**Grimmia incrassicapsulis B.G. Bell** –

**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. Glenny, 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**