

Notes

Proposed Mt Watkin Reserve -

(Excerpts from two emails in response to items in our last newsletter)

- centre of diversity for *Grimmia* spp

I have recently seen an item in the Otago Bot. Soc newsletter (37) about Mt. Watkin.

About six months ago I was actively working on the genus *Grimmia*, which is a large and taxonomically difficult cosmopolitan genus of epilithic mosses. At the time I was very struck by the exceptional diversity of this genus on Mt. Watkin and was hoping to get there to look at the *Grimmia* spp. I haven't yet. I can't tell you exactly how many species of *Grimmia* occur at Mt Watkin but the diversity there is exceptionally high and I certainly noted it as a highly significant locality for that genus in New Zealand. I believe there were four or five species on Mt. Watkin, out of a total of ten *Grimmia* spp. occurring in New Zealand. I don't know of any other single locality with such a high diversity.

Mt. Watkin is the type locality of *Grimmia inaequalis* Dixon & Sainsbury in Sainsbury, *Trans. Roy. Soc. N.Z.* 75: 169B186, *hom. illeg.* Holotype: N.Z., Otago, Mt Watkin, near Waikouaiti, 30 Nov. 1935, G. Simpson & J.S. Thomson, s.n. (Herb. G.O.K. Sainsbury 823), WELT!, Isotypes: BM (not seen, cited by Bell, 1984), CHR 486071! *Grimmia inaequalis* is homotypic with *Grimmia incrassicapsulis*.

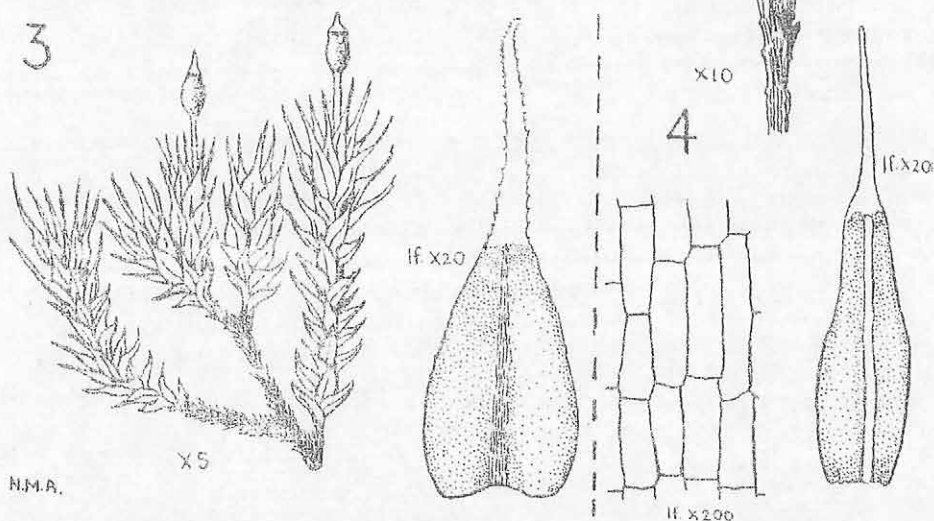
Two species of *Grimmia* that occur there and which are relatively rare in New Zealand are:

1. *Grimmia incrassicapsulis* B.G.Bell On basalt, conglomerate, greywacke, and probably on schist rocks. The many collections from the basaltic type locality (Mt. Watkin) appear to come from both well-sheltered and exposed situations, with some from "fissures on non-sheltered faces of rocks in jumbled mass of basaltic boulders" and another from a "talus slope in sheltered situations." Ranging from c. 450–1990 m (on Eyre Ra.); seven collections from the type locality (i.e. Mt Watkin) appear to all come from between 450 and 550 m. This species is known from approx. seven localities in New Zealand, but is best documented from Mt. Watkin. Also confirmed from Tasmania and reported from S Georgia.

2. *Grimmia longirostris* Hook., Nearly cosmopolitan but rare in many parts of its range. On dry rock from 610–1850 m (in Remarkable Ra). Little is known of the substrate requirements of this poorly documented species in N.Z. Muñoz, (1999, p. 150) considers it to occur on "any kind of rock, from acidic to ultrabasic" and to have a wide altitudinal range in Latin America. In N.Z. it sometimes co-occurs with *G. trichophylla*. This species is known from a total of six New Zealand localities, all in Otago and Canterbury.

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Grimmia laevigata (3) and
Grimmia inaequalis (4)
(= *Grimmia incrasscapsulis*),
drawn by Nancy Adams in
Sainsbury, GOK,
Trans. Roy. Soc. N.Z., Bulletin No. 5,
A Handbook of the New Zealand Mosses,
Wellington, 1955



Proposed Mt Watkin Reserve -

- important site for vulnerable new *Gingidia* sp

I was just reading the notes in the recent BSO newsletter on Mt Watkin. The *Gingidia* (native aniseed) there is particularly interesting. Brian Patrick noted quite a number of years ago that *Gingidia* plants from NE Otago had a different invertebrate fauna from *G. montana*, and he considered it to be a different species.

I've been looking at this over the past 2 years and agree with Brian that there is an unnamed species of *Gingidia* in NE Otago. I think Mt Watkin is the southern limit and it goes north to near the Mill House. It's most common around Trotters Gorge. At quite a number of the sites that Brian recorded it from, and to which I've been back, and not found it, it is being shaded out by broom and forestry plantations. The record from Mt Watkin is therefore a very important one.

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