

## Newsletter

Number 26, June 1988.  
Editor: Ian St George,  
45 Cargill St. DUNEDIN.



### Editorial

Enclosed are the badges if you ordered them - if you did not they are very handsome, and there are plenty left. Price: a mere \$5 - why not take a few and sell them at the next local orchid society meeting? Or give them to friends? The sweatshirts and T-shirts either have been, or are about to be mailed.

All quiet in the south: we envy the year-round appearance of orchids in warmer environs in the north, but we do have time to get our slides in some semblance of order during these long, daylight-saved evenings by the fire, and we can try our hands at drawing.

I would welcome drawings. They should be black ink on white paper for adequate copying in the *Newsletter*.

### Notes

- ◆ You were wondering just exactly where the vandalism took place that Doug McCrae wrote about in the last issue? it was Rainbow Mountain.
- ◆ An Iwitahi participant left a grey/silver windbreaker jacket behind - the owner may retrieve it from Trevor Nicholls, 33 Hinekura Ave, Taupo.
- ◆ Trevor writes: "Who needs to travel 40km to see rare native orchids? In early January. I was clearing the odd weed from under the rhodos in the garden. There I came across a colony of about sixty *Gastrodia minor* and one *G. cunninghamii* with seed heads. I will be watching out for them at the end of this year to see if they come up again, and to catch them in flower". *G. cunninghamii* reappears each year under rhododendrons in the Dunedin Botanical Gardens too - Ed.
- ◆ Lyn Young, Mosgiel, writes about Te Anau orchids: "This was our most disappointing season ever. The December 1987 visit found the plants several weeks later in development than in the past. Most had not even reached the bud stage whereas in the past they were mostly flowering. The plant numbers also seemed very sparse compared to previous trips. We determined to return in February to check our observations and hopefully to find some plants in flower, but February 1988 was a disaster as an orchid expedition. Probably owing to the unsettled dry weather in the area, everything was past and the forest was exceptionally dry. Moss banks, usually sopping wet, crunched underfoot. It felt like walking on Skippy Cornflakes. The orchids had few seed heads - we estimate only 1094 of usual expectations. Of those we did find, *none* contained viable seed, only wizened heads, malformed and empty."
- ◆ Bev Woolley of Hamilton tells me the *Corybas* found in the Maratoto Valley was *Corybas aconitiflorus* - in July 1987.



*Calochilus robertsonii*

Iwitiaki 8/12/85

◆PJ de Lange writes "Yes I have seen both *Corybas* - the *C. trilobus* form in the December Newsletter (WAIK 6202 preserved); I thought it was a form of *C. acuminata*. And Bruce Irwin's one at Te Kauri S.R. on Aotea Sandstone - small red flowers and green dorsal sepal." *Any other observations?* - Ed.

◆Bob Goodger notes that in recent Newsletters names from the provisional checklist are being used. As this list has a very limited circulation at present, he felt that currently accepted names from *Flora II* should be used in preference - if the new names are essential then the accepted names should follow in brackets. *This makes very good sense - contributors please note. The new checklist will, we hope, be printed later this year In a book planned by NOG members. Watch this space - Ed.*

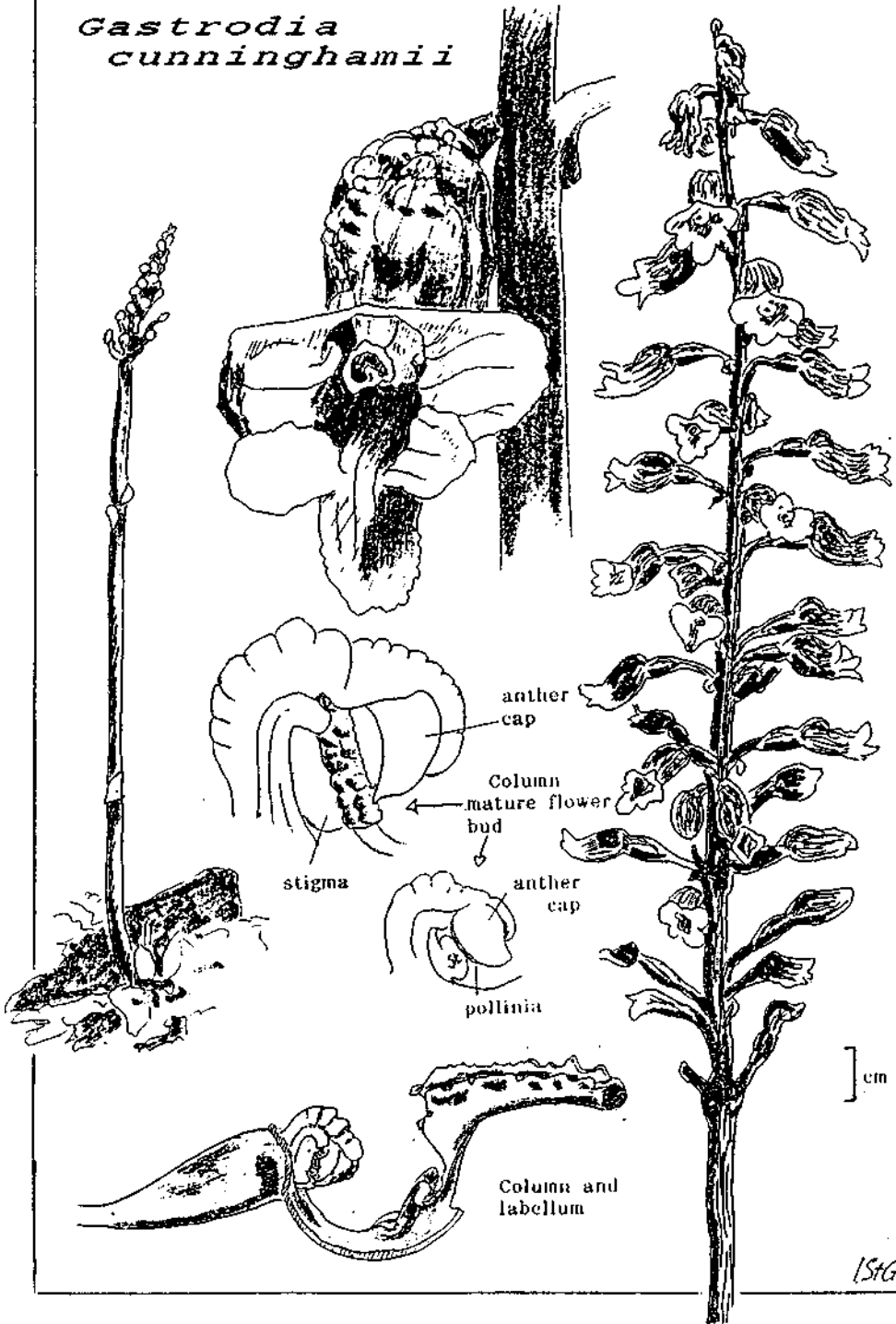
◆Bob has looked at the host trees of perching orchids - and reports (from King Edward Park at Stratford on 2 March) "in an old oak *Earina mucronata*, *E. autumnalis* (flowering) and *Dendrobium cunninghamii* in large clumps. We also saw *E. mucronata* and *E. autumnalis* on elm, chestnut, macrocarpa, pine, mamaku, rimu and miro. Have also seen *E. mucronata* on other punga species, rewarewa, kauri, matai, schist rocks and limestone. *E. autumnalis* on various punga species, rewarewa, matai, rimu, tawa, schist rock, limestone. *D. cunninghamii* on kauri, rewarewa, mamaku and other punga species, matai and miro. *Bulbophyllum pygmaeum* on rewarewa, kauri, tawa, and in a couple of places in the kaimais it is on practically every shrub and tree. *B. tuberculatum* on rewarewa, tawa, and kahikatea. Perching orchids grow from ground level to so high in the forks of kauris and other large podocarps that you need binoculars to see them. Over the years we have seen a number of perching terrestrials - i.e. *Corybas*, *Pterostylis*, *Thelymitra*, *Chiloglottis* and *Microtis*.

◆*I have seen all the five common perching orchids (not Bulbophyllum tuberculatum of course) on both sycamore and macrocarpa at Martin's Bay In Fiordland. On the other hand, Earina mucronata (on schist rock) is the only one I have seen in the Wakatipu district, far from the sea - Ed.*

◆The *Orchadian* (the journal of the Australasian Native Orchid Society) has a new editor - Noel Grundon, 4 Jean St, Toowoomba, Qld 4350, Australia - and he seeks contributions. He would consider original articles of a scientific nature in any branch of the biological sciences; original articles of a general nature dealing with culture, conservation, hybridisation; letters to the editor; news of events and activities (including Club activities) which would be of interest to the greater membership of native orchid growers; and all or part of original articles reproduced with the permission of the author(s) and publisher of the journal in which the article appeared. *NZNOG authors seeking a wider Australasian audience should note that publisher's permission is not needed for material that has appeared in our Newsletter, though we would, of course, appreciate acknowledgement - Ed.*

◆Do you like to read reviews of new orchid books? Itch to get your hands on papers like "Fertilidade de cruzamentos e relacio filogenetica entre algumas especies do genero *Cattleya* Lindl." or "On the fertilisation of *Gastrodia elata*" or "Symbiotic germination of *Spiranthes sinensis* associated with some orchid endophytes"? Want to hear about proposed orchid field trips to exotic places? The Royal Botanic Gardens, Kew sends us the *Orchid Research Newsletter*, a feast of such information. We also receive the *Journal* of the Native Orchid Society of South Australia, and the *Bulletin* of the Western Australian Native Orchid Conservation and Study Group. If you are Interested in seeing any of these let me know and I will send copies - Ed.

*Gastrodia  
cunninghamii*



1 cm

1866

**NZ native orchid mapping scheme**

I have included with this *Newsletter* traced reductions of the new Ecological Regions and Districts Maps (the originals are large, expensive and would not photocopy clearly). Although the boundaries of regions usually follow geographical features, they may not always be easy to determine in the reductions; If you are not sure which region contains the orchid locality you want to report, please give a standard map reference.

I ask you now to begin orchid mapping in earnest, with the winter to fill in past records, and the new orchid season to record this year's finds. The full Instructions are in *Newsletter* 24. Do record *all* orchid sightings, not just the rarities - and If you are using the original maps, please record by *region*, not by district.

I have made application to Lottery Science for funding for the second year of the mapping scheme.

Bev Woolley writes, "...the last paragraph on unidentified orchids alarms me (and others) considerably, if those who receive the *Newsletter* are not able to identify orchids, it is possible that by asking them to remove plants for identification they could be being asked to remove the only examples of plants in the area! Surely it would be better to leave the plants alone, mark the spot in some way and refer the reference and site to a specialist who could examine the plants in the field?.... Please - let us leave the growing plants where they are". *You are right, Bev: the idea seemed a good one at the time, but yours is better - Ed.*

**Symposium on floras and herbaria: Botany Division DSIR  
Lincoln, 21-25 November 1988**

If you would like to be at the formal opening of the herbarium extension, the launching of *Flora of NZ*, vol 4, the Inaugural AGM of the NZ Botanical Society, lectures, workshops, or the Weed and Wildflower Show, write to Flora Festival, DR PJ Garnock-Jones, Botany Division DSIR, Private Bag, Christchurch.

**Wild orchids tour leaves Christchurch, 28 November 1988**

Southern Heritage Tours Ltd (PO Box 6314, Dunedin) takes a ten day Wild Orchids Tour from Hanmer Springs, to Westland, back over Arthur's Pass to Broken Hills, to Shag Point, Dunedin, the Catlins, Stewart Island, Te Anau, the Eglinton Valley and Milford Sound, visiting en route some of the finest accessible populations of South Island orchids. Departure from Christchurch Monday 28 November 1988. Cost: \$1695 with twinshare and private facilities. Southern Heritage leads several other nature Journeys - contact them direct.

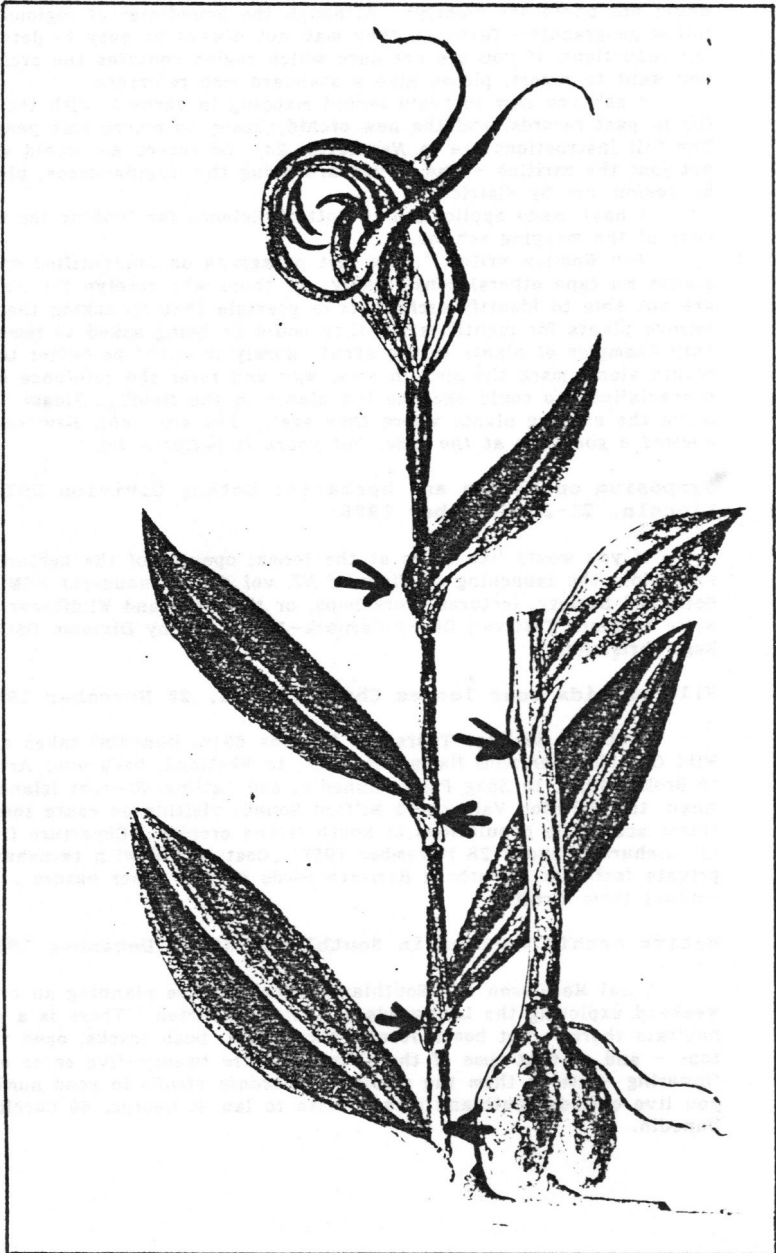
**Native orchid weekend in Southland, 10-11 December 1988.**

Coral Mathieson and Southland associates are planning an orchid weekend exploring the Longwoods area near Riverton. There is a range of habitats there - wet beech forest, clay banks, bush tracks, open tussock tops - and at that time of the year there are twenty-five or so orchids flowering - among them the elusive *Townsonia viridis* in good numbers. If you live outside Southland please write to Ian St George, 45 Cargill St, Dunedin.

Articles

**Experiments with *Pterostylis oliveri***

by ED Hatch, Laingholm, Auckland.



On 16 February 1966 I received from Arthurs Pass three flowering plants of *P. oliveri* which had been pulled from the soil and had no tubers. I removed the flowers for dissection and laid the remains horizontally on a sterile bed of wood mould - the well rotted debris from the base of an old kauri stump - covering the stem lightly but leaving the butt and the tip of the stem and the large leaves, exposed. I kept them damp (not wet) and by the beginning of April the visible portions of the plants had shrivelled and broken away.

Removing the layer of mould I found that each node of the stem, opposite the axils of the leaves, had produced a descending rhizome 3-4cm long with a terminal tuber. From the three technically dead plants I had recovered fourteen sound tubers - 1 of 13mm diameter, 1 of 10, 2 of 8, 4 of 7, 2 of 5, 4 of 3mm.

I had also two leafless rhizomes with good meristems, broken from the plants in transit, each 10cm long and 2mm diameter, and these I treated in the same way, laying them in the mould with the broken ends exposed. By March 26 each of these had produced, without benefit of leaf chlorophyll, a terminal tuber 6mm diameter.

I potted all these tubers up in the usual way and they came through in mid-December as three to four leaved rosettes of oblong-orbicular leaves. The heat and humidity of Auckland were apparently too much for them and none survived the first summer.

The accompanying illustration is from a watercolour by Jessie Brownlee c. 1930. The superimposed arrows show the positions of the adventitious rhizomes.

### **Australian Notes**

*The following paper is reprinted from the Journal of the Native Orchid Society of South Australia (1987: 11, 54) with the permission of the Editor. It expresses some interesting views and poses some interesting questions - not all of them pertinent to New Zealand, and not all that we would agree with, but a challenge in the conservation debate.*

### **Conservation of orchids: real versus perceived.** by Bob Bates.

Recently there has been tremendous interest in the so-called "endangered species". Any plant "lucky" enough to be on this list will be intensively studied and all its known locations mapped. Large sums of money are invested in buying up the sites of these populations and fencing them off. This is seen as conservation but there are many flaws to this approach.

- (1) The current estimate suggests that only 60% of endangered orchid species are named. As only 60% are named the other 50% receive no protection at all.
- (2) Fencing off the small areas where the recorded endangered species are known to grow usually means that either the site becomes overgrown due to lack of grazing or such a vestige of scrub becomes the home of every last kangaroo in the district. In either case the effect is detrimental to orchids.  
Fencing off populations also makes them more obvious to unscrupulous collectors. I have seen the results of this: within

the fenced-off area all the orchids are gone within a few years (although often they have increased in numbers outside the reserve).

- (3) Mapping of endangered populations often leads to their locations being made public. As a part of the study numerous visitors will be trampling around, photographing, taking collections and shifting plants. Such a study will possibly come up with a sensible "management plan", but what usually happens is that no-one is appointed to carry out the suggested management plan, no money is available, the person doing the work is not a "naturalist" and has no intuition for what is right.

In any case even if everything is done properly the population may still not be viable due to

- (a) its small size,
- (b) loss of pollinators,
- (c) the "island" effect, whereby isolated populations are prone to loss by catastrophe. What usually happens however is that the suggested management plan is way off mark anyway!
- (d) Finally the concept of channelling money and energy into protecting specific populations of single species is just not logical. What we really need to "protect" is our total environment. What needs to be conserved, is the largest "gene pool" of plants and animals possible. I have seen "conservationists" celebrating the fencing of a small swamp, while nearby 1000 hectares of diverse habitat is bulldozed. A rare orchid saved while genetic diversity is reduced all around does not make good sense.

In South Australia numerous conservation parks are set up (all containing identical habitats) while nearby a dozen different vegetative types not represented in any parks are destroyed. In our state at present, real conservation has taken the form of a passive approach, namely that of preventing further land clearance. An active approach would be far more practical, namely revegetating and re-forestation. We have the capacity to make our environment far more diverse, far more aesthetic, more exciting and at the same time more productive! There should be sweeping belts of trees and shrubs linking up conservation parks to provide corridors for gene flow and replacement of fauna and flora after natural disasters such as bushfires and drought.

Can cultivation of orchids play a part in conservation? This is a difficult question.

To take a hypothetical example: a rare spider orchid *Caladenia* species Z exists as a remnant population of 600 plants. A well-meaning orchid grower digs up half of these and puts them into pots without knowing any of their requirements. The potted plants die and the wild population is reduced to a non-viable size. The species is lost.

Another example: a keenly competitive grower has plants of two endangered *Diuris*. He crosses these and the resulting hybrid is to his liking, he keeps it and gives the parent species to less capable growers who promptly lose them. In each such situation conservation would have required that the plants be left in the wild.

In a state as dry as South Australia more thought should be given to the construction of dams, lakes and wetlands (and I do not refer to the muddy holes of overgrazed paddocks). Much of this improved environment might be suitable for the re-introduction of orchid species.

Let us channel our energies into positive approaches and play down the aspects such as orchid "rescue" digs, fencing small patches of native vegetation, the concept that a population of any one species is more important than a population of any other species.



## Membership

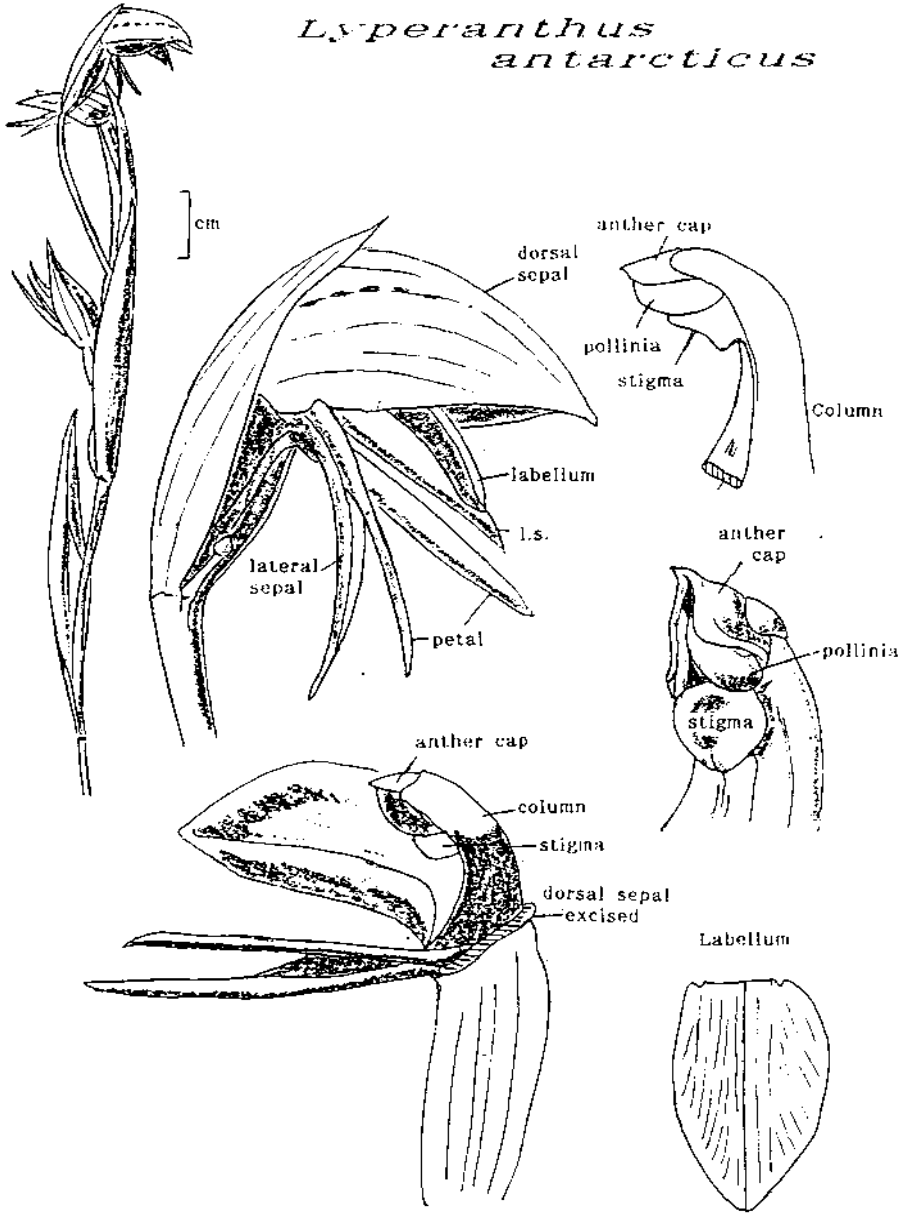
Membership of the Group is now 143. The following are paid up members at 26 May 1988.

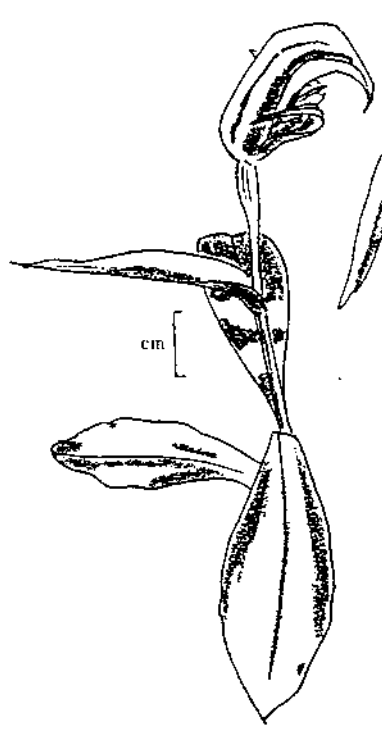
Noellne Clements, 256 Kamo Rd, Kamo, NORTHLAND. Mrs B Hoggard, Kaimaumau Rd, Waiharara RD, KAITAIA. Mrs S Hoggard, Kaimaumau Rd, Waiharara RD, KAITAIA. Mrs Katie Reynolds, 42a Anzac Rd, WHANGAREI. Mrs Karen White, Okahu Rd, R D 1, KAITAIA. S Gregory, PO Box 483, KAITAIA. Doug McCrae, Paranui, RD 3, KAITAIA. Allan F McKenzie, No 6 RD, WELLSFORD. Rosemary Weir, 60 Landscape Rd, PIPETTED, Peter Mullins, PO Box 64-024, Birkenhead South, AUCKLAND. Mrs M Drabble, 6 Montgomery Ave, Takapuna, AUCKLAND 9. Betty Gunn, 61 Pupuke Rd, Birkenhead, AUCKLAND. Sandra Jones, 14 Park Rd, Titirangi, AUCKLAND 7. ,GN Parker, 8 Janet Place, Laingholm, AUCKLAND 7. Ron Whitten, 6 Thorley St, Mt Eden, AUCKLAND 4. Marjorie Guttery. 13 Springleigh Ave, Mt Albert. AUCKLAND. Brent Torrens, 8 Lynbrooke Ave, Blockhouse Bay, AUCKLAND 7. AW Holmes, 116 Beach Rd, Papakura, SOUTH AUCKLAND. ED Hatch, 26 Tane Rd, Laingholm, AUCKLAND 7. Mr and Mrs RC Grange, 660 East Coast Rd, Mairangi Bay. AUCKLAND 10. Maureen Young. 36 Alnwick St, WARKWORTH. Heather Crowskey, 46 Milan Rd, PIPETTED, AUCKLAND. MG Wilson, 16 Argyle St, Herne Bay. AUCKLAND. Mrs PM Turvey, 3/7 Queen St, PAPAURA. Barbara J Knowles, Main Road, Onewhero, RD 2 TUAKAU. Diane Passau, Main Road, Onewhero, RD 2 TUAKAU. A Beck. RD 2, Ngatea, HAURAKI PLAINS. Mrs JP Green, 14 Princes St, WAIHI. Gary Staples, Box 92, PAEROA. Rev HE Whitten, 301 Fergusson Drive, THAMES. Lorna Grey, 9 Bristol Ave, Otumoetai, TAURANGA. Ron Maunder, Paradise Orchid Nurseries, PO Box 2107, TAURANGA. Mrs Wilma Fitzgibbons. 106 Dickson Rd, Paparua. Mr and Mrs R Godger, 9 Somerset Grove, TAURANGA. PJ Forrest, "Milford Haven", No. 1 Road, No. 2 RD TE PUKE. JB Irwin, 192 Bellevue Rd. TAURANGA. Mrs Pauline Mayhill, 18 Ruamoana Place, Omokoroa, RD 2 TAURANGA. W Wright, 2 Forbes Rd, Kawerau, BOP. Mr and Mrs JM Feist, 25 Seddon St, TE PUKE. Miss MP. King, 87a Lome St. MORRINSVILLE. Peggie Jenner, 26 Page St. MORRINSVILLE. PJ de Lange, 19 Cranwell Place, HAMILTON. BP Killen, 26 Southey St. CAMBRIDGE. Mrs Betty Seddon, 11 Grey St, CAMBRIDGE. Mrs AE Swney, 7 Portsmouth Place. MATAMATA. Stella Rowe, 1 Corrin St, HAMILTON. Beverley Woolley. 8 Beverley Cres, HAMILTON. Mrs MLD Skinner, 117 Lake Cres, HAMILTON. Mrs D Abraham. 14 Nisbet Tee, Kinloch, RD 1, TAUPO. Frances Nicholls, Mr Trevor Nicholls, 33 Hinekura Ave. TAUPO. Mrs A Gatchell, Crystal Brook Lodge. Waitahanui, TAUPO. Mrs J Blackwood, 250 Pohutukawa Ave, OHOPE. Mr M Gibbs, 16 Rahui St, TAUPO. Mr WB Shaw, Forest Research Institute, Private Bag, ROTORUA. Gordon Weatherall, 29 Raniera Place. ROTORUA. C Ecroyd, 33 Raniera Place, ROTORUA. N & E Miller, Te Akau Rd, RD 4. ROTORUA. Mrs J Lennane, 48 Gordon St, GISBORNE. Paddy Taylor, Joe Taylor, 7 Grundy St, GISBORNE. Mr JJ Smith, 1 Cobham Place. GISBORNE. Mrs Beryl Ellmers, 1 Cobham Place, GISBORNE. Ian Jenkins, 1 Fleming Cres, NAPIER. PM Pegram, PO Box 34, Frasertown, HAWKES BAY. WF Liddy, 8 Thurley Place, Bayview, NAPIER. Mrs Shirley M Thomson, Ashdown Park. Weld Road, RD 4, NEW PLYMOUTH. Rob Ward, 13a Veronica Place, Bell Block. TARANAKI. Mr G Fuller, 26 Victoria Rd. NEW PLYMOUTH. Mrs Val Smith. 22 Whiteley St, NEW PLYMOUTH. Clive Perry, 234 Bridge St, ELTHAM. Mrs Audrey Eagle, 8 Mount View Place, NEW PLYMOUTH. Mrs YJ Cave. Seafield, No.4 RD. WANGANUI. Kevin Luff, PO Box 6092, WANGANUI. Ross Macdonald, 12 Bens Place, WANGANUI. Massey

University

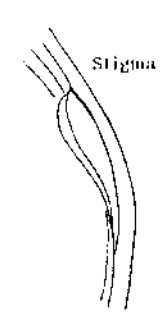
Library, Private Bag, PALMERSTON NORTH. Ian Cooksley, c/- Dept Conservation, RD 31 Manakau, via LEVIN. L Ford, 34 Highbury Ave, PALMERSTON NORTH. Barbara Schreiber, 3 Macmillan Place, FIELDING. Dr EO Campbell, 26 Frederick St. PALMERSTON NORTH. Mrs JA Chrystall, RD 11, FOXTON. Mike Dunn, Kuku Beach Rd, RD 20 Ohau, LEVIN. PC Shapcott, PO Box 7, MARTINBOROUGH. Mrs HA Cook, c/- Post Office, GREY TOWN. JB % Kinder, 402 Ferguson Drive, LOWER HUTT. Jean Mowbray, 8 Downsview ' Place, PUKERUA BAY. Mrs Dorothy Cooper, 37 Waimea Rd. Waikanae, , WELLINGTON. Tony Robinson, 61 Moana Rd. WELLINGTON 6. Mr JW Anderson, Rosebank Ave, LOWER HUTT. Mr P Tomlinson, 14 Putnam St, Northland, WELLINGTON 6. D Catchpole, 26 Taipakupaku Rd. WELLINGTON 3. Mr AP Druce, Botany Division Regional Station, Taita Research Centre DSIR, Private Bag, LOWER HUTT. Mr C Ogle, 8 Donlin Rd. PUKERUA BAY. John SD Gregory, 329 Main Rd, LINDEN. Mr Philip Chandler, 16 Cruikshank Rd, WELLINGTON 3. John Johns, 630 Stokes Valley Road, LOWER HUTT. Simon Dyne, 25 Wyndrum Drive, LOWER HUTT. Terry Burns, 70 Campbell St, Karori, WELLINGTON. CS Butcher, 189 Taita Drive, LOWER HUTT. Mrs Margaret Anderson. Coast Road, WAINUIOMATA. K Jarrett, Native Landscapes, PO Box 38221, PETONE. ND Neilson, 60 Horokiwi Rd West, Newlands, WELLINGTON 4. Gordon Sylvester, Pencarrow Cres, Wainuiomata, WELLINGTON. KR Grange, 7 Wyndham Ave, LOWER HUTT. Mary McEwen, Biological Resources Centre. Dept of Conservation, PO Box 10-420, WELLINGTON. BM Ledger, 16 Bellbird Cres, Waikanae, WELLINGTON. KF Ross, 13 Hinau St, LOWER HUTT. Secretary. Capital City Orchid Society, PO Box 3839, WELLINGTON. Ms MC Wassilleff, 69 Tiber St, Island Bay, WELLINGTON. Mark E Moorhouse, PO Box 3074, Richmond, NELSON. Mrs JM Jenks, RD 2, UPPER MOUTERE. Mrs B Pickering, Coopers Creek, Oxford, NORTH CANTERBURY. Thom Pendrigh, 27 Burnett St, Oxford, NORTH CANTERBURY. Canterbury Botanical Society, PO Box 8212, Riccarton, CHRISTCHURCH. Dean Pendrigh, 22 Allstone PI, CHRISTCHURCH 9. FD Horsley, 28 Glandovey Road, CHRISTCHURCH 6. John Thompson, 18 Therese St, CHRISTCHURCH 2. Rodney Boon, 6 Clipstone Place, Halswell, CHRISTCHURCH 3. Peter Heenan, 3/32 Southampton St, Beckenham, CHRISTCHURCH. Botany Division Library, DSIR Lincoln, Private Bag, CHRISTCHURCH. Dr Brian Molloy, Botany Division, DSIR Lincoln, Private Bag. CHRISTCHURCH. IJ Tweedy, 11 Sandringham Place, Bryndwr, CHRISTCHURCH 6. John Hunt, PO Box 31-011, CHRISTCHURCH. IL Stephenson, 14 Regent Ave, RANGIORA. Mr DJ Barron, 33 Mountain View Rd, TIMARU. Mrs Barbara McGann, 4a Rother St, OAMARU. MC Matheson, 4 Cherry Lane, BALCLUTHA. Mrs C Garry, Sec Otago Orchid Club, 4 Tilburn St, Halfway Bush. DUNEDIN. Mark Hanger, 1 Montague St, Northeast Valley, DUNEDIN. Ian St George, 46 Cargill St. DUNEDIN. Brian Loughrey, 719 Portobello Rd, DUNEDIN. ML Young, 61 Argyle St, MOSGIEL. Miss HF Duff, 77 Craighleith St, Northeast Valley, DUNEDIN. Dunedin Naturalists' Field Club, PO Box 6184, DUNEDIN. Mr G Watson, 63 Isabella St. INVERCARGILL. Maureen Townson, 136 Grace St. INVERCARGILL. AG and CM Mathieson, Myross Bush. No 11 RD, INVERCARGILL. Mrs I Lankshear, 292 Racecourse Rd, INVERCARGILL. Mr David McNaughton, No. 7 RD. Mokotua, via INVERCARGILL. Ida Collett. 11 Lionel St, The Rocks. RIVERTON. Dr Warren Stoutamire, Biology Dept: University of Akron, Akron Ohio 44325, USA. Malcolm J Thomas, 23 Outlook Drive, Berwick, Victoria 3806, AUSTRALIA.

*Lyperanthus antarcticus*





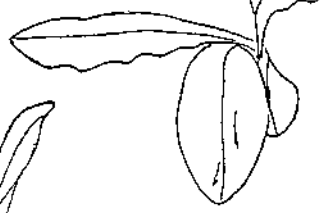
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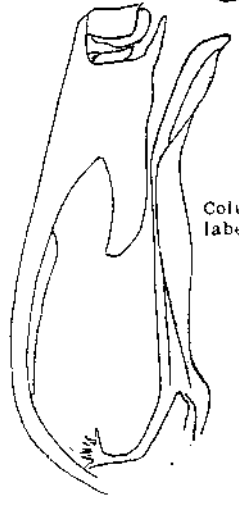
Stigma



Seedling



Column and  
labellum



Labellum



*Pterostylis areolata*

1846