

References

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Notes and Articles

***Gingidia grisea* – a new species from north-east Otago**

John Barkla

In the *Bot. Soc. Otago Newsletter* (No. 38) Peter Heenan from Landcare Research commented on the importance of the proposed Mt Watkin reserve for an unnamed species of *Gingidia*. It had initially been drawn to his attention by BSO member Brian Patrick who noted it had a different invertebrate fauna from *G. montana*.

In the *New Zealand Journal of Botany* (Vol. 42: 175-180) Heenan formally describes and names this new north-east Otago endemic as *Gingidia grisea*. The specific epithet *grisea* refers to the grey appearance of the leaves. The dense glaucous bloom on both leaf surfaces, along with secondary bracts which are broad-elliptic and long-acuminate, distinguish this species from the more widespread *G. montana*.

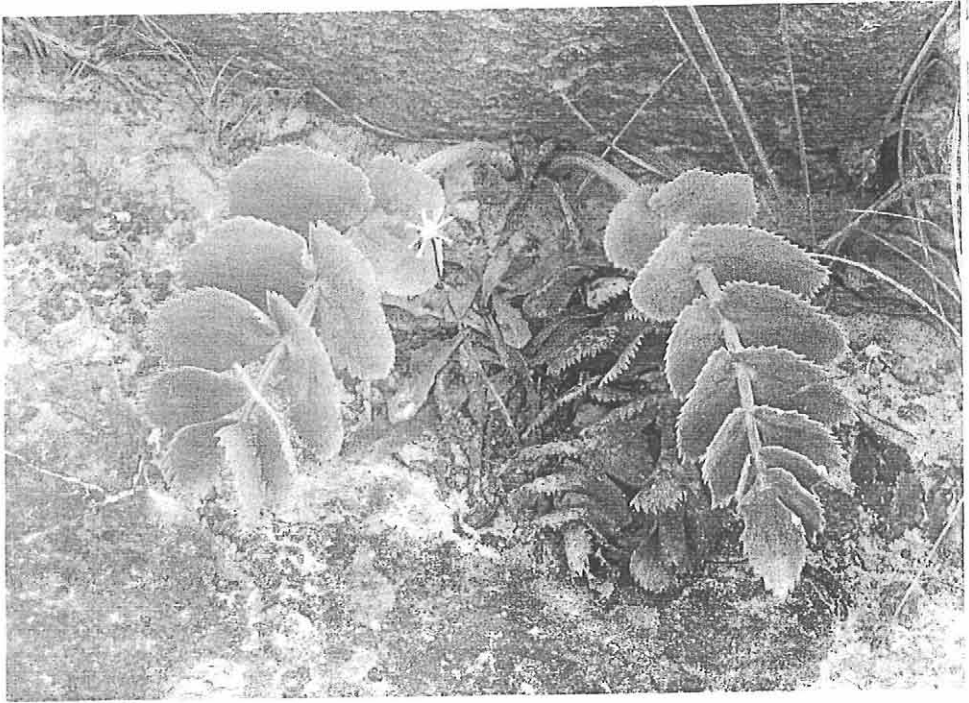
Gingidia grisea appears restricted to a small geographic area of north-east Otago from Mt Watkin in the south to near Herbert in the north. Its western limits are the upper parts of the North Branch Waikouaiti River. Altitudinal range is from near sea level (Shag Point) to about 600 m (Mt Watkin).

Gingidia grisea is restricted to base-rich substrates of igneous, schist and sedimentary rock. Rock outcrops and bluffs are favoured habitats and a stronghold of the species is the bluffs of Trotters Gorge Scenic Reserve.

Heenan cites several examples of habitat loss due to the ingress of shrubby weeds and shading by forestry plantations. He refers to the observations of BSO members that goats pose a threat to the vegetation of Mt Watkin, where *G. grisea* is now confined to inaccessible rock outcrops. In light of the decline in the total number of populations during the past 20 years Heenan recommends *G. grisea* have a conservation status of Nationally Vulnerable_{DP}. The qualifier Data Poor recognises that more field survey is required to fully elucidate its distribution, population size and extent of recruitment.

New sites for *G. grisea* in the Kauru River and Shag Valley have been discovered since Heenan's paper went to press. I would be very pleased to hear of further records from members.

(You can see a colour version of John's *Gingidia grisea* image on our website – ed)



Gingidea grisea, Shag Point Conservation Area, June 2004 – *John Barkla*

OUR GOLDEN LANDSCAPES:

History of the development and use of our tussock grasslands

Summary, 2004 Hocken Lecture

Emeritus Prof Alan Mark, Botany Dept., University of Otago.

Information is reviewed from the time grasses first appeared in the New Zealand fossil record, in the Eocene, ~40 m.y.a., to the present. Grassland became widespread in the late Tertiary, as a result of mountain-building associated with the Kaikoura Orogeny and was most extensive during the late Otiran glaciation and early post-glacial period. Contracting through post-glacial times, it was restricted by 2500 yr BP largely to the alpine zone and the interior basins of the South Island, but had a presence in most regions. Grassland expanded 2500-1500 yr ago through **natural fires** at 500-2000 yr intervals in the drier interior of the South Island and locally in the North Island, until fires lit by the first human settlers (**Polynesians**) about 700 yr ago; its incidence increasing about ten-fold. Indigenous grassland thus consolidated rapidly in the interior of both islands and reached its greatest extent at the time of European settlement in the 1840s.

Pastoralism on all the Crown land in the South Island high country rain-shadow region began in the 1850s, with an “eruptive phase” of “exploitative