



Journal
of the
Native Orchid Society
of
South Australia Inc



Caladenia eminens

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

Post office box 565 Unley 5061

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 cost \$2 per issue. Subscription \$14 family or single.

NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA INC JUNE 1999 Vol. 23 No. 5 JOURNAL

JUNE MEETING

Tuesday June 25 at 8.00 pm: Saint Matthews Hall, Bridge Street, Kensington. Speaker Geoff Edwards will speak on Orchid Adventures in Qld.

Doors open at 7.15 to allow trading table to set up and library to proceed

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DIARY DATES

June 20	Conservation group by the Murray	Wellington
June 27	Warren Conservation park	Kersbrook
July 17	Norton Summit excursion	Adelaide Hills
July 18	Wongalere Working bee for <i>C. behrii</i>	Williamstown
August 28	Quorn Trip	Flinders Ranges
Sept 3-5	Yorke Peninsula Springtime Spectacular	Curramulka
Sept 19-20	NOSSA Spring Show	St Peters
Oct 17	Annual Echunga Picnic	Echunga
Nov 7	Three Duck Orchids	Ashbourne
January 2000	Three <i>Dipodium</i> species	Naracoorte
April 3-4 2000	SE Genoplesiums, <i>Pterostylis parviflora</i>	Mt Monster
Oct 8-15 2000	Aust Orch Conference	Burnie

Next Committee Meeting: Wed June 30 that 7:30 at the home of Cathy and Malcolm Houston 33 Margaret St Henley Beach.

ARE YOU FINANCIAL? IF THERE IS A RED DOT ON YOUR JOURNAL WRAPPER YOU HAVE NOT PAID THIS YEAR 'S SUBS!

ON THE BENCH

Epiphytes

Bulbophyllum schillerianum, *Dendrobium bigibbum*, *D. lithacola*, , *D. Colonial Campio*, *D. Hilda Poxon*, *D. Aussie Child*, *Dockrillia Virginia Jupp*, *D. rigida*, *Liparis reflexa*

Terrestrials

Pterostylis abrupta, *P. anatona*, *P. collina*, *P. hians*, *P. laxa*, *P. longipetala*, *P. ophioglossa*, *P. procera*, *P. sanguinea*, *P. vittata*, *P. x furcillata*, *P. x toveyana* (Mentone), *P. Rogoff*, *P. Sentinel*, *P. Trunkfish*, *Spiranthes australis*.

The *Pterostylis anatona* from Eungella, was new to most of us; it looked like a version of *P. procera* with smaller, neater flowers and a labellum thrust well forward out of the flower. Both are examples of speciation of Autumn flowered species evolving from the Spring flowered *P. baptistii*. The amazing dwarf *P. hians* or yawning greenhood with its very open flowers on 3cm stems from leathery orbicular leaves was growing in sphagnum and had multiplied from last year. The *Dendrobium bigibbum* present varied in flower colour from softest pink to deep magenta... the first time we have seen such a range of these beauties.

PLANT COMMENTARIES N. Oliver & and L. Nesbitt

JUDGING

Terrestrial species :

- 1st *Pterostylis sanguinea* grown by G. Nieuwenhoven
- 2nd *Pterostylis reflexa* grown by M. Tiggeman
- 3rd *Pterostylis procera* grown by G. Nieuwenhoven

Terrestrial hybrids:

- 1st *Pterostylis x furcillata* grown by Les Nesbitt grown by
- 2nd *Pterostylis* Rogoff grown by Les Nesbitt

Epiphytic species :

- 1st *Liparis reflexa* grown by G & J Burford
- 2nd *Dendrobium rigidum* grown by G. Nieuwenhoven

Epiphytic hybrids

- 1st *Dendrobium Colonial Campio* grown by J & B Gay
- 2nd *D. Hilda Poxon* grown by J & B Gay

Plant of the Night *Dendrobium Colonial Campio*

POPULAR VOTE

Best Terrestrial *P. sanguinea*

Best Epiphytes *Dendrobium Colonial Campio* and *D. bigibbum*



LAST MONTH'S SPEAKER:

At the May meeting we enjoyed a photographic holiday in Victoria's Grampians National Park. (Not to be confused with the Grampians, the highest range in Scotland.) Our speaker Bob Markwick has been visiting this wonderful area for 30 years and the slide show included pictures taken over a long period.

The Grampians Range has been uplifted three times in the last 300 million years and after each uplift eroded away again.... we are well into the current period of erosion. Some parts of the Grampians have changed little over thousands of years but other areas have changed dramatically in the last hundred. The wonderful lakes for example which add so much to the beauty of the Grampians are all man-made. The town of Halls Gap was a sleepy village 20 years ago but has a busy shopping centre today. Fortunately building restrictions mean that very little new building can occur.

At times the area has been an 'island in the sea', but at present the Grampians is an island of 4 hundred million year old sandstone rock covered in native vegetation, in a sea of farmland. A high proportion of plant species are endemic to the 167 000 hectare park but not the orchids in fact strictly speaking there are no Grampians endemic orchids. There are however at least a hundred orchid species recorded for the area and there are several reasons for this variety the main one being the great variation in altitude, which means sub-alpine species like *Caladenia alpina* on the highest peaks and mallee type orchids like *Pterostylis planulata* on the lower rocky outcrops.

There are a range of swampy areas, fern gullies, woodland and heath, deep sandy soils, poor shallow soils over rocks and deep fertile soils in some valleys.

The Grampians represent the most westerly extensions of distribution for no less than 20 species which means also the closest these species come to South Australia. Many of the Grampians species once occurred in our South-east where they are now extinct so our best chance these days to see the spectacular *Diuris punctata*, or the delightful *Caladenia gracilis* is to visit the Grampians. Orchids flower in the Grampians during every month of the year but October-November is the best time to see the greatest variety of species missing from SA!!

PARKS OPEN DAY:

Many thanks to NOSSA members who staffed our display at Belair National Park on June 5th. The superb display using our new stand had some of Thelma's orchid art for sale. Certainly our best effort yet.

CULTURAL CERTIFICATE

Congratulations to Les Nesbitt who was awarded a Cultural Certificate for his pot of *Pterostylis ophioglossa* shown at the April meeting. More on this from Les in July Journal!

COMING FIELD TRIPS -JUNE AND JULY

20th June - Conservation Group weeding trip to Tailem Bend.

The *Pterostylis arenicola* site here has a large infestation of bridal creeper. Weeding will consist of dabbing poison with either weeding wand or brush onto the bridal creeper leaves. Weeding to be followed by an investigation of the local orchid population.

Meet: Corner of Dukes Highway (Tintinara Road) and Princes Highway (Meningie Road). Time: 10 am.

June 27th Warren Conservation Park for winter flowering orchids.

Meet: 10am at Kersbrook shop.

July 4th Mount Compass boardwalk. Conservation trip for cutting and removal of reeds, coral fern and some pruning of tea-tree. Waterproof boots required.

Meet: 10am at Mt. Compass shops

July 10th Halbury scrub. Conservation trip for spot weeding of bridal creeper. Winter flowering orchids.

Meet: 10am outside Council offices on Edith Tce.

July 17th Norton Summit Midwinter Mountaintop Special

Meet: 10am at CFS in Colonial Road. Left turn from Norton Summit road just past church, into Colonial Road.

July 18th Wongalere Girl Guide Centre. Conservation trip with TPAG for boneseed and bridal creeper weeding.

Meet: 10am at Wongalere. Drive around the reservoir side of Para Wirra Rec. Park, turn right into Bassnet Road. Cross South Para river, turn right onto Para Wirra road and gate is 500m on right.

Please contact Thelma Bridle (8384 4174) for any further details.



Welcome to new members

Mark Haese of Valley View
Roslyn Capel of Willoughby NSW and
Kris Kopicki of St Peters.

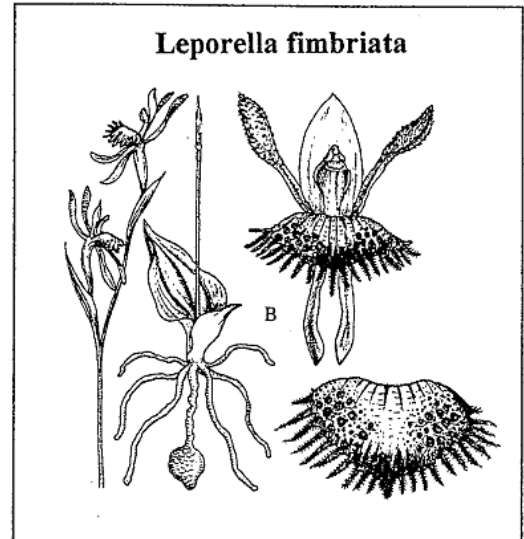
Sunny, warm and no rain - a surprising forecast for Anzac Day, but ideal for an orchid trip to Kuitpo Forest. A number of others thought so too, as 17 members met at Kangarilla and headed off to Knott Hill to look for *Eriochilus cucullatus* and *Leporella fimbriata*. Many of the Leporellas now grow on the opposite side of the firebreak to where they were a few years ago. This is a more open sandy area and as the flowers are often well hidden by appearing under shrubs, it was lovely to see large groups flowering in the open on 18 cm stalks.

There were many *Genoplesium* aff. *rufum* along the track, ranging in colour from dark maroon, maroon and green mixed to a single yellow-green albino specimen. One large population had stout 16 cm tall flower spikes with large numbers of flowers. *Caleana major* leaves were already 2.5 cm long, which some of us found surprising as this species does not flower until November.

We also found *Acianthus pusillus* in early flower, growing under the shelter of pine trees and many *Thelymitra* sp. leaves in the same area. *Pyrorchis nigricans* leaves were scattered and still quite small. We found very few *Eriochilus cucullatus* flowering at Knott Hill. Unfortunately the trip leader had not appeared, and as we didn't know where the pink parson's bands were to be found we decided after lunch to visit the Onkaparinga River Recreation Park.

Here we walked along the Echidna Track, situated on the northern side of the gorge. Those familiar with the area were able to point out to others the best areas for winter and spring flowering orchids, some of which grow here in abundance. We found large populations of *Eriochilus cucullatus* in flower, with up to 3 flowers per spike. A number had finished flowering, but there was still a good showing of white flowers combined with the early white flowers of the rare *Drosera praefolia*.

A few *Acianthus pusillus* were almost in flower here, *Genoplesium* aff. *rufum*, bi-coloured red and green were going over. *Pterostylis robusta* and *P. sanguinea* were forming buds while *P. nutans* was seen as rosettes only. Amongst the moss were many leaves for *Caladenia* sp., *Diuris orientis* and *Glossodia major*. Many *Thelymitra* sp. leaves were found throughout the bush. There were also many birds about and we sat watching golden whistlers, scarlet robins and others whilst discussing possible future field trips.



PTEROSTYLIS BRYOPHILA CONSERVATION

SPECIAL RECOVERY PLAN EXCURSION

Report by Thelma Bridle & Bob Bates

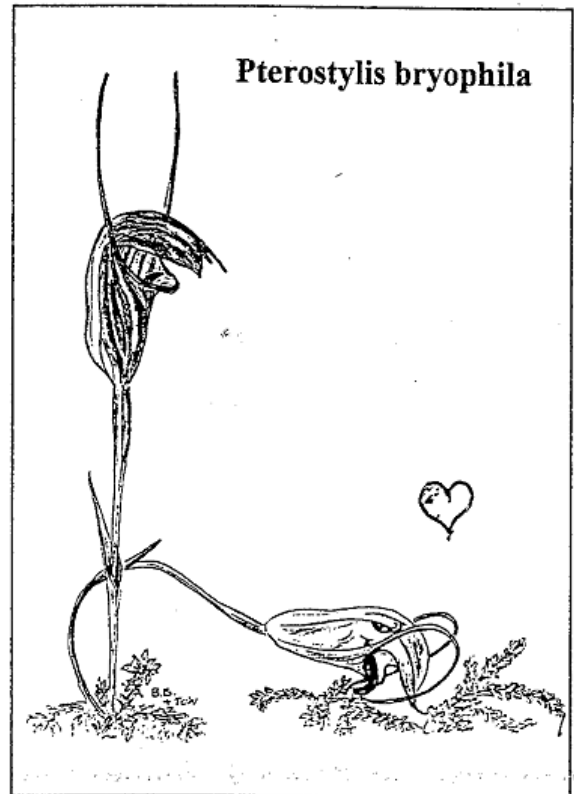
This excursion on Sunday May 30 was most successful despite the fact that we met in pouring rain and a howling gale. We drove through some violent weather to Hindmarsh Falls. It had been wet during our last visit in April today was even wetter but whereas there was no sign of orchids 8 weeks ago, mosquito orchids *Acanthus pusillus* were now in full flower all along the track to the lookout as well as plant of *Pterostylis sanguinea*, several *Pterostylis nutans* in bud and some sturdy *Pterostylis bryophila* found on the very edge of the concrete steps,

There were noticeably more flowers of this recently named species than last year. This location has been monitored by our editor for over 20 years and it was noted that the colony had shifted some 20 metres from the top of the falls to its present location presumably due to weed invasion nearer the Falls. As this was to be a working bee we removed large tussocks of *Dactylis glomerata*, a nasty introduced grass which was threatening the remaining plants.

The twelve NOSSA members present as well as visitors Ann and Brian Tindall from Victoria soon moved on to Mt Billy CP where the largest known population of this threatened species has been monitored since its discovery by NOSSA members almost 20 years ago. Lo and behold the rain stopped and we helped recovery team manager Doug Bickerton assess the population here, which is centred on the Mt Billy Creek.

After a fire here a few years ago the population declined to alarmingly low numbers and weeds were rampant but the vegetation has self managed and as the native vegetation has recovered so have the green hoods! We counted over 600 plants in flower which means a population of over 2000 *P. bryophila*.

In areas where *Acacia paradoxa* had been removed the species formed large colonies and as flowering plants extended right under the prickly Acacia we decided not to remove any more.



True to its name which means 'moss-loving' (see Thelma O'Neill's amusing illustration) the best flowering patches of *P. bryophila* were in regenerating moss amid the sedge *Isolepis nodosa* which affords flowers protection from kangaroos.

P. curta and *P. nutans* rosettes were also located amongst the large colonies of *P. bryophila* rosettes. It was pointed out that as *P. cucullata* was once collected here it would be an ideal site for re-introduction of that species. *Acianthus pusillus* was flowering well, some with very pale almost green flowers. *Leptoceras menziesii* was very scattered, with only a few leaves just showing. Fungi were quite numerous, no doubt stimulated by the heavy falls of rain in the past few days. Bridal creeper was still in evidence but not in such profusion, due to successful treatment with weedkiller over the last 2 years. An *Exocarpus cupressiformis* (cherry ballart), previously almost smothered by bridal creeper, is now parasitised only by mistletoe - a parasite on a parasite

There was little sign of rabbits and we suspect that the paucity of these rodents had a lot to do with the increase in green hoods. It was our prediction that *P. bryophila* will continue to increase here as the woodland opens out to reach maturity in about 10 years time and then stabilise provided that no further fires occur!

ANOTHER NEW ORCHID ADDITION TO THE NORTHERN LOFTY REGION

The Tothill Ranges are well known for their rare and beautiful plants. They are now part of a private reserve and since the sheep have been removed orchids are reappearing in greater numbers. Last year (1998) *Diuris behrii* was seen for the first time in 20 years.

An unexpected find was *Thelymitra benthamiana*! The leopard sun-orchid has never been seen north of Adelaide so this Tothills find extended its known distribution by about 100 km.

"WILDLIFE"

Cathy Warcup John Rainbird

You and your friends are invited to this wildlife exhibition at the Lombard Art Gallery 51a Magill Rd Stepney

Gallery hours Friday to Sunday 2 - 5 pm

Exhibition closes Sunday 27th June



CULTURE NOTES FOR AUSSIE TERRESTRIAL ORCHIDS

(These notes from Les and Kay Nesbitt's catalogue in 1981 are from the golden days of ground orchid cultivation in Adelaide! Eds.)

These orchids are adapted to a Mediterranean climate and are very easy to grow when their basic requirements are understood. In Adelaide they thrive under 50% shade-cloth on raised benches, provided they are allowed to dry out in Summer.

Australian ground orchids normally follow an annual growth cycle, comprising 6-8 months as growing plants under cool moist conditions and 4-6 months as dormant tubers under hot dry conditions. All species like good air circulation and will not thrive in a stuffy, humid atmosphere, especially if temperatures are high.

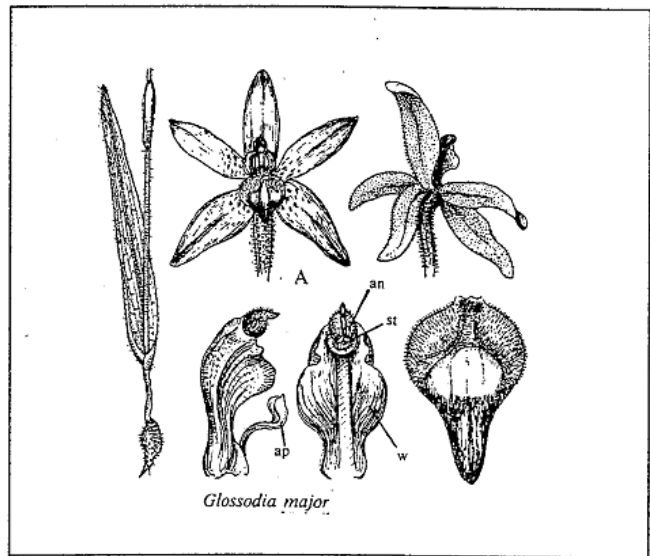
Some species prefer extra shade and do well under benches, others like more sunshine but most adapt to a range of light intensities. If stems are weak and spindly then increase the light. Spring flowered species may fail to open their flowers under low light.

Do keep soil moist at all times during active growth, watering lightly by hand.

This is necessary mostly in September-October, remember that in pots soil dries out more quickly than in your garden!

Slugs and snails love orchids and must be kept under control... galvanised benching is effective. Be careful with fertilisers because these orchids are easily burnt or killed by overuse. *Pterostylis* and *Diuris* are very hardy and even benefit from weak foliar feeds in early growth. Do not use fertilisers or insecticides on more difficult genera like *Caladenia* and *Thelymitra*. These species depend on symbiotic relationships with soil fungi and any chemicals can upset this balance.

The new tubers are produced in Winter and early Spring . Colony forming species multiply each year by producing extra or dropper tubers as many as ten per plant. The leaves dry up and turn yellow as the days get hotter and drier in late spring. After the leaves have turned brown let the pot dry out completely to dry up all old roots and

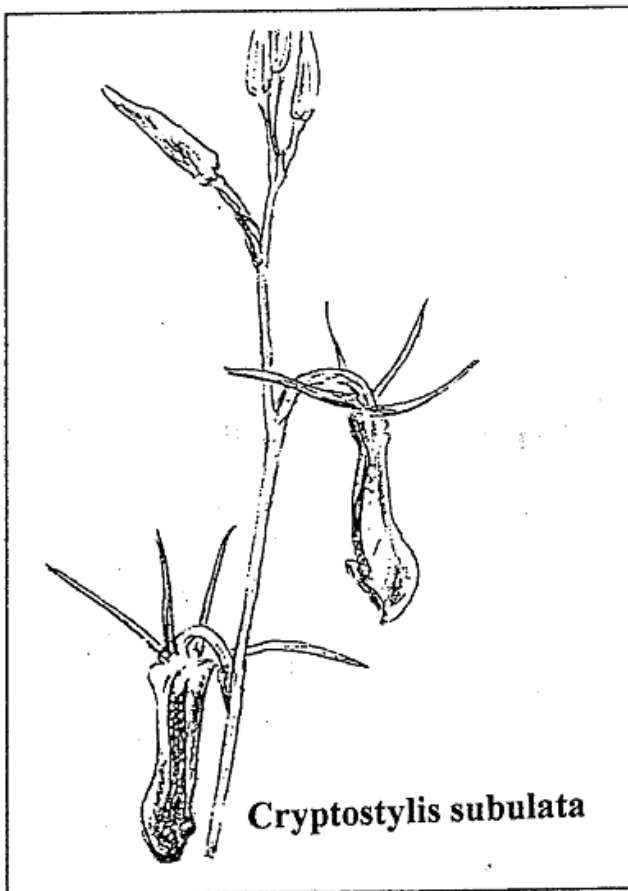
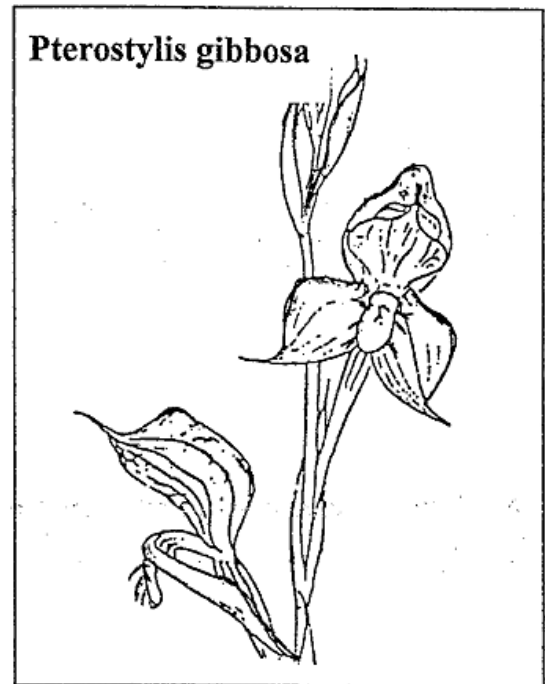


tubers otherwise they will turn into a soggy mouldy mess and infect the adjacent new tubers.

The pots can be knocked out and the tubers examined in summer without harm, in fact we find that best results are obtained if the tubers are re-potted in fresh soil each year. A suitable soil mix is 40% loam, 45% sand and 15% peat moss with a little blood and bone fertiliser added. Replant the tubers with the tops 20mm deep. Cover the soil surface with a mulch of pine or sheoak needles, chopped to 20mm long to prevent erosion.

Repotting is normally done in November, December and January. Keep the pots cool and almost dry until the end of February when they may be set out in their growing positions and watered lightly. The tubers of some species will rot if kept wet during the dormant period, others will produce plants prematurely which are then attacked by pests such as thrip and red spider and fungal diseases in the warm weather.

Each tuber sends up a shoot to the surface in Autumn and leaves grow rapidly in the late Autumn early Winter as the rains set in. *Pterostylis* are usually the first to appear in March, followed by *Diuris* in April, *Caladenia* in May and *Corybas* in June-July. To increase plants of non-colony species you will



need to sow seed on the tops of pots and hope that you get seedlings. Alternatively after plants have flowered or towards the end of the growing season you may tip out the plants carefully, remove the new tubers for summer storage and replant the plants with old tuber attached, quite often the plants produce one or more new tubers !!!

AUSTRALIAN NATIVE DENDROBIUMS 29

DENDROBIUM SMILLIAE F. MUELL

BY MARK PHILLIPS

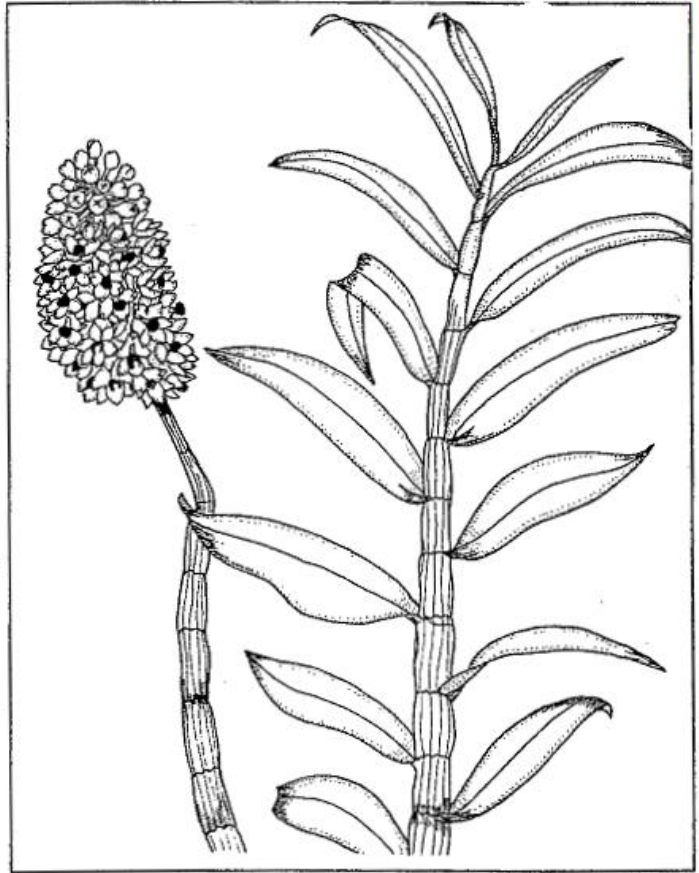
This distinctive, attractive and colourful species was named in honour of Mrs EJ Smillie in 1867 from plants collected from near Rockingham Bay by explorer Jim Dallachy. Often known as the Bottlebrush orchid because of the colourful bottlebrush-like, dense flower spikes.

This epiphyte or lithophyte forms large circular clumps of erect, stocky plants. Leaves are leathery and usually about 20cm long alternating up the spindle-shaped pseudobulbs. The flowers are waxy, to 25mm long, greenish and pink with a dark green shining labellum apex.

Common in New Guinea extending across the Torres-Strait islands to as far south as Townsville in lowland forests or the lower slopes of mountains in monsoon thickets or rainforest margins. Usually found in upper branches of trees but has been seen on large boulders and even in mixed clumps with other orchids in trees hollows.

The blooms provide nectar for honeyeaters (bush canaries) which hover in front of the flowers as they effect pollination.

Curiously the leafy pseudobulbs defoliate just before flowering. Easily grown in tropical areas but even a heated glasshouse may not be good enough in Southern areas. Must be kept completely dry in winter and watered heavily in Summer.



ORCHID QUOTES FROM ROGER RANKIN

Diplomacy means letting someone else decide that your orchid is best.

It is better to fill a space with ten flowering orchids than twenty you can not flower!

FOURTH AUSTRALASIAN...NATIVE ORCHID CONFERENCE
MELBOURNE: 5th - 8th OCTOBER 2000