
Type: Tibet, YadongXian, Chun-Pei river, 2900 m, May 1975, leg. Zang Mu No. 71, holotype IFSBH; isotype NY!

Synonyms: Grimmia mammillaria Li Xing-jiang

Distribution: Afr.2. As.2.3

Description
Grimmia mammosa grows in dull, dense, yellowish-green to greyish-green, rigid tufts, the leaves are erect-appressed when dry, spreading when moist, broadly lanceolate to ovate-lanceolate, concave above, the costa is broad, up to 1/3 width of leaf base, not projecting at dorsal side, the hair-points are long, denticulate, flattened below, the margins are plane and crenulated. The distal areolation is bistratose, mid-leaf cells are rounded-quadrate, with distinctly bulging (papillose) walls, basal marginal cells are oblate with firm straight walls, the basal juxtacostal cells are ±quadrate with thicker transverse walls. The sexuality is dioicus and capsules, exserted on straight seta, are occasionally present, they are ovoid to cylindrical with a rostrate operculum.

Discussion
Grimmia mammosa is a peculiar Grimmia because it has distinctly bulging cell walls, very rare in the genus. Grimmia papillosa, should have been a more propriate name but illegal (Grimmia papillosa Kindb. Bih. K. Svensk. Vet. Ak. Handl. 7(9): 110. 1883). In the Himalayas, it is rather common in suitable habitats and I found it frequently in the Nepalese Khumbu valley (Greven 2002). It was probably overlooked in the 19th century because it was described not earlier than in 1981. The species has a disjunct distribution because it occurs in Africa also (Sierra Leone and Malawi). G. mammosa can easily be distinguished from other Grimmia species by the papillose cell walls in middle and upper part of the leaf. A second specific character is the flattened broad costa, up to 1/3 width of the leaf base. At first glance, the plants are similar to G. laevigata and the sample from Sierra Leone had been stored under that name. However, as a result of papillae the leaf surface is dull, while in G. laevigata the leaf surface is shiny by smooth epidermis walls.

Specimens examined

References