

Grimmia kidderi Jam. - Bull. Torr. Bot. Cl. 6: 54. 1875.

Type: Kerguelen Island, 1874, leg. J.H. Kidder, lectotype, designated by Muñoz (1999), FH!; isolectotypes (2 replicates) FH!

Synonyms: *Grimmia austro-funalis* Broth., *G. bossierei* Card. & Thér., *G. frondosa* Jam., *G. immerso-leucophaea* (C. Müll.) Par., *G. kerguelensis* Card., *G. minutifolia* C. Müll., *G. nordenskjöldii* Card.

Distribution: Afr.4. Am.6. Ant.

Description

Grimmia kidderi grows in compact, usually sand-filled, whitish-hoary tufts on acidic rock in Antarctic habitats. The leaves are appressed when dry, erectopate when moist, oblong- to narrowly ovate-lanceolate, larger above, weakly carinate, the perichaetial leaves are twice as long as the vegetative leaves, the costa is channeled above, slightly projecting on dorsal side, the hair-points are long, flattened below and descending down margin, the margins are plane, 2-4-stratose, erect to slightly incurved above. The distal areolation is unistratose, only in the uppermost part and margins bistratose, the mid-leaf cells are short-rectangular with incrassate and sinuose walls, the basal marginal cells are rectangular with thickened transverse walls, the basal juxtacostal cells elongate with incrassate and slightly sinuose walls. The sexuality is dioicous, capsules on straight setae are occasionally present, they are immersed, ovoid to oblong-ovoid, with a rostellate to rostrate operculum.

Discussion

Grimmia kidderi is an Antarctic species, also occurring in southern parts of Chile and Argentina. On the bryologically poor subantarctic islands, *G. kidderi* is one of the most common bryophytes, and the species has been described eight times. *G. kidderi* is rather variable but the presence of a hair-point on almost all vegetative leaves, combined with the generally small oblong- to narrowly ovate-lanceolate leaves with sinuose and incrassate mid-leaf cells, will distinguish it from the other subantarctic *Grimmia* taxa with the exception of *G. reflexidens* Müll. Hal. The differences with this species, discussed in Bell (1984), are that in *G. kidderi* the leaves at the base of the stems are more oblong- than ovate-lanceolate, the upper margin is frequently involute and the basal juxta-costal cells are 4 times as long as broad. In *G. reflexidens*, the similarly situated leaves are more ovate- than oblong-lanceolate, the upper margin is rarely involute and the basal juxtacostal cells are 2-3

times as long as broad. On one of the packets, I noticed the local name "grey furry moss", in my opinion a well-chosen name.

Specimens examined

Kerguelen Island. Foundery Branch, leg. J.H. Kidder, 26-11-1874, FH!; Plateau des Stationsberges, leg. Urbansky, 22-02-1902, H-Br 1824012; without locality, leg. E. Wentley, 01-02-1903; **South Georgia.** Bay of Isles, near Brunonia glacier, alt. 10 m., leg. S.W. Green nr. 1322, 22-01-1961, CHR 489509; Cumberland East Bay, stream from Hodges glacier to Gull Lake, alt. 350 ft., leg. S.W. Green nr. 1849, CHR 489507; East of Bore Valley, alt. 600 ft., leg. B.G. Bell nr. 909, 25-11-1971; Fortune Bay, leg. P.J. Lehr nr. 2148, 2167, 17-11-2003, B 113957; **Prince Edward Island.** South of Cove Bay, on lava, alt. 50 m, leg. Van Zinderen-Bakker nr. 614, 18-03-1965; **Marion Island.** Stoney ridge, exposed lava, alt. 100 m, leg. B.J. Huntley nr. 2045, 24-02-1966; **Heard Island.** Dovers moraine, 1.2 km southwest of Split Bay Station, steep moraine gully, alt. 130 m, locally common, leg. Donaldson nr. 240, 15-03-1993, CBG 9303646; **Hoste Island.** Peninsula Dumas, Puerto Corriente, sea level, dry rock, just above splash-zone, leg. B.O. van Zanten & J.D. Kruyer nr. 86.01.185, 13-01-1986;

References

- Bell, B.G. 1984. A synoptic flora of South Georgian Mosses: *Grimmia* and *Schistidium*. Br. Antarct. Surv. Bull. 63: 71-109.
- Cardot, J. 1908. La Flore Bryologique des Terres Magellaniques, de la Géorgie du Sud et de l' Antarctide. Wissensch. Ergebn. der Schwedischen Südpolar Expedition 1901-1903. Lithographisches Institut des Generalstabs, Stockholm.