

Grimmia crinita Brid. - Muscol. Recent. Suppl. 1: 95. 1806.

Type: Switzerland, Vaud, Lausanne, leg. Roger, lectotype, designated by Geissler & Maier (1995), B!

Synonyms: *Guembelia crinita* (Brid.) Hampe, *Gymnostomum decipiens* Web. & Mohr.

Distribution: Afr.1. As.5. Eur.

Description

Grimmia crinita is growing in flat, white-hoary patches with usually homomalous leaves, which are ovate-lanceolate to obovate, concave-keeled above, abruptly contracted into hair-point, narrowed in basal part, the costa is weak, not projecting on dorsal side, hair-points are long, broadly flattened below, smooth and terete above, the margins are plane. The distal areolation is unistratose throughout, the mid-leaf cells quadrate with slightly incrassate and sinuose walls, basal marginal cells quadrate with firm walls, basal juxtacostal cells rectangular with thin smooth walls. The sexuality is autoicous, capsules, on short, slightly arcuate setae are usually present, they are immersed, ovoid, ventricose with conical operculum.

Discussion:

G. crinita is a thermophilous lowland species with a main distribution in Mediterranean countries. Here, it can be found on calcareous sandstone and weathered mortar-covered stonewalls around vineyards and gardens. I found it also commonly occurring on basic sandstone along the River Ebro, close to the village of Caspe, prov. of Zaragossa, in Spain. Here, it grows associated with *G. tergestina* and *G. orbicularis*. It reaches its most northern border on south-facing mortar walls and other calcareous substrates in Northwestern and Central European countries. Because of the usually abundant gametangia, there is a great diversity in leaves, ranging from small and oval, sometimes muticous in the perigonia, to oblong and long-haired in the perichaetia. The enlarged obovate perichaetial leaves have hyaline basal cells and hyaline upper parts, which continue into hair-points. Characteristic are richly fruiting plants, growing in small, white-hoary patches with homomalous white-hair-pointed leaves. In favourite habitats, it may form extended silky patches e.g. on mortar walls around almond orchards in the vicinity of Palma de Mallorca. *G. crinita* may be confused with *G. anodon*, *G. plagiopodia*, *G. curviseta*, and especially with the Mediterranean and Asian *G. capillata*. The differences with these species are discussed under these taxa.

Specimens examined

Algeria. Laghouat, J.P. Frahm s.n.; **Belgium.** Hainaut, Gerpinnes, A. Sotiaux 2289; Namur, Vierves, Ph. de Zuttere 18774; **England.** Warwickshire, Hatton, Canal bridge, J.E. Bagnall s.n.; **France.** Puy-de-Dôme, La Roche-Blanche, 5 km south of Clermont-Ferrand, Greven 3152; Puy-de Dôme, St. Nectaire, Hotel

du Parc, Greven 3148; Nîmes, 9 km west of Lunel, Greven 3610; Dep. Hérault, Palavas-les-Flots, south of Montpellier, Touw & Kroes s.n.; Chatonat, along D 52, Greven 3150; Pyrenees, east side Prades, Greven 3149; Charente Maritime, St. Pierre d'Oléron, La Menounière, Sotiaux 15347; Côtes d'Or, Châteauneuf, église, Ph. de Zuttere 7676; Hérault, Palavas-les-Flots Touw & Kroes s.n.; **Italy.** Merano, D. Mohr s.n.; **Spain.** Mallorca, Son Bauza, Greven 2820; Mallorca, Sa Torre, Greven 2821; Mallorca, Capocorn, Greven 2822; Mallorca, Establiments H.C. Greven 2823; Mallorca, Son Boscana, road between Cabo Blanco and Capocorn, Greven 2822; Prov. Zaragossa, River Ebro, peninsula La Magdalena, Greven 3156, 3612; Prov. Zaragossa, Caspe, Greven 2046-2050, 3151; El Tablazo, Taber nos, J. Guerra s.n.; Huesca, Martes Berdun, Wallace s.n.; **The Nether lands.** Zuid Limburg, St. Pieters berg, Franquinet s.n.; Veluwe, Fransche Berg, A.C. Bouman s.n.

References:

- Greven, H.C. 1995. *Grimmia* Hedw. in Europe. Backhuys Publishers, Leiden, The Netherlands.
- Maier, E. 2002. The genus *Grimmia* Musci, (Grimmaceae) in the Hmalaya. *Candollea* 57: 143-218.