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New record of *Carex stellulata* (Cyperaceae) in Sicily

Abstract

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Carex stellulata is the only European species related to the sect. *Stellulatae* (Kunth) Christ. While being already known in almost all the Italian regions and in Corsica, it has recently been recorded for the first time in Sicily. Its finding in a little peat-bog in the Madonie Mountains is here reported.

The local phytocoenosis is characterized by some species of *Sphagnum* and others acidophilic bryophytes, oceanic ferns and various, mostly endemic, anthophytes.

In Sicily the genus *Carex* L. is represented by several species, including *C. panormitana* Guss., endemic to Sicily itself and Sardinia (Urbani & al. 1996).

Apart from the species quoted in the Italian and Sicilian floras of XIX and XX centuries, other taxa belonging to the same genus have recently been recorded in the Island of Pantelleria, in the Madonie and Nebrodi district, especially thanks to the renewal of floristic investigation.

C. illegitima Cesati (Catanzaro 1971), *C. pallescens* L. and *C. paniculata* L. (Marcenò & Raimondo 1977), *C. × boemhingausiana* Weihe – also recorded in Italy for the first time – (Raimondo 1979), *Carex laevigata* Sm. (Raimondo & Ottonello, 1981), *C. demissa* Hornem (Raimondo & al., 1984) and finally *C. grioletii* Roemer (Rossitto & Ottonello 1986) have been recorded. Some are taxa with a western-boreal distribution, whose occurrence in Sicily has been considered as a consequence of the glacial expansion in the Mediterranean (Raimondo 1984). In the same geographical and environmental background of the Madonie Mountains, characterized by small sphagnum peat bogs where many of the above-mentioned *Carex* have recently been found, the occurrence of *Carex stellulata* Good. (*C. echinata* Murray) has recently been recorded and is here reported.

C. stellulata, (Fig. 1), the only European species belonging to the sect. *Stellulatae* (Kunth) Christ., is a caespitose plant 5-35 cm high with stems obtusely trigone; leaves 1-2 mm, linear, narrow, grooved, shorter than the stem; inflorescence simple, loose, with spikes subglobose and utricles 3-4 mm long, narrowly ovate, scabrous, star-like arranged when ripening, beak usually erect.

Its distribution includes Europe, temperate Asia, N America, S W Africa (Zangheri 1976).

It is a calcifugous species occurring in marshy and sphagnum bog areas. In Europe, it occurs in many countries, except Balearic Islands, Crete, Sardinia and, according to Chater (1980), also Sicily.

Pignatti (1982), referring the species to the amphiatlantic element, reports it in almost all the Italian regions – except Umbria, Latium, Apulia, Campania, Sardinia and Sicily – as well as Corsica.

As concerns its southern European distribution, the species occurs only in mountainous areas (Chater 1980).

The Sicilian locality lies in the southern Madonie, on the north-western quartzarenaceous slope of Catarineci Mount, about 1300-1350 m a.s.l., and consists of a small sphagnum peat bog – in Scorsone locality within the Geraci Siculo territory (Madonie Mountains) – locally named “triemula” (Petronici & al. 1978). The local phytocoenosis is characterized by some taxa of *Sphagnum* L., referred to the sect. *Subsecunda* (Lindb.) Schlieph. ex Schimp., and many other bryophytes, such as the liverworts *Pellia epiphylla* (L.) Corda, *Riccardia multifida* (L.) S. Gray, *Jungermannia gracillima* Sm., *Calypogeia trichomanis* (L.) Corda, *C. arguta* Mont. et Nees, *C. fissa* (L.) Raddi, *Lophocolea bidentata* (L.) Dum., the mosses *Calliergonella cuspidata* (Hedw.) Loeske, *Aulacomnium palustre* Hedw., *Polytrichum commune* L. ex Hedw., *Bryum pseudotriquetrum* (Hedw.) P. Gaertn & al. and *Philonotis fontana* Lindb. As well as by pteridophytes such as *Osmunda regalis* L., *Blechnum spicant* (L.) Roth, *Athyrium filix-foemina* (L.) Roth and *Pteridium aquilinum* (L.) Kuhn.; also by anthophytes such as *Carex punctata* Gaudin, *C. remota* L., *C. demissa* Hornem., *C. distans* L., *Salix pedicellata* Desf., *Hypericum tetrapterum* Fries, *Montia fontana* L. subsp. *amporitana* Sennen, *Galium elongatum* Presl. subsp. *elongatum*, *Mentha aquatica* L., *M. longifolia* (L.) Hudson, *Prunella vulgaris* L., *Ranunculus fontanus* Presl, *Lycopus europaeus* L., *Lysimachia nemorum* L., *Laurentia bivonae* (Tineo) Pignatti, *Epilobium parviflorum* Schreber, *Cirsium creticum* (Lam.) D’Urv. subsp. *triumfetti* (Lacaita) Werner, *Bellis hybrida* Ten., *Holcus lanatus* L., *Poa trivialis* L., *Juncus striatus* Schousb., *J. conglomeratus* L., *Isolepis setacea* (L.) R. Br., *Dactylorhiza maculata* subsp. *saccifera* (Brongn.) Diklic.

This phytocoenosis, belonging to the phytoclimatic context relevant to the *Quercus petraea* (Mattuschka) Liebl. and *Ilex aquifolium* L. relict forest (Raimondo 1984), occurs in sites characterized by acid (pH 3-4) peaty substrate (Raimondo & al. 1980).

The finding of *C. stellulata* in Sicily confirms the importance of the small peat bogs in the Madonie Mountains not only as evidence of the glacial expanding biogeographical effects in the Mediterranean, but also as sites for the conservation of species in their farthest southern distribution.

Specimens of the recorded taxon are kept in PAL [Spadaro & Raimondo, Madonie, Margio dello Scorsone, ca. m 1300 s. l. m., 8 giugno 2002].

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