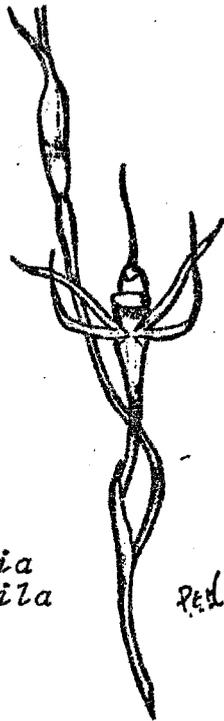


NATIVE ORCHID  
SOCIETY  
*of*  
SOUTH AUSTRALIA



*Caladenia  
leptochila*

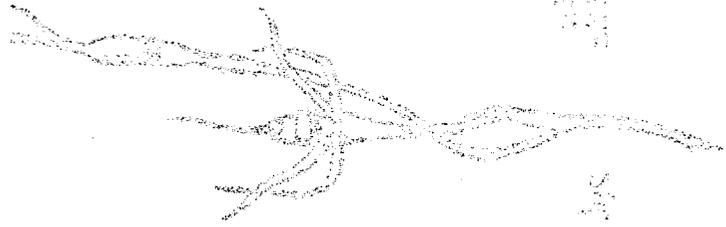
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MAY 1980

MAJINE ORCHID  
SOCIETY

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MAJINE ORCHID  
SOCIETY

10



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

JOURNAL

Volume 4, No. 4

May, 1980

Registered for posting as a publication Category B. Price 40c

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NEXT MEETING.

When: Tuesday, 27th May, 1980 at 8.00 p.m.

Where: St. Matthews Hall, Bridge Street, Kensington.

Why: Guest Speaker - DR. RUSSELL SINCLAIR will talk on "Ways epiphytes deal with water stress."

Plant display and commentaries, popular vote, library, trading table, raffle and general chinwag.

LAST MEETING.

The A.N.O.S. slide programme consisted of magnificent close-up shots of the flowers of mainly epiphytic species. Many of these species are not in cultivation here. Habitats range from Tasmania to Northern Queensland. A number of the orchids shown have very tiny flowers yet the slides were so clear that the uninitiated could be excused for thinking that the flowers were several inches across.

POPULAR VOTE.

<u>Epiphytes:</u>	( <u>Dendrobium bigibbum</u> var <u>bigibbum</u> )	Jean Attenborough
(Equal first)	( " " " )	Jim Simmons
<u>Terrestrials:</u>	( <u>Spathoglottis plicata</u> )	Audrey Howe
(Equal first)	( <u>Leporella fimbriata</u> )	Phillip Ekers
	( <u>Pterostylis baptistii</u> )	George Nieuwenhoven
	( <u>Pterostylis obtusa</u> )	Bob Bates

PLANTS ON DISPLAY.

As is usual in Autumn the epiphytes, led by the strikingly beautiful Dendrobium bigibbum, outclassed the terrestrials for appeal and number of plants. More terrestrials are re-appearing on the benches each month, however the position will soon be reversed. The range of native orchids exhibited at our meetings is increasing and so is the spread of flowering time as collections mature and growers experiment with different cultural practices. Three years ago you would not have seen a greenhood in flower at an April meeting of any orchid society in Adelaide.

Dendrobium mortii 4F, Den. bigibbum var bigibbum 4F, Den. Verninha F, Den. Hilda Poxon F, Den. striolatum F, Liparis reflexa 2F, Liparis reflexa var parviflora F, Oberonia palmicola, Sarcochilus australis F, Spathoglottis plicata 2F, Prasophyllum nigricans 2F, Erichilus cucullatus 3F, Leporella fimbriata 3F, Pterostylis revoluta F, Pt. obtusa 2F, Pt. baptistii F, Pt. ophioglossa F, Pt. angusta B, Pt. aestiva Leaf, Pt. longifolia Leaf.

Only one plant of the seedling competition Dendrobium Ellen X Den. falcorostrum was brought in. This has made very good growth in the 18 months since purchase for Reg Shooter. Where are the other plants??

RAFFLE PRIZES.

Dendrobium aemulum, Den. falcorostrum, Diuris longifolia.

BEGINNERS LUCK.

Two of the members who joined at the last meeting were the successful winners of Raffle prizes. Mr Bob Edwards and Mr & Mrs Penno, who did not own an orchid previously, were successful in winning Dendrobium aemulum and Diuris longifolia.

NEW MEMBERS.

Mr. R.J. Edwards	Oakbank	Mr. P.R. Robjohns	Paradise
Mrs W.J. Folks	Whyalla Playford	Mr. W. Stoutamire	Akron, Ohio, U.S.A.
Mrs J.M. Jenks	Upper Moutere N.Z.	Mr. I. Walton	Walkerville
Mr & Mrs R.M. Penno	West Lakes Shore	Mr. J.Z. Weber	Adelaide

COMMITTEE MEETINGS.

Future meetings of the Management Committee will be held on the Friday next following the monthly meeting of the Society.

ARE YOU FINANCIAL ? ?

or

ARE YOUR SUBSCRIPTIONS PAID ??

This is the last journal to be sent unless your subscriptions are paid.

FIELD TRIP.

A trip to the Halls Gap area, in conjunction with the Victorian Group of A.N.O.S., is planned for the long week-end in October this year.

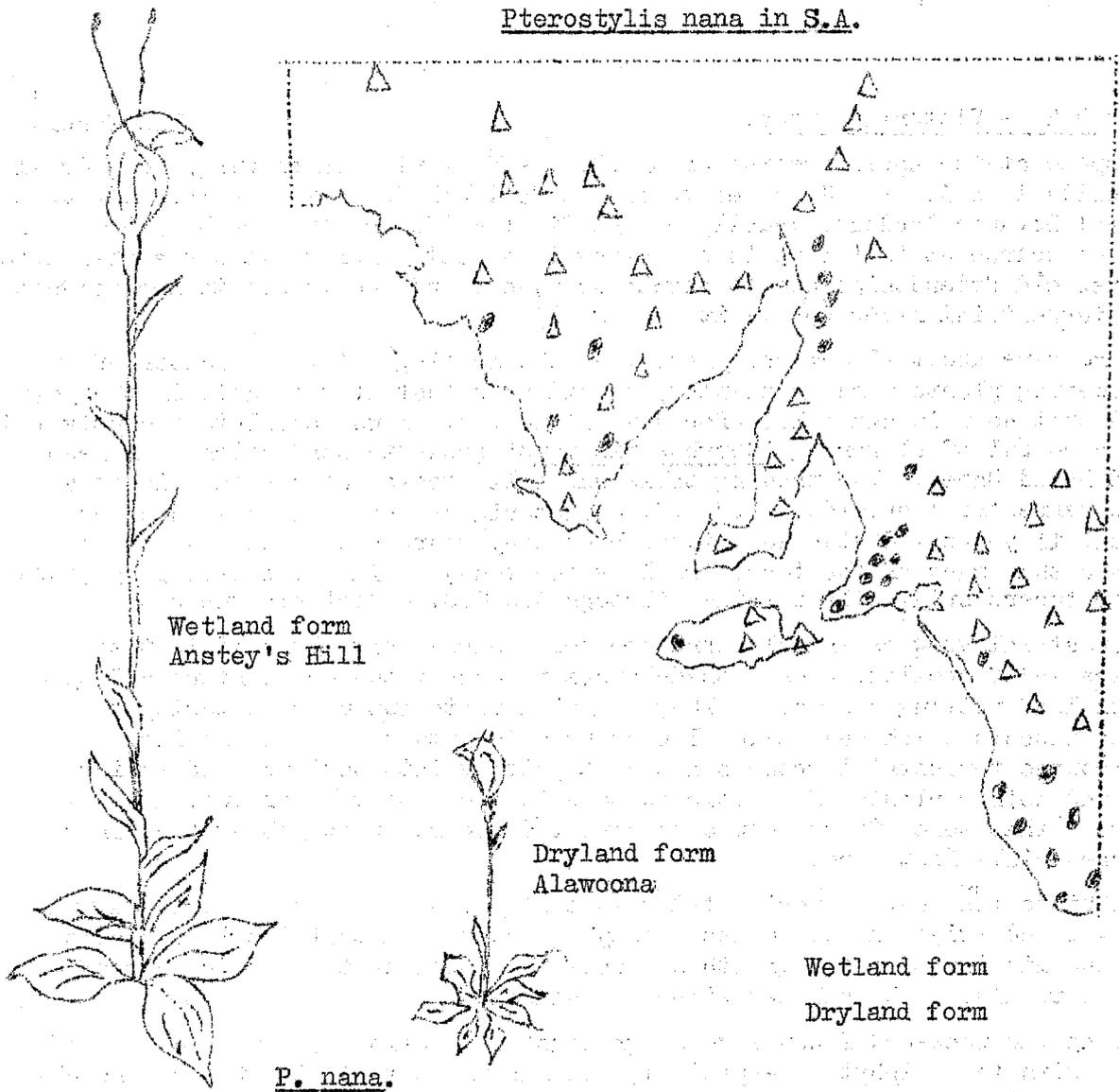
Further information will be available next month.

THE TWO FORMS OF PTEROSTYLIS NANA IN SOUTH AUSTRALIA.

R. Bates.

Pterostylis nana R.Br., the dwarf greenhood, is a common winter and spring flowering orchid in most of South Australia inside the 250 mm isohyet.

There are two distinct forms which remain true in cultivation. People familiar with the species in the Mount Lofty Ranges know it as a plant of damp, well shaded areas. The flower stem is usually about 10 cm. tall. The leaves are mainly crowded near the base of the stem but in very shady conditions may extend up, as in the W.A. form 'pyramidalis'. The flowers on this form have long filiform sepal tips much higher than the galea.



The second form, which is still easily recognised as P. nana is a plant of semi arid areas, of the mallee and of harsh limestone country. In the sub 250 mm rainfall of the Gawler Ranges it is one of the commonest orchids, found on the bare rock outcrops where in full sun it thrives in soil 1-2 cm deep over red granite. This form is only about 4-5 cm tall, with a miniature rosette of leaves placed flat on the ground as in Pterostylis of the 'Rufa' group. The tiny flower is green and brown with short sepal tips. It can complete its annual above-ground cycle in three months, the leaf

THE TWO FORMS OF PTEROSTYLIS NANA IN SOUTH AUSTRALIA. (Continued)

rosettes appearing in June, the flowers in July, with fat seed pods by the end of August.

I have grown this dry-land form in a pot with the larger wet-land form and had them both flowering together in August, the 5 cm dry-land form completely dwarfed by its taller 'brother' which carried its flowers on leafy stems up to 15 cm.

I would not recommend P. nana in cultivation as its close ally P. concinna gives a much better performance.

A.N.O.S. - Victorian Group.

Les Nesbitt.

I spoke at the April meeting of A.N.O.S. - Victoria, on growing terrestrial orchids in S.A. The Group meets in the National Herbarium in the Melbourne Royal Botanic Gardens, usually on the first Friday of the month. If you are in Melbourne at that time this meeting is a must. For me it was a chance to renew old friendships and to psyche up myself and the locals to new heights of terrestrial fever. (or is it 'depths'?)

There were about 70 members present at the meeting. A large number of flowering plants were on display, considering that it was early in the year and that no rain had fallen for several months. I was completely captivated by a potful of flowering 'Corybas hispidus' grown to perfection by Eileen and David Dawes. The trading table was well stocked with both epiphytes and terrestrial orchids. A.N.O.S. - Victoria has been in existence for about 11 years and started a tuber bank many years ago. You may not be aware that many of the terrestrials grown today in Adelaide were propagated from tubers originally obtained through A.N.O.S. - Victoria tuber bank.

Terrestrial growers in Melbourne use very coarse gravelly sand in their mixes and fibreglass roofed shadehouses to combat the wet winters and control leaf rotting problems. They do not have to put up with thrip, the tiny insects which devastate flowers here in Autumn and late Spring. Melbourne terrestrial growers are just getting into serious seed sowing around mother plants after some success in the past year or two. We all agreed that more effort should be directed towards propagating the rarer terrestrials from seed.

The Victorians have experimented with soil pH, and the use of crushed gum leaves and twigs in soil mixes. They are convinced that the 'gum rubbish' in the mix improves the growth and health of some of the harder to grow terrestrials, such as Thelymitra and Caladenia.

During the week-end I saw several growers' collections and was most impressed with the epiphytes, especially the magnificent plants of the Sarcochilus species which are so difficult to grow in Adelaide. I am convinced that we need much more shade, shelter and humidity to succeed with these. Misting sprays are used in Melbourne glass houses so are absolutely essential here. Adelaide water with its high salt content is a major problem to be overcome if tank water is not available.

A.N.O.S. - Victoria put out a very good monthly bulletin which is well worth the annual subscription. If you wish to join, send \$4.00 to their Treasurer - Velda Palazzi  
6 Carnarvon Street  
EAST HAWTHORN Vic. 3123.

GROWING ORCHIDS IN TASMANIA.

Peter Hornsby.

Just over 30 years ago, the Editor of the "Australian Orchid Review" asked the Rev. Rupp if he would write an article on the "Orchid Garden" belonging to Neil Burrows of Launceston, Tasmania. At the time, Mr. Burrows was developing a small plot, 70 square feet in area, as an orchid garden, and the article was based on the answers to a series of questions posed by Rupp. Many of the points made are just as valid today, so the questions and answers have been resurrected and are given below:-

1. When did you begin to cultivate native orchids? - In 1939, first of all in tins. My orchid bed was started in 1942.
2. Are they all from what we might call the Launceston - Tamar River area? Most of them come from this area: a few come from more distant places; e.g., Dendrobium striolatum from the East Coast, and Pterostylis cycnocephala from Stanley, in the opposite direction.
3. Do they include species from both mountains and lowlands? Yes.
4. When preparing your orchid bed, did you use any special methods? Yes. I placed on top of the old garden soil a 2 inch layer of small pieces of brick, basalt rock, charcoal, etc., to provide drainage, and to separate the old soil from that in which my orchids are planted. Above this "drainage layer" from 4½ to 6 inches of bush soil was added, and the orchids were put into this. For orchids which like wet conditions, like Thelymitra venosa and Cryptostylis subulata, I placed a sheet of iron with a few holes in it, immediately under the drainage layer, and this portion of the bed I made perfectly flat.
5. Do you always bring some of the earth the orchids were growing in when transplanting them from the bush? - No, not always. I use either soil from the same area or a mixture of soils from different localities. The orchid bed has many pure soils and soil mixtures; bush soils only are used.
6. Do different species require different kinds of soil? - Most of our orchids will grow in the same type of soil, particularly in brown iron-stone. Many of the Greenhoods are not particular, and do well in a variety of soils. Others, however, are not so adaptable. Pterostylis grandiflora and its namesake Thelymitra grandiflora, for instance, will thrive only in chocolate ironstone soils.
7. What have you found the easiest species to grow? - Pterostylis pedunculata, curta and nutans; Caladenia patersonii, clavigera and carnea; Eriochilus cucullatus.
8. On the average are the flowers in your orchid bed larger than, smaller than, or the same size as those in the bush? - On the average, species of Pterostylis are larger; but most of the others are about the same size.
9. Can you give us a list of the orchids you are growing successfully? Thelymitra ixioides, nuda, grandiflora, pauciflora, retracta, rubra, venosa and cyanea; Diuris maculata and pedunculata; Prasophyllum fuscum and patens; Chiloglottis reflexa; Aasianthus exsertus and reniformis; Eriochilus cucullatus; Caladenia patersonii, clavigera, angustata, dimorpha and carnea; Glossodia major; Cryptostylis subulata; Pterostylis concinna, curta, nutans, pedunculata, foliata, decurva, grandiflora, longifolia, and parviflora.
10. Have you ever tried to grow the Hyacinth orchid, Dipodium punctatum? Yes, but I have had no success.

GROWING ORCHIDS IN TASMANIA.

(Continued)

11. Are the plants in your orchid bed reproducing themselves, either by seed or by the vegetative method? - Species which are found growing in "colonies", e.g., Pterostylis curta, P. pedunculata, etc., are rapidly increasing by the vegetative method. Other orchids, such as Glossodia and Diuris, also increase, but very slowly, by this method. My orchids also produce seed, but up to the present there has been no increase in plants by this means.

Apropos question 11, Rupp mentioned earlier that Burrows had not at that stage succeeded in raising native orchids from seed, but he was persevering. At the time of writing, the orchid garden had been under way for some five years, so it was reasonably well established.

The grower concerned is now no longer a "young enthusiast", does anybody know:-

- (a) Is Mr. Burrows still with us?
- (b) Did he succeed in raising orchids from seed?
- (c) What is the fate of his orchid garden now?

Perhaps some of our colleagues in Tasmania could supply the answers? With such an industrious beginning, it seems certain that succeeding episodes could be just as interesting.

\* This is an updating of an article that first appeared in the "Australian Orchid Review (1946), 11, 73-74, under the title "An Orchid Garden in Launceston, Tasmania", by H.M.R. Rupp.

CULTIVATION OF CALADENIAS FROM SEED.

R. Bates.

The recent progress in flasking of terrestrial orchids does not appear to have extended to the Caladenias (Western Australia's major orchid genus.) Fortunately the Caladenias are easy to grow by a far simpler method:-

Collect seed pods when they have begun to turn yellow (Just before they open). This is tricky to achieve in the bush and it may be a good idea to use a rubber band to keep in place a small paper bag over the pod to save the seeds. It is easy enough in the orchid house as this ideal picking period lasts about 7 days. The pods are placed in a sealed envelope in a dry place and forgotten until the next March or April.

The pods are then broken open and the seeds spread on top of a pot which contains tubers of any common local non-colony forming Caladenias. (Preferably however a species similar or the same as the one you are seeding). Terracotta pots are ideal. It is best to use a gravelly soil straight out of the bush. The seeds are then covered with bush leaf litter to a depth of about 1-2 mm. It is best to use a leaf litter made up of uniform very small leaves like chopped Casaurina or even pine needles.

The young leaves of the Caladenias already in the pot should not yet have emerged when you sow the seed.

The importance of cleanliness at all stages must be stressed. Wash hands with germicide before collecting pods and before sowing seed as well as when putting soil in pots and handling tubers. Dirty hands are the commonest way that pathogenic fungi are introduced to pots.

Hopefully natural rainfall will keep the leaf litter damp. Complete drying out to the top of the soil on which you sowed the seed would be fatal

CULTIVATION OF CALADENIAS FROM SEED. (Continued)

to the seedlings. Water by hand if drought conditions prevail.

Do not sow seed which is white or yellowish in colour as it is either unripe or not fertile. Caladenia seed is brown or black. The tiny seedling leaves will appear about late August.

Last year I had the thrill of seeing a pot of Caladenia rigida, a rare South Australian endemic) with 100 seedlings from 3 seed pods sown and 30 seedlings of the almost extinct Caladenia gladiolata from a single pod. Theoretically with some rare species, one grower could produce more plants in a single year than there were in the bush.

This year I have sown some seed of some very unusual home made crosses, I was surprised that seed was even set with some of the inter-section crosses. Only time will tell if it was fertile.

The most important points again:-

1. Cleanliness at all stages.
2. Use of fresh bush soil for each sowing.
3. Leaf litter to cover the seed - not soil.

\* This article first appeared in 'The Official Bulletin of the W.A. Native Orchid Study and Conservation Group', June 1979.

PLANT OF THE MONTH

G. Nieuwenhoven.

PTEROSTYLIS VITTATA.

Pterostylis vittata, commonly known as the 'Banded Greenhood', occurs in Western Australia, Victoria, Tasmania and South Australia.

A widespread species which occurs on the tops of hills rather than in the shaded valleys. Non-flowering plants form a rosette of leaves, flowering ones form an upright stem with several lance-shaped leaves clasping the stem. It forms a few (approximately 6) leaves before starting to produce the red and green slightly nodding flowers.

The plant is very similar to Pterostylis longifolia but the flowers are chunkier while the Pterostylis longifolia flowers are wholly green. They are often found in the same location and in fact on many occasions I have found them growing side by side. It is still a reasonably common species and seedlings can often be seen growing around mature specimens.

It has a large (2.5 cm) round but slightly flattened tuber. The species is often brought into the meetings at this time of the year and will flower for two or three months progressively.

Although common enough in its natural habitat it does not seem to survive for many years in cultivation, so far the secret of survival has eluded most growers, including the more experienced ones. More success is probably obtained by using clay pots as this species does not like wet or soggy conditions. The soil I use now is straight hills crumbly loam with no sand or peatmoss added. In fact the kind of soil where they naturally occur is probably quite suitable. After your plants have been repotted in early summer top the pots with some partly decayed gumtree litter and sow the seeds into this about the end of April or early May, depending on whether your area has had opening rains, with luck seedlings will appear in springtime and this way perpetuate the plants in your collection, in fact it is the only way if you want to produce plants in any number as it only produces one new tuber each season.

FIELD TRIP TO COX'S SCRUB CONSERVATION PARK. - 3.5.80 Peter Hornsby.

This was scheduled as a gentle afternoon trip to Cox's Scrub and the weather turned out an autumn best; fine and warm with plenty of blue skies. We met at Ashbourne, where our Secretary, Roy Hargreaves, was observed carefully stripping the bark off an old tree. Apparently he had forgotten his lunch and was hopefully searching for witchety grubs!

Eventually eight carloads made their way to the gap in the hedge that marks the entrance to the Park. The first to catch our eye were the Banksias in full bloom, including both colour forms of B. ornata and the smaller B. marginata. The start was slightly delayed while a group of us removed an embryo colony of scoursobs, but it did allow the remainder to locate our first orchid in flower, namely Leporella fimbriata. During the course of the afternoon we found them in two separate locations, both more open sandy patches where the mallee had given way to low vegetation roundabout 50 cm high. We also found evidence of newly emerged basal leaves of Lyperanthus nigricans.

Next we moved to the 'top' of the hill where we found an extensive patch of Eriochilus cucullatus, Parsons Bands, in flower. The largest of them were much photographed by the time we moved on.

It is interesting to recollect the rainfall records this year. It rained in Adelaide on December 29th, 1979, and from then until mid-April, only 6 mm were recorded. However, by the end of April a further 68 mm had been recorded. The picture would have been very similar at Cox's Scrub. Both of the autumn flowering species we had recorded share a common feature: both put up a flowering stem before the main leaf develops. To achieve this they presumably utilise most of the energy stored in the previous year's tuber, and so are largely unaffected by the late summer conditions. The less important feature, that of developing the leaf, whose main function is to replenish the tuber, can be left as late as possible, until the time when conditions are more conducive. This, and the prevalent conditions, probably also accounted for the very small number of leaves, signifying non-flowering plants, found on this occasion compared with our visit in August 1977.

We followed the track down the hill through the mallee scrub. On the way we discovered an occasional Thelymitra sp. Their positions were signalled by the previous year's dried stalk, and at its base a newly emerged leaf. We even found specimens of T. antennifera with leaves almost fully developed. It is remarkable how the spring-flowering Thelymitras were in evidence, while the winter-flowering species, like Acianthus exsertus and various Pterostylis for example P. nana, had still to appear. It seems that both A. exsertus and P. nana are far more susceptible to climatic conditions during their growing period than for instance L. fimbriata and E. cucullatus.

Diligent searching of the trackside failed to produce any other orchids, though our 'professional' for the day Enid Robertson, and guest Anne Prescott, found plenty of other species to attract their attention. In fact it was at the turning point of our walk that Enid found our first Prasophyllum nigricans - a specimen long past flowering and with well-developed seed pods - a feature that led Enid to comment of the dearth of developing seed-pods on the E. cucullatus we had seen.

Having satisfied ourselves that we had found all that could be expected, we made our way back to the cars. On the way Enid snatched a quick rest at the trackside, only to nearly sit on a perfect specimen of P. nigricans in full bloom - thereby verifying the assertion that the only successful way for locating them is to get down to their level. In all then we had quite a rewarding day.

Orchids seen in flower:-

Eriochilus cucullatus, Leporella fimbriata, Prasophyllum nigricans.