NEW ZEALAND NATIVE ORCHID GROUP
Newsletter No.14
June 1985

Dear Member,

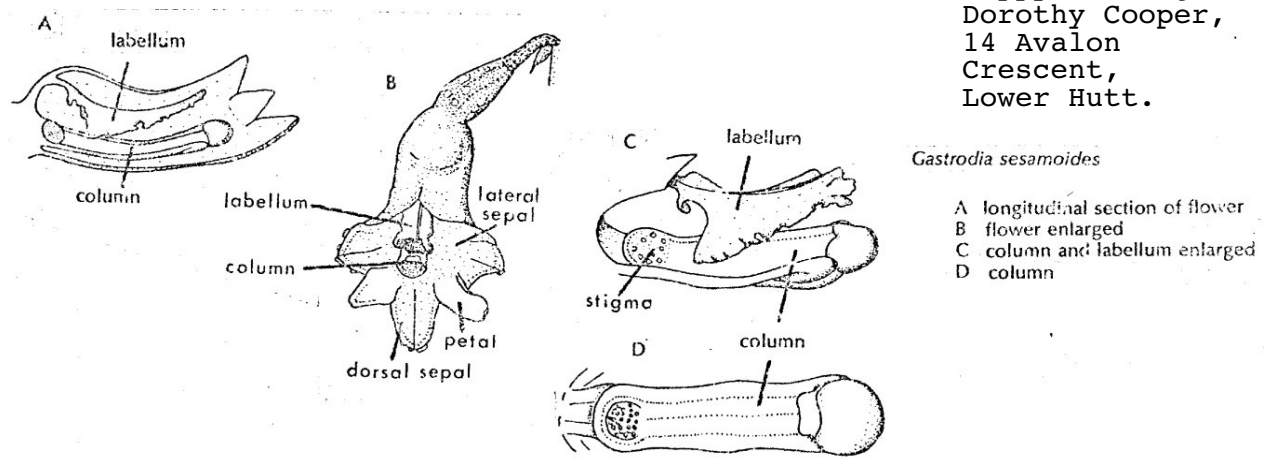
In this nesletter Gordon Sylverster has given us a plan of the display he intends to set up on our behalf at the Second International Orchid Conference, 9-13th October,1985. Please give him whatever help you can, I think this, will be a great opportunity to show the public that we do have native orchids in New Zealand and it could have far reaching results.

Many thanks to Dean Pendrigh of Chr1stchurch who writes: “While I was looking at the flowers of a Gastrodia sesameides on the Lyell Walkway (Dec. 1984) I saw a small fly enter one of the flowers. I caught the fly and have enclosed it with this letter. The fly has still got some pollen on its back and spent about 20 seconds inside the flower turning itself around so it could fly out". I wrote back to Dean asking what his method of 'preserving' the fly was, and whether he was sure of the identification of G. sesamoides.

He reported back that he had set the fly in PVA glue (Black Flag), on a hard surface, preferably clear plastic, - it is best to place the fly on its side, be careful not to drop it while putting it in place,, and place in warm conditions to dry.

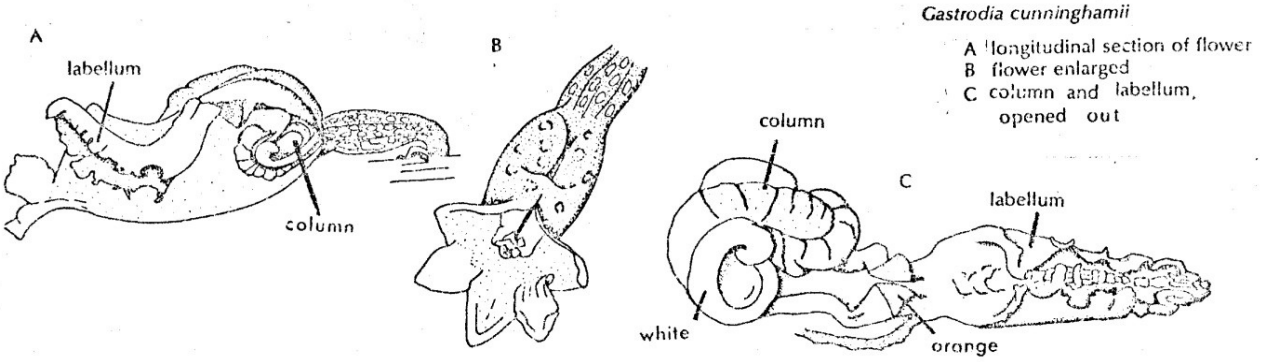
This method seems to be very successful and apparently quite simple, and in this case is a rare positive identification of a pollinator., beam said he didn’t measure the column in the flower which he had identified as G. sesamoides, and wasn’t sure how long it should be compared with that of G. cunninghamii. To help identify these species, for those who do not have a copy of my book, I include some sketches of the relative parts of the flower. G. sesamoides is supposed to be honey-coloured to conform with the type, and G. cunninghamii greeny-black. The former has a long column and the later a short curled column, but I have found honey-coloured forms with short column and. dark ones with long column so obviously something has to be sorted out.

Happy hunting,,
Dorothy Cooper,
14 Avalon
Crescent,
Lower Hutt.



Gastrodia sesamoides

A longitudinal section of flower
B flower enlarged
C column and labellum enlarged
D column



Gastrodia cunninghamii

A longitudinal section of flower
B flower enlarged
C column and labellum, opened out

INTRODUCING COLOUR INTO YOUR HERBARIUM

George Fuller
New Plymouth

Upon reading an article on preserving herbarium material in Newsletter no.11 whereby silica crystals are used to preserve colour, my recollections went back to when I was living in Malta and studying the native orchids, all of which are terrestrial, fleshy and tend to dry out into a rather dark and disappointing specimen, much as many of our own natives do.

My original objective was a thorough photographic record only, but gradually the discoveries extended into extremely rare species as far as sightings in Malta were concerned and it dawned upon me that I had a responsibility to ensure that herbarium specimens were taken, there being no official body with responsibility for such matters. The methods and ethics of my efforts could be material for another article, but I must confine myself to the exciting method I found for preparation of herbarium material of orchids.

In trying to identify the Mediterranean species, I obtained access to a copy of "Orchids of Europe" by A. Duperrex and gained much more than I had anticipated. In a short chapter near the end headed "The Preservation of Orchids" a method ascribed to M. Jean Terrerraz _ using sulphur is detailed which in practice is quite simple and in my experience very efficient.

The first requirement is an airtight non-combustible container of sufficient size to contain the specimens, plus a little to spare. A metal box is suggested but in this day and age some form of plastic container would suit. Actually, I made up a wire frame from which I could hang specimens and simply inverted a plastic bag over it, making sure it reached down to the ground. An inverted plastic bucket or other container might also do.

Having arranged the specimens by whatever means in a small tray of sulphur powder (or a sulphur candle, whatever that is) is ignited and placed in the container, not too close to the specimens! The sulphur burns slowly with a blue flame and when the oxygen is exhausted, goes out. It should perhaps be noted that a very pungent and deadly gas, sulphur dioxide is produced which just may not go down too well with the rest of the family, especially if they are the type who do not appreciate holidays in Rotorua. The victims are left in the gas chamber for about 10 minutes while the neighbours are being pacified over the strange smell.

Opening up the first time is indeed a very dramatic experience and anyone attempting this method will be convinced that George Fuller has pulled another confidence trick, for those beautiful specimens will be a limp and colourless mossy heap, as bleached as the proverbial sheets or shirts of advertising fame. What a disaster - one feels a resurgence of that feeling when the first sponge, prepared with visions of fluffy clouds turns out looking and feeling like a round of damp corrugated cardboard.

All is not lost, for we are only half way to our goal. These limp and slimy ghostly apparitions are taken carefully and arranged on paper just as one would with fresh specimens, except that in many ways the process is easier because there is less resistance and they can be laid out to perfection - an important factor where later reference to detail is a consideration.

Blotting paper is not recommended for pressing and drying but non-glazed newsprint is suitable though I suppose one may run the risk of superimposing the stock market report on the leaves if newspaper is used. Several layers should be laid out both under and over the specimens, then the big sandwich is covered with a firm board upon which a weight is applied. It is very important that the papers are changed regularly,

probably daily to start with as water loss from the bleached tissue is rupid. This also allows detailed control of the layout of the specimens for best results'

As drying out proceeds, a miracle of transformation begins to take place, for a level, of original colour begins to return and instead of having depressing blacks and browns the leaves will revert to a green and though flower colour may not be restored to original at least it will be suggestive or transparent and that is a mighty big advance over what one normally sees.

Perhaps I should be a little cautious and not raise the prospective preserver's hopes too high on the issue of colour, but if there was no resurgence at all, the method would still be worthwhile for another important reason. It is over twenty years since I assembled my Maltese collection and ever the intervening period it has been subjected to the same level of neglect that has seen various documents transformed into fodder for tiny critters that eat in the dark and don't need a drink with their meals, yet there is neither a tooth mark nor damage from mould on the orchids. Sulphur is a very fine preservative in dry conditions.

I don't want to encourage the ravaging of our orchid population but I do hope that someone will carry out some responsible and serious trials and having done so, publishes the details in this news letter. If the method does not work on our orchids, I for one would be interested to learn of it. It is worth noting Duperrex's closing observation which indicates that he had tried to extend the method to other plants but had not obtained good results. Perhaps that is why I have never seen the technique described elsewhere. Be that as it may, I suggest that this may be the means of preserving the subtleties of what must be amongst the world's most delicate and fragile orchids the various species of Corybas Come tc think of it, why haven't I done something about this? Roll on spring!

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IN REPLY- to "Yoania australis at Kare Kare" -Sandra Jones, newsletter 13
E.D.Hatch

I found Mrs Jones acute observations of the Yoania at Kare Kare most interesting. The plants occur in what we used to call, in my youth, a corrie, a slump area on a lull side where a stream starts, what the orchids are in fact doing is following the line of the subterranean water down the valley, but sti11 clinging tightly to the roots of the taraire.

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A LETTER FROM ABROAD:
Dear Mrs Cooper,

As I learned from the N.Z. Orchid Society "Review" of June 1934, a Native Orchid Croup has been set up in order to protect the native orchids of New Zealand.

I should like to encourage you on your way to better protection of wild orchids. I can offer some experience in this field as I am working in the German Nature Conservation, especially native orchids of Germany Northern Bavaria.

If you are interested in details of our work which could be stimulating for yours, drop me a short line please. By the way, Cyridium calceolus thanks to protection laws is to be found now at several places in Bavaria.

Sincerely yours,
Erwin Burmeister.

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(This is not the first of such letters, - many countries have now "heard of us"! - Ed.)

SECOND INTERNATIONAL ORCHID CONFERENCE October 9-13

Gordon Sylvester

The Second International Orchid Conference is being held in the Show Buildings, Newtown, Wellington. The Native Orchid Group has applied for exhibition space and have been assigned a large area centred on the entry to the lecture theatrette. We have for our use all that area on both sides of the entry. At present I have received 3 offers of material for our exhibit. The format will include a living plant area, herbarium sheets, preserved plants, illustrations, and a continuously running orchid slide show with commentary.

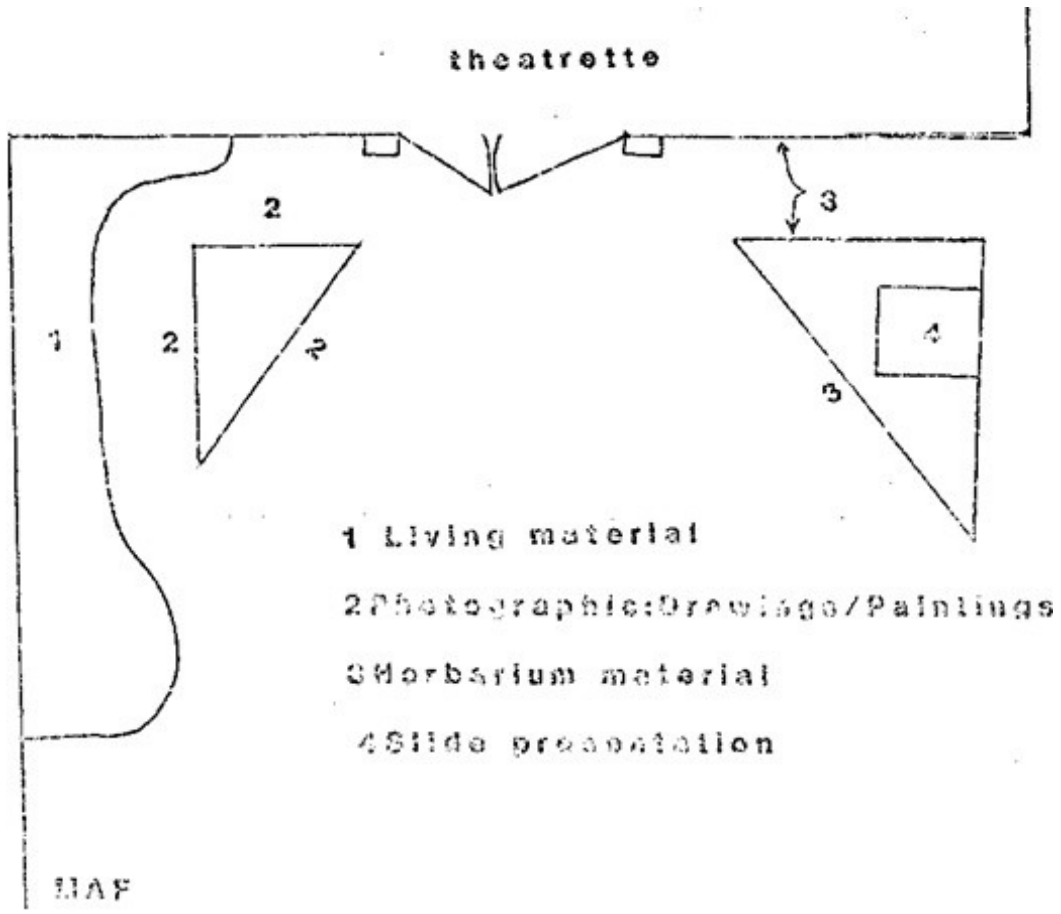
We will have some financial assistance but what will be required will rest entirely on the final format of our exhibit. There has not been any restrictions placed on use or how much space we use, as long as we do not interfere with the public access to the theatre entry. Our immediate neighbours are Ministry of Agriculture and Fisheries.

We need more offers of material, the greater the range of plants we can display, will be to our credit, both flowering plants and those having just foliage will be acceptable. Herbarium sheets must be conformable with what is already on hand (A3 sheets), preserved material must be non-toxic and nonflammable. Paintings and drawings must be originals or clearly identifiable as to artist, the owner's name, must be on the reverse, Slides must be identified and have the owner's name or be clearly identifiable.

Any material sent will be returned on completion of the conference. Finally this is an ideal opportunity to advertise ourselves, there will be a large contingent from Australia who will show keen interest in our natives, and many more from Now Zealand.

Any suggestions or offers of material can be sent to:

Gordon Sylvester,
22 Pencarrow Crescent,
Wainuiomata,



Not to Scale