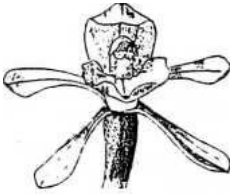


Newsletter
ISSN 0114-5924
Number 32, December 1989.
Editor: Ian St George,
45 Cargill St. DUNEDIN.

Original papers

The great Taranaki *Corybas* crawl

by Bruce Irwin, Tauranga.

In NZNOG *Newsletter* N° 29, Val Smith of New Plymouth suggested that any proposed orchid outings should be publicised. I needed help to map the distribution of two forms of *Corybas* within the *C. macranthus/ C. rivularis* group which I consider deserve species rank, so I wrote to Val asking for her help. Not only did Val agree, but she persuaded about ten others to join in, including NZNOG members Audrey Eagle, George Fuller, Kevin Luff and John Dodunski.

On Saturday 16 September, five cars set out from New Plymouth, each to explore allocated roads east of New Plymouth - Hawera State Highway from Tongaporutu in the north to Eltham in the south. The object was to record all localities of the four forms of *Corybas* shown in the illustration That evening we met at Audrey Eagle's home to compare and collate results. When all finds were plotted on a map of Taranaki, fairly clear patterns emerged.

In northern areas, the unnamed dark red *Corybas* "A" was present, but was outnumbered perhaps 3:1 by the green form of *C. rivularis (orbiculatus*) so common on Mt Messenger.

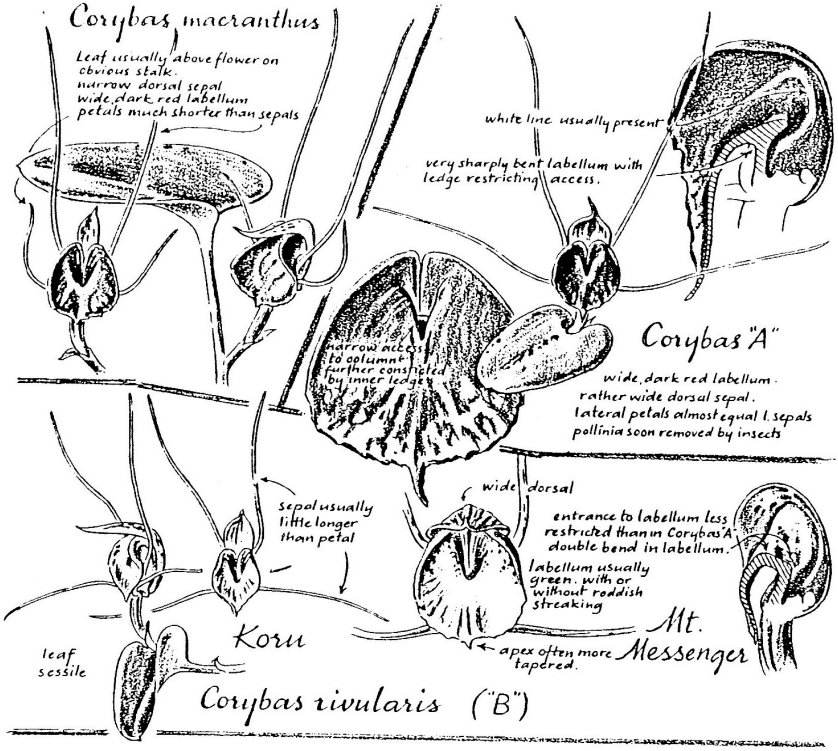
Further south *Corybas* "A" dominated whereas *C. rivularis* "B" dropped out altogether about the latitude of Tariki.

Still further south, to the east of Stratford, *Corybas* "A" was the only *Corybas* of the *C. macranthus/C. rivularis* group recorded.

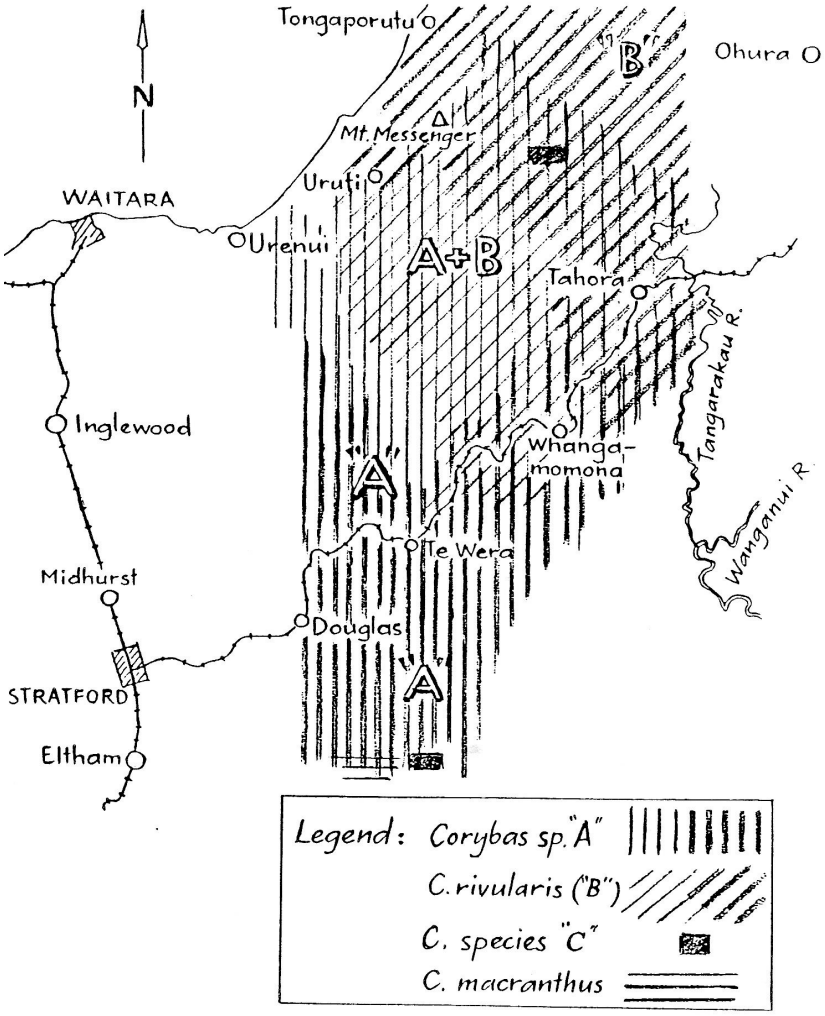
In the southernmost areas searched, *Corybas "A"* was still the dominant species but *C. macranthus* was recorded and just short of the road end, well into the Matemateongo Range, we found *Corybas* "C" in good numbers. The finding of this last form was a thrilling climax to a very interesting day.

Corybas "C" had been recorded once before in Taranaki. In September 1987 Rob Ward and Ernie Corbett showed me a flowering colony at Rerekapa, 10 Km east of Mt Messenger. The following year Peter de Lange reported the form from near Kawhia. Kevin Luff has seen a single colony near Wanganui, 20Km northwest of the colony (since destroyed) which I found between Upokongaro and Parikino more than forty years ago. In the South Island, Jean Jenks reported finding apparently Identical plants in several places In the Nelson area.

Forty years ago at Koru Pa near New Plymouth I found a form of *C. rivularis.* the flowers of which resembled both in shape and colour a small form of *C. acuminatus* (except for its much shorter dorsal sepal). The day after the great *Corybas* crawl, Val Smith showed some of the group a colony of *C. rivularis* which she had located at Koru Pa, but across the Oakura River from my earlier find. To my surprise, Val's colony appeared identical with the green Mt Messenger plants (*Corybas* "B"). If the two distinct forms still exist on opposite sides of the river, then perhaps a third unnamed *Corybas* is present.



If Corybas "C." is found, please note which other Corybas species are present within 500 metres: also estimate extent of colony. Are all flowers ± identical. Fix position of colony on map as accurately as possible. Note landmarks so colony can be found again.


N
Tongaporutu
Ohura
Mt. Messenger
WAITARA
Uruti
Urenui
A+B
B
Tahora
Tangarakau R.
Inglewood
Whanga-
momona
A
Te Wera
Wanganui R.
Midhurst
Douglas
STRATFORD
Eltham
A
Legend: Corybas sp. "A"
C. rivularis ("B")
C. species "C"
C. macranthus

When will this *rivularis* tangle be sorted out? Can you help?

I must mention that in September *C. macranthus* has tiny buds hidden below the leaves, it is unlikely that *C. macranthus* has a wider distribution in Taranaki titan we recorded.

I thoroughly enjoyed the weekend shared with other orchid enthusiasts and would like to express my grateful thanks for such generous help

I recommend similar projects to members in other areas of the country.

Orchid touring in Victoria and South Australia, 1988 — part 3

by Doug McCrae, Auckland.

Sale and Wilson's Promontory. Victoria

Sale is a county town about 200km southeast of Melbourne. You may think a cemetery is an odd place to find the largest known colony in Victoria of the beautiful purple *Diuris punctata.* Around 500 plants, most flowering at the time of my visit, were seen in the unmown grassy areas behind the tombstones. Every shape and hue enticed me to use a whole film on this one species. My most vivid memory of Australian orchids would be the sighting of this colony of the most attractive member of the *Diuris* family.

Other orchids noted in the area were just a few specimens of *Diuris pedunculata* and *Thelymitra pauciflora.* Wilson's Promontory National Park,150km further to the south was the only other habitat visited this day. The "Prom" as it is known is the most southerly part of the Australian mainland and is one of Victoria s most popular national parks. Among the wildlife I was to see there were wallabies, kangaroos, wombats and those big black ants with nippers!

Rosellas, lorikeets and wattle birds were often seen and heard in the unusual Banksia forest that dominated the area around Miller's Landing.

Eucalypt species were sub-dominant and there were large areas of native grasses with the odd clump of Banksia trees. The soil here, as in all other habitat visited in Victoria is quartz sand or peaty quartz.

As we walked along the 3km track towards the sea we noted *Acianthus caudatus* in seed. *Thelymitra flexuosa* and *T. rubra* in flower, *T.pauciflora* and one *Thelymitra* species were in spike. In the tall Banksia forest were large numbers of the dainty finger *Caladenia aurantiaca. Pterostylis nan a* and *Corybas unguiculatus* were in seed in the more open areas, usually at the bases of trees. The occasional *Diuris corymbosa* was seen in flower in grassy areas, as was *Caladenia pusilla* and *C. clavigera. C. fragrantissima* was In bud. *Pterostylis pedoglossa* was in seed and the leaves of unflowered *Lyperanthus nigricans* were noted in open areas at the base of large solitary Banksia trees. Flowering *Microtis unifolia* was seen occasionally.

The track ends at the sea, just above which are the ruins of Miller's old house. A small island about 100m offshore can be reached at low tide. Our timing was coincidental and we walked across to search the tiny landmass for the two *Corybas* species, *C. incurvis* and *C. diemenicus,* known to grow there. A couple of colonies of leaves were seen but as flowering had finished their identity could not be verified.

Cribb Point

This well-known orchid area is situated on the Mornington Peninsula about 100km south of Melbourne. The area we were to investigate was part of a housing development and consisted of grassy paddocks with a sandy, peaty loam soil, alternately dry and damp. The day was sunny, but cool and windy, so few flowers of the reported nine species of *Thelymitra* were to be open for photographs.

It didn't take long to locate all the *Thelymitra* species. The numbers of spotted and unspotted *Thelymitra ixioides* were amazing. *Thelymitra pauciflora* and *T. juncifolia* were in bud. *T. rubra, T. flexuosa. T. carnea. T. antennifera* and *T. aristata* were flowering. The last of the nine was difficult to identify, but research later indicated a hybrid between *T. pauciflora* and *T. ixioides.*

Across the road in a large grassy area *Caladenia clavigera* was occasional and two or three plants of *Cryptostylis subulata* were seen Victoria's most common *Caladenia. C. dilatata* was in flower. My second sighting in Victoria of *Prasophyllum elatum* in flower was here and there were quite a few plants of *P. patens* poking their flower heads above the surrounding long grass.

This was my last day of orchiding in Victoria. I felt almost overwhelmed by the diversity and sheer numbers of orchids seen during a week that had gone so fast. My thanks go to all the members and friends of the ANOS Victorian Groups who were so friendly and helpful in making this part of my southern states tour so enjoyable and fruitful.

Part 4 in the next Newsletter.

Caladenia alata R.Br. syn. C. exigua(Cheesem.) Cheesem.

by E.D. Hatch and D. McCrae, Auckland.

An Australian species recorded from New Zealand only from upper Northland - from Kaikohe to the North Cape - scattered or in compact groups in sheltered places in gumland scrub. Rather local.

On podzolised gum-clay plants rarely exceed 125mm in height with one small white or pink flower, but when growing in damp depressions they are more robust, to 200mm, with sometimes two, much larger flowers.

Peculiar to *C. alata* are the two orange stipitate glands, one on either side of the base of the midlobe of the labellum. There is also an irregular orange patch at the apex of the midlobe, which is usually abruptly recurved and hidden from view. The labellum lobes are normally banded with red, but may be colourless.

In the Te Paki area for some reason, the flowers often lack the characteristic glands of the midlobe, but these may be found occasionally in a rudimentary condition.*C. alata* flowers early in the season, during August-September. Several plants observed in cultivation did not open their flowers at all. yet set ample seed. This suggests that the species is self-pollinated In the wild the flowers open freely.

Additional distribution records, particularly south of Kaikohe. would be welcome. Please contact Doug McCrae, 112 Haverstock Road. Mt Albert. Auckland 3.

We are grateful to Bruce Irwin for permission to use his excellent illustrations.

NOTES

♦**Reminder: Taupo field days, 9 and 10 December**; if you intend to come, contact Max Gibbs at 15 Rahui St, Taupo.

♦The Taupo Group of NZNOG and the Taupo Orchid Society have produced *An appreciation of New Zealand Native Orchids on the Central Volcanic Plateau,* an excellent booklet of 60 pages, protected by a sturdy plastic flow-wrapped cover, and available from 15 Rahui St. Taupo at $10 - profits to native orchid conservation work in the area. Text and illustrations by NZNOG member, Max Gibbs. A must for all members, especially those who have been, or Intend going, to Iwitahi.

♦Lottery Science has granted $2000 to Doug McCrae to continue his work on Northland orchids. This is good news indeed.

♦Good news too for stamp collectors, but more importantly, for those of us keen to see native orchids better known and valued in New Zealand: after an approach from NZNOG, NZ Post is to issue a set of stamps showing native orchids in 1990. The stamps are of species endemic to New Zealand, the designs made by a professional stamp designer after submission of drawings by Bruce Irwin.

♦Val Smith writes (8 October), "John Dodunski told me of a colony of *Corybas aconitiflorus (cheesemanii)* he had found on the Te Henui Walkway in New Plymouth. I was not aware of it in our area at all, and it was one of the orchids I had hoped to see on a planned trip to Auckland, so as you can imagine, I followed up the lead promptly. I eventually found the plants under dry beech litter as described - many seed capsules had formed, but fortunately one flower was still out and was photographed (1 September). 1 will go back to the colony again next year, probably early in August when they should be in full flower. Last week on a tramping trip to the southern Wairarapa I saw my first *Pterostylis foliata* just coming into flower on the bush walk lookout area at Putangirua Pinnacles Reserve. A few *P. graminea* (var.*graminea)* were also out, and a *Caladenia carnea.* Other orchids seen were *P. alobula* (?), numerous and finished flowering, and possibly two or more other *Pterostylis* species in bud, *Thelymitra* (possibly several species) in bud, *Microtis unifolia* leaves, *Acianthus sinclairii* finished flowering, and possibly *Acianthus reniformis* leaves. Altogether a very interesting area, both scenically and orchidwise (4 October)."

Interestingly, P. foliata was just through the ground at Shag Point in Otago on I October - Ed.

♦Dan Hatch comments on notes in *Newsletter* 31: "The photograph in Dorothy Cooper's *NZ Native orchids* of *Gastrodia sesamoides* is in fact *G.* ' long column'. *Bulbophyllum tuberculatum* is endemic - the Australian plant is *B. argyropus*." *And now that I read him, David Jones says the same thing about B. tuberculatum in "Australian native orchids" - Ed.*

♦From Kew's *Orchid Research Newsletter* No.14 (June 1989) we read that one Henry Azadehdel was recently successfully prosecuted by Her Majesty's Customs at the Old Bailey in London for orchid smuggling. Plants worth more than 45,000 pounds sterling were confiscated. The Judge said, "The destruction of rare species is not caused by overenthusiastic collectors but by cynical and ruthless commercial exploitation and trafficking for profit. If ever a trade wants discouraging, it is this." Henry Azadehdel was sentenced to a year in prison and 20,200 pounds in fines and costs. A full account of the case and its implications, together with various comments, is printed in *New Scientist* 1670: 48-53 (1989). *The judge was wrong about over-enthusiastic collectors* - Ed.

♦Bill Poulton (5 Colwill Cres, Wolfdene 4207, Queensland) writes, "1 was wondering if you have any members who would be interested in swopping seed; I'm only interested in epiphytes. .. my wife and I hope to attend the 13th WOC in Auckland. .. we have quite a few cool growing species which 1 feel will do well over your way.... contact me at the above address".

♦Two further booklets in our Historical Series are now available. The fifth in the Series is *The New Zealand orchids: references and illustrations.* It is a 38 page book of lists - first a list of papers referring to the NZ orchids; second a list of illustrations of NZ orchids, published or in public collections. The sixth in the Series: Dan Hatch has examined the letters to T.F. Cheeseman from those great bush-botanists of Northland R.H. and H.B. Matthews, in the Auckland Museum, and has written a fascinating 20-page account - *Orchid extracts from the Matthews correspondence* - never before published. Both booklets in the Historical Series should be ordered before 31 January.

♦Barbara McKerchar of Invercargill is the grand-daughter of G.M. Thomson, turn-of-the-century Dunedin naturalist and student of native orchids. She has painted a delightful series of native orchid watercolours reproduced as high quality greeting cards. Illustrated in the set of eight are *Thelymitra venosa (cyanea), Thelymitra* sp. *(pulchella), Earina autumnalis, Corybas trilobus, Corybas macranthus, Dendrobium cunninghamii. Caladenia lyallii,* and *Pterostylis* sp. *(banksii).* A sample is included with this issue. These are available from Mrs McKerchar at $ 13.50 for a minimum of 24 cards and envelopes, plus $1.50 post and packing. Cut off the order form enclosed and send it direct to her, with payment.

♦Bananas again: The Native Orchid Society of Queensland's *Bulletin* (October 89) suggests (of *Caladenia menziesii* and *Lyperanthus nigricans* - but it would be worth trying on some of our hard-to-flower species) "Some growers have stimulated flowering in these species by placing the pot in a plastic bag with a green banana skin and leaving it there until the skin turns brown".

First Australasian Native Orchid Conference and Show, University of Wollongong, New South Wales

27 - 30 September 1990

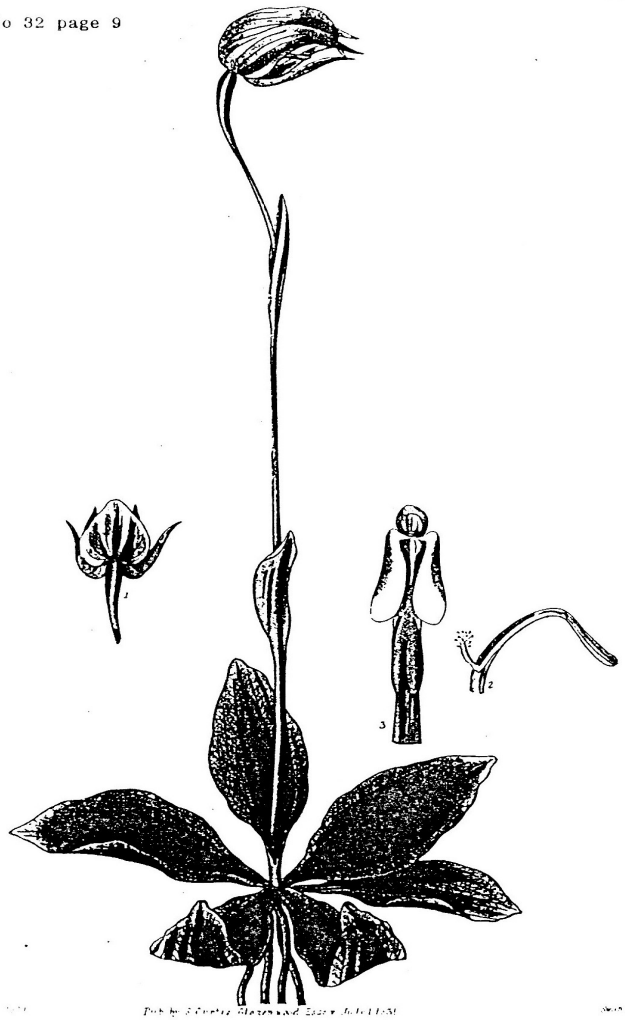
Seminars; native orchid show; art, china painting and photographic show; social functions; eight pre- and post-conference orchid tours to choose from. While it will not be possible for New Zealanders to exhibit plants, this is to be a truly Australasian conference - New Zealand registrants are welcome, and entries for the photographic, art and china-painting competitions are eagerly sought. See filer enclosed with this number of the *Newsletter.*

Further advice from Miss Margaret Prendergast, ITC Uniadvice Ltd, University of Wollongong, POB 1144, Wollongong, NSW 2500, Australia.

(Could any member who intends going to the Wollongong Conference and who might be prepared to manage a sales table (stamps, badges, books) please get in touch with me? - Ed.)

Historical reprint

Hooker W.J. From Curtis's *Botanical Magazine* Vol 5 of the new series or Vol 58 of the whole work. 1831. t3085.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2
3

(3085)

PTEROSTYLIS NUTANS. NODDING-FLOWERED PTEROSTYLIS.

****

Class Order.
GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Perianthium ringens, tetraphyllum, foliolo inferiore bifido (e duobus infra cohaerentibus conflato). Labellum unguiculatum, subinclusum. Lamina basi appendiculata v. gibbosa. Ungue infra labio inferiore connato. Columna basi galea connata, apice alata. Anthcra terminalis, per- sistens, loculis approximatis. Masscc Pollinis in singulo loculo binas, compressae, pulvereae. Stigma medio columnar adnatum. Br.

Specific Character and Synonyms.

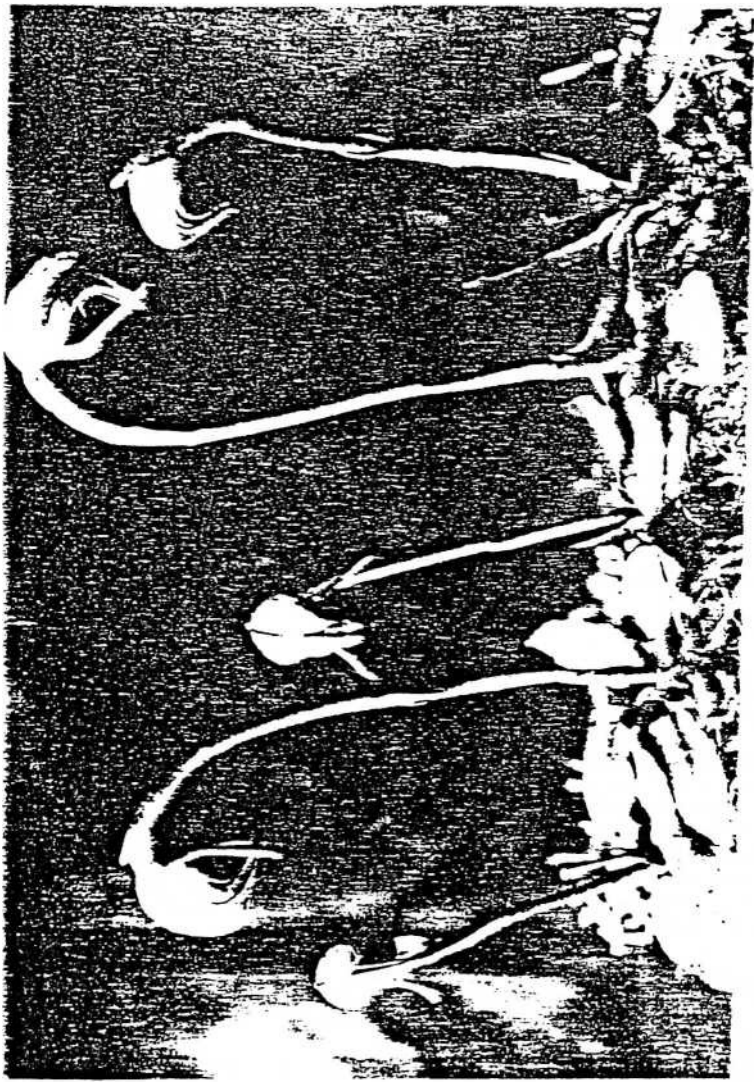
PTEROSTYLIS*[1] nutans ; foliis radicalibus stellatis, flore nutante, labiis longitudine subaequalibus, galea acuminata, labello apice attenuato truncato.
PTEROSTYLIS nutans. *Br. Proclr. FL Nov. Holl. v. 1. p. 327. Spreng. Syst. Veget. v. 3. p. 715.*

Descr. *Leaves* radical, spreading in a stellated manner, oval, rather acute, membranous, striated, reticulated, tapering into a short petiole. Scape erect, scarcely a span high, erect, glabrous, with about two foliaceous, sheathing brac- teas, and terminated by a solitary, nodding flower: the three upper segments of the flower are approximate so as to form

---

Derived from trTtpor, a wing", and ctvXo,-, a style, in allusion to the winged style or column.

Yesterday's orchids: copy of a photograph taken by H.B. Matthews of plants found in the vicinity of Kaitaia: *Pterostylis nutans* - alas, long gone.



form a helmet, very convex, gibbous at the base, acuminated at the extremity, greenish-white, striated. *Lower* segment (of two combined segments) small in proportion to the rest of the flower, green, with two lanceolato-subulate laciniae. *Labellum* linear-attenuated, downy, rather thickened and obtuse at the extremity. *Column* green, with two broad, white wings towards the extremity. *Germen* clavate, furrowed.

Introduced to the Royal Gardens at Kew from New Holland, in the year 1826. The drawing was made from an excellent flowering specimen, in September, 1828, and obligingly communicated by Mr. AITON.

In the direction of the flower, and in the shape of the labellum, this species is altogether different from the *P. curia*, figured in our next plate.

Fig. 1. Back view of a Flower, nat. size. 2. Labellum, with its penicellatcd appendage. 3. Front view of the Column :—all but fig. 1. magnified.

Editorial

Names of the NZ orchids

Ian St George

If you are one of those who has expressed confusion and mystification about the current names of the NZ orchids, you are not alone. There are new species, and the old names of some others have changed. Even the most knowledgeable are uncertain about some current names, but most of those used in Moore and Edgar's 1970 *Flora of New Zealand Volume II* are still correct. Several species must await formal description, but some clarification from published data is in order.

Take your copy of *Flora II* (or photocopy pages 102-167 of somebody else's copy) and make the following corrections or notes on the page numbers shown. You may have to do it again soon, but at least this will bring your copy reasonably up to date as of 1989.

p 106: *Acianthus fornicatus* var. *sinclairii* becomes *A. sinclairii* Hook.f.

p 106: *Acianthus reniformis* becomes *Cyrtostylis reniformis* R.Br.[1] *Cyrtostylis oblonga* Hook.f. is taken out of *C. reniformis* and is reinstated as a separate species..

p 107: *Acianthus viridis* Hook.f. remains In the meantime the correct name for *"Townsonia viridis"*.

p 109: *Caladenia:* the various forms lumped under *C. carnea* in *Flora II* have been separated out as follows.

C. alata R.Br is reinstated for the species once known as *C. carnea* var.*exigua* - with the one large marginal callus (stalked gland) on either side of the base of the labellar midlobe.[2] [3] (and see Hatch and McCrae in this issue).

C. carnea R.Br. (the species once known as *C. carnea var. bartlettii)* has prominent transverse red bars on the labellum and column with the clubbed labellar calli in 2 rows.[4]

C. minor Hook.f. is reinstated (though from Australia Jones still includes *C. carnea* var. *minor* under *C. carnea* [5]) - it is the variety with the 2 rows of calli absent from the surface of the labellar midlobe, and the tip pale (pi 10 of *Flora II,* photograph Plate 13 of Johns and Molloy).

C. catenata (Smith) Druce has a much longer labellar midlobe and lacks the red bars on the labellum and column[6] (photograph Plate 12 of Johns and Molloy).

C. iridescens R. Rogers is the species once known as *C. carnea* var. *minor* forma *calliniger*[7]

The others await formal clarification (even from Australia, Jones notes "A detailed study of the complex is badly needed"[4]),

p113: *Chiloglottis gunnii* Lindl. is added [8]

p116: *Corybas aconitiflorus* becomes *C. cheesemanii* Hook.f.[9]

p116: *Corybas unguiculatus* is separated into *C. carsei* (Cheesem.) Hatch[1] and C. affinis *unguiculatus.*

p118: The species listed as *Corybas rivularis* is now *C. acuminatus* Clements et Hatch.[11]

p118: The species listed as *Corybas orbiculatus* is now *C. rivularis* (A. Cunn.) Reichb.[11]

pl21: *Calochilus campestris* becomes *C. herbaceus* Lindl.[12]

pl22: *Cryptostylis subulata* (Labill.) H.G. Reichb. is added.[13]

pl25: *Thelymitra venosa* becomes *T. cyanea* (Lindl.) Benth.[14]

pl26: *Thelymitra ixioides* is separated into *T. aemula* Cheesem. and T. affinis *ixioides.*

pl28: *Thelymitra dentata* is now regarded as a hybrid.

More *Thelymitras* will be added.

p 131: *Caleana minor* remains - *Paracaleana* is no longer considered to be correct.

pl34: *Pterostylis mutica* becomes P. tristis Col.[16]

pl36: *Pterostylis barbata* becomes *P. plumosa* Cady.

pl44: *Pterostylis patens* Col. is separated out from *P. banksii*.

pl45: *Pterostylis graminea* var. *graminea* and *P. graminea* var. *rubricaulis* remain correct in the meantime.

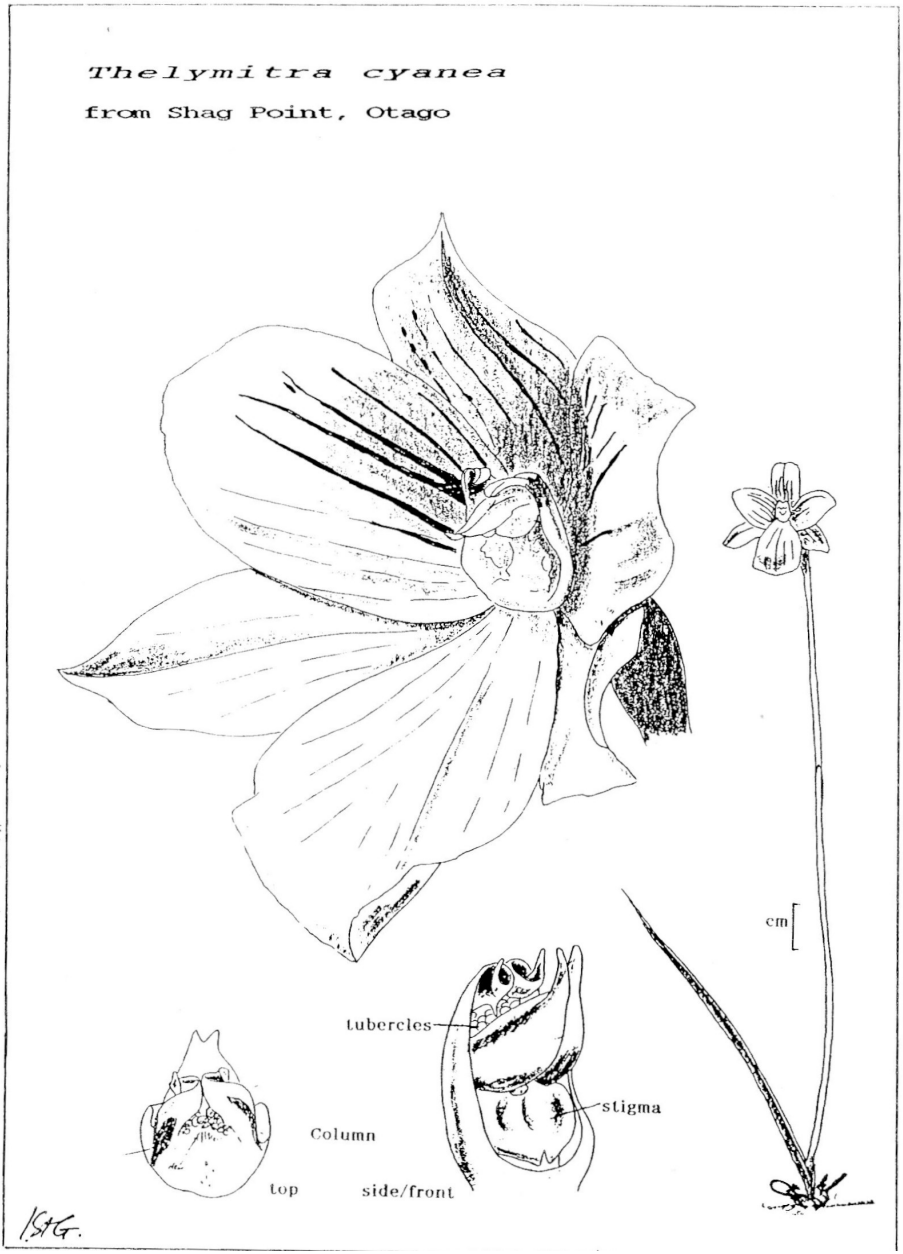
pl47: Pterostylis cardiostigma D. Cooper is added.[16]

More Pterostylis remain to be formally described,

p155: *Spiranthes sinensis* (Pers.) Ames remains, despite some having reused the name *S. novae-zelandiae.*

pl60: *Earina aestivalis* Cheesem. is separated out from *E. mucronata.*

The other names in *Flora II* remain in use. Several species not listed remain to be described: watch this space.


Thelymitra cyanea
from Shag Point, Otago
cm
tubercles
stigma
Column
top
side/front
I.St.G.

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16. Cooper D. 1983. *Pterostylis cardiostigma* D. Cooper *sp.nov.* - A New Species for New Zealand. *Orchadian* 7: p215.

STOP PRESS

Corybas "C" at Skippers

by Ian St George

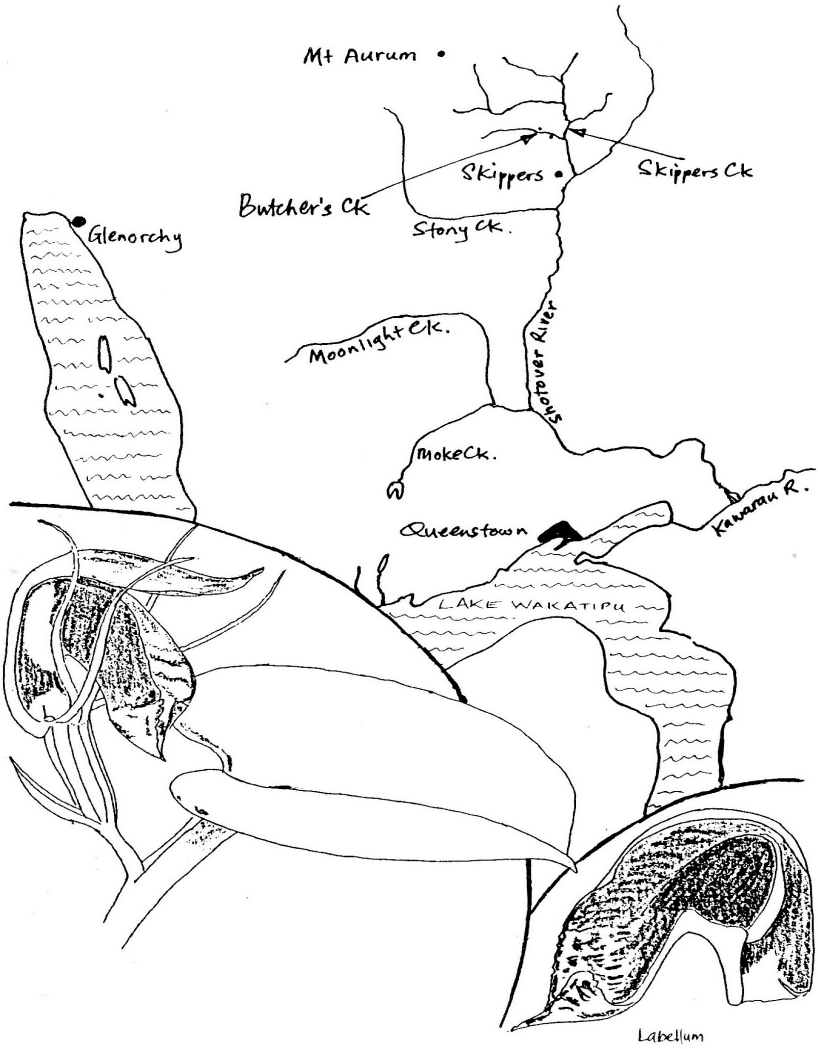
Skippers Creek (the famous gold-rich tributary of the Shotover River north of Queenstown) is a pleasant place to spend a day or two fossicking for gold in the summer, but only the very keen venture up there at other times of the year. Several summers ago 1 noticed round *Corybas* leaves at the edge of a mossy waterfall a kilometre or so up Butcher's Creek off Skippers Creek. *Corybas rivularis* I assumed, but decided one day I would go back in flowering season and make sure.

The spring of 1989 has been warm and settled - the creeks are low and clear, and algae have actually had time to grow on some of the stones. Labour Weekend found us in the vicinity. The *Corybas* was there still, small buds "above" the leaves, but after a good search, a flower, but with the short petals and sepals of Bruce Irwin's *Corybas* "C". A freak? No, all other flowers that I could find were the same. Another waterfall held another colony, and its flowers were the same.

The orchids grow at the edges of the waterfalls, where the water flow is slight enough for five or ten cm of moss and grasses to stick to the almost vertical rock. Some are protected from the falling water by dead grass hanging down in front of them, but some are in the direct stream, and all are thoroughly soaked. The rock here is schist.

I have never seen other *Corybas* in the area.

The map reference is E40 682 900


Mt Aurum
Skippers
Skippers Ck
Butcher's Ck
Stony Ck.
Glenorchy
Moonlight Ck.
Shotover River
Moke Ck.
Queenstown
Kawarau R.
LAKE WAKATIPU
Labellum