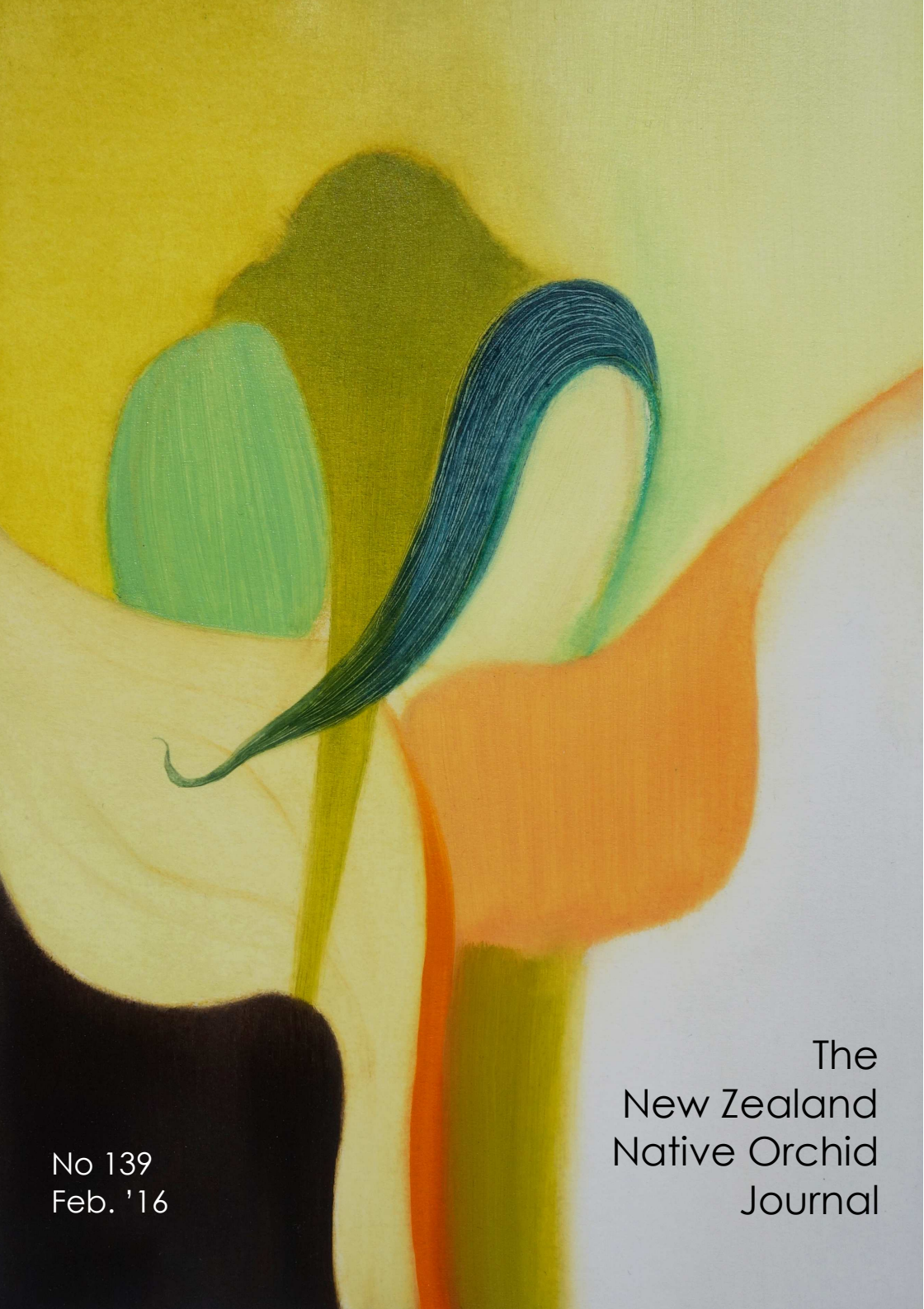
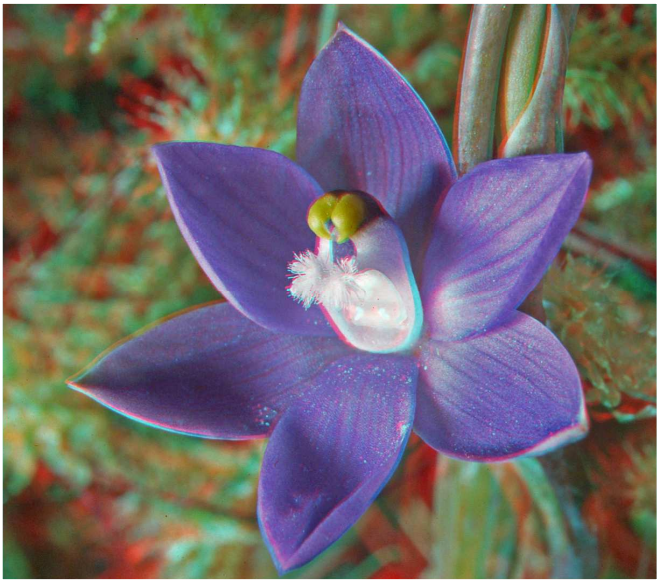


The New Zealand Native Orchid Journal

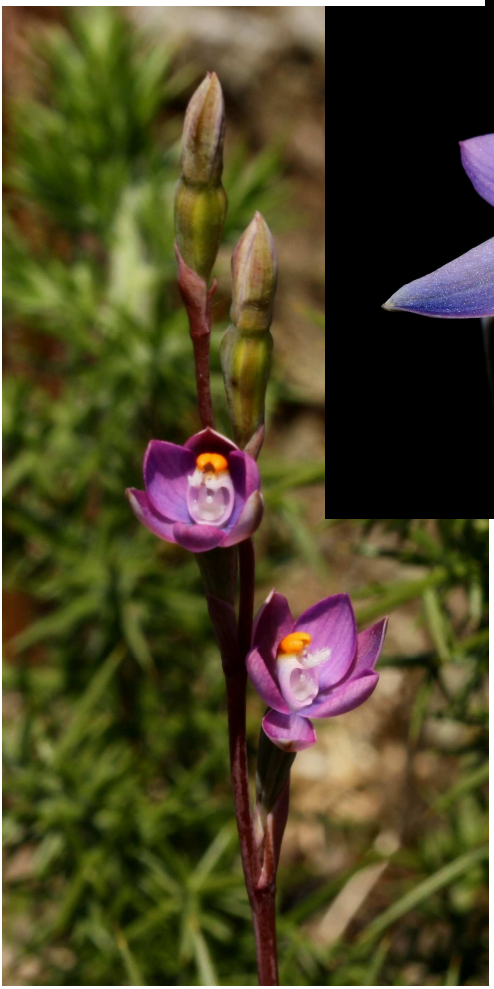
No 139
Feb. '16

Orchids in 3D



Eric Scanlen writes, "*Thelymitra* 'orange top' has up to 32 flowers per stem, thus differs considerably from similar *T.* aff. *pauciflora*, with its 1 to 6 flowers with yellow topped columns. These taxa grow in close proximity at Wilks Rd. Silverdale [J92:15] where the Column and Allan Ducker counted those 32 florets. But its name has had a chequered career. HB Matthews described it in his 1928 manuscript as *T.* 'scaphifolia' with 1 to 7 flowers (J112:40) and it has been called *T.* sp. aff. *pauciflora* in Oz by Backhouse & Jeanes, then *T.* aff. *Brevifolia* [J94:12] by our Editor but Kevin Matthews had the leaf length [J111:11, 20] as normal Thely. length, not at all 'brevi'. Matthews & Son on orchids had it previously as '*T. intermedia* sensu Irwin & St George', but the Editor put a stop to the fruitless debate by tagging it *T.* 'orange top' in J119:5."

Thelymitra "orange top"



Kevin Matthews sent these photographs showing the stunning natural colour of this taxon (3d processing can reduce some colours), "*T.* 'orange top' prefers ancient kauri wetlands where it grows on slightly raised hummocks. It can be a robust plant with up to 20 flowers on a scape 650mm tall with 3 bracts and a leaf 14mm wide x 450mm long. The leaf when reaching this size on robust plants is liquorice strap like with a central keel and 3 raised ribs either side of the keel. I have recently found this robust *Thelymitra* on the farm growing in an ancient kauri wetland under moderate manuka shade. In drier late spring sites that are winter wet, like the side of the Ahipara Gumfields road, it is less robust with one to 4 flowers and a leaf more generally fitting with *T. pauciflora* aggregate, however the flowers are much the same size at approx. 25mm.

T. 'orange top' is uncommon and was formerly growing alongside *T.* 'ahipara' at a Sandhills Road site that was recently destroyed during ancient kauri log mining. *T.* 'orange top' opens willingly in full sun and will open the same flower up to 5 days consecutively; it has no perfume and has friable pollen. The postanther is a bright yellow with hint of orange prior to self opening and upon self opening it turns burnt orange. It has to be one of our most striking *Thelymitra*.

Original paper

New combinations and a replacement name for three New Zealand spider orchids (*Corybas*)

Carlos A. Lehnebach.
Museum of New Zealand Te Papa Tongarewa, PO Box 467, Wellington. New Zealand. Email: CarlosL@tepapa.govt.nz.

Abstract
To reflect the current taxonomy in use for New Zealand spider orchids, a replacement name and two new combinations are proposed; *Corybas hatchii* Lehnebach, *Corybas hypogaeus* (Colenso) Lehnebach, and *Corybas papillosus* (Colenso) Lehnebach.

Taxonomy of New Zealand (NZ) spider orchids (*Corybas*) has changed constantly over the years (see Hooker 1853, Hooker 1864, Moore 1976, Clements *et al*. 2002, Jones *et al*. 2002, Szlachetko & Rutkowski 2003). For instance, some NZ species initially described under *Nematoceras* Hook.f. have been transferred to *Corysanthes* R.Br., and subsequently moved to *Corybas* Salisb.; while other species have been segregated from these genera and placed under newly created genera such as *Anzybas* D.L.Jones & M.A.Clem., *Molloybas* D.L.Jones & M.A.Clem. and *Singularybas* Molloy, D.L.Jones & Clem. (Clements *et al*. 2002, Jones *et al*. 2002).

Lyon (2014) has reassessed generic boundaries within the *Corybas* alliance using multiple DNA markers. Her study included over 80 taxa from across the distribution of *Corybas* (i.e. the Himalayas to Southern China, the Malay Archipelago, Polynesia, New Guinea, New Zealand and Australia). This thorough study has demonstrated the monophyletic nature of the *Corybas* alliance and she recommended that all members of the alliance should be transferred to *Corybas*.

Such recommendation has already been implemented overseas and in New Zealand, to some extent. For instance, the World Checklist of Selected Plant Families (WCSP, 2016) compiled by Kew Botanic Gardens no longer recognises *Nematoceras*. In NZ, both the Department of Conservation (see de Lange *et al*. 2013) and the New Zealand Native Orchid Group have adopted Lyons' recommendations. However, not all *Nematoceras* species have been transferred to *Corybas*. This is because there is no combination in *Corybas* for *Nematoceras hypogaeum*, *N. longipetalum* or *N. papillosum*.

To reflect the current generic taxonomy in use I proposed new combinations and a replacement name for these species below:

Corybas hatchii* Lehnebach, *nom. nov.

Basionym: *Corybas macranthus* var. *longipetalus* Hatch, *Trans. & Proc. Roy. Soc. New Zealand* 76: 580 (1947).
Replaced synonym: *Corybas longipetalus* (Hatch) Hatch, *J. New Zealand Native Orchid Group* 47: 6 (1993) nom. illeg., non *Corybas longipetalus* (Ridl.) Schltr. 1923.
Synonym: *Nematoceras longipetalum* (Hatch) Molloy, D.L.Jones & M.A.Clem. in Jones *et al*., *Orchadian* 13: 449 (2002).

The epithet honours Dan Hatch, who greatly contributed to the knowledge of New Zealand orchids and initially described this taxon.

Corybas hypogaeus* (Colenso) Lehnebach, *comb. nov.

Basionym: *Corysanthes hypogaea* Colenso, *Trans. & Proc. New Zealand Inst.* 16: 336 (1883 [1884]).

Synonym: *Nematoceras hypogaeum* (Colenso) Molloy, D.L.Jones & M.A.Clem. in Jones *et al*., *Orchadian* 13: 449 (2002).

Corybas papillosus* (Colenso) Lehnebach, *comb. nov.

Basionym: *Corysanthes papillosa* Colenso, *Trans. & Proc. New Zealand Inst.* 16: 337-338 (1883 [1884]).

Synonym: *Nematoceras papillosum* (Colenso) Molloy, D.L.Jones & M.A.Clem. in Jones *et al*., *Orchadian* 13: 449 (2002).

Acknowledgements

This work was supported by the Marsden Fund under Grant 10-MNZ-002. I would like to thank Pat Brownsey, Phil Garnock-Jones and Leon Perrie for their comments and advice on taxonomy and nomenclature.

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The type locality Ian St George

The Kawakawa river and *Pterostylis banksii*

One of the most celebrated stories of New Zealand orchidology is the discovery and subsequent history of *Pterostylis banksii*. It is best, I think, told by WJ Hooker himself:

(3172)

PTEROSTYLIS BANKSII. LARGE-LEAVED PTEROSTYLIS.

****

Class and Order.

GYNANDRIA MONANDRIA.

(Nat. Ord.—ORCHIDEÆ.)

Generic Character.

Perianthium ringens tetraphyllum, foliolo inferioro bifido (e duobus infra cohærentibus conflato). *Labellum* unguiculatum, subinclusum. *Lamina* basi appendiculata v. gibbosa; *ungue* infra labio inferiore connato. *Columna* basi galea connata, apice alata. *Anthera* terminalis, persistens, loculis approximatis. *Massæ Pollinis* in singulo loculo binæ, compressæ, pulvereæ. *Stigma* medio columnæ adnatum.

Herbæ *terrestres, glabræ.* Bulbi *nudi, indivisi, caudicem descendentem radiciformem terminantes.* Folia *nunc radicalia stellata, nervosa, membranacea, scapo bracteato aphyllo; nunc caulina alterna radicalibus nullis.* Flores *solitarii rariusve racemosi, ochroleuci, sæpius majusculi.*

DIV. II. Appendix *apice diviso sæpius penicellato.* Folia *radicalia in planta florida nulla.* Caulis *foliosus. Br.*

Specific Character and Synonyms.

PTEROSTYLIS *Banksii;* caule folioso unifloro, foliis lato-lanceolatis inferne carinatis basi vaginantibus, labello oblongo ovato-subuncinato obtusiusculo columnam æquante, appendice pennicellato. *Cunn. in litt.*
PTEROSTYLIS Banksii. *Brown, in Herb. Banks.*
PTEROSTYLIS macrophylla. *Cunningham, MSS.*

Not having had the opportunity of seeing a living specimen of this extremely rare plant, I am unable to offer a description of it, and which, at best, would have given a very inadequate idea of the plant, in comparison with the accompanying figure, which is from the inimitable pencil of FRANCIS BAUER, Esq. The history of the plant I shall give

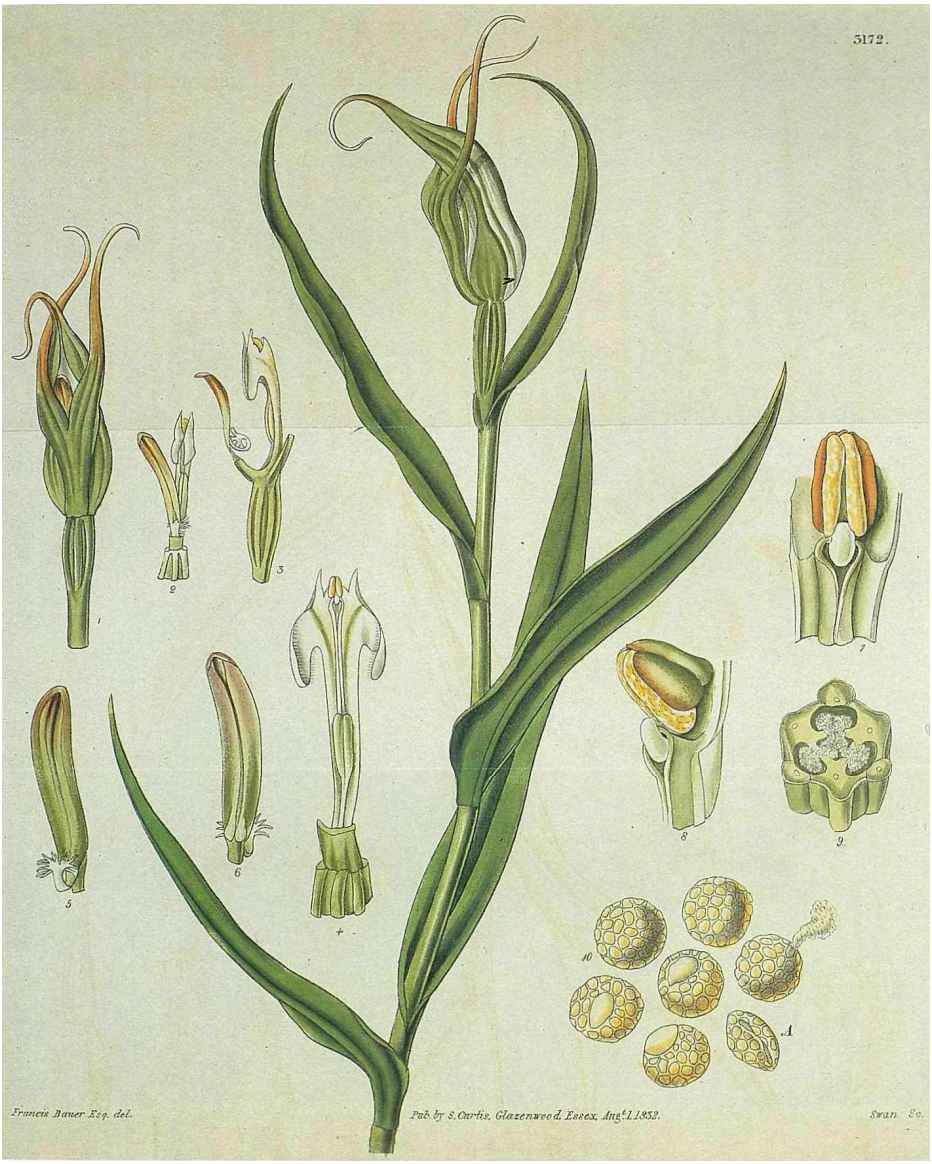
give in the words of Mr. ALLAN CUNNINGHAM, in the letter above quoted, and dated April, 1832. "When I was in New Zealand in 1826, I found on the bank of a stream which is received into the Bay of Islands, a PTEROSTYLIS, remarkable no less for the large size of its cauline leaves, than for its height, which exceeded a foot. On my return to Sidney, I carried with me some roots of this unpublished plant, which I transmitted to Kew, by an opportunity which then offered. There it had been long supposed to be dead, when, to the surprise of all of us, it has thrown up a perfect flower-stem, which I carried to Mr. BAUER, who has not only made a beautiful drawing of it, but has most kindly permitted me to send it to you to publish in the Botanical Magazine."

At this time Mr. BAUER had not examined the grains of Pollen; but when he had done so, and found them to be very different from those of Orchideous plants, he most liberally communicated his exquisite drawing of them through Mr. CUNNINGHAM; accompanying it with the following note: "I have now on the 2d of May, examined the Pollen Grains with PLOESSEL'S grand microscope, and, to my great surprise, found a total deviation from those of all the hundreds of specimens of Orchideous plants I have yet investigated. These grains, in their ordinary form, consist of three or four-celled corpuscules, or as Botanists express it, 'e sphærulis quaternis conflatis' (see BROWN, Prodr. p. 310.). I therefore send you herewith, a sketch of some grains of your plant, which are represented as seen under water, except that at *A*, which is in a dry state, when it appears collapsed. This I consider an important circumstance, and could not be detected by Botanists possessed only of glasses of moderate power."

These grains of Pollen as given here are magnified 570 times lineally, or 324,900 times superficially!

Mr. CUNNINGHAM had named the species P. *macrophylla:* but on showing the drawing to Mr. BROWN, that learned Botanist recognized it as the same with a specimen found by Sir JOSEPH BANKS in New Zealand, at the time he accompanied Captain Cook round the world in the Endeavour, and of which the plant, or the drawing, still exists in the Banksian Museum. Mr. CUNNINGHAM then readily consented to the wishes of Mr. BROWN, that it should bear the name of its first discoverer.

Fig. 1. A Flower of PTEROSTYLIS; *nat. size.* 2. Front view of the Fructification with the Labellum, *nat. size.* 3. A side view of the same; *nat. size.* 4. A front view of the parts of Fructification, with the Alæ forcibly expanded; *magnified* two times in diameter. 5. Front view of the Labellum *magnified* two diameters. 6. Back view of the same, *magnified* two diameters. 7. Front view of the Anther, the Stigmatic Gland, and a small portion of the Columna, *magnified* six diameters. 8. A side view of the same; *magnified* six diameters. 9. Transverse Section of a portion of the Ovarium; *magnified* four diameters, (F. BAUER). 10. Grains of Pollen as described above.



Franz Bauer's illustration shows a rather postmature and shrinking flower.

Specimens of *Pterostylis banksii* in the Kew Herbarium.
No. 313 (lower left) was the subject of Bauer's illustration.

Editor's rant Ian St George

On the desirability of tag names

A common—and in our view ill-considered—brickbat directed at the Group is its use of tag names for orchids.

We believe each tagname raises an hypothesis ("This unusual orchid may be part of an undescribed entity") that invites, in the best traditions of logical positivism applied to scientific enquiry, proof or disproof.

We believe furthermore that this journal should be a forum for discussion of unusual and apparently undescribed orchids and we do not believe that activity can be conducted with any logical sense without naming them with tags.

We have not, so far, ventured into the specialised work of formal publication, because, importantly, we are stating our lack of total conviction that these are separate species. We are simply advancing an hypothesis.

In the philosophy of language a proper name, for example the names of persons or places or orchids, is a name which is taken to identify uniquely its referent in the world.

The commonsense view was formulated by John Stuart Mill in *A System of Logic* where he defined a proper name as "a word that answers the purpose of showing what thing it is that we are talking about but not of telling anything about it".

Simple really. But then philosophers applied principles of formal logic to linguistic propositions.

Bertrand Russell was the first to propose a descriptivist theory of names, which held that a proper name refers not to a referent, but to a set of true propositions that uniquely describe a referent—for example "Aristotle" refers to "the teacher of Alexander the Great". (And Aporostylis refers to the little white-flowered ground orchid with two different sized leaves. So does "the odd-leaved orchid").

Rejecting descriptivism, others instead advanced causal-historical theories of reference. These hold that names come to be associated with individual referents because social groups link the name to its referent in a naming event (eg, a baptism). That event henceforth fixes the value of the name to the specific referent within that community.

That is what botanists call formal description, but it also pretty much fits what Landcare Research has to say about tag names. They say some plants and animals that are recognised as belonging to distinct species have not received a formal description. Tag names are used so that information about the species can be referred to in publications and databases. Two forms of tag names are used in Plant-SyNZ™.

One is "genus unknown, species undescribed" which is rarely the case with orchids so I will say no more about it. The other is "genus known, species undescribed".

When the genus is known, the format is Genus sp. "tag name" (Author year), i.e. for the leaf mining fly reared from *Hydrocotyle* species, *Liriomyza* sp. "hydrocotyle" (Spencer 1976) and for the leaf mining fly reared from *Melicytus alpina*, *Liriomyza* sp. "Melicytus alpina" of Martin 2000. The first species was first mentioned by Spencer in a 1976 publication, while the second species has not been recorded in a publication. [Landcareresearch http://plant-synz.landcareresearch.co.nz/database/names.html].

Thus, just as we would write formally, for a described species, *Bulbophyllum tuberculatum*

(Colenso 1884), so we might write formally, for an undescribed species, *Corybas* sp. "whiskers" (Irwin 1995). That tag name fits the descriptive and the causal-historical theories of reference because it has *come to be associated with an individual referent* (the plant itself) *and because social groups* (the members of NZNOG) *link the name to its referent in a naming event* (Bruce Irwin's description and drawing of the plant in NZNOJ 1995; 55: 23–4) *which henceforth fixes the value of the name to the specific referent within that community.*

Informally, we would write *Bulbophyllum tuberculatum* or *Corybas* "whiskers" (as we do).

Tag names, like common names, are not unique if more than one person has identified an entity—Irwin identified *Corybas* "whiskers" long after HB Matthews identified the same plant as *Corybas* "viridis" in 1928. Irwin published it, Matthews did not. If the tagnaming is unpublished the first published tag should take precedence, though this would not have the same importance as precedence in the publication of formal descriptions.

Tag names identify previously unnamed (and formally undescribed) entities that may or may not turn out to be worthy of formal description as species. It is difficult to locate intelligent argument against their use.

Admittedly we have a lot of tag names—Eric Scanlen has tagged over 50 possibly undescribed entities among NZ orchids and there are many more named by others. Some might argue that new tag names are created on inadequate grounds: others that formal description has been slow with respect to NZ orchids so such a proliferation is a necessity.

Whatever your bias, I think we might all agree we ought to be re-examining these tagnamed orchids until we reach some consensus.

Are the names—the hypotheses that have been raised—logical and coherent? If not let's hear no more of them.

But if so, couldn't we take one of them at a time and look again? Define (describe, draw, photograph) the features that distinguish it from its near kin, grow both in similar environments, deposit some specimens in a herbarium, do the DNA: sort at least a few of them out?

Even if the outcome is, "these three tagnamed entities fall within the natural variation of a named species" we will have made progress.

The New Zealand Native Orchid Journal

The main aim of the **New Zealand Native Orchid Group** is informing people about native orchids, so we permit others to copy material published here, provided the source and author are acknowledged. Authors should note this as a condition of acceptance of their work. Authors seeking formal publication in line with the *International Code of Nomenclature* will have their work submitted to two peers.The *Journal* is published quarterly from February, and deadline for copy is the first of the month beforehand. We like copy to be typed or sent on disk or by email.

Chair: David McConachie, 42 Titiro Moana Rd, Korokoro, Lower Hutt, pleione@orcon.net.nz.

Secretary: Pam Shearer, 7 Ring Terrace, St Marys Bay, Auckland. pam@insidetrack.co.nz.

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The website posts journals six months after original publication.

Editor: Ian St George, 32 Hawkestone St, Thorndon, Wellington 6011 istge@yahoo.co.nz.

THE EDITOR and EDITORIAL BOARD AND MAY NOT SHARE AUTHORS' OPINIONS .

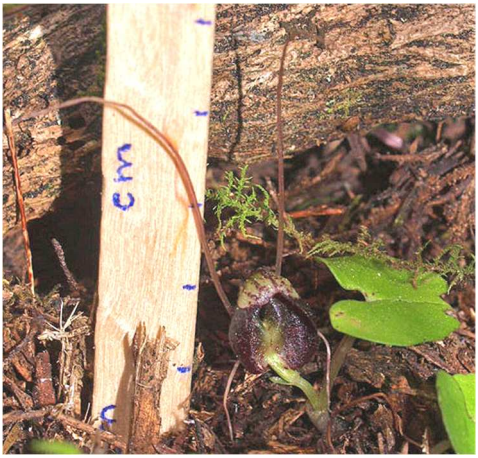
Notes

Caladenia alata flowering at Kevin Matthews's place on 25 September 2015. ►

Mike Lusk "Was lucky to be at Maungataniwha, a privately owned large area on the E side of Te Urewera (23 November) and in the course of wandering about found a few *Caledenia minor* in flower. Both those I photographed have a striking lack of red pigment in the flowers." ▼

Pat Enright sent these photographs on 5 October, of plants "In sandy soil under coastal kanuka just past the Mukamuka Stream."

It is *Corybas* "rimutaka", identified by the long oval labellar margins. It usually has a sharp apiculus on the dorsal sepal, but that seems to be variable. Note the hairs—*Ed.*



Mike Lusk photographed these in Hawke's Bay on 6 October.

They appear closest to *Corybas trilobus s.s.* (aka *Corybas* "Trotters")—*Ed.*

Bringing back native forest orchids

(Far North New Zealand). By Sachie Iida

Six years ago my husband and I bought a native forest in the Far North West of New Zealand. At the time the forest ground was bare, all grazed by goats, possums and rats. Trees were ring-barked, skeletal trees were everywhere. It was a native forest, but on the verge of collapse to a wasteland.

After intense pest control over the last six years, like taking out over 150 goats, the forest is recovering. Now we see all kinds of native orchids emerging from the once bare ground. Some areas are now covered with beautiful flowers.

Through the year we get to see different kinds of orchids flowering. They somehow survived and have come alive again.

I am new to New Zealand native orchids. I sort of noticed they somehow like a little bit of open, sunny side, having a bit of bush behind the spot. I have counted 18 different kinds of native orchid over the last 5 years.

When walking in cold winter, suddenly I smell something sweet in the air, follow the smell and you find Bamboo orchids hanging on trees. Most often seen are Greenhoods. One comes in summer and another smaller one comes in winter.

Once I found a teeny, weenie orchid growing on a trees' trunk, how tiny they were, only like a pinhead. First I didn't know what it was but it had a typical orchid flower. I looked it up and it was a bulb-leaf orchid.

Since I'm new to native orchids I'm not sure whether we have any endangered species coming back and growing in our forest.

New Zealand's native orchids are all small, but there's beauty in the small flowers. It's easy to walk past and not notice them.

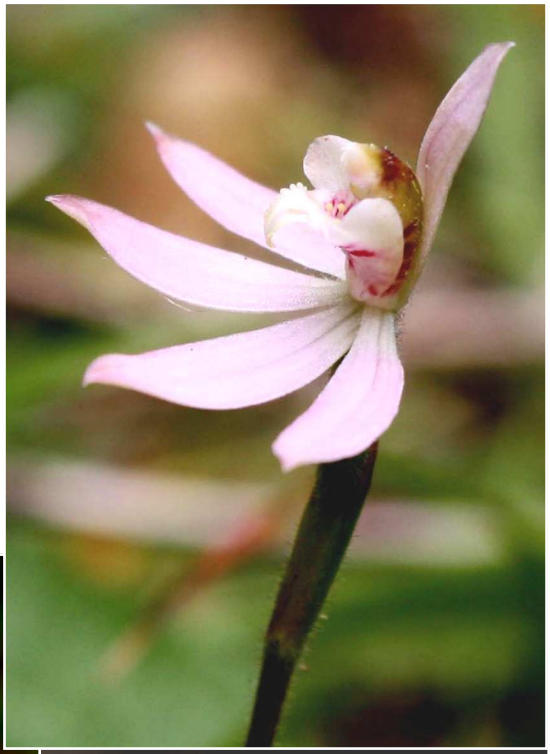
In future, I would like the orchids spreading all over. I think its happening. Once I find some, the following year there comes up many. They like open, bare space, like finger orchids invade open space. After all, with the area having been grazed by goats, in their favourite grazing flat area, I often see orchids.

Recently Sachie and her husband opened up the forest for eco tourists to enable the forest conservation to be sustainable long-term. One of their guided activities is orchiding. If you're interested in visiting their website is http://wwwforestofruru.co.nz , or Sachie would be happy to hear from you at: Sachie@forestofruru.co.nz

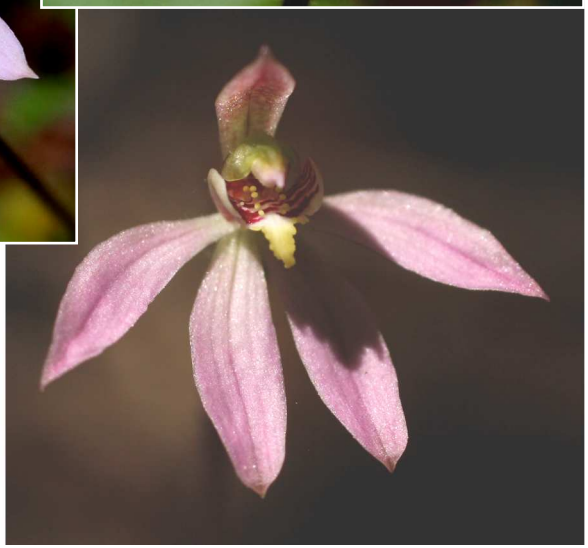
↑ Sun orchid in summer

← Greenhoods galore in winter

On 23 November Mark Moorhouse asked for some opinions about the pink *Caladenia* from Ngaio Bay (near Kaiteriteri). Photographs at right & below. Some points of interest: Calli with noticeably short stems on the disc. Column not bright green. No stipitate calli on midlobe. Sepals with similar shape tips to petals, ie subacute-acute with pinched tips giving appearance of being mildly apiculate. Stem reddish with red hairs. Disc has no stray calli. Dorsal lacks freckling on inner surface. Labellum wings widely open and lack callus at base. Midlobe has knobbly edge as in *C. variegata.* ► ▼



Mark sent a photograph ► of the local form of *C. variegata* for comparison: differences— Differences: Column bright green. Shades of pink darker and more intense. Calli on disc do have strays and generally have taller stems. Noticeable difference in shape of tepal tips. Sepals are blunter than petals, and dorsal is always freckled. Labellum wings have a callus at base.



Cheryl Dawson emailed, “At Herapi (Tararua) on Monday 23 November the *Pterostylis* we came across last October 13th were out; they were there in several small groups scattered along the track in various stages of development the more mature ones being around 4cm in height; some had 4 oval leaves with at least two quite heavily serrated others smooth.”

Mike Lusk sent photographs (24 November) of similar plants from Te Ruahine ▼

Gordon Sylvester sent these photographs of *Pterostylis venosa* from Scott track, Arthur's Pass, on 27 November. ►

Cheryl Dawson spent the weekend (of 30 November) on Mount Egmont and "came across what we think is *Pterostylis humilis* on the Kaiauai–Waiwhakaiho track at around 700 mts; the red of the labellum was brilliant the lateral sepal not so much…." ▼▼▼

Pat Enright, the Puffer track, Kaitoke, Tararua, 5 December.

▲ *Pterostylis graminea* s.s. is well over, so what is this?

Three flowered *Caladenia chlorostyla* ▲

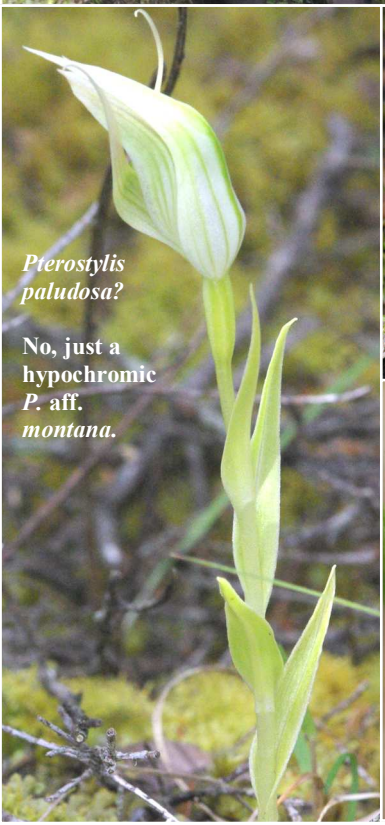
Your editor on the Puffer track, 8 December.
◄ *Pterostylis banksii?* No, this was only as big as *P. montana.*
►Slender red stemmed *Thelymitra colensoi* flowers earlier than other *Thelymitra*
◄ *Thelymitra formosa* is a strong upright plant, yet to flower here.
◄◄ *Pterostylis venosa* had had only one flower in the colony below the Marchant Ridge.
▼ (left) *Earina mucronata* here has a uniform cream, the labellum only a shade darker.
▼ (below) Even the plentiful *Thelymitra pulchella* has a lot of purple pigment this year.

Iwitahi 2015

photographs by Brian Otto

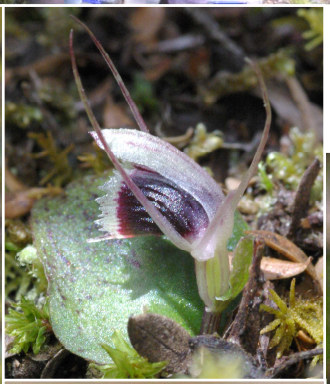
NZNOG field days at Ohakune

What were they looking at? photographs by Brian Otto



Pterostylis paludosa?

No, just a hypochromic *P.* aff. *montana.*



This is what they were looking at:
Townsonia deflexa ▼

Ohakune field trips and AGM

Reported by Graeme Jane

I was one of the last to arrive at Te Arawa Lodge Ohakune on Friday evening. By the time I arrived, the majority (about 20) were crowded around a very large table just finishing off a great stew, with the early arrivals discussing the day's adventures and debating various issues. Allan Ducker also later entertained with an illustrated discussion in the lounge on *Caladenia* and *Thelymitra*.

Saturday dawned wet but soon cleared, so after a brief wait we drove up Mountain Road to the Blyth Track for a short stop. Immediately around the car park there were numerous *Pterostylis* aff. *montana* and over the first 100 m or so of the track numerous *P.* "pulchra galea", a large flowered plant with a long dorsal sepal, a very narrow twisted labellum hanging out from the galea. It shared many characters with *P. montana* but the size was suggestive of *P. banksii* or *P. patens*.

After the photo stop we headed further up the mountain to the Waitonga Falls track and traversed the path to the foot of the falls. At first there were numerous *Pterostylis* aff. *montana* but then an eagle eye spotted a patch of the tiny *Townsonia deflexa* in good flower. Cara-Lisa in her foray also found a good patch of them further up the track. By the time I had moved on those ahead had spotted a few *P. humilis* tucked away under some ferns (marked by Ian the previous day). Later, on return down the track after everybody had taken their photos, who else but me would dare to verify it by exposing the heart-shaped stigma (then more photos).

Further along the track there were numerous *Pterostylis patens* including a very pale form. The beech forest walk gave way briefly at the saddle to an open wetland of red tussock with the odd patch of *Theymitra* leaves (probably *T. pulchella*). The cold wind persuaded many to turn back there. Further on down through beech forest *Corybas trilobus* leaves were abundant but only two flowers were seen. On the return someone had found Corybas "alba" in flower by the bridge almost at the car park.

A bit of bad driving then by me led to a split in the party. The main party headed to Middle Road to seek out *Prasophyllum,* while my vehicle headed to Smash Palace, thrashing around seeking the main party. First we headed up Matapuna Rd to its end at the beehives (a key clearing opposite visited by mob later without seeing much). Not finding them there we went to end of Clyde Access. Here *Pterostylis cardiostigma* & *P. patens* were both in good flower but the track proved largely unproductive. So after a brief foray we headed towards National Park still seeking the main group, stopping (and giving up) at a way stop near Arch culvert.

This proved very fruitful. Near the road edge there were lots of *Pterostylis* aff *montana*, some with the short lateral sepals (almost curled). By the culvert *Corybas papa* was just finishing flowering and a little further downstream a few *P. graminea* were in flower. Back in the clearing we found *Corybas oblongus* was in flower and *Thelymitra pulchella* in bud. Also lots of *T. longifolia* and plonkers with the narrow leaves were present in leaf or early bud. In the wet part of the clearing numerous blue flowered *Pinquicula grandiflora* in full flower caught our eye. This was only the third record of this adventive. In the edge of the tea tree I spotted a pale *P.* aff. *montana* with short leaves stupidly mistaking it for *P. paludosa*. It was the wrong habitat and I didn't check the stigma - it was elongate not heart-shaped. In the beech forest there were numerous leaves resembling *P. irwinii* or *P. porrecta* and a few flowers in early bud - a "must re-visit". Finally

across the road a solitary dark *Prasophyllum colensoi* was in flower.
We then headed back to Matapuna Rd to a random stop just after the lake, alongside some likely tall kanuka. Here *Caladenia lyallii* with only 2 rows of calli, many *Adenochilus gracilis,* and colourless flowered *Chiloglottis cornuta* kept us entertained for quite a while. Mark located *Corybas* "Waiouru" near the creek but the flowers were all over. Meanwhile the main party arrived from the clearing at the end of the road, having crossed paths with us. By this time the showers had become frequent and heavy so we all headed back to base at 4 pm. More people had arrived for the AGM. At dinner we were treated to a great lasagne while discussion ranged over the day's finds. There was particular discussion about the orchid group web site and Nature Watch, a web site used by younger members for identification and curation of their plant photos. It also proved particularly useful for identifying the then unknown adventive *Pinguicula* (within minutes during the AGM). The brief AGM which started on time duly re-elected the same officers and committee and left the subscription unchanged.

Sunday we were away about 9.30 after packing up and waiting for rain to ease (after heavy rain overnight). First stop was Rangataua swamp and after using the railway bridge to cross a flooded creek we got stopped at the outlet to the swamp where the track was cut by a normally small stream in high flood. After a consultation, we decided to bush bash across the forest to the swamp. At the edge of the swamp the first barrier was again a tiny creek now running 30 cm high. Then out on to swamp and a dry open peaty area, a search for *Pterostylis micromega* and *Prasophyllum hectorii* began but this was soon curtailed by deep water After 30 mins of wet feet and plodding through the swamp we retreated - a tally of a few *P. patens* seedlings, but only one flower, a small *Gastrodia* and a few *Thelymitra.* Most people returned to camp for lunch but a few heading south departed.
After lunch we made a brief stop at the police station for masses of *Thelymitra* "Whakapapa" (*T. purpureofusca*) - a small, *T. longifolia* with small narrow, upright bronze-purple leaves and mauve/pink/purple flowers but leaves like *T.* "China blue" of the southern beech forests. Next stop was a brief one at the Arch culvert for others to see our yesterday's finds. Then on past the Forest&Bird Lodge at Whakapapa to the water intake in search of Corybas "round leaf". Lots of leaves were found but a only a few aborted flowers and one much photographed seed capsule. Also under the bushes in the swamp were the odd *Pterostylis* (*P. humilis* or *P.* aff. *montana*?) with numerous leaves and a few buds. At this point I departed leaving the remainder of the group to foray around the motor camp and nature walk.

Mark Moorhouse photographed *Pterostylis porrecta* at Whispering Falls.

The Hatch Medal 2015

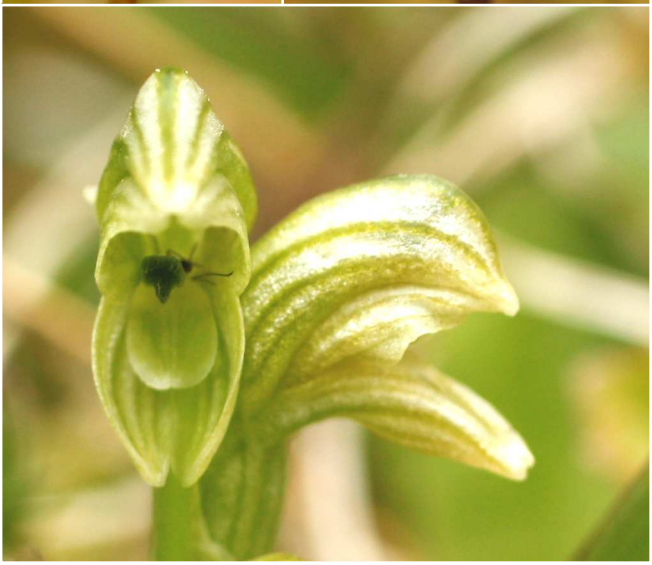
The Hatch Medal for 2015 was awarded to Judith and Brian Tyler at a glittering awards ceremony attended by the rich and famous at Arawa Lodge, Ohakune.

They were recognised for the many years they have ably managed the Group's finances and the distribution of its publications, keeping the membership list up to date, sending out journals to new members, dispatching field guides and other books published by the Group.

In addition, Brian collaborated with the late Bruce Irwin so the Group could publish the magnificent limited edition book of Bruce's drawings and watercolours of NZ orchids.

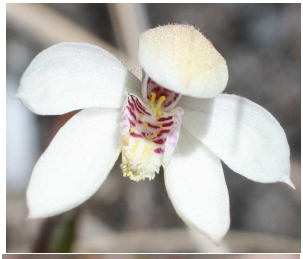
While their work is not as obvious as that of many others, their quiet industry is the kind essential for the survival of groups like ours.

Pat Enright photographed *Pterostylis porrecta* in the Porirua Bush on 13 December.



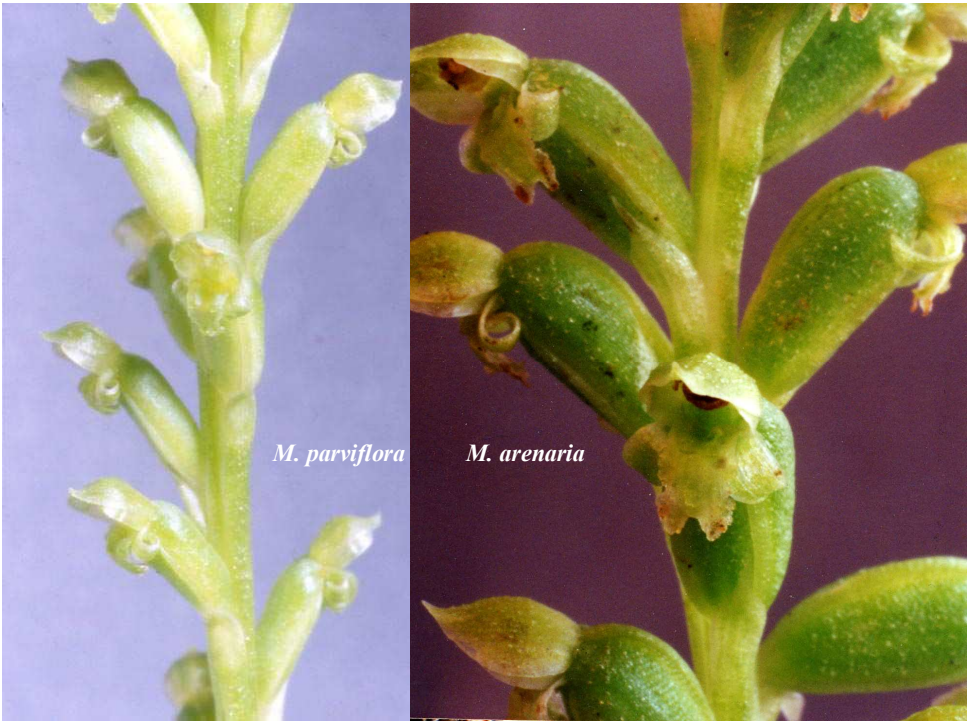
On 19 December Mark Moorhouse struck a "fabulously fine calm day, just perfect for a visit to Mt Arthur ridge, Western ranges, Nelson (where he)... located two colour forms of *Townsonia*, and a large population of *Pterostylis tanypoda*…. Spotted the attached flower hosting its 2mm long pollinator."

Caladenia aff. *alpina* flowers had a rather lax labellum and bumble bees were damaging them… ▼




Microtis oligantha


Microtis oligantha
M. unifolia



The small matter of *Microtis*

Microtis oligantha (the three plants in the upper photograph on p26 and the left spike in the lower photograph, from Wakatipu) is a tiny plant with few flowers whose dorsal sepals are not upturned at the tip and whose lateral sepals are often straight rather than curled. Small, few-flowered plants of *Microtis unifolia* (at right in lower photograph) are bigger, have the typical upturned dorsal sepal tip and usually have curled lateral sepals. Both flower in the spring.

A smaller plant whose flowers are structurally indistinguishable from *M. unifolia,* flowers in summer (as late as April) and is undescribed.

Microtis parviflora has a tapering labellum (left above).

Microtis arenaria (right above) is similar to *M. unifolia* (and has been lumped with it by some) but always has a bifid labellum with a backturned central apiculus. Its ovary is typically humped giving the round-shouldered studious appearance above.

Plants similar to the Australian *M. rara* have been reported in New Zealand.

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