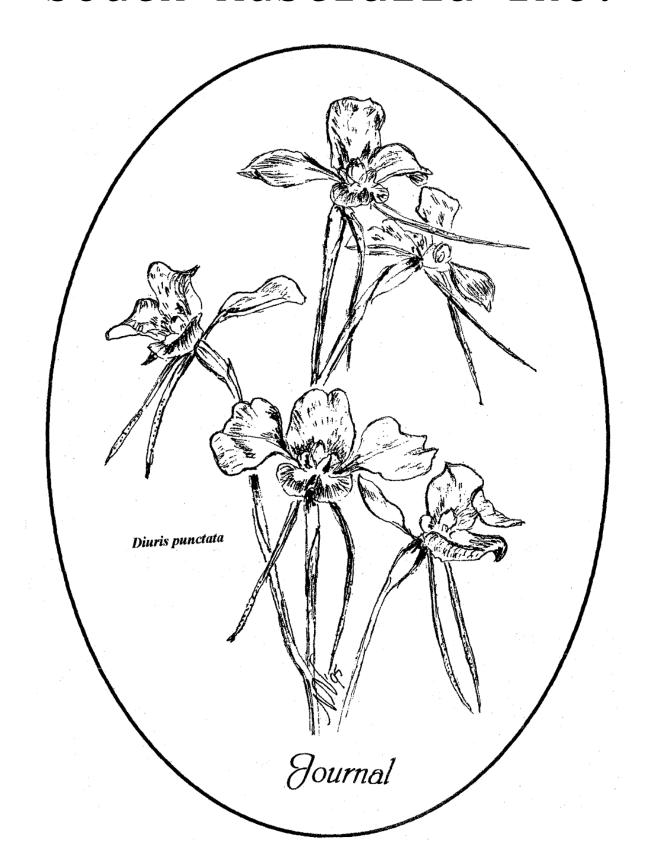
Native Orchid Society of South Australia Inc.



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# NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC.

P.O Box 565, UNLEY S.A 5061

The Native Orchid Society of South Australia promotes the conservation of native orchids through cultivation of native orchids, through preservation of naturally-occurring orchid plants and natural habitat.

Except with the documented official representation from the Management Committee of the native orchid society of South Australia, 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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Mr H Goldsack (deceased)

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# **NATIVE ORCHID SOCIETY**

# OF SOUTH AUSTRALIA INC

# NOVEMBER 1995 Vol. 19. No. 10 JOURNAL

#### **NOVEMBER MEETING**

Tuesday, 28th November, 8.00 pm: at St Matthews Hall, Bridge Street, Kensington.

CHRISTMAS BREAKUP and AUCTION Bring a plate of party food and lots of plants, books etc for the Auction This should be great fun and a great fundraiser.

Doors to the hall will be open at 7.15 pm for those wishing to borrow books from the library.

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COMMITTEE MEETING To be held at 7.30 pm Friday December 1st.

#### **DIARY DATES**

Nov 26 Christmas Barbecue

Dec 16 Orthoceras special. Mount Crawford

Jan 10 Dipodium roseum special. Mount Lofty Botanic Gardens

Feb 10 Spiranthes special. Southern Swamps

#### FIELD TRIPS

*Orthoceras strictum* special. Sunday December 16. Meet Forreston P.O. at 2pm. We will see the various colour forms growing along Telephone Road.

TUBER BANK 1996 Are you able to donate tubers this year please? Every donation helps our Tuber Bank and small quantities are always acceptable. Initially, we need DETAILS ONLY of species and hybrid tubers that you have available. We appreciate your co-operation with the careful naming of tubers thus ensuring an accurate listing which will appear in the December Journal.

Thankyou for slide-boxes already received. Further box donations will be most welcome.

- 1. Details of tubers by November 30th to T & T O'Neill 19 Parana Street, Flinders Park 5025 (phone 08 436535)
- 2. Arrangements for tuber collection December
- 3. Tuber Bank List December Journal.



#### XMAS BARBECUE

To be on Sunday November 26<sup>th</sup> at Mangiri Park (Charlicks Road, Crafers) see map in last journal Starting time 11 am

Cost is \$2 per head - this includes \$1 entrance and \$1 towards expenses.

NOSSA will provide the meat and bread.

You will need to bring salads, dessert, condiments, drinks and barbecues.

There will be a garden tour to follow lunch. SEE YOU THERE!

# ON THE BENCH

Terrestrials: Caladenia arenaria, C. congesta, Diuris brevifolia, D. drummondii, D. drummondii x D. sulphurea, D. brevifolia x D. sulphurea, D. drummondii x D. punctata (D. Dragonfly), Microtis parviflora, Pterostylis arenicola, P. biseta, P. excelsa, P. rufa, P. Cutie, P. Jack Warcup, Thelymitra benthamiana, T. nuda, T. longifolia x T. pulchella, T nuda.

Epiphytes: *Dendrobium discolor* var. *fuscum*, *D*. Ella Victoria Leaney (4), *D. kingianum*, *D. kingianum* (Merrellan No. 1 x Rougeroy), *D. kingianum* (Tamborine x Hot Lips), *D. monophyllum*, *D.* Star of Riverden x *tetragonum*, *Rhinochilus* Dorothy, *Sarcochilus* Aussie Passion x *hartmannii*, *S. fitzhart*, *S. hartmannii* (Red Heart), *S. hartmannii* (6), *S.* Heidi, *S.* Lorraine, *S.* Pinky, *S.* Weinhardt,

The most noticeable aspect of the terrestrials on display was the height of the stems, all species and hybrids were exceptionally tall. Our commentator pointed out that late flowering species tend to grow in damp locations in competition with reeds and sedges and other lush vegetation so they need tall stems to compete with these other plants and get their flowers up above them. There were some interesting hybrids including one made by Doug McCrae from New Zealand 8 years ago ie *Thelymitra pulchella* x *T longifolia*, a pretty plant with lolly-pink, striped flowers. Almost a metre high was the *D. drummondii* x *D. sulphurea*, a cross between a WA species and a NSW species ie opposite coasts of the continent. (See article by Les Nesbitt in this issue.) The epiphytes were dominated by *D. kingianum* hybrids and *Sarcochilus* species. It was an eye opener to see the variety of *Sarcochilus* hybrids being made even a *Rhinochilus* ie *Rhinerhiza* x *Sarcochilus*.

Bob Bates gave the commentary on the Terrestrials Peter Barnes spoke on the Epiphytes.

#### POPULAR VOTE:

Terrestrials: Diuris drummondii x D. sulphurea (D. Golden-dragon) grown by Les Nesbitt.

Epiphytes: Dendrobium Ella Victoria Leaney grown by Roger Herraman

#### **COMMENTATORS CHOICE:**

Terrestrial Species: Thelymitra nuda grown by Les Nesbitt.

Terrestrial Hybrid: Dendrobium Dragon Fly grown by Les Nesbitt.

Epiphyte Species: Sarcochilus hartmannii grown by Don Wells.

Epiphyte Hybrid: *Dendrobium* Ella Victoria Leaney grown by Roger Herraman.

### OCTOBER MEETING

Noel Lothian former director of the Adelaide Botanic Gardens & radio talk back gardening personality was introduced by Roy Hargreaves the very gentleman who had approached Noel to be our first NOSSA Patron 20 years ago. Noel congratulated the Society on its achievements and then spoke on the history of the Mount Lofty Botanic Gardens. (Noel lives close by). The gardens were set up so that cool growing, acid loving plants could be grown and trialled. The variety of plants able to be grown in the Adelaide Botanic Gardens is restricted by the small size of these gardens, the alkaline

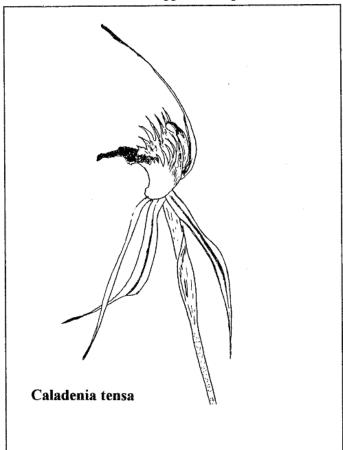
soils and scorching summer heat. A few more are able to be grown at Wittunga (Blackwood) with desert plants being grown at the Port Augusta Botanic Gardens. When the Backhouse Estate came on the market in 1954 the Government acquired it for 15 pounds an acre. This property had a difference in altitude of 220 metres from top to bottom with aspects varying from dry ridge to swampy gully. Eventually almost 100 hectares were acquired from three different properties. Over 5000 species have been trialled in 20 years. The tourist potential of the park was recognised and roads, buses, picnic facilities, lakes and even a coke machine have been provided. Noel emphasised the continual changes that are made especially in the herbaceous species grown.

Events covered by Noel's slides included: the opening ceremony on December 7th 1977 officiated by the then Governor General, the building of the lake, the Ash Wednesday bushfires (which burnt 80% of the garden) and the regeneration since. An example of how much prices went up: the first 25 acres bought at 15 pounds an acre, the last 25 acres bought for \$1700 per acre.

#### SOUTH EAST ADVENTURE

## by WINSOME & LES MCHUGH

Saturday morning a small band of orchid nuts gathered at Christmas Rocks. We were greeted by occasional showers and a cool strong wind. We got a little carried away with checking out the orchids amongst the rocks and were an hour late leaving our meeting spot, your guide the main culprit. Our first stop was Jip Jip Conservation Park entrance where we struggled through the thick scrub finding many gems including a number of *Pterostylis* 



plumosa minus their labellums. We then proceeded up to the parking bay where lunch was taken and then we walked up to the rocks. The view was spectacular from the top with rain falling in the horizon and the paddocks yellow with capeweed.

Our next stop was Desert Camp Conservation Park which is totally opposite to Jip Jip being very flat and under water in a wet year. There we found *Prasophyllum odoratum* in abundance and as the sun was starting to shine, open sun orchids.

Our last stop for Saturday was Padthaway Conservation Park. Here we had tall open forest which made walking easy and we saw many beautiful orchids and were all impressed with the *Thelymitra epipactoides*, stout plants with a colour like turquoise.

Sunday morning we awoke to a much warmer, sunny day and our first stop was the same block we visited last year. This year we had considerably more orchids open and the *Caladenia* and *Calochilus* were more common.

From there we proceeded to check out a spot which in previous years has yielded up to 100 *Diuris* sulphurea but this was not their year, not one was

found.

Finally at our last stop where we had lunch by the side of the road we were able to enjoy numerous *Caladenia*, *Lyperanthus nigricans* and *Thelymitra* which were open in the warm sun

	1	2	3	4	5	6
Acianthus pusillus	L					
Caladenia cardiochila	F			F		
C. carnea		F		F	F	F
C. carnea var. ornata	F				F	
C. colorata				F	F	
C. colorata x formosa					F	
C. cucullata					F	F
C. formosa				F	F	
C. formosa x cardiochila				F		
C. fuscata						F
C. tensa						F
C. patersonii	F	F	F	F	F	
C. prolata		F	F	F	F	
C. pusilla						F
C. stricta	F					
C. lentaculata					F	F
C. verrucosa	F					
Calochilus robertsonii					F	F
Corybas sp.		L			L	
Cyrtostylis robusta	L	L				
Diuris pardina	P		P	P	F	F
Eriochilus cucullatus	L					
Genoplesium sp.				P		
Glossodia major					F	F
Leporella fimbriata					P	
Lyperanthus nigricans	L	L		L	F	F
Microtis sp.	L		L	F	F	F
Prasophyllum fitzgeraldii		F				
P. odoratum			F			
Pterostylis aff. aciculiformis				F		
P. longifolia		В				
P. nana	P	P				
P. pedunculata		F			F	
P. plumosa	F	F	F			
P. pusilla		F				
P. robusta	P					
P. sanguinea	P	P		P	P	
Thelymitra antennifera			F	F	F	F
T. epipactoides				B/P		
T. ixioides	F	В		В	F	F
T. nuda			F	В	F	
T. pauciflora	В	В	F	В	В	F
T. rubra	В		В	В	F	F

L = Leaves

F = Flowers

B Buds

P = Pods

1 - Christmas Rocks
 2 - Jip Jip Conservation Park
 3 - Desert Camp Conservation Park
 4 - Padthaway Conservation Park
 5 - Kyby Special
 6 - Nethertons Burnt Block

This block was burnt in February this year and was truly spectacular. If it was not the orchids the blue and white lilies filled the landscape.

Here our tour ended with some people heading home but a few die-hards went back to Padthaway Conservation Park for another look.

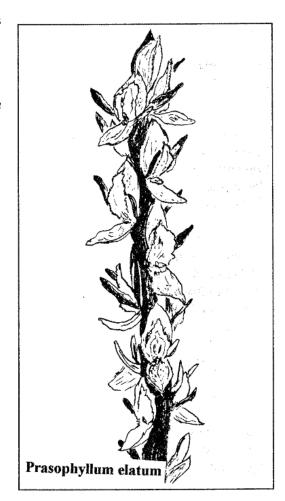
We would like to say a special thankyou to Kelly and Peter for leading us on Saturday and Thankyou to everyone who joined us for the weekend and yes we had a great time in Melbourne.

#### FIELD TRIP REPORT - LOFTIA PARK, 15th OCTOBER 1995

On a warm spring morning nine of us met at Loftia Park which was completely burnt in a bushfire in February. We were hoping to see orchids which require stimulation by fire for flowering. Peter Lewis was unanimously elected leader as he was the only one with a map and an idea of where a number of orchids were growing. We drove along Evans Road noticing many stands of tall *Prasophyllum elatum*. Walking through the area showed a good deal of regeneration of eucalypts and seedlings of acacia. The ash had been well washed into the ground by winter rains and there was a mass of spring flowers. The small blue lobelia (*L. rhombifolia*) found more commonly after bushfires was well represented and there were lovely and numerous spikes of both the trigger plant *Stylidium graminifolium* and the grass tree *Xanthorrhoea semiplana*.

The Mt Lofty daisy bush *Olearia grandiflora* was just breaking into flower. The numerous *Caladenia tentaculata* flowers seemed particularly large. Many *Burnettia (Lyperanthus) nigricans* were in flower, with up to four flowers per stem and the other firestimulated orchid in flower was *Prasophyllum elatum*, at 1.5m, South Australia's tallest orchid in prolific groups along Evans Road. There were both black-stemmed and green-stemmed types growing together, the darker stemmed plants having the more colourful flowers. Although their scent was only faint hoverflies and bees were attracted and it was obvious that a number of flowers had been pollinated. Just one plant of *Thelymitra benthamiana* was found, and its four buds should start opening in a couple of weeks. *Thelymitra aristata* buds just needed a little more of the sun's warmth to open.

### by THELMA BRIDLE



# Orchids found at Loftia Park:

In flower: Prasophyllum elatum, Burnettia (Lyperanthus) nigricans; Caladenia tentaculata, C. leptochila,

Glossodia major, Thelymitra rubra, Pterostylis pedunculata Not open: Thelymitra aristata, T. benthamiana, T. pauciflora. Flowers over: Pterostylis sanguinea, Diuris corymbosa.

We had lunch just a short distance from Loftia Park at Kate and Quentin's, and after lunch were given a guided tour through their large hillside bush block, The area had not had a bushfire since 1955 and although formerly grazed this had ceased over 20 years ago. Among the display of

flowers we found 28 different orchids, a greater variety than at Loftia Park but more scattered through the bush as opposed to the concentrated profusion of the fire-stimulated orchids. Orchids of particular note were several flowering *Leptoceras menziesii*, a good number of *Calochilus robertsonii* with up to 5 flowers on a stem and a couple of small rufa group *Pterostylis* aff. *aciculiformis* plants in flower. There were several deep pink *Caladenia pusilla*, usually much paler. We found a flower spike from Dec/Jan of *Dipodium roseum*. This year's flower spike had not started to show. In a cool moist valley we were surprised to find *Pterostylis curta* still in full flower. In this same area have been found the natural hybrid between *Pterostylis curta* and *Pterostylis pedunculata*. Even a plant of *Cyrtostylis reniformis* was still in flower. After our walk Kate very kindly provided us with a welcome cup of tea and a huge, delicious homemade chocolate cake - many thanks Kate.

Orchids in flower: Caladenia carnea, C. tentaculata, C. leptochila, C. pusillus, Leptoceras menziesii, Calochilus robertsonii, Pterostylis pedunculata, P. nutans, P. aff. aciculiformis, P. plumosa, P. curta, Caladenia prolata, Cyrtostylis reniformis, Thelymitra rubra, T. antennifera, Glossodia major, Microtis sp.

Orchids not open: Thelymitra ixioides, T. pauciflora, T. aristata.

Orchid flowers over: Acianthus caudatus, Diuris pardina, Pterostylis sanguinea, P. longifolia, Thelymitra flexuosa.

Orchid leaves: Corybas dilatatus, C. incurvus.

#### **DIURIS DRUMMONDII HYBRIDS**

#### by LES NESBITT

*Diuris drummondii* is a tall, yellow, late flowering species from Western Australia. My plants of *D. drummondii* 'Buttery' flower in November each year. The plants grow to 750mm tall and carry 2 to 4 large flowers at the top of the flower stem.

I have flowered three hybrids using this species. All are tall, large-flowered hybrids which bloom in October. These hybrids were made in the late 80's. The first to flower was *Diuris* Golden Wand (*drummondii x aurea*). this plant has large golden flowers with faint brown markings. Last season George Nieuwenhoven registered *Diuris* Dragonfly (*drummondii x punctata*), The first seedling from my cross of this hybrid was in flower for the October meeting. The hybrid follows the *drummondii* parent with little influence from *punctata* except to muddy the yellow colour. Other crosses between the purple *punctata* and yellow species also result in muddy unattractive colours. A nice hybrid resulted from *D. drummondii x sulphurea* which has spotted yellow flowers. Hopefully this hybrid will multiply. Two seedlings flowered this year.

None of these three primary hybrids contain pollen. I have put pollen from species on to each to see if they will set pods. *Diuris* are notoriously difficult to hybridise beyond the first generation.

#### SOME MORE THOUGHTS ON CALADENIA/GLOSSODIA

by WINSOME & LES MCHUGH

Over the past three years we have experimented with different potting mixes for our *Caladenia* and *Glossodia*. All our current mixes are based on the grey coastal sands.

We have noticed the best results are those pots which are half filled with 100% grey sand at the bottom and a richer top half of the pot. This top layer contains the grey sand with red terrarosa and/or plain commercial potting mix added in various quantities.

This does duplicate how they grow in sandy areas of the South-east. Their tubers are usually deep in the cool, barren sand while their stem collar is just below the soil surface in the richer humus filled layer. Their stem collar is where the mycorrhizal fungi interact with *Caladenia/Glossodia*. Our *Glossodia major* exhibited at the July meeting has a pot mix of bottom layer 100% grey sand and the top layer equal parts grey sand, red terrarosa soil and plain commercial potting mix

We have found they sometimes will sulk in the first year after repotting but bounce back in their second year. Most problems seem to be keeping them too wet without good air flow which leads to rots so our growing house has a solid roof and some open sides. We are responsible for how much water they receive. Remember they have the ability to survive droughts so keep them damp not over-wet in the growing season. We still recommend terracotta pots for the *Caladenia patersonii* complex but have found *Caladenia deformis*, *latifolia*, *carnea* and *cardiochila* do better in plastic pots using the same soil mixes as discussed above. But please remember this works for us under our conditions, it may not work for you.

#### WANTED TO BUY

Second hand 5" to 7" terracotta pots. Any quantity. Phone Winsome & Les McHugh, 087 622952

#### AUSTRALIAN DENDROBIUMS NO. 13

by SANDY PHILIPS

Dendrobium johannis the Brown antelope orchid

Named in 1871 by H.G. Reichenbach after the British horticulturalist John Gould Veitch (Johannis the German equivalent of John).

*D. johannis* is confined to the north east of Queensland from the McIlwraith Range to Cape York and is therefore a species requiring heat in Adelaide. In its natural habitat it grows on monsoon forest trees, often near swamps. It flowers in Autumn. The blooms last several weeks and are strongly perfumed (although some people find the odour unpleasant).

*D. johannis* is closely related to *D. trilamellatum* but flowers at a quite different time and has a different perfume and shiny brown flowers. Because of the large, long-lived flowers on attractive arching racemes this species is popular in cultivation but requires a minimum temperature of 10°C and needs to be kept dry all winter. Best if mounted on hard-wood or grown in a small pot.

#### FIELD TRIP REPORT: MILLBROOK RESERVOIR by GARY GUIDE

A select band of NOSSA members met at gate 38 of the Millbrook Reservoir reserve on the misty morning of October 13th. The reserve here is mostly of *Eucalyptus leucoxylon* woodland with *E. goniocalyx* on the ridge and is bounded on two sides by the reservoir itself, on the third by the remains of the old town of Millbrook and the fourth by the main Inglewood-Gumeracha road. The location is famous for its *Diuris* and we were not disappointed. There were hundreds of tall *Diuris behrii* some with native bees, *Halictus* sp. resting in the flowers waiting for the sun to warm them enough to start their day. We hand pollinated a few of the more isolated specimens. It was noticeable that the *D. pardina* present were in discrete clumps and were of the form having purple-black blotches on a pale yellow background. A real thrill for the photographers was the large number and variety of forms of the hybrid *Diuris x palachila*. Some leaned toward *D. behrii* in form others were closer to *D. pardina*, some may even have been backcrosses. Like the *D. behrii* the hybrids were very scattered. In contrast there were tight groups of *Diuris corymbosa* with very intense colours of red, yellow and purple. These had crossed with *D. pardina* at one point to form a natural hybrid on the edge of the track.

Most people are not interested in *Microtis* but as there were huge numbers present we decided to try and work out the species. This turned out to be relatively easy. The commonest species was robust with flowers to 8mm long, a strong perfume and a labellum markedly bilobed at the tip. These we

determined as *M. arenaria* (*M. biloba*) the commonest onion orchid in the Adelaide Hills! There were also lots of a little species with short, dense flower spikes and tiny flowers. An odd feature was the perfectly spherical seed capsules. There was no perfume present. The labellum was not square so they were not *M. frutetorum* or *M. unifolia* but nor were they *M. parviflora* as the labellum had frilly margins. We decided that this was one of the three or four undescribed *Microtis* in South Australia. A third species had distinctly pyramid-shaped spikes of tiny scentless flowers with smooth triangular labella. This one we were happy was *M. parviflora*.

An orchid which we had not wanted to see was *Monadenia*; just a small patch on the track and easily removed. A happier find nearby was a colony of deep pink *Caladenia latifolia*. It is unusual to find this species in woodland, it is more normal to see it on the coast or in rocky places (like Morialta Gorge).

As the sunshine evaporated the mist its heat began to open the sun-orchids, mostly the pink *Thelymitra rubra* There was a really unusual specimen with 10 slate pink flowers on a thick stem. It was reminiscent of *T.* x *chasmogama* but we wondered what the blue-flowered parent might be until a short specimen of *T. grandiflora* was found and we guessed our mystery plant to be *T grandiflora* x *T. rubra* a hybrid none of us had ever heard of let alone seen before!

After a picnic lunch by the water (the site chosen was actually where the photo of Millbrook Reservoir in "Orchids of South Australia" was taken from). We drove cross-country to the Pipeline Track from whence we had a great view over the Torrens Gorge. We were impressed by the numerous *Pterostylis foliata* on the banks of the track. This species (like most self pollinated ones) is very good at colonising disturbed areas. By now it was quite warm and we were glad to be on the shady side of the hill. Far below we could hear the rush of the River Torrens over the rocks. Self pollinated species were predominant along the track including: *Thelymitra pauciflora* (3 forms - thin leaf, white, thin leaf, blue and strap leaf, mauve) in thousands, *Caladenia prolata*, many not opening at all and more *Microtis*.

Orchids seen: In flower: Caladenia carnea, C. prolata. C. rigida, C. tentaculata, Calochilus robertsonii, Cyrtostylis reniformis, Diuris behrii, D. corymbosa, D. pardina, D. x palachila, D. pardina x D. corymbosa, D. pardina, Glossodia major, Leptoceras menziesii, Microtis arenaria, M parviflora, M. species nova, Pterostylis nana, P. nutans, P. foliata, P. pedunculata, Thelymitra grandiflora, T. rubra, T. pauciflora, T. juncifolia, T. grandiflora x T. rubra.

In bud: Monadenia, Pterostylis biseta.

# ORCHID QUOTES FROM ROGER RANKIN

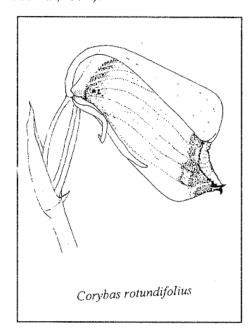
Give a man an orchid and you please him for a month, teach him how to grow them and you please him for a lifetime.

A charming orchid is one I notice; a charming woman is one who notices me!

Pollination is a sexually transmitted condition.

#### NEW ZEALAND HELMET ORCHIDS

Fourth in a series adapted from the article- *Corybas* in New Zealand by Dan Hatch (The NZ Native Orchid Group Journal, 1994).



*Corybas rotundifolius* (J.D. Hook) H.G. Reichb. (1871) = leaf shape Syn. Nematoceras rotundifolia J.D. Hook (1853)

Another misunderstood species. First collected by Colenso on 2 April 1846, near the village of Puehutai, on the upper Manawatu river, it was described by Hooker as *Nematoceras rotundifolia* Unaware of this (or rather of the nature of Hooker's species), Cheeseman redescribed it from Kaitaia in 1899 as *Corysanthes matthewsii*, and this was the name by which it was known until 1945, when Rupp, who was 'lumping' included it in the Australian *C. unguiculatus*, where it stayed until 1989 when the 'splitters' reinstated it as an endemic species with the tag name aff. 'unguiculatus'.

Meanwhile Brian Molloy obtained Colenso's original Puehutai material from Kew and discovered that *rotundifolius* was in fact the plant described by Cheeseman as *C. matthewsii*. To confuse matters further, Thomas Kirk in 1864 had mistakenly used the name *rotundifolia* for the plant now known to be *rivularis* q.v.).

Distribution: This species is now confined to scrub and light forest between Warkworth and the North Cape. Specimens in herbaria suggest that it once extended much further south. It is larger than *C. carsei* and lacks the cleft dorsal sepal.

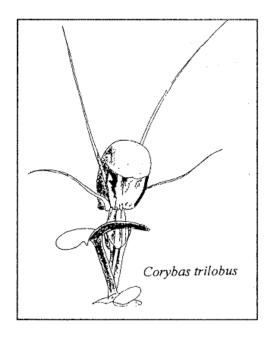
Flowers: July.

Corybas trilobus (J.D. Hook) H.G. Reichb (1871) = leaf shape Syn. Nematoceras triloba J.D. Hook (1853)

Probably the best known of the *Corybas* species. The leaf is usually wider than long, a constriction near the tip producing a 3-lobed effect, hence the name. Both leaves and flowers however are very variable and more than one species is probably included in *trilobus* s.l. (*C. hypogaea* and aff. 'trilobus' for example). Forms very large colonies, often with *C. cryptanthus*, more rarely with *Yoania australis*. The petals are about a third of the length of the lateral sepals.

Distribution: North, South, Stewart, Chatham, Auckland and Campbell Islands.

Flowers: June - December.



Many thanks to Barbara Bayley who has kindly provided the skilful drawings of *Caladenia tensa* and *Prasophyllum elatum* in this issue. Barbara's illustrations have appeared before and will continue to appear in future issues.