

Grimmia incrassicapsulis B.G. Bell –
A Synoptic Flora of South Georgian Mosses: Grimmia and Schistidium, p.
80-82. 1984.

Type: New Zealand, Otago, Mt. Watkin, 1500 ft., Nov. 1935, leg. Simpson & Thomson No. 823, holotype BM!; isotype NY!

Synonyms: *Grimmia inaequalis* Dix. & Sainsb.

Distribution: Am.6. Ant. Austr.2

Description

Grimmia incrassicapsulis grows in flat, blackish, hoary, sand-filled tufts. The leaves are linear to oblong-lanceolate, loosely appressed and slightly contorted when dry, erecto-patent when moist, keeled above, the costa is weak below, channeled above, projecting on dorsal side; the hair-points are long, smooth to denticulate, and the margin are plane. The distal areolation is unistratose, bistratose only at margins, the mid-leaf cells are quadrate to short-rectangular with incrassate and nodulose walls, the basal marginal cells as well as the basal juxtacostal cells are pellucid and elongate with thin walls. The sexuality dioicous. Immersed capsules on a short straight setae are usually present, they are clavate-ovoid with a rostellate operculum.

Discussion

Grimmia incrassicapsulis is only known from the southern hemisphere, occurring in New Zealand, the southern part of South America, and Antarctica. It forms flat, black, hoary cushions, usually provided with inconspicuous, immersed, wide-mouthed capsules on very short setae. Although Bell (1984) described it autoicous, in my New Zealand material, I could not find antheridia on capsule-bearing plants, so I consider it dioicous. Although in the field, it might be confused with *G. asperitricha* or with *G. reflexidens*, under the microscope the linear leaves with pellucid, elongate, thin-walled basal cells immediately distinguish it from these species. With *G. asperitricha* it shares capsules with extremely incrassate exothecial cell walls.

Specimens examined

New Zealand. Otago, Mt. Watkin, 1500 ft, leg. Simpson & Thomson nr. 823, Nov. 1935, CHR 98685; Otago, Mt. Watkin, leg. K.W. Allison, 04-10-1950, CHR 3929; Southern Island, Arthurs Pass, leg. Glenney, 07-02-1988; Southern Island, Queenstown, Remarkable Mts., ski area, alt. 1475 m, leg. H.C. Greven nr. NZ 24,

27-02-1997; Canterbury, Craigieburn Ra, Mt. Cockayne, on greywacke, alt. 1690 m, leg. H.C. Greven nr. NZ 23, 18-02-1997; Northern Island, Mt. Tongariro Nat. Park, Tongariro crossing, rim near Red Crater, alt. 1825 m, leg. H.C. Greven nr. 2814, 18-12-2005;

Chile. Reg. Canales, Parc Nacional Torres del Paine, along westside of Lago Skottsberg, alt. 160 m, leg. C.C. Townsend nr. 97/207, 16-01-1997;

References

Bell, B.G. 1984. A synoptic flora of South Georgian Mosses: *Grimmia* and *Schistidium*. Br. Antarct. Surv. Bull. 63: 71-109.

Sainsbury, G.O.K. 1945. New and Critical Species of New Zealand Mosses. Trans. of the Royal Society of New Zealand Vol. 75, Part 2: 169-186.