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Gigaspermum mouretii Corb. (Gigaspermaceae, Musci), new to the moss flora of Turkey

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Abstract – *Gigaspermum mouretii* is reported from the Amanos Mountains (province of Hatay) as new to the bryophyte flora of Turkey.

Bryophyta / *Gigaspermum mouretii* / Musci/ Hatay/ Southern Turkey/ Amanos Mountains

INTRODUCTION

According to Crosby *et al.* (2000), *Gigaspermum* consists world wide of only two species: *Gigaspermum mouretii* Corb., distributed in the northern hemisphere including the Mediterranean region, and *G. repens* (Hook.) Lindb., scattered in the southern hemisphere – Southern Africa, Madagascar, Australia (including Tasmania) and New Zealand – (Herrnstadt *et al.*, 1980; Carratello & Aleffi, 1998).

Gigaspermum mouretii is a circum-Tethyan (Mesogean) species of xerotherm – Pangaean origin (Kürschner, 2003, 2008). As indicated by Schumacker & Martiny (1995) *G. mouretii* is a rare oceanic-Mediterranean species. It was described by Corbière (1913) from Morocco and later mentioned in other localities (Jelenc 1955, 1967; Frahm, 1988; Ros *et al*., 1999), but is now known to have a Mediterranean range that includes continental Spain (Allorge & Casas, 1958; Acuña *et al.*, 1974; Ros (1984); Ros & Guerrra (1987)), Balearic Islands of Mallorca and Formentera (Casas *et al.,* 1985; Rita & Rosselló, 1989), all the Canary Islands (Malme, 1988; Dirkse & Bouman, 1990; Dirkse *et al*., 1993; González-Mancebo *et al*., 2008), Sicily (Carratello & Aleffi, 1998), Creta (Blockeel, 2003), and Cyprus (Carratello & Aleffi, 1998). The closest locality to Turkey is Israel, where this species is known from several sites (Hernnstadt *et al.*, 1980, 1982, 1991, 2004).

During a field trip in June 2002, *Gigaspermum mouretii* Corb. was collected on Mount Musa in the southern part of Amanos Mountain (Fig. 1), in an area subject to a dry continental climate. Because of the minor precipitation on the southern and eastern slopes steppe vascular plants are seen there, for instance *Festuca drymeja* Mertens & K. Koch, *Euphorbia macrostegia* Boiss., *Stipa bromoides* (L.) Dörfler and *Astragalus schizopterus* Boiss. Lower parts of the

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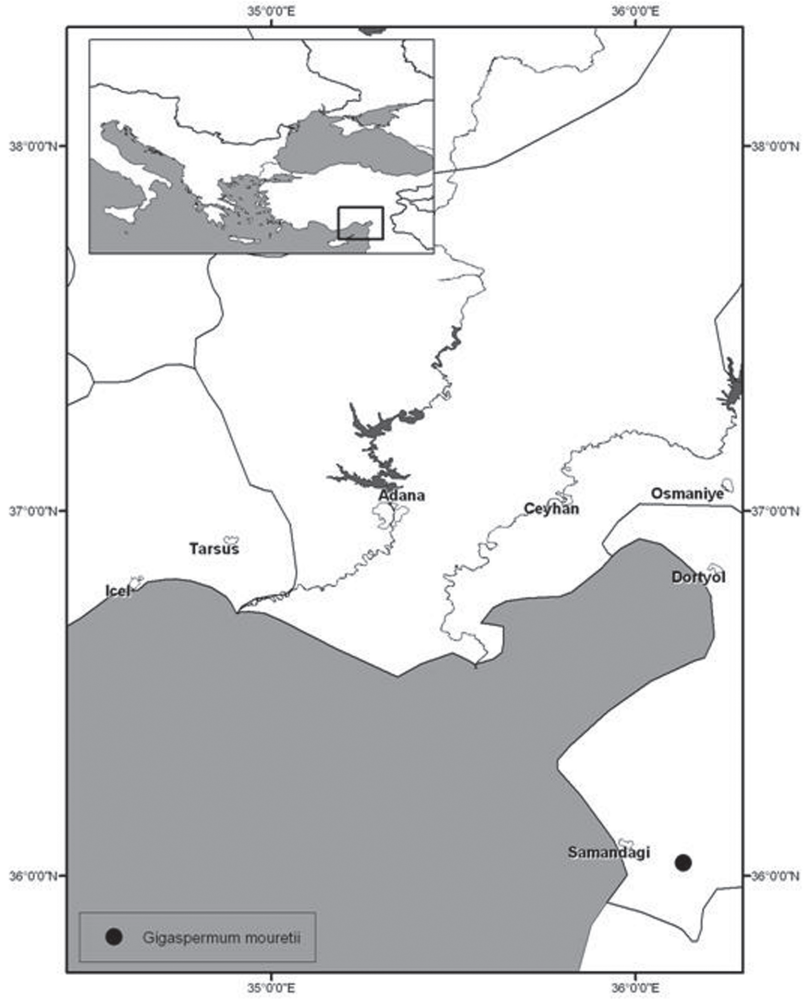

Fig. 1. (●) The locality of *Gigaspermum mouretii* in Turkey.

mountain support maquis elements like *Pinus brutia* Ten., *Quercus coccifera* L., *Pistacia terebinthus* L. subsp. *palaestina* (Boiss.) Engler, *Laurus nobilis* L., *Styrax officinalis* L., *Arbutus andrachne* L., *Myrtus communis* L. subsp. *communis* and *Cercis siliquastrum* L. subsp. *siliquastrum.*

The Amanos Mountains mark the southern border of the Anatolian Diagonal that influences the dispersion of the northern flora southwards up to Lebanon and Syria. These mountains provide a bridge linking the Taurus and Lebanon Mountains, and the North Syrian Desert, and make it possible for

species to migrate between these areas (Boulos *et al.* 1994). This could explain the presence of *G. mouretii* in this area. Another hypothesis by Carratello and Aleffi (1998) is that the species was carried out by African winds or by travelers (tourists).

SPECIMEN EXAMINED

Turkey, Hatay province: South of Harbiye, Sofular Village**,** Ömerin Tepesi, 36° 15'30'' N 35°54'13'' E, 550 m, on rocky soil and under shrubs, 15-06-2002, *Özlem Tonguç Yayintaş* T 1243 (MO, CHN, Çanakkale).

The locality belongs to the grid square C13 (Fig.1) of the Henderson's system (1961). *Gigaspermum mourettii* was found scattered together with *Didymodon vinealis* (Brid.) R.H. Zander, *Trichostomum crispulum* Bruch. and *Barbula unguiculata* Hedw. Plants 1-2 mm long, light green to whitish, only at base chlorophyllous. Leaves compact, orbicular, and apices apiculate, *ca* 0.7 – 1.37 mm long; leaf margin plane, smooth; costa absent; leaf cells generally thin – walled, rhomboidal, 12 – 22 µm wide, basal cells rectangular, 55 – 120 (– 135) µm Sporophyte unknown in Turkey.

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