# The New Zealand Native Orchid Journal

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# Contents

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Use your 3D spectacles: if you don't have them, contact the editor, istge@yahoo.co.nz

# The type locality: Ian St George

## *Pterostylis patens* Col. from Glenross & the Ruahine

If you look up *Pterostylis patens* at the NZ Plant Conservation Network's website you find *P. speciosa* and *P. subsimilis* given as synonyms, so we have here to consider all three. Colenso described them all: *P. patens* in 1885, *P. speciosa* in 1889 and *P. subsimilis* in 1895.

Cheeseman lumped the three, along with Colenso's *P. emarginata* and *P. auriculata*, into *P. banksii*, commenting "Mr. Colenso has made no less than 5 species based upon what appear to me to be exceedingly slight and inconstant differences". Hatch included *P. speciosa* and *P. subsimilis* in his *P. banksii* var. *typica* and created *P. banksii* var. *patens* for *P. patens*. Moore followed Cheeseman and included the lot in *P. banksii*. Molloy separated *P. banksii* var. *patens* in Johns & Molloy, and later separated *P. auriculata*.

Then in 2002 Jones, Clements and Molloy agreed with Colenso in accepting *P. patens* as a true species, but cited *P. speciosa* and *P. subsimilis* as synonyms; they could not find Colenso's type specimens so selected a neotype, "128007A&B" (actually 168007A&B) at CHR. De Lange has followed suit on the NZ Plant Conservation Network website.

Here are Colenso's descriptions with comments.

***Pterostylis patens*, 1885: *Trans NZ I* 18: 270**

Stem stout, 1-flowered, 4 inches high; 2–3 short ovate acute brownish and scarious bracts near base; 4–5 stem-leaves, equidistant, 3 inches long, 5–7 lines broad, sub-linear-lanceolate, not narrowed at base, sub-acute, recurved and revolute, thickish, finely papillose, keeled, 3-nerved, nerves obscure; uppermost leaf shorter, close to base of ovary, 1½ inches long, erect, half the length of perianth and sub-clasping. Perianth large, very open, bladdery, particularly at base, which is sub-globular, somewhat sub-quadrate in outline and very wide; upper parts of segments brownish-red, extending low down on lateral sepals. Galea erect, broadly arching and flat above, 2 inches long without tip; tip of dorsal sepal hooked, sub-acuminate, extending ½ inch beyond lateral petals, which are strongly 1-nerved, broad at tips, and acute; lower lip, the entire part thrown largely forward and downward, cuneate, ¾ inch long, much concave between lobes, their margins incurved above, and the lobes suddenly and completely reflexed below base of perianth, and extending downwards and horizontally beyond base of upper bract (or floral leaf), tapering into stoutish points more than 1 inch long. Labellum prominent, very irritable, linear-oblong, 10 lines long, 2½ lines wide, truncate at base, recurved at tip, with a longitudinal central stout ridge throughout; tip thick, obtuse, red, minutely papillose; claw stout, curved, nearly 2 lines long, a thick green protuberance on under surface opposite to its base, and a large tuft of stoutish spreading fimbriæ at tip, which are also lob-

ulate or branched; column slender, wings incurved, large, more than 4 lines long, front margins sub-sinuate with a long finely subulate erect tooth from upper front angle rising above anther, lower lobes obovate or oblong and rounded, margins entire; stigma long, narrow, not prominent, at its central base an erect subulate white appendage, 2 lines long, projects forward from between two finely incurved corrugated lines or side-angles of lower column.

*Hab*. Forests, hilly country, near Norsewood, County of Waipawa; 1883–84: *W.C.* Glenross, County of Hawke's Bay; 1884: *Mr. D. P. Balfour*.

*Obs*. I. I first detected this plant in 1883, but then, while perfect, it was past flowering. Believing it to be a new species, I brought away carefully its tubers and planted them in a pot, and they have grown strongly and flowered. I have had, however, but one fresh flower to examine, but this was so large, fully developed and gaping, that I had no difficulty in so doing, and that without breaking-up or even gathering the specimen.* Its form is striking, and its habit peculiar; all its floral parts being so very open and free, and its lateral sepals wholly deflexed horizontally; in these characters I have not seen anything like it among all the flowers of the genus, neither in these species of New Zealand, nor in those of Australia and Tasmania.

*Obs*. II. I may also remark that a slenderer plant of the same height grows close to the above, (in the pot,) as if from a twin-tuber, the three leaves of this are near the top of its stem, and are about as long as those of the other, but are sub-linear-spathulate; it has also a similar scarious bract at the base. It may be the barren or leafing form (young) of this species; as such obtains among some of the Australian and Tasmanian species—as, for instance, in *Pt. obtusa*, Br., Hook. fil., "Flora Tasmaniæ," pl. 115, C.

* I have, however, since writing the above, received flowers of several plants from Mr. Balfour, which fully agree with my description. (November, 1885.)

Colenso thus described a plant grown in a pot from tubers he had collected from the Ruahine; it matched some sent later by David Balfour from Glenross. The critical descriptors are "tip of dorsal sepal hooked… lower lip (ie, synsepalum), the entire part thrown largely forward and downward, cuneate, ¾ inch long, much concave between lobes, their margins incurved above, and the lobes suddenly and completely reflexed below base of perianth, and extending downwards and horizontally beyond base of upper bract (or floral leaf), tapering into stoutish points more than 1 inch long".

These appear to be the plants with very long lateral sepals pointing back and down (**Fig.1** overleaf); they are still growing on the Apiti track up into the Ruahine from Norsewood (**Fig.1a**) and Blowhard reserve near Glenross (**Fig.1b** by Mike Lusk). The NZPCN site has photographs only of such flowers. The neotype sheet at CHR appears to show a range of different plants (**Fig.2**). The type specimens of *P. patens* are in Colenso's herbarium at WELT but either lack flowers or have deteriorated beyond recognition (**Fig. 3**).

***Pterostylis speciosa*, 1889: *Trans NZ I* 22: 488**

Plant stoutish, erect, 9in.–10in. high; stem and leaves of a reddish hue. Leaves: basal 0, but 2–4 small ovate pale scales, distant on lower stem; cauline 4, nearly equidistant, much longer than flower, 5in.–8in. long, ¾in. broad at middle, linear-lanceolate, acute very thin, sessile, clasping, much and reticulately veined, light-green. Perianth large sub 2in.; segments


▲ **Fig.1**: *Pterostylis patens* from its type localities; 1a from Apiti track, Ruahine; 1b from Blowhard reserve, near Glenross (photo Mike Lusk).

**Fig.2**: The neotype of *Pterostylis patens* at CHR ►


**Fig. 3 ►►** Specimens of *P. patens in seed,* sent to Colenso from Glenross in March 1884 by David Balfour, now in WELT at Te Papa.

rather loosely spreading, richly variegated with bright-red dark-green and fawn colours, the upper portions of segments brilliant red; largely veined; veins very prominent. Dorsal sepal large, acuminate, slightly tailed; lateral sepals connate, erect, largely spreading above and behind dorsal, tails long; sinus very broad, base emarginate; lateral petals loose from dorsal sepal, their tips very acute, not tailed; tongue linear-lanceolate, 2 lines wide, veined, reddish, minutely and thickly papillose; tip obtuse, thickish and slightly knobbed; appendage long, curved, fimbriate. Column long, wings broad, auricles long wide rounded, two subulate horns arising from outer angles shorter than the column, the margin between them slightly erose; stigma large, wider than column.

*Hab*. Near Mount Tongariro, County of East Taupo; 1889: *Mr. H. Hill*.

The epithet *speciosa* indicates particularly showy and attractive flowers and indeed Colenso emphasised the redness of the stem, leaves and flower parts. The specimens were sent by Henry Hill from the Central Volcanic Plateau. Colenso kept two plants, one with a dissected flower, in his herbarium (**Fig.4**) but sent good specimens to Kew (**Fig.5**). The petals are "unzipped" from the dorsal sepal as Colenso described.

This is clearly not *P. patens.* Red pigmentation is variable in many *Pterostylis* taxa, so may not be important. Similarly, the unzipping of the petals from the dorsal sepal is a common abnormality in *Pterostylis.*

Included in *Pterostylis patens* on the NatureWatch website are a range of large-flowered *Pterostylis* with hooked dorsal sepals and with lateral sepals shorter than those of *P. patens,* ranging from more or less erect, to bent back horizontal or somewhat downpointing. Pressed specimens at WELT are similar (**Figs 6a, b**). Some of these would also fit Colenso's description of *P. speciosa.*

***Pterostylis subsimilis*, 1895: *Trans NZ I* 28: 611**

Plant 8in. high. Leaves, radical 0; stem-leaves 5; distant, lanceolate, much acuminate, the 4 uppermost 4in. long ½in. wide, the lowest leaf small and narrow 2in. long, sessile, half-clasping, very membranous; midrib slight; veins distantly reticulated, forming long areoles; near base of the stem 3 short sheathing-bracts. Scape slender, 1-flowered. Galea erect, curved; dorsal sepal 2in. long, very acuminate; petals linear-lanceolate, 1½in. long, acute; lower lip deltoid, ½in. long, its two lobes long and slender with filiform red tails embracing galea; labellum red, ¾in. long, lanceolate, veined; veins parallel; midrib stout, minutely papillose, tip truncate; appendage broadly cuneate, curved, trifid, tips fimbriate; column erect, wings large 3½ lines long; lower lobes much produced, obtuse, rounded; upper lobes or teeth very narrow, erect, shorter than column; the uppermost dorsal margin of wings rounded and free from column; anther-hood large, erect, concave, apicular, reddish; stigma long, wider than column. Ovary 7 lines long, very slender.

Hab. Ruahine Mountain-range, east side: Mr. A. Olsen; 1894.

Obs. A species *prima facie* resembling *P. speciosa*, Col (Trans. N.Z. Inst. vol. xxii., p. 488).

The epithet *subsimilis* indicates a character that is "similar but less so" when compared to the reference plant; in this case Colenso remarked that *P. subsimilis* at first sight resembled *P. speciosa*, so we can conclude that *P. subsimilis* was similar but less showy and attractive than *P. speciosa.*


◄ **Fig.4**.
*P. speciosa* at WELT

**Fig.5** ►
*P. speciosa* at Kew.


**◄Fig. 6a,**

**Fig. 6b ►**

Plants in Herb. Carse (left) and Herb. Petrie (right) at Te Papa, both collected at Waimarino, both later identified as *P. patens,* but both resembling the type of *P. speciosa.* Flower detail below.

The type specimen at WELT has a dissected flower (**Fig. 7►**) and tells us very little.

Andreas Olsen had a farm on Garfield road, Norsewood, with easy access to the Ruahine along what is now the Apiti track, where the very large-flowered *Pterostylis* we have been calling *P. subsimilis* grows (**Fig. 8▼**). Again, the plants in *Pterostylis patens* on the Nature-Watch website include that taxon which would fit Colenso's description of *P. subsimilis*.

If that plant is indeed *P. subsimilis*, then *P. speciosa* should be similar but showier (redder).

**Fig. 8 ►**
A large *Pterostylis* that fits the locality and the description of *P. subsimilis.*

Sunshine track, Ruahine.

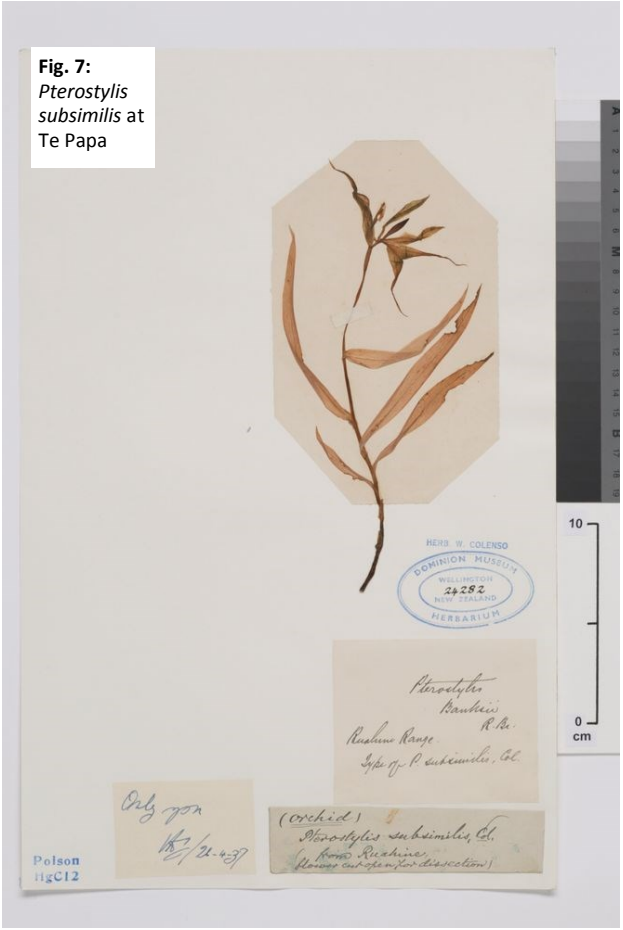



**Fig. 7:** *Pterostylis subsimilis* at Te Papa

**Figs** **9a** *Pterostylis patens* **9b** *P. speciosa* **9c** *P. subsimilis*

**Conclusion:** *Pterostylis patens* can reasonably confidently be restricted to plants with flowers similar to those in **Fig. 9a** above. *Pterostylis subsimilis* is more contentious but (**9c**) above is the only candidate that fits the description and the locality. *Pterostylis speciosa*—(**9b**) above—remains a mystery to be solved in the Central Volcanic Plateau—it will be a plant that flowers perhaps as late as January, is similar to *P. subsimilis,* but at least sometimes has heavily red-pigmented parts and at least sometimes is "unzipped".


***Pterostylis patens***

Photo Eric Scanlen, Karioi, 7 Jan 2002.

# The inbox

Pat Enright found *Corybas vitreus* in the southern Wairarapa in midjuly. Nearly as early as (and very similar to) *C.* "pygmy". See https://www.inaturalist.org/calendar/caqalai/2019/7/19 –and see "The Column" in this issue.

Jack Warden posted these two, photographed in Northland on 1 August, on the *iNaturalist* website. They appear to be of the *Corybas* "pygmy" complex: see "The Column".

*Corybas vitreus* at Lowes Bush, Wairarapa, September 2004

*Corybas* "Remutaka" photographed by Pat Enright in the Remutaka range on 30 August. Note the "long face," the tiny point on the ridged dorsal sepal and the "alba" form, lacking anthocyanin pigment.

Congratulations to Andrew Broome whose NZ Native Orchids Facebook page had 916 members by 5 August.

Andrew Broome makes the comment, "I want to be clear that this Facebook page has nothing to do with the NZNOG people and is entirely my own effort. Anything good or bad that happens here is down to me."

It is very encouraging to see an independent forum for discussions on NZ orchids and to be aware of such a constructive use of social media: brilliant.

For those of us fearful of Facebook, it is possible to join without divulging personal details, indulging in vacuous chat, being swamped with new "friends," texting at breakfast or behaving in otherwise scary ways.

Mike Lusk emailed (5 September), "We were passing Iwitahi today and stopped so that I could check the cages and administer a bit of snail bait. The latter may exterminate an undiscovered species of native Gastropod but the focus is on orchids, yes? There has been considerable tree felling, at least in the small area I visited but I was most disappointed to find that a large *Pinus nigra* had been felled onto the 3 cages. Two I was able to clear and inspect but the third would need a saw to expose it. There were no orchid leaves to be seen in the ones I cleared. It is pleasing to know that this species has been discovered elsewhere.

Mike also wrote to Jack Warden and emailed me a copy:

"We spoke briefly the other day about needing to increase the participation of young orchid enthusiasts so that the group doesn't fade away. Already the Journal is, as Ian puts it, running out of oomph and the average age of participants at the annual gathering would be well over 60. Currently the NZNOG Yahoo site is used only occasionally and by few, but it is arguably the best place to get informed comment. Postings to *iNaturalist* are many and all get to the NZNOG website. I'm pretty sure all get seen by people who are to a varying degree knowledgeable amateurs but comment is occasional only. There are also plenty of postings to Andrew Broome's site and many of the pix are excellent, but people capable of giving an id or erudite comment don't seem to use it. I take it that Andrew is not wanting to actively compete with NZNOG.

"It seems to me that we need to somehow get the last mentioned postings, and the Yahoo ones onto the NZNOG site and to encourage some of the people who currently stick to the Yahoo group to look at postings to other places. If something like to his doesn't happen we will continue to have good information left unshared and under-used.

"Any suggestions as to the format and content of the Journal and the weekend gathering for the AGM would be most gratefully received too. Fish and Game put out info from regional reps from time to time and it might be possible to do the same for orchids."

*These are thoughtful comments; young people are taking an interest in ecology and we need to communicate with them using their media—Ed.*

Jack Warden sent photographs of *Corybas macranthus* from near Warkworth to *iNaturalist.* Some leaves were almost sessile with flowers above them; others were on long leafstems, the flowers below. Same species.

## Lowes Bush Lament

### Conversations with myself while revisiting a great little orchid spot

"You should get a GPS, then you'd know whether you're coming or going."

"My wife says that. But no, I don't actually need one, I know exactly where I am, I have perfect recall and can remember every detail of the place I'm looking for. It will soon become obvious—I mean, the orchids are thick: you can't take a step without walking on them."

"Yeah but that was a while ago."

"Nah. Quite recent."

"2004 it says here."

"Gosh. Fifteen years. Well, you'd expect the trees to have grown and the undergrowth to have provided more cover, so of course it will look a *bit* different. What does surprise me though is the fence and the power poles aren't where they used to be."

"You don't actually know where you are do you?"

"No, its not that. Really, I know I'm close. But I am surprised I haven't even seen *one* orchid. This place has really changed."

"Yeah right."

"Well, take for instance all this supplejack: it was much easier to clamber over last time."

"That's because you can't get your leg up that high any more."

"Well, the creek used to be narrow enough to jump over."

"Yeah, yeah."

"God, I'm bleeding. My skin used to be tough, but now its so soft the cutty grass causes lacerations."

"I rest my case."

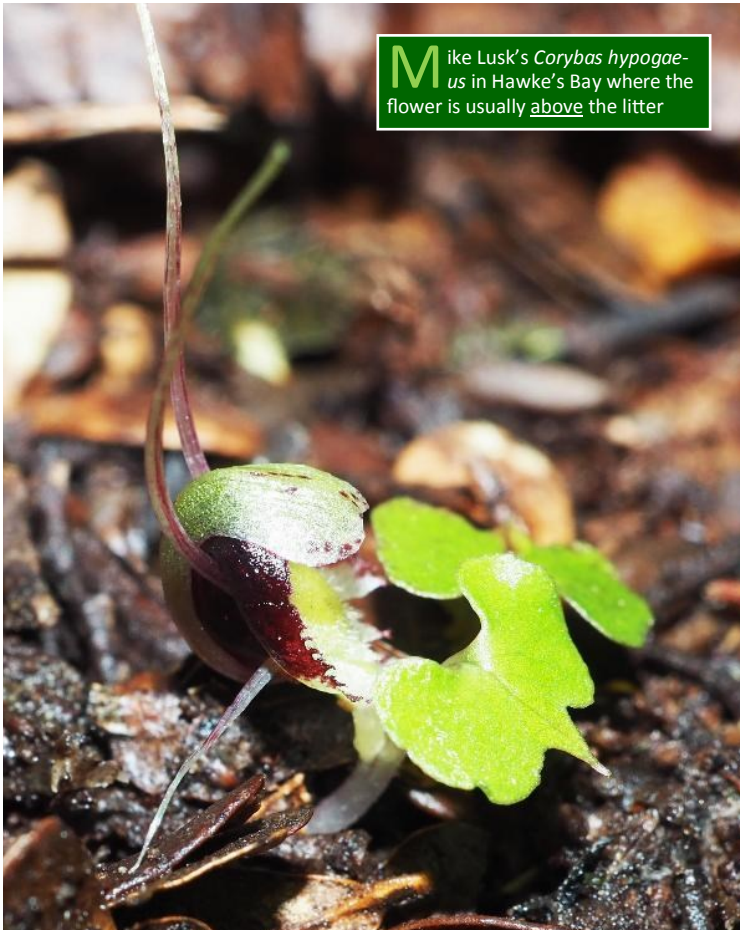
"Do you think I should get her to give me a GPS for Christmas?"

"If you live that long."

—Ginger Oates

Colenso found *Corysanthes hypogæa flowering* near Norsewood in September 1883. He wrote, "Plant very small… leaf single, (1–2cm) diameter… (heart to kidney shaped)… middle lobe (long & sharp), … flowers (1cm) diameter... lateral sepals and petals ... very narrow filiform, upper pair (2cm) long, lower pair hair-like, (1cm); lip (has)... 2–3 deep laciniations or ragged lobes below, with the sides much cut and jagged and incurved…. Among mosses in... (beech) forest.… while its one small leaf is spread flat on its mossy bed, its delicate flower is 1–2 inches below the surface, and never appears above during its flowering…. *In these warmer days the Corybas hypogaeus flower is often on or just under the surface litter, but occasionally only a beckoning sepal is visible, reaching up through the gap between the posterior lobes of the leaf. The following were photographed under beech on the Flat Point road, near Te Wharau, 120km south of Norsewood, on 12 September 2019—Ed.*


*Corybas hypogaeus*



Mike Lusk's *Corybas hypogaeus* in Hawke's Bay where the flower is usually above the litter

Pat Enright and the editor went to Craigie Lea in the Eastern Wairarapa on 28 September, seeking the orchid found there and photographed by Eric Scanlen that has become known as *Corybas* "Craigie Lea" which some of us think is a bit like *C. sulcatus* from Macquarie. We didn't find it. Or if we did it was still in bud. We did find the orchid illustrated here, at various stages of flowering and with some variation in colour—not all were as black as this. It is *Corybas* "Trotters".

# To the editor

## Dr Mark Clements on *Caladenia minor*

I must straighten out one matter regarding the typification and therefore the identity of *Caladenia minor*. I note in your article of May 2018: *NZNOJ* 148 that there is and continues to be confusion about the type of *C. minor*. It is pretty simple actually, I selected and published a lectotype in 1989: 28 of the *Catalogue of Australian Orchidaceae*:

"New Zealand; Northern Island. Dry clay hills. Edgerly s.n. (lectotype species (a) K! here designated, isolectotype E! K-L!)"... the rest including synonyms is really irrelevant to this part.

The lectotype is on sheet (K), K000859096a the Royal Botanic Gardens Kew. Importantly on the bottom of that herbarium sheet is label in red Lectotype HERB KEW (a) label with the comment in my hand, "This is the only specimen from this collection that matches the species illustrated by Hooker. Caladenia minor J.D.Hook." (a): signed by me and dated 21/9/1987. This label is written in black ink.

Also on the sheet is another label in my hand also dated 21/9/1987 and signed by me and written in the same black ink: "All except (a) are Caladenia alata R.Br."

The specimen (a) to which I am referring and which I designated and published as the lectotype is in the very top LHS of the sheet. You will note the "(a)" is in my hand in black ink and matches the others in terms that it is my hand. This is the lectotype, nothing else. This is the specimen to which the name is fixed because it matches all the elements of the protologue in every respect most notably the illustration by Hooker and of course reference to Edgerly.

This is the purpose of a lectotype, to fix the name to a particular specimen (not specimens) especially where there is a mixed collection. My choice of a lectotype was therefore undertaken very carefully and was deliberate.

The other labels by Brian Molloy are not relevant and anyway postdate the publication of the designation of the lectotype by me.

There is also another sheet (K000079097) at Kew which is part of the Hooker herbarium, in which there is a collection isolated at the top LH corner of the sheet with 4 specimens with two labels attached. The collection comprises:

i) on the LHS specimen a specimen threaded through a paper label, presumably a field label, with the annotated " 1945 Caladenia glandulosis W.C.";
ii) centre and RHS two whole plants/specimen with tubers under which is written in Hooker's hand "N. Zealand Colenso."; the RHS specimen has the flower missing but there is an X in pencil indicative of it having been removed for study. [It is possibly that this detached flower is the one at the bottom LHS of the set removed from and spread out on the packet at the far RHS lower corner of the entire herbarium sheet.];
iii) directly under the annotation "N. Zealand Colenso." there is a paper label with "1945" written on it;
iv) to the LHS of that is a single small specimen lacking floral or tuber material;
v) directly below this Colenso collection I attached a KEW herbarium Syntype HERB. KEW. Label on which I wrote "Match for the Lectotype Colenso 1945. Caladenia minor J.D.Hook." signed by me dated 21/9/1987.

After studying all the syntypes in the Hooker herbarium I concluded that this collection was a match for the single specimen I had identified, chose and annotated as the Lectotype of *Caladenia minor*. I did not however say it was an isolectotype although it possibly might be, as there was no indication that the lectotype was from this same gathering. I did this in case the Lectotype was ever destroyed or damaged.

Brian Molloy attached a label dated 28/9/1991 below my label . He wrote " LECTOPARA TYPE of Caladenia minor Hook.f." . I am not sure I agree with his interpretation.

I have re-examined all the syntype of *Caladenia minor* including that in the Lindley herbarium and on reflection only the first two listed above appear truly to be part of the same gathering. The collections in the Lindley herbarium and the Sinclair collections in the Royal Botanic Gardens Edinburgh (E) E00394053 , E00394054 are similar in floral structure although taller plants. There are two other collection in E, E00394051 & E00394052 , the latter also a Sinclair collection that have similar looking specimens on the sheets although the latter appear to be a mixed collection. I labelled these all as isosyntypes, dated 7/9/1987 prior to making a choice of a lectotype.

The most significant morphological features from examination of the type are:

1) distinctive floral bract about the length of the short pedicel, ovary about the same length
2) small flower with blunt short, segments that barely extend beyond the length of the column
3) lateral sepals free, that is not connate at based
4) a clearly trilobed labellum, the side lobes erect encasing the column, rounded broad apices, uniformly coloured [veined but lacking lateral stripes]
5) labellum midlobe only slightly longer than sidelobes with few short marginal apically globose teeth (they still look yellow in the lectotype)
6) a series of perhaps 6 lateral maroon striations visible along the outer basal half of the labellum
7) flower solitary

So when I look through the images provided in the *NZNOJ* or on the web I can find very few that really look like that illustrated by Hooker. I've included a couple of images of Australian plants, one of *C. pusilla* s. str. from Tasmania **[1]** and another going under the name *C.* aff. *pusilla* **[2]** that is not far away from your *C. minor* for you to look at.

I hope that clears up a few things and I am happy to answer any questions you might have on the subject.

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# The Column: Eric Scanlen

## The *Corybas* "pygmy" group.

Mark Moorhouse mentioned only the first tagged *Corybas* "pygmy" in his erudite article in J152. Dr Graeme Jane had tagged it *C.* "pygmy sandhills" with able assistance from Gael Donaghy and Bruce Irwin. However, there are about 13 taxa in this small single flowered group, from Stewart Island to Tauroa.ER5. They are represented in the *Pocket Guide* as *C.* "pygmy", p51, and in the 2011 *Field Guide* as *Nematoceras* "pygmy" item 77[4].

Carlos Lehnebach described *Corybas vitreus*, in 2016. It had been *C.* "pygmy 1", but more recent observations have included another 12 or so in the group. Notably, none have that mid labellum drainage channel, from the *C. trilobum* style, gnat's egg pocket, but Fig. 3 herein and Bruce's Irwin's drawing, Fig. 3 section on *C.* "pygmy 1", show the still extant egg pocket, hidden inside where fungus gnats can still mistake it for a fungus and lay their eggs. *C.* "pygmies" do have a reniform leaf, the node in the colourless, sometimes, purple spotted sheathing bract and a thorn-like rear apiculus, all early flowering in June/July in the North (except Figs. 6 & 15) to August in the South. Many larger plants sprout for two months after flowering has finished and the seed capsule sits on a tall, extended scape. The Column admits to adapting Graeme's tag to all the following members of the group, due to these similar traits. Brief identifying descriptions are included in the captions to the following figures.


**Fig. 1 *Corybas* "pygmy sandhills",** Bruce Irwin's drawings (p386 and J73:**12,**13) are definitive, drawn from Graeme's specimens of 12 June 1999, Green Hills Beach Wharewaka. Typically, every tiny plant was flowering. Specimens from Whararíki and Gael's photo, J73:11, also show the domed dorsal sepal with slightly channeled and spotted ridge atop. The labellum has a small apiculus but no notch. Graeme tagged it here as *C.* "pygmy" but Bruce drew it as *C.* "pygmy sandhills" which tag, the Column has adopted to distinguish the taxon.

**Fig. 2 *Corybas vitreus*** (was *C.* "pygmy 1"). 25 June 1994, Parau track, Sth. Waitakeres, on Allan Ducker's celebrated field trip, with Dan Hatch, at 78, Bruce Irwin and other stalwarts. Dan described it well in News Letter 7, May 1982, but as *C. trilobus,* and thus it was identified, among other different tags, despite the lack of the drain from the gnat's egg pocket, for 21 years through to Journal 89:24, Dec. 2003, where the Column did tag it, *C.* "pygmy" form 1. It is common in the Waitakeres and occurs from ER 56 to ER5. An alba-form flower, was recorded at Hungry Creek, Puhoi. Leaf is reniform, mucronate. Peduncle at ±2mm long is at 90º to the petiole at the node with the flower ±level with the leaf. Dorsal sepal is pale green, (see cover J143 by Pam Shear-


er) with a small cleft. The notched labellum is white with brown-purple [1] shoulders. Lateral tepals, and bracts, white with some purple spotting. Labellum opening is vertical in profile, oval from the front, ±7mm wide with visible margin slightly ragged.


**Fig. 3 *C. vitreus,*** long. section showing the internal, fungus gnat's egg pocket. From Matakawau, ER 9, 16 July, 1999. Did anyone else notice this feature in J 89:**30** Fig.4 or in J 140:**23** Fig. 2? The Column didn't until 20 years later! Presumably, this is a consistent trait in all the *C.* "pygmy" taxa? but, confirmation is needed and is important.

**Fig. 4 *Corybas* "pygmy purple"** Eaves Bush ER9, 16 July 2004, has masqueraded up until now, as *C. vitreus* (*C.* "pygmy 1") but has an apiculus in a barely detectable labellum notch. Colour is brown-purple [1] in labellum and dorsal sepal, the latter notched, with more or less white streaking. It occurs with *C. vitreus* in the north but more reports please, to be sure.



**Fig. 5 *Corybas* "pygmy 1b",** ("b" for broad base), from a big colony in Matakawau Reserve, Awhitu Peninsula, 19 June 2007 by Tricia Aspin. Also found by Allan Ducker on Mt Donald McLean and by Mike Lusk in the Herekino Gorge on 22 July 2008. Dorsal sepal is slightly notched, pale green with mauve spots at times. Lateral tepals are white or white +mauve, may be curled at the tips. The labellum has the apiculate notch, and is broad at the base, translucent but still with deep brown-purple lateral margins.


**Fig. 6 *Corybas* "pygmy 1 b late"** was also found , by Allan, on Mt Donald McLean, southern Waitakeres, 5 August 2013. It has the broad, but slightly ragged base, almost obscuring the little, apiculate and notched labellum. Centre of the labellum is pale green. Confirmation wanted for the late flowering please.


**Fig. 7 *Corybas* "pygmy 2".** Allan Ducker spotted this on the south side of Bream Tail Reserve, by Cove Rd, 17 July 1999, and reported it in J 89:**30.** It was among a large colony of *C. vitreus* ("pygmy 1"). The white speckled, deep -carmine [1], ball shaped flower, standing above the leaf, was unique. The labellum centre is pure white. Peduncle, lateral tepals etc. were all of *C.* "pygmy" form. The unusual shape and colour of the flower prompted the new tag but further specimens are necessary.


**Fig. 8 *Corybas* "pygmy 3",** was found by Geoff Stacey on the eastern side of the Hunua Range, in native bush and scrub. Pre 1999, he established a sizeable colony at his Wharekawa Garden, in native scrub. It's distinction from other *C.* "pygmy" forms, is that the flower sits firmly on the leaf, which slopes slightly forward. Geoff didn't say anything about petioles lengthening with maturity and the Column saw no such thing in numerous specimens. The labellum has a large notch at the base with a minute apiculus at centre, on undamaged flowers. The labellum is maroon but patchy white at centre. Dorsal sepal varies from pale green with central deep-reddish-purple [1] stripe and similar tinged sides.


**Fig. 9 *Corybas* "pygmy 3b".** Maureen Young found this taxon on Rangitoto Island [1]. It too has the flower sitting firmly on the leaf but the otherwise similar labellum has neither notch nor apiculus. The dorsal sepal is white with odd purple spots. I have no records of other specimens of this taxon thus further reports are important.


**Fig. 10 *Corybas* "pygmy 4"**, Ian St George's from Five Mile Creek, Queenstown, July 1988. See also *Newsletter* 28, Dec 1988, pp 11,12, named as *C. trilobus,* at 300 m above sea level, in open ground, stiff with frost. Graeme Jane also had it as *C. trilobus* in J69:11,1 June 1998, at Puponga Farm Park (ER46), but Gael Donaghy's photo does look like C. "pygmy 4" with its plain green, domed, dorsal sepal, having a continuous level rim. The labellum has a notch with pale apiculus protruding.

**Fig. 11 *Corybas* "pygmy 5" just opened** from Brian Tyler, Levin 23 June 2005. This early bloom has the leaf level with the base of the flower but it's not *C.* "pygmy 3". The petiole extends as it matures to stand the leaf above the flower in July, as in Fig. 12. The un-notched labellum is scooped forward at the base, has slate lilac sides, and stripes inside on its leaf green, inner base. Lateral tepals are straight, reddish-purple with translucent tips.



**Fig. 12 *Corybas* "pygmy 5" mature.** 10 July 2005. Notice how the petioles have extended until the flower tops are level with the leaf and lateral tepals have drooped and faded.

**Fig. 13 *Corybas* "pygmy 5 alba"** Brian Tyler's from Levin, 9 July 2008. The extended labellum base is still apparent but colour is now white with tinges of lilac. Lateral tepals are all translucent. This flower is sitting on the leaf. The petiole extends in time, as in the full coloured form. More reports please.


**Fig. 14** *Corybas* **"pygmy eyelets",** Mike Lusk's from Stewart Id. with millimeter scale, 12 August 2009. The eyelets atop the lateral sepals, brought about the tag name, but could be due to frost on the emerging flower? The very short lateral petals on the foreground bloom, are just kinked at the top but the next flower back has them lax and non-kinked; which reinforces the frost theory. I.e., tips above ground got frosted those below didn't. However, these blooms differ from all other *C.* "pygmies" with all green dorsal sepals, straight and level front and apiculated labellum base, with no notch? The foreground bloom's apparent notch appears to be from damage. More observations are needed to settle this taxon's status.

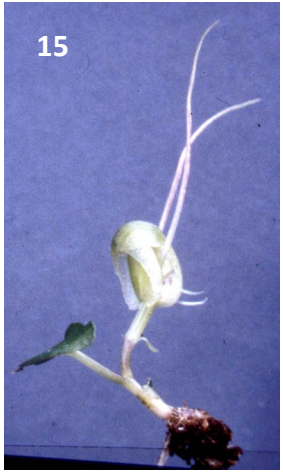


**Fig. 15** *Corybas* "pygmy white" 10. Sept.(?) 2002 by Ian St George, found by Margaret Menzies at Omoana. It is all white and does have the basic traits of *C.* "pygmy" but flowering time as per the computer file, may be email sent time? More reports please.

**References**

**1.** STAMP COLOUR KEY by Stanley Gibbons.

**2.** Wilcox MD, Natural History of Rangitoto Island, *Auckland Bot. Soc*. 2007, pp 82, 83.

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