NEW ZEALAND NATIVE ORCHID GROUP Newsletter No. 3 September 1962

Dear Member,

Interest is high in our group, numbers are still growing and we have our first Australian member! All we need now is reports - from-all over New Zealand, on anything to do with our native orchids, any article no matter how small is sure to be of interest to somebody and by sharing our knowledge in this way we can all learn that little bit more.

I would like to thank Tony Druce for his kind donation towards costs and I hope to get out one more newsletter before the end of the year.

I feel this group could be useful for all sorts of things - if people will take the time to put pen to paper. One aspect I would like to hear reports of is the finding of two-flowered specimens of those species which normally have solitary flowers.

I have found two-flowered plants of <u>Chiloglotlis cornuta</u>, <u>Corybas trilobus</u> and <u>C.oblongus</u>, <u>Pterostylis alobula</u> and <u>P. graminea</u> - all in the Wellington area. Any other reports?

David Given's latest list of endangered New Zealand plants gives as probably extinct:- Chiloglottis fornicifera, Pterostylis nutans and Thelymitra matthewsii; if anyone has any information to the contrary please let me know.

Let me close by thanking all those who have taken the time to contribute - come on all you others!

Dorothy Cooper, 14 Avalon Crescent, Lower Hutt

PRASOPHYLLUM SUTTONII (<u>P. patens</u>) — HOW DO THE SEEDS GERMINATE? E.D.Hatch

I only ever found <u>Prasophyllum suttonii</u> once, in January 1945 in a pond or tarn in the State Forest plantations above Tangiwai, on the south—western slopes of Ruapehu.

The water was shallow - 100-130mm deep - and studded with little hummocks of <u>Calorophus minor</u>. The hummocks themselves, about 600mm in diameter, supported numerous plants of the washed-out looking <u>Pterostylis micromega</u> and <u>the Prasophylllum</u> grew in the open water between the clumps.

between the clumps.

It occurred to me at the time to wonder how the Prasophyllum seed germinated and got to the bottom of the pond. They would obviously come down on the surface of the water - but what happened next? Then there was the anaerobic problem. Orchid development in my experience is notoriously dependent on a free flow of air, and bow do they get on under water? We have a great deal to learn about many of those plants before they disappear forever with the draining of the swamps,

It is interesting to note that Cheeseman in the 1906 Manual, records both <u>Pterostylis micromega</u> and <u>Prasophyllum patens</u>, as he called it from the Ngaire (Ngahere?) swamp near Mount Egmont. I found the <u>Pterostylis</u> to be fairly frequent in bogs round the central mountains during 1942-5, and it occurs occasionally in the lower Waikato, but I only once found the <u>Prasophyllum</u> growing with it.

Book Review:

Recently our Club librarian thrust into my hand a newly acquired book saying "This will interest you, includes some of New Zealand's natives". At the first opportunity I was lost in the pages of 'Orchids for the Outdoor Garden", A.W.Darnell. (A descriptive list of the world's orchids, for the use of American gardens.) Dover-Publications, New York, 1976 first edition. Unabridged re-publication of the work originally published by L.Reeve Ltd., Kent, England in 1930.

Disappointment soon struck when I realised that the work was so outdated and old, Unrevised since 1930, with some descriptions unrecognisable, I felt it a pity, a book in which people would gain nothing.

New enthusiasts would be completely misled with obsolete names and inaccurate descriptions.

Anon.

ORCHIDS OF THIS COROMANDEL PENINSULA

John Smith

Dodsworth

Acianthus fornicatus flowering June-July A.reniformis Sept-Oct Calebenia catenata Oct Aporostylis bifolia Dec Chiloglottis cornnta Oct-Nov Corybas aconltiflorus May-July July-Sept C. trilobus
C. rivularis Sept-Oct C. orbiculatus Sept-Oct C. oblongus 0ct-Nov Thelymitra longifolia Oct-Nov T. carnea Sept-Nov T. pauciflora
T. ixiodes Jan Oct-Nov Pterostylis banksii Oct P. graminea Sept-Oct P. ťrullifolia May-Oct May-Aug P. alobula P. brumalis May-Aug Orthoceras strictum Jan-Feb Prsophyllum patens Jan P. pūmilum Mar P. nudum Apr Microtis unifolia Nov Earina mucronata Oct-Nov Earina autumnalis Feb-Apr Dendrobium cunninghamii Dec-Feb Bulbophyllum pygmaem Dec Drymoanthus adversus Oct Gastrodia sessamoides Nov-Dec Yoania australis Jan

George Fuller of Pukekara Park, New Plymouth, has managed to get photos of a small insect pollinating Corybs macranthus. Apparently there has been some doubt as to the species of Corybas as the flower in the photo is above the leaf. A short, time ago in the Eastbourne hills of Wellington, I came across a patch of <u>C. macranthus</u> on a fairly dry bank,. Some plants had very short leaves and the flowers were definitely above the leaves although on close examination it could be seen that they branched off the leaf stalk below the leaf, Some weeks later on looking at these same plants, leaf stalks had elongated and flowers were now below the leaf.

ROBERT BROWN AND THE CORYBAS CONTROVERSY

A necessary preface to this note is a very brief history of Robert Brown, who was born at Montrose in Scotland in 1773.

Brown was an army surgeon with an interest in botany, and a friend of Sir Joseph Banks. He sailed to Australia in 1801 as naturalist to Flinders' survey expedition. The <u>Investigator</u> was condemned as unseaworthy at Port Jacks on in 1803, but Brown remained botanising in New South tales and Tasmania until 1803, when he returned to England and settled down to writing up the botanical results of the survey.

These he -published in 1810 as Prodromus Florae Novae Hollandiae et Insulta Van-Diemen (usually cited as R. Br. Prodr. 1810). In 1810 also, on the death of Jonas -Dryander, he became the third and last of Banks' librarians. Banks died in 1820, leaving the botanical collections to Brown for his lifetime, with the proviso that they eventually be placed in the British Museum. In 1827 Brown handed the Banksian material over to the Museum in exchange for the position of Curator of Botany, which he held until his death at 84 in 1838. Brown was a friend of Darwin and Sir Joseph Hooker, and an early supporter of the natural system of plant classification which gradually replaced the numero-sexual system of Linnaeus.

R. A. Salisbury was in general a competent botanist (after all he described our kauri, (Agathis australis), but he was apparently not above occasional skulduggery. He is reported to have made a 'rude' copy of a drawing by Ferdinand Bauer (who was the botanical artist on the Investigator), and to have drawn up his description of Corybas from it, Bauer's drawing, which had Browns' name attached to it, showed the colours by a series of figures which were misinterpreted by Salisbury, who also mistook the tubular nature of the labellum and the detailed structure of the anther. Accused of unethical behaviour Salisbury told the tale of the plant growing not long ago in certain- English garden from which he had obtained his data.

In 1810, 5 years after Salisbury had published Corybas, Brown described the genus Corysanthes (Prodr. p. 328). He admitted that his Corysanthes bicalcarata was probably identical with Corybas aconitiflorus, but would not acknowledge the validity of Salisbury's genus. He queried the story of the plant in Lady Essex's garden and doubted that the orchid, which was rare even in the vicinity of Port Jackson, and had only been collected by Paterson, Bauer, Caley and himself, could be grown in the open in England. He also pointed out, to Salisbury's further embarrassment, that it was not possible to ascertain by looking at dried specimens, or even at specimens which

Brown undoubtedly was, as Gilmour said "perhaps the greatest figure in the whole history of British botany" and his mana was correspondingly high. He was considered to have been badly treated, and the name <u>Corysanthes</u> was generally accepted in English-speaking countries. There had never been any doubt however about the identity of Salisbury's genus, and when the principle of priority later became important to taxonomy, <u>Corybas</u> was revived (by H.G.Reichenbach in 1871) and the now numerous species recombined. The controversy continued until the early 1940's when the international Council of Nomenclature finally refused to conserve <u>Corysanthes</u> and found in favour of <u>Corybas</u>.

had been softened by soaking in water, that the leaves were purplish

on the underside!

This tendency of Brown's, to ignore earlier workers in what he considered to be his field of Australian botany, was also responsible for the Caladenia carnea-catenata confusion.

Ian St George

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15 Dec 80
                        Flagstaff - C.lyallii flowering.
                        12 Mile Creek, Queenstown - T. longifolia in flower; Gastrodia sp. in flower;
3 Jan 81
                        Skippers - Microtis and Prasophyllum in flower. Flagstaff - T. venosa in flower.
24 Jan 81
                        12 Mile Creek, Queenstown - P. australis dead flowers, T. longifolia flowers finished.
8 Feb 81
                        Ross Creek track - E.mucronata in bud;
15 Nov 81
                       Mt Cargill. - Bethuners Gully track; E. mucronata in bud, a few flowers in sunny spots; E. autumnalis - no buds; D. cunninghamii - no buds: P. banksii and Thelymitra in
28 Nov 81
29 Nov 81
                       Tautuku nature walk - <u>C. trilobus</u> in fruit, <u>P. banksii</u>: in flower, <u>C. oblongus</u> and <u>P. graminea</u>? in flower, <u>D. cunninghamii</u> no buds. Tahaban la coach road - <u>P. montana</u>
                        in flower, E. mucronata in full flower, E. autumnalis no
                        buds, <u>C. cornuta</u> buds and just in flower, <u>C. trilobus</u> in fruit, <u>P. banksii</u> in flower. Hinahina forest - <u>D.</u>
1 Dec 81
                        cunninghamii no buds.
                       Five Mile Greek, Queenstown - C.catenata in bud and flower; Thelymitra in bud, P. banksii in flower. C. trilobus occasional fruit only, Flagstaff - C. lyallii abundant and in flower, Thelymitra in bud Trottors Correct Day banksii in flower, C. trilobus
5 Dec 31
6 Dec 81
                        in bud Trotters Gorge - P. banksii in flower. C. trilobus
9 Dec 81
                        in fruit.
                       C. macranthus in fruit, P. graminea? dying flowers, Dunedin Botanical Gardens - Gastrodia sp in bud, C. cornuta abundant, in pine bark and chips on track. (? new method of spreading now that it has colonised pine
12 Dec 81
                       Pigeon Flat roadside - <u>T. Longifolia</u> just in flower.
Leith Valley roadside - <u>C. cornuta</u> abundant in flower in edge of pine forest; Bush above Chingford Park - E.
13 Dec 81
                        mucronata in
                        flower a red stemmed Pterostylis with dead flowers,
                        Gastrodia sp. in bud.
                        Swampy - A. bifolia, C. cornuta, L. antarcticus in bud, P. banksii (? - a very short plant) in flower, Thelymitra in
                        bud.
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LOCK, LOVE and LEAVE or "CONSERVE OUR NATIVES " Phil Tomlinson

It may be thought that our natives are so plentiful that there is no need to conserve them. Other countries have thought the same about their own plants, but they now find that these can only be seen In their natural habitat with difficulty, all readily available specimens being long since removed. Don't let this happen here.

While our natives arc not as spectacular as their more glamorous cousins, they still have a character of their own. Unfortunately, it has been found that the majority are unsuitable for home culture, as they just do not survive. Therefore they can only be fully enjoyed in their splendour in the bush, banks or streams of the countryside, look for them there, the exercise does us all good.

Do not collect, and especially never in parks and reserves. If you must, go to a habitat that is threatened with clearing, cutting or cultivation, and only salvage fhe plants likely to be destroyed. The epiphytes are easier to maintain in cultivation with care, although the bulbophyllums are more reluctant. The more common terrestrial species are much harder to cultivate artificially. Some <u>Pterostylis</u> species, <u>A. fornicatus; Microtis unifolia</u> and some thelymitras can be kept with care, but often they can only be kept struggling to produce flowers well short of their real capabilities in nature. Leave them in their real homes; find, look at, love, perhaps photograph, but leave to propagate and flourish for future generations of orchid lovers.