

# NEW ZEALAND ORCHIDS IN BLACK & WHITE

photographs by HB Matthews (1861-1934)  
from the Auckland Museum collection

Compiled by  
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n. 13. These photos in all cases represent the flowers,  
and plants (shown) exactly natural size, for by a mark on  
my camera the least variation would put the exhibit out  
of perfect focus.

If the prints are not spoiled by use, I would like them  
given to the Auckland, or Dominion Museum; as for  
reference they would be better than ordinary dried  
or herbarium specimens, as they will stand the test of  
a magnifying glass

H. B. Matthews

Our publication of HB Matthews's manuscript names herein does not comply  
with the International Code of Botanical Nomenclature, so is informal.

It therefore does not create names for undescribed plants,  
nor synonyms for formally described plants.

## Introduction

Henry Blencowe Matthews followed his father to become New Zealand's leading amateur orchidologist. This was at a time when there was no professional orchid specialist in New Zealand. He lived and worked in Kaitaia until his retirement to Auckland allowed orchid field trips to Waimarino, now National Park Village.

Matthews is important because he discovered many of the northern orchids that were formally described by Cheeseman, but also because he recognised as different many of the species which the taxonomically conservative Cheeseman did not accept, and which have more recently been shown to be distinct species. He had a keen and highly sophisticated eye for differences between plants. He recognised four taxa in what we call the *Prasophyllum colensoi* aggregate, and they appear to correspond with JB Irwin's *Prasophyllum* "A" and "B", and another taxon rediscovered by the late Doug McCrae. He photographed *Nematoceras* "Trotters", recognising it as *N. trilobum* s.s. He saw the differences among *Diplodium alobulum*, *trullifolium* and *brumale*, and photographed and named them separately. He saw the differences among northern members of the *Nematoceras rivulare* complex. He acknowledged two taxa in *Simpliglottis*. There are other important instances of his skill, many illustrated here.

Matthews left a manuscript describing the orchids he thought should have been species. That document is reproduced and discussed in Eric Scanlen's *Matthews & Son on Orchids*, No. 14 in the New Zealand Native Orchid Group's *Historical Series*. Readers seeking more information are referred to that companion booklet.

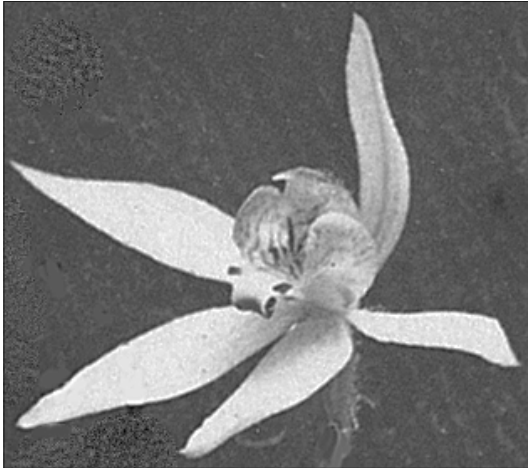
He is important because he was the first to photograph N.Z. orchids systematically. Frank Blackwell had photographed a few for Laing and Blackwell's *Plants of New Zealand*, but his work lacks the quality of Matthews's. Matthews used a half plate camera, orthochromatic film which shows red as black and yellow as quite dark, and photographed plants at true size (as they are reproduced here). He favoured filling the frame with as many specimens as he could gather and mount in a semi-realistic setting, and he and his father may have been responsible for the disappearance of *Pterostylis nutans* from the far north, of *Petalochilus*, *Caleana minor* and of *Chiloglottis formicifera*. His shots look reasonably natural, but had to be taken in the studio – sheltered, inside photography – a necessity with the slow film of the time, and long exposures needed to get depth of field.

He is important because, apart from Rogers's drawings, his photographs appear to be the only pictorial record of *Petalochilus*, the controversial, now possibly extinct, genus that he discovered, that Cheeseman said were a freak state of *Caladenia*, and that Rogers eventually described as a distinct genus because of the petaloid labella.

The Auckland War Memorial Museum has a large collection of HB Matthews's half plate glass negatives of orchids, all taken between 1921 and 1924, and a larger collection of contact prints taken from them, and from other negatives now lost. The full catalogue (QK495.064) was compiled by MA Smits and AE Wright in 1987.

We are grateful for the opportunity to reproduce some of them here, and thank Gordon Maitland and Ewen Cameron of the Museum for their enthusiasm and support.

Ian St George  
Eric Scanlen  
November 2008.



*Caladenia exigua*, Kaitaia, 21Sep24, detail

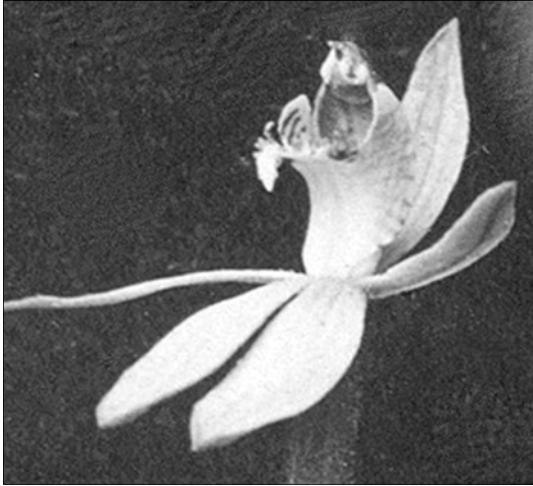


*Caladenia exigua*, Kaitaia, 21Sep24.  
*Petalochilus alatus*.

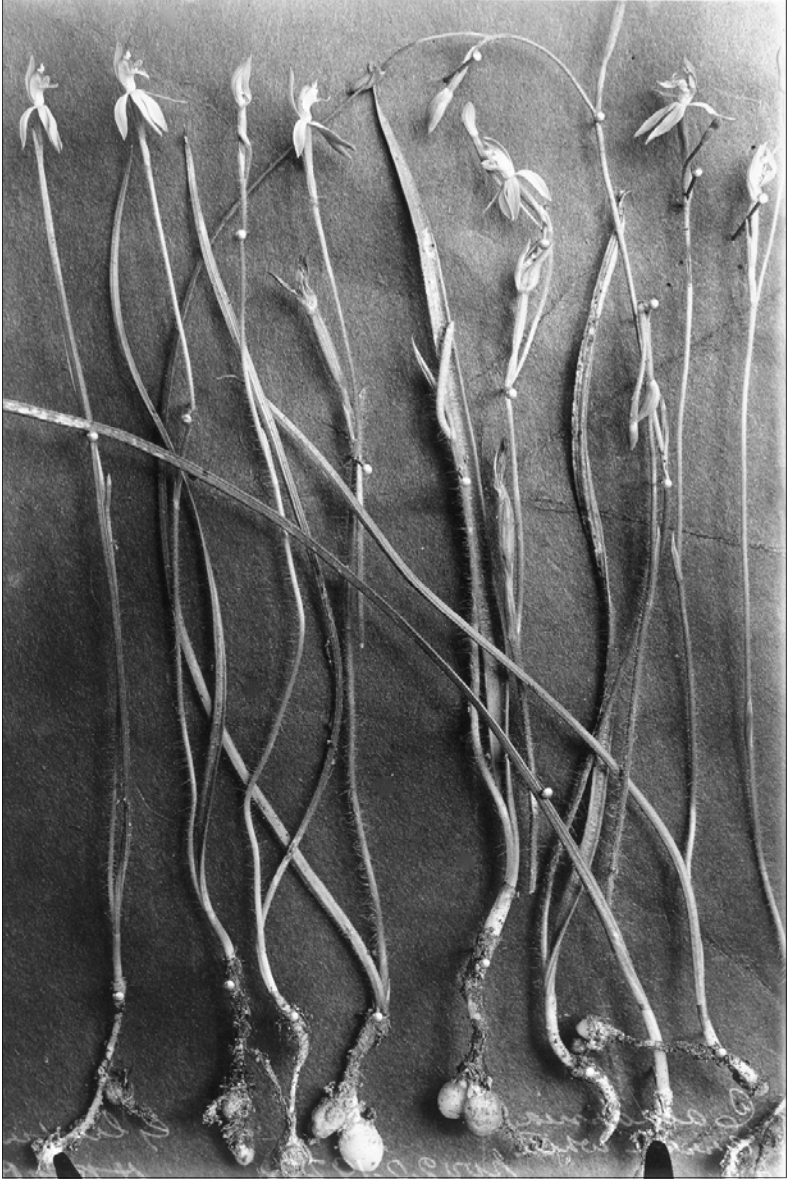


“*Caladenia leucochlora*”, Kaitaia, 18Oct23.

*Petalochilus chlorostylus*.



“*Caladenia leucochlora*”, Kaitaia, 18Oct23,  
detail of flower.



“*Caladenia leucochlora*”, Glenfield, 20Nov22.

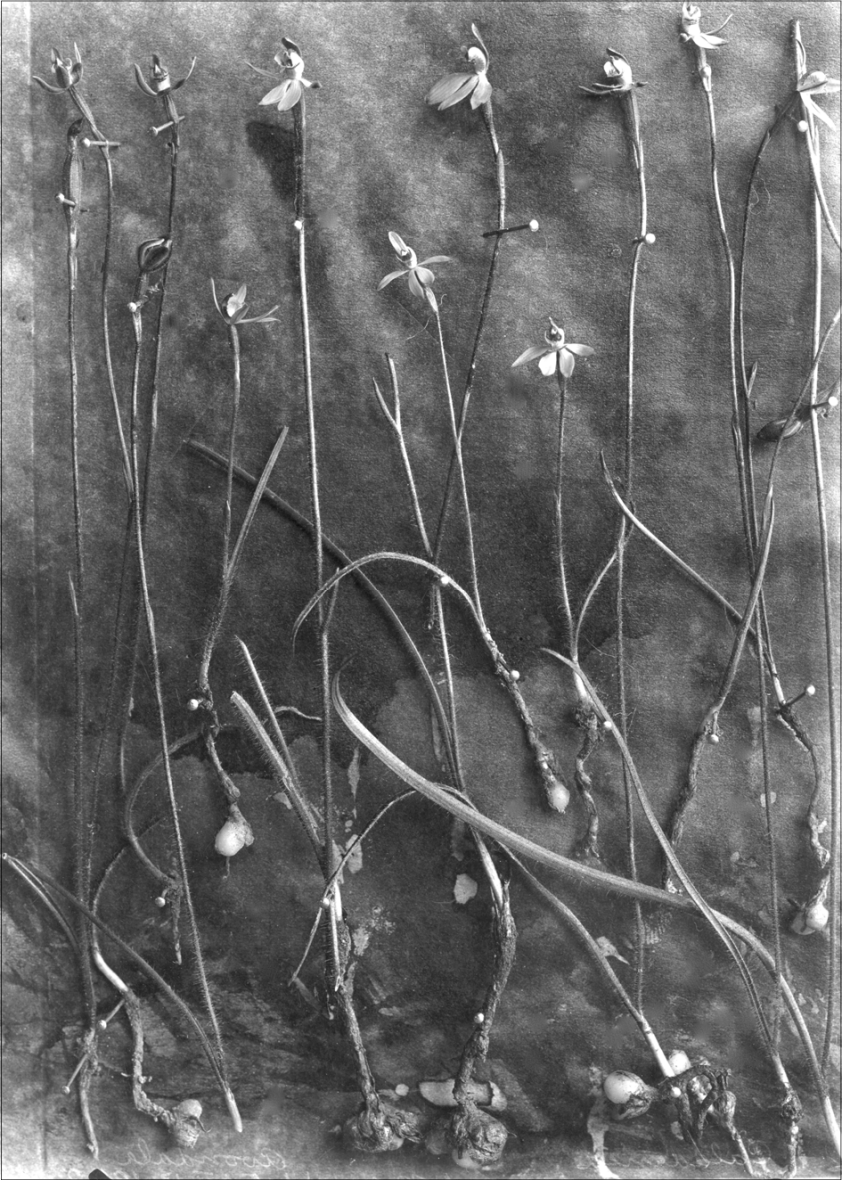
A similar plant to *Petalochilus chlorostylus*, but with some differences.





“*Caladenia leucochlora*”, Glenfield, 20Nov22,  
detail of flower.

Matthews was at first undecided how to name this taxon. His first handwritten description used “*Caladenia viridis*” with jottings below of “*C. leucochlora*” and “*C. chloroleuca*”.

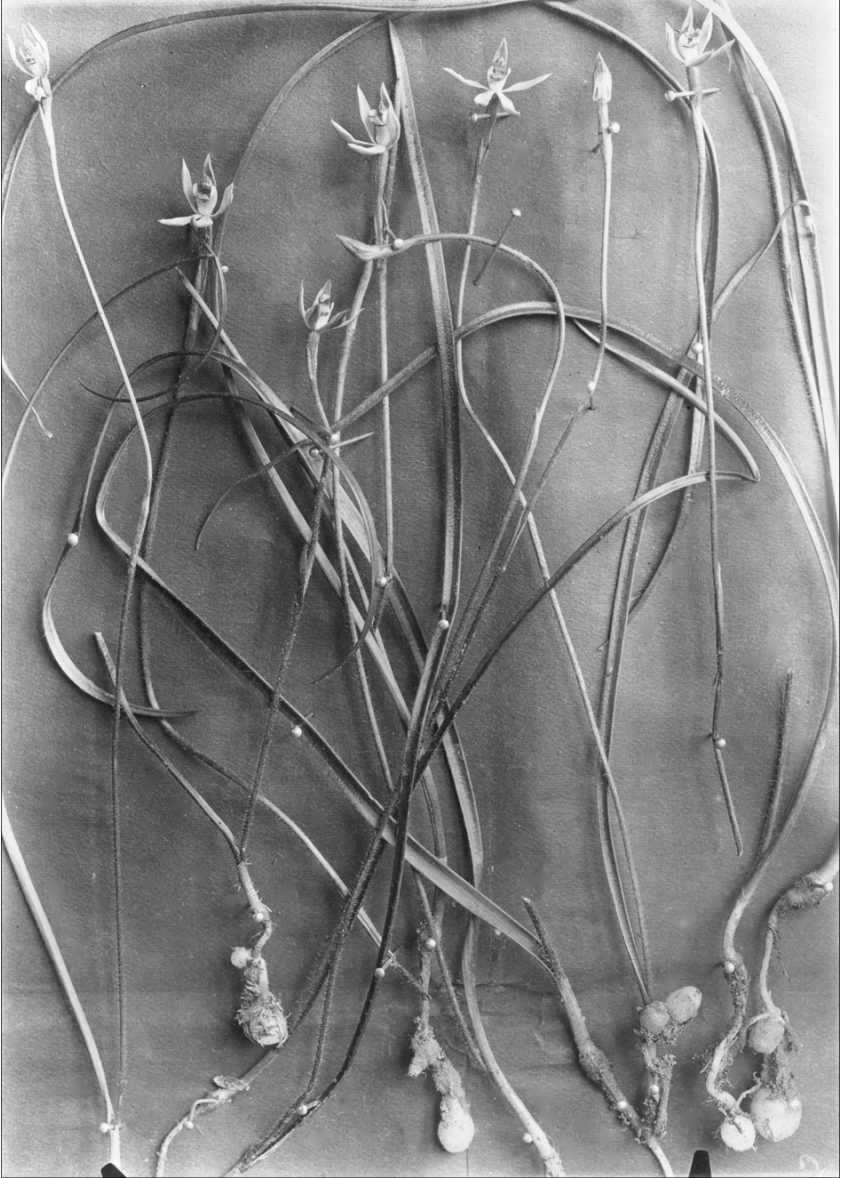


*Caladenia minor*, Avondale, 13Oct22.

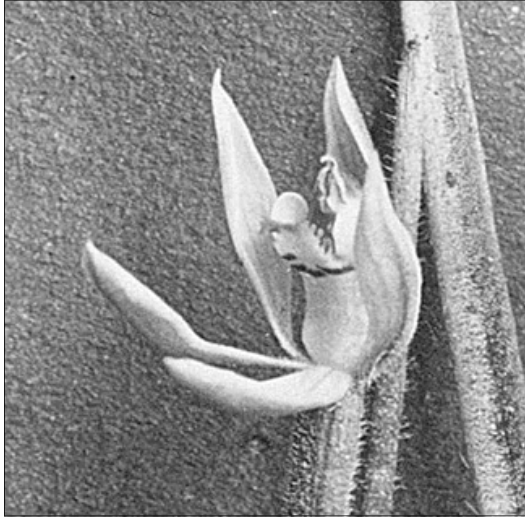
Controversy has dogged the application of this name: this is what Matthews thought it was in 1922. *Petalochilus bartlettii*.



*Caladenia minor*, Avondale, 13Oct22,  
detail of flower.



“*Caladenia nitidoa-rosea*”, Kaitaia, New Lynn, Glenfield, 26Oct22.  
An undescribed taxon, closely allied to the Australian *Petalochilus fuscatus*.



“*Caladenia nitido-rosea*”,  
Kaitaia, New Lynn, Glenfield,  
26Oct22, detail of flower.

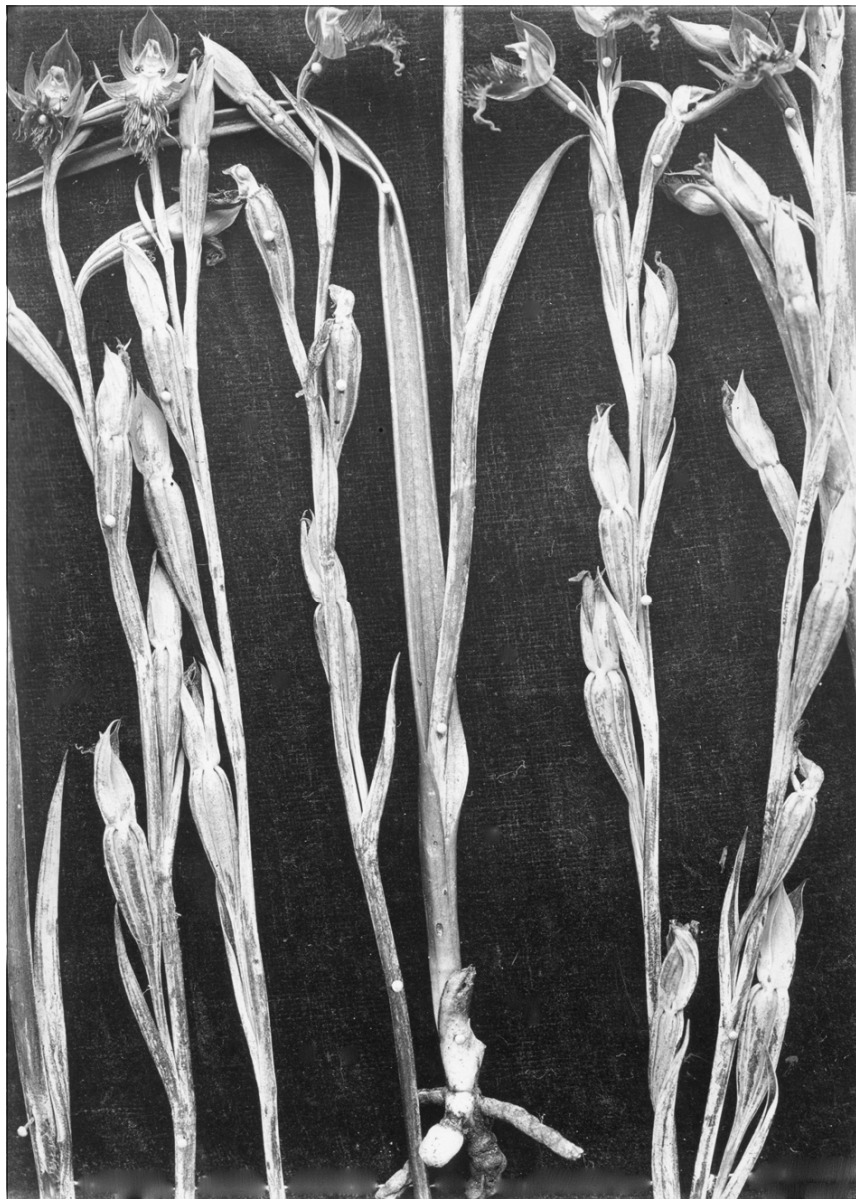
Matthews’s first draft description tagged it  
*C. nitido-rosea*. In his second draft it was  
*C. nitido-rosea* but the typed final draft had it as *C.*  
*nitido-rosea*.



*Caladenia lyallii.*  
*Stegostyla lyallii.*



*Caleana minor.*  
*Sullivania minor.*



"*Calochilus viridi-sanguineus*", Kaimaumu, 8Sep24.

*Calochilus herbaceus*.





“*Chiloglottis calliniger*”, Waimarino, 23Dec21.

Various forms and patterns of labellar calli occur in *Chiloglottis cornuta*.



*Chilolottis cornuta.*



*Chiloglottis formicifera.*

*Myrmechila formicifera.*

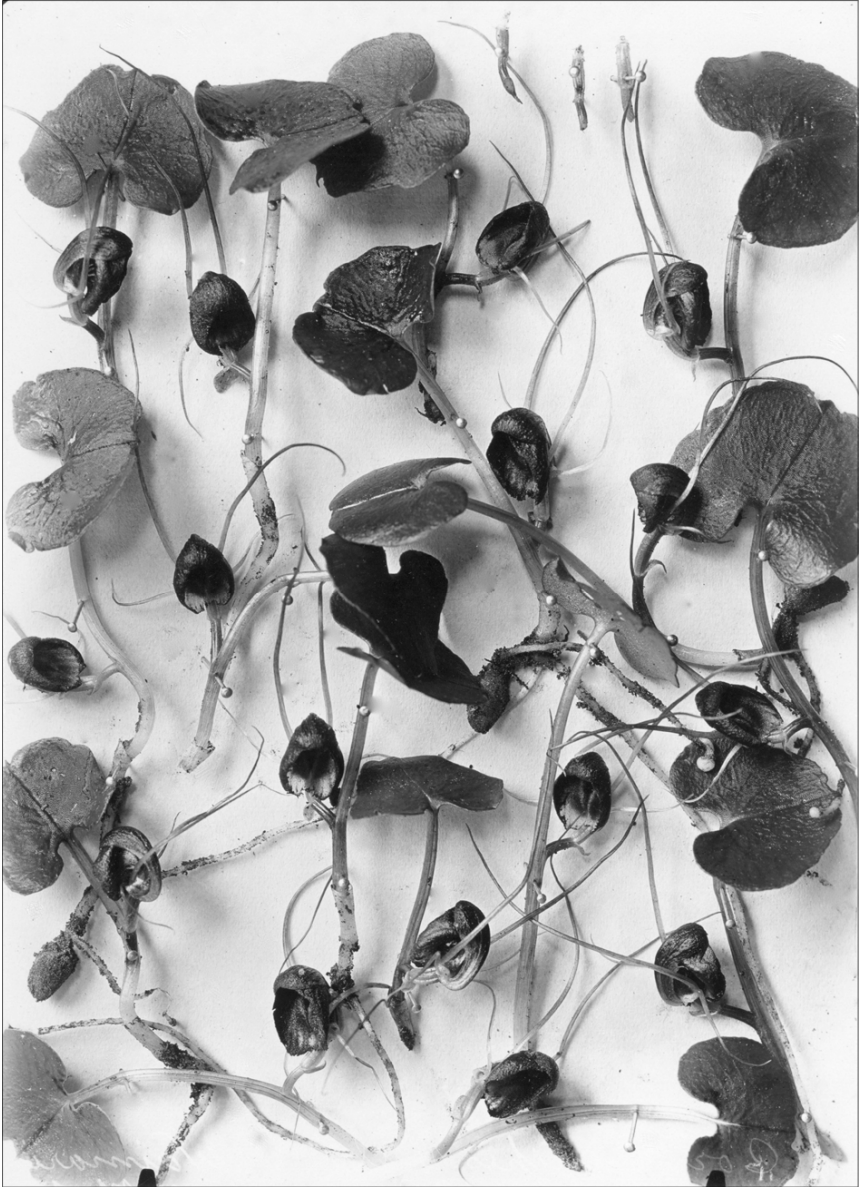


“*Corysanthes aestivalis*”, Waimarino, 31 Dec22.  
A member of the *Singularibas oblongus* agg.



*Corysanthes rotundifolia*, Kaitaia, 10Nov21.

*Nematoceras rivulare*. Some pandurate leaves led to the name *N. panduratum*.



*Corysanthes triloba.*  
*Nematoceras trilobum* s.s.

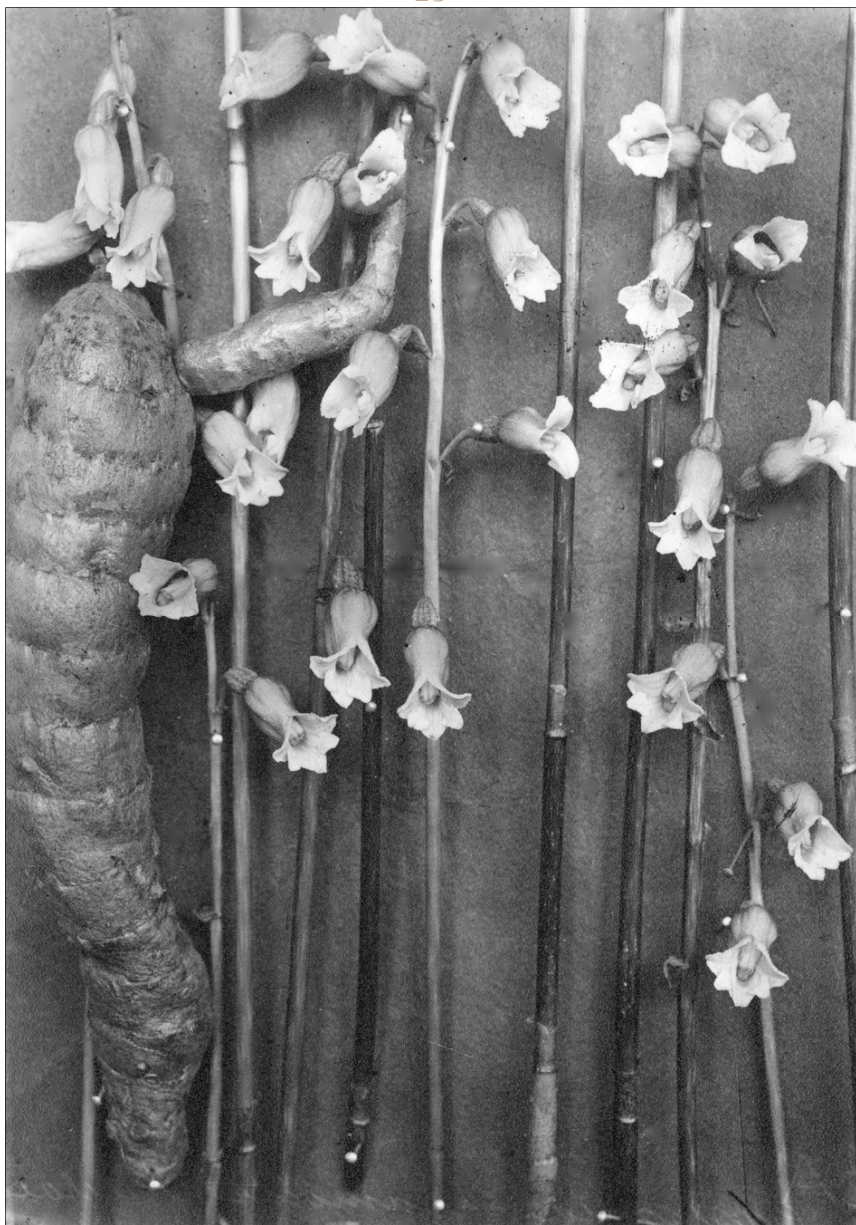


*"Corysanthes viridis"*, Nihotipu creek, 25Sep22.  
An undescribed taxon recently called *Nematoceras* "whiskers".



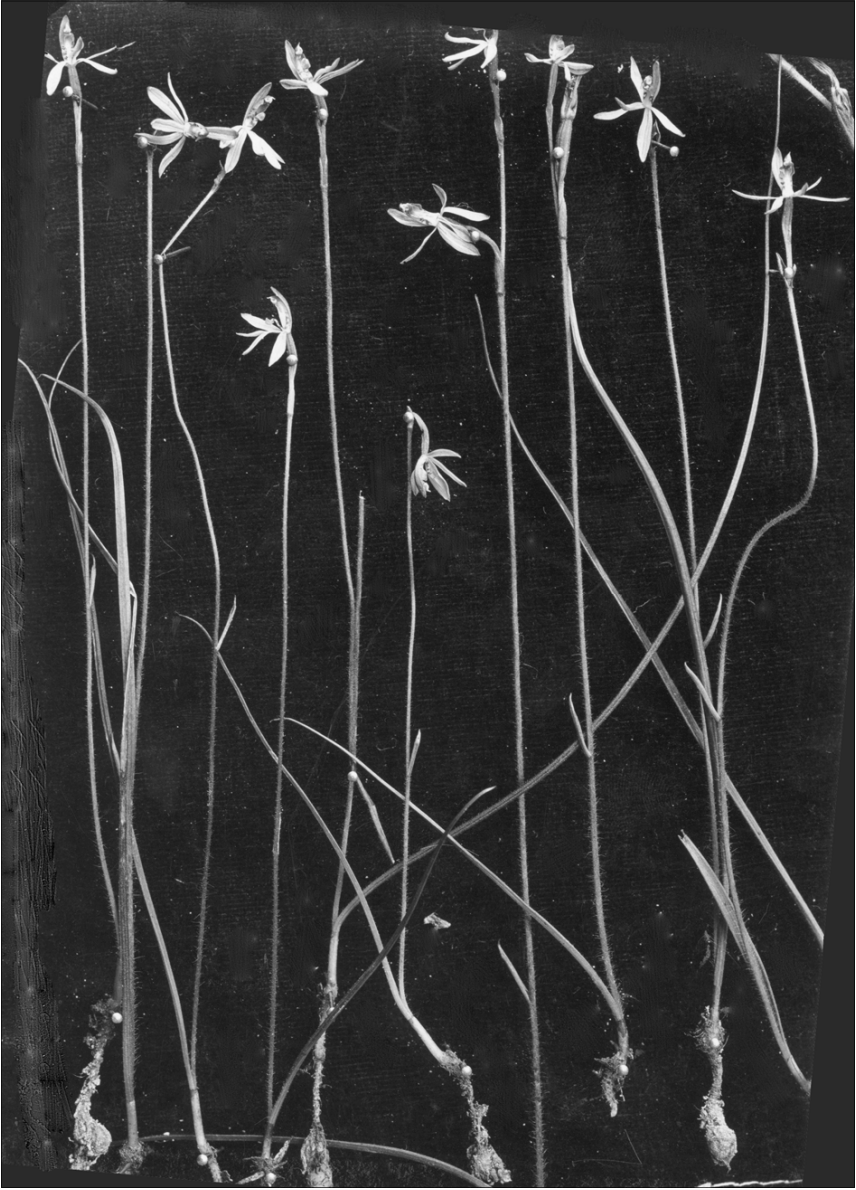
*Earina aestivalis*, Ahipara, Myrtle Gully, 15Jan23.



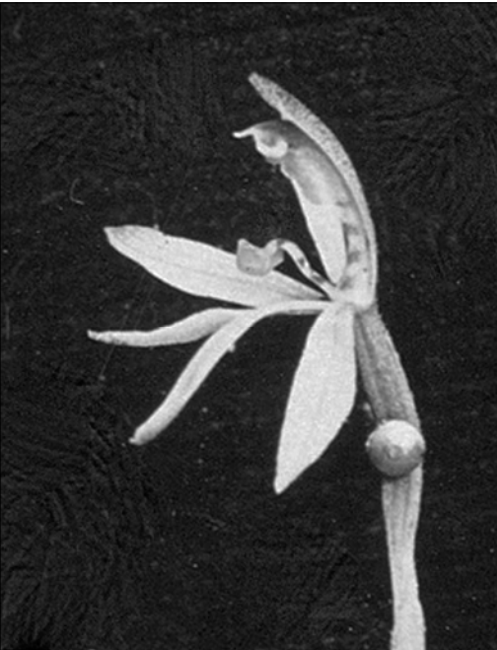
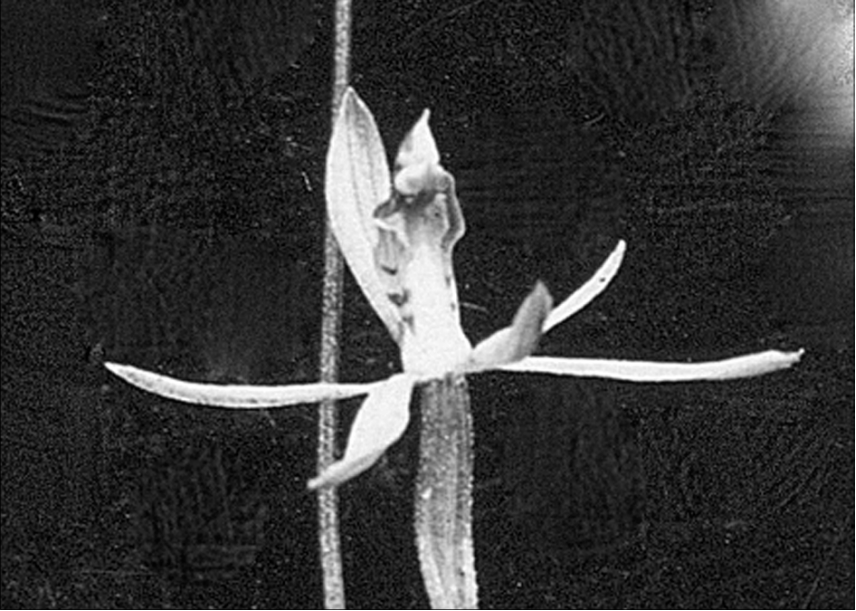


*Gastrodia sesamoides*, Kaitaia, 14Dec22.

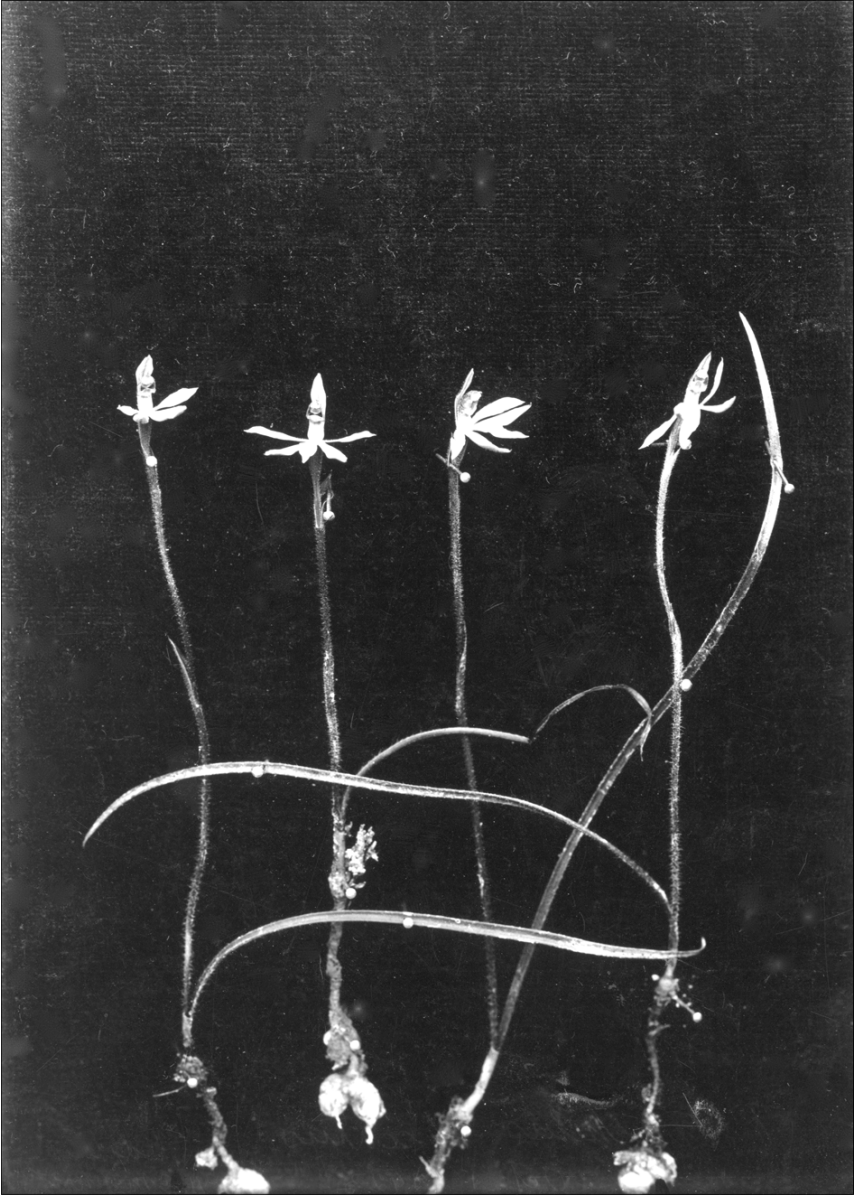
*Gastrodia* aff. *sesamoides*.



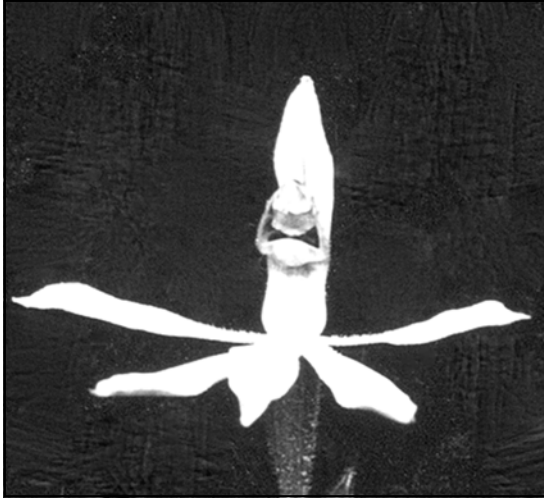
*Petalochilus calyciformis*, Kaitaia, 15Nov24.



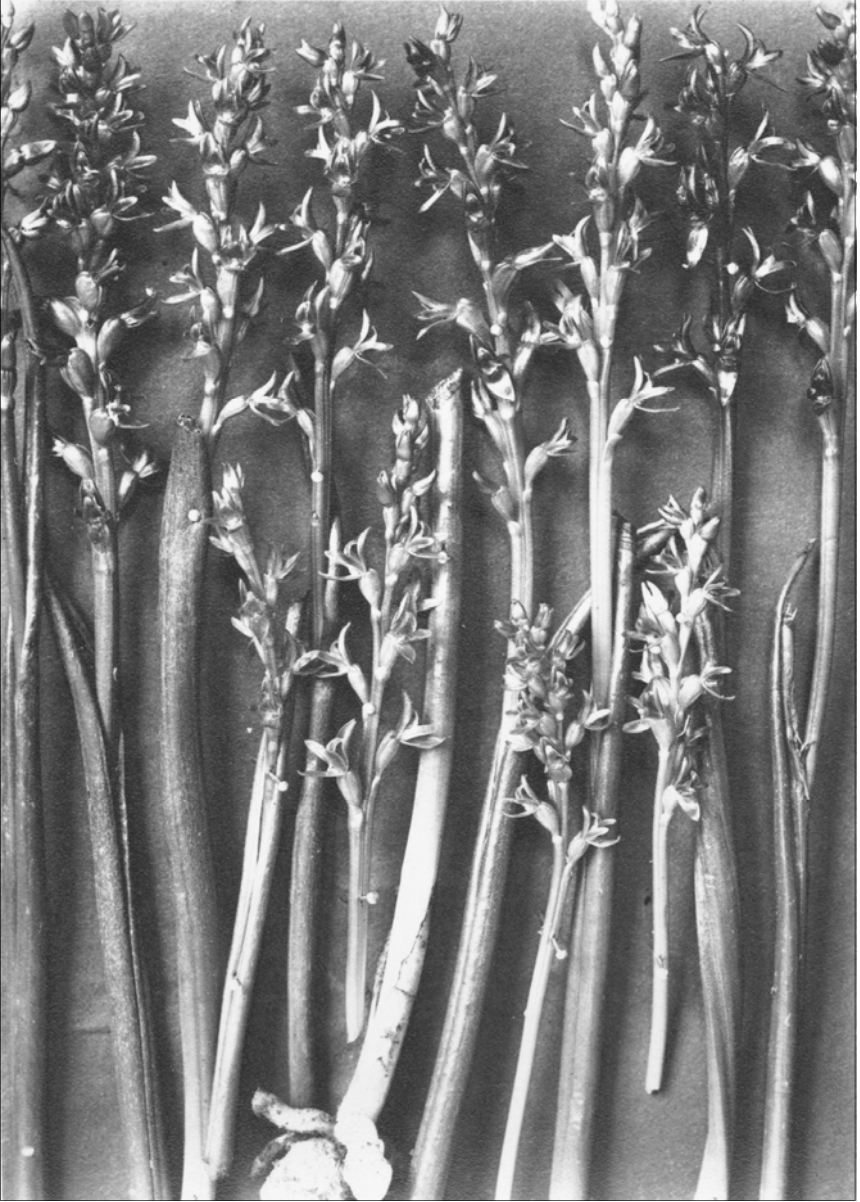
*Petalochilus calyciformis*,  
Kaitaia, 15Nov24,  
detail of flowers.



*Petalochilus saccatus*, Kaitaia, 18Oct23.



*Petalochilus saccatus*, Kaitaia, 18Oct23, detail of flower.



*Prasophyllum colensoi.*



“*Prasophyllum debile*”, Opunake, 1921.  
Recently known as *Prasophyllum* “B”.



*"Prasophyllum patentifolium"*.  
An undescribed Far North taxon.





**"Prasophyllum rubriflora".**

*Con nastylis nuda.*



**"Pterostylis allisonii".**  
*Pterostylis micromega.*



“*Pterostylis colensoi*”.

*Pterostylis foliata*.



"*Pterostylis gracilis*", Kaitaia.  
*Diplodium trullifolium*.



"*Pterostylis heterophyllus*", Birkdale, 6May22.

*Diplodium brumale*.



“*Pterostylis media*”, Mangatangi, 8Oct22.  
A consistently smaller plant than *Pterostylis banksii*.

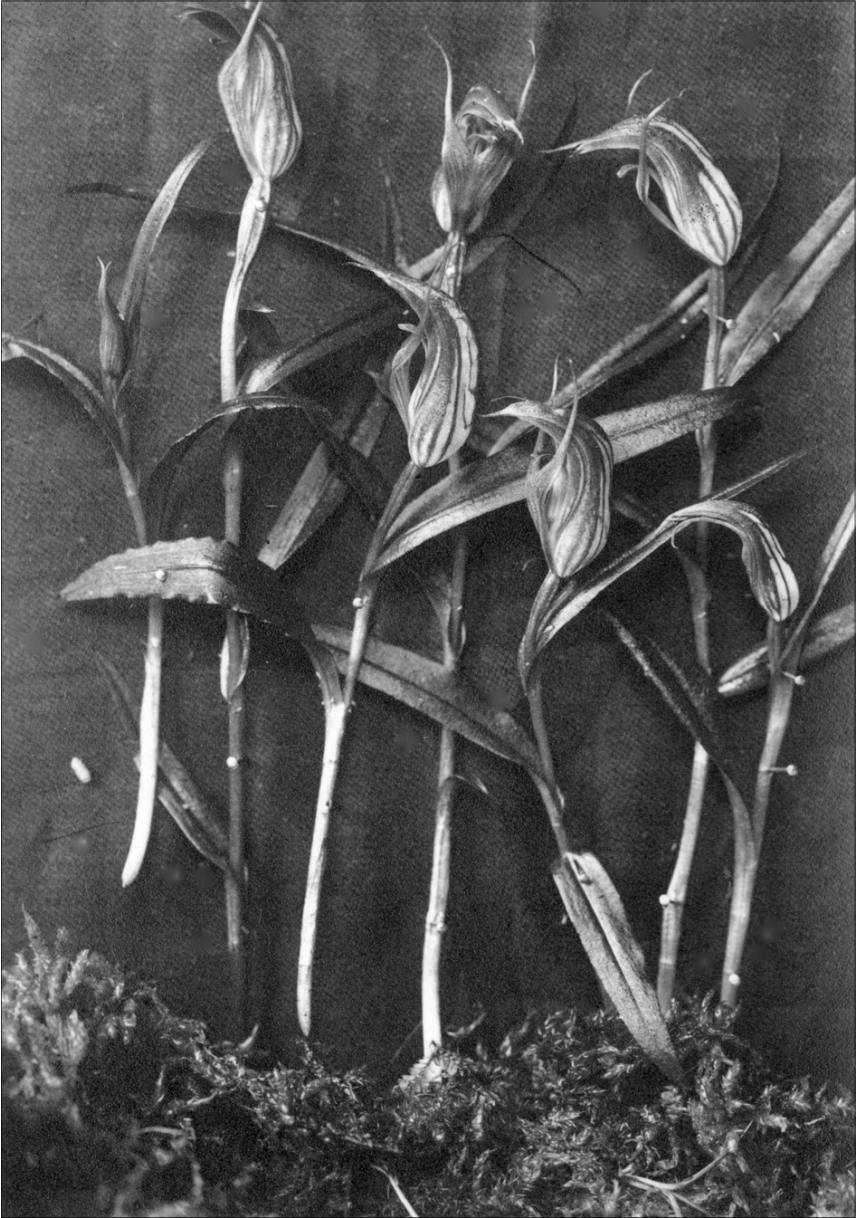


*Pterostylis nana.*  
*Linguella puberula.*

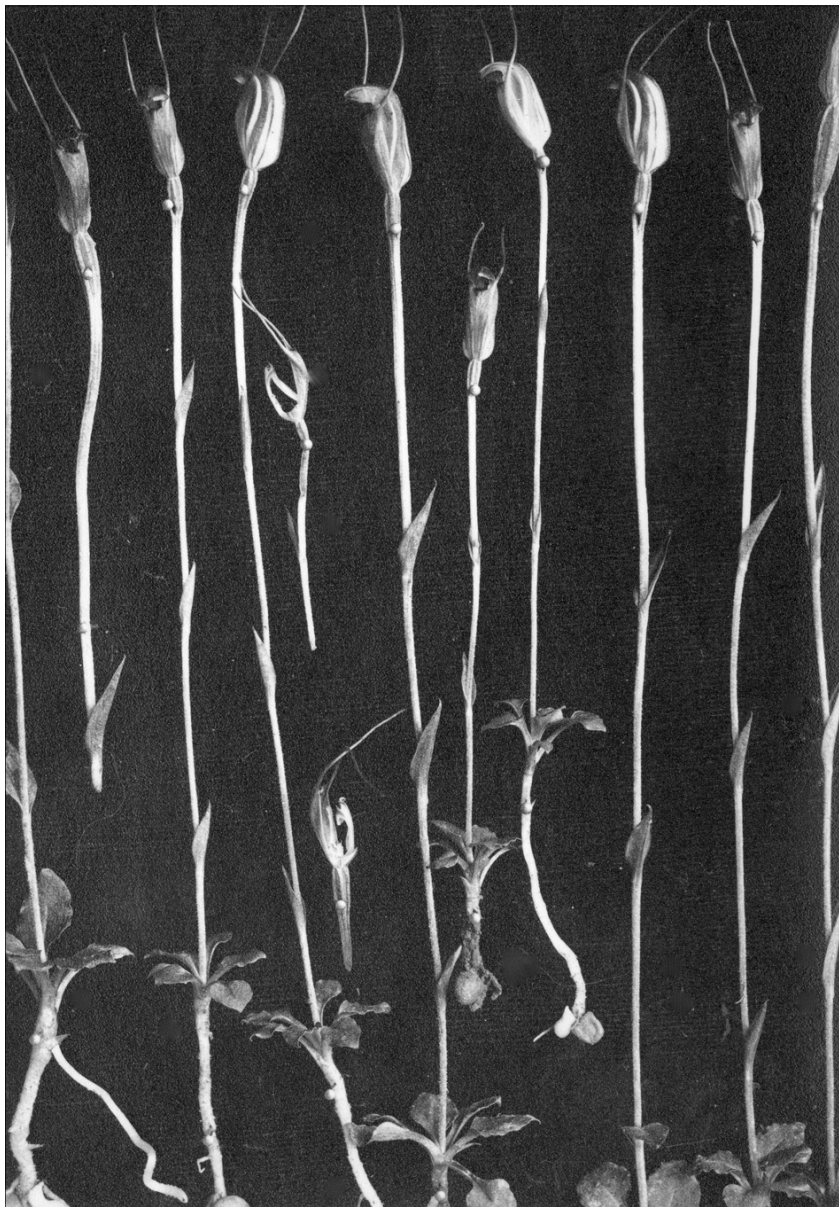


*Pterostylis nutans.*





"*Pterostylis pulchragalea*".  
Plants in the *Pterostylis* aff. *montana* agg.



*Pterostylis puberula*, New Lynn, 12Oct24.  
*Linguella puberula*.



"*Pterostylis rotundigalea*", Waimarino, 22Dec21.

*Pterostylis patens*.



*Spiranthes australis*, Lake Tongonge, 21Jan22 (+ detail).

*Spiranthes* "Motutangi", an undescribed taxon.



"*Thelymitra acuta*" (he also called this "*T. carsei*"), Waimarino, 4Jan22 (+ detail)

*Thelymitra formosa*.



*Thelymitra aristata*, Kaitaia, 15Oct23 (+ detail).

*Thelymitra* "tholinigra", an undescribed taxon.



*Thelymitra caesia*, New Lynn, 23Nov22 (+ detail).

One form of the variable *Thelymitra pulchella*.



"*Thelymitra cheeseemanii*", Birkdale, 22Nov22 (+ detail).

*Thelymitra pauciflora* agg.



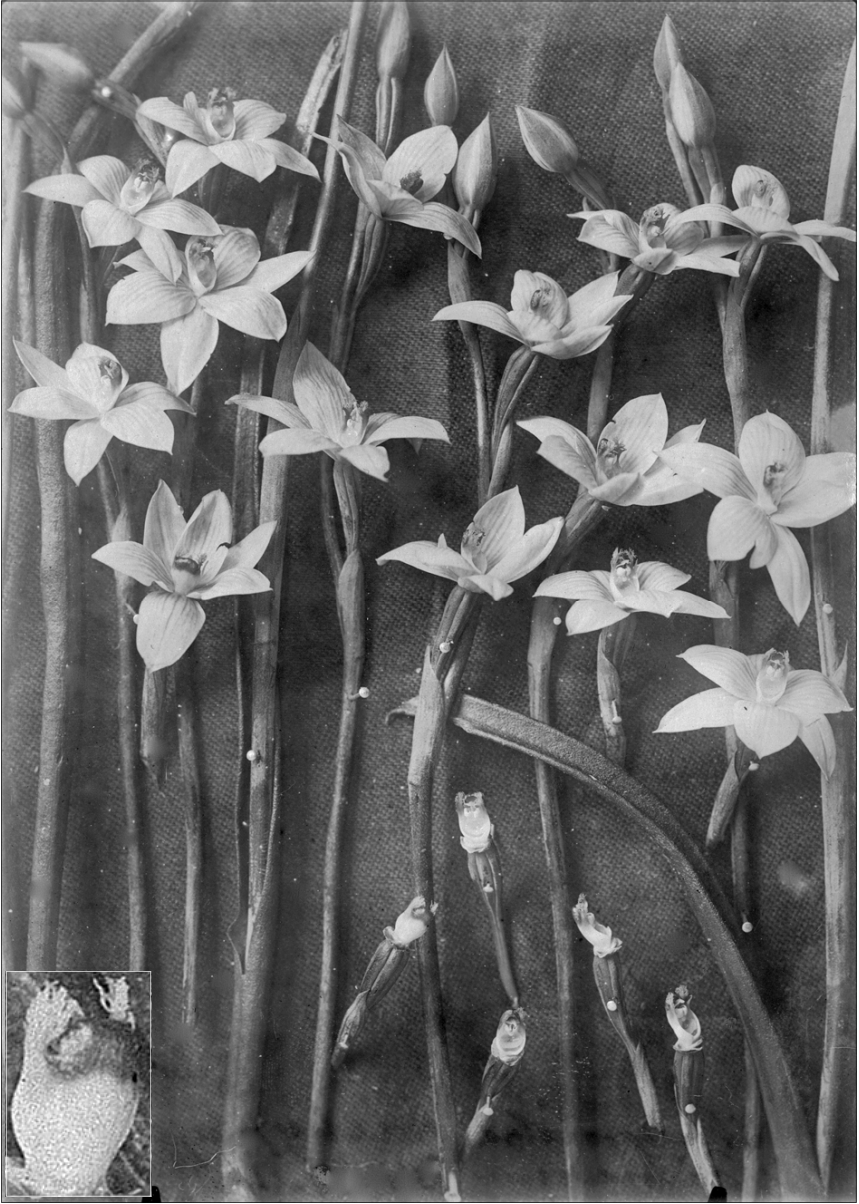


"*Thelymitra crenulata*", Birkdale, 11Nov22 (+ detail).

*Thelymitra tholiformis*.



*Thelymitra matthewsii*, Kaitaia, 6Sep23.  
The twin-flowered plant is unusual.

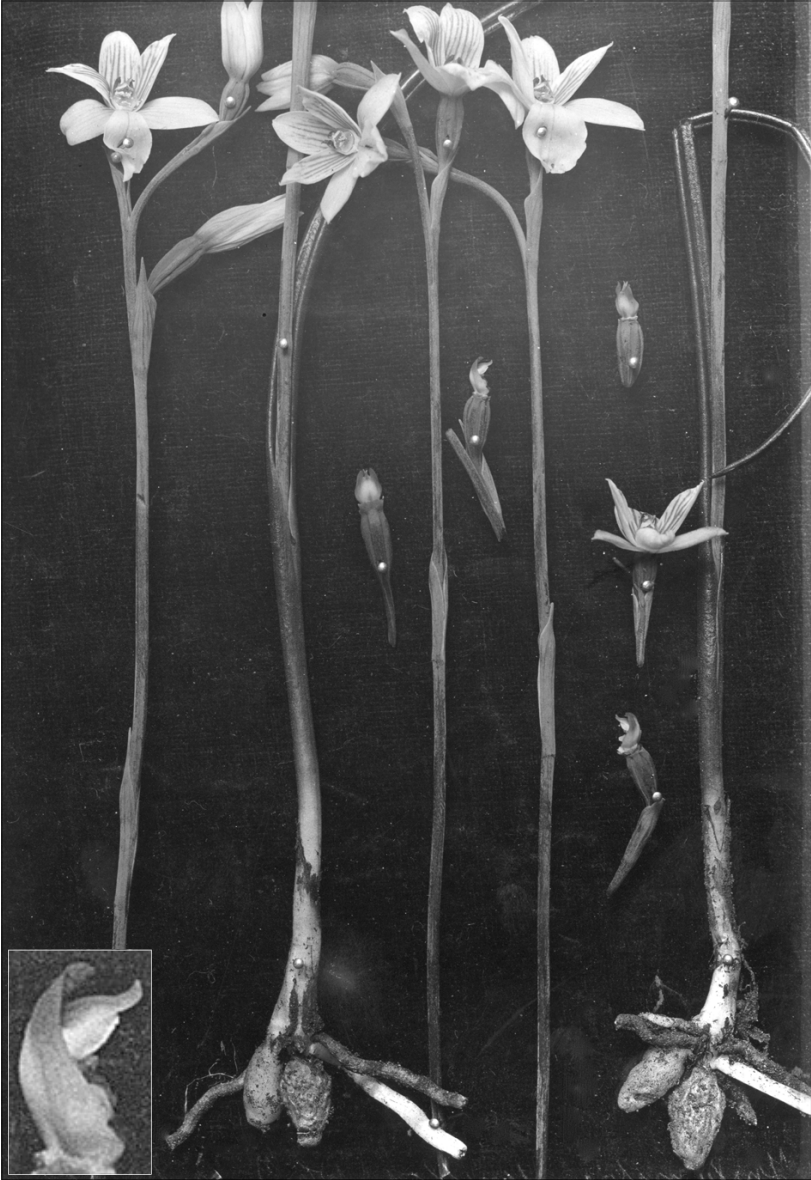


*Thelymitra pachyphylla*, Waimarino, 28Dec21 (+ detail).  
Another form of the variable *Thelymitra pulchella*.



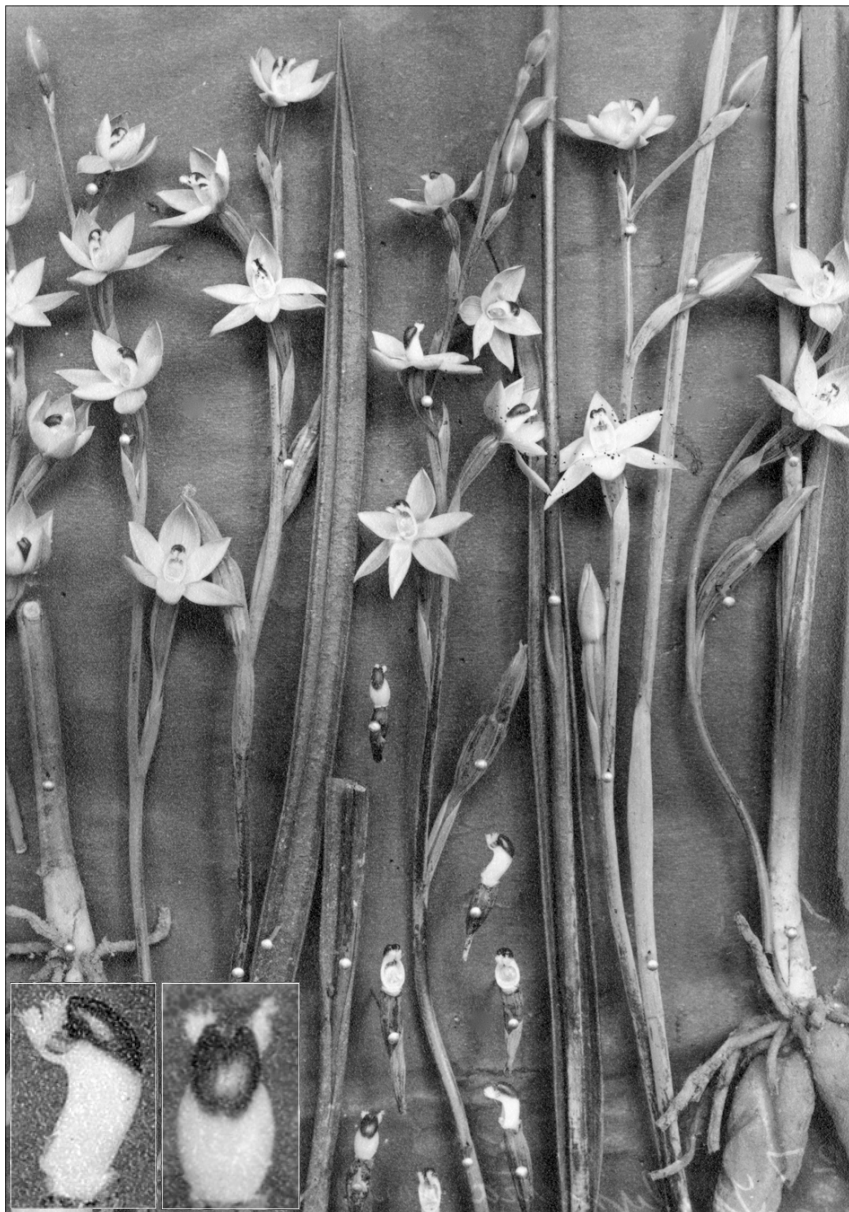
*Thelymitra pulchella* (+ detail).

(As described by JD Hooker – with no fimbria on the column arms)



“*Thelymitra purpura-alba*”, Waimarino (+ detail).

Matthews wrote, “The three top segments of the flower lavender-purple with darker stripes – lower segments white with green stripes.” A very unusual *Thelymitra cyanea*.



“*Thelymitra scaphifolia*”, Birkdale-Avondale-Mangatangi, 27Oct22 (+ detail).  
*Thelymitra pauciflora* agg.



*Thelymitra uniflora*, Ohaupaupau, 4Jan24 (+ detail).

*Thelymitra cyanea*.

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