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NOTES ON THE DISTRIBUTION AND ECOLOGY OF CAREX PANORMITANA GUSS. (CYPERACEAE)*

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Carex panormitana was described by GUSSONE in 1844 (Fl. Sic. Syn., 2: 575) as existing in "Palermo al fiume Oreto" and was later reported in Sardinia at "Muravera, juxta Flumendosa" by Christ (in BARBEY W., Fl. Sard. comp. 65, 1884) who attributed to this taxon exsiccata collected by Moris. According to ARRIGONI (Boll. Soc. Sarda Sci. Nat. 23: 225-228, 1984) this entity is a neoendemic vicariant of *C. acuta* Good in Sicily and Sardinia. As far as regards Sardinia, ARRIGONI also reported the plant at Scala di Giocca (Sassari) and at Codula di Luna (Nuoro). With the exception of the latter report, it is deduced from bibliographical and herbarium data (FI, PAL and SS) that no recent findings of this rare Sardo-Sicilian endemic species have been reported. These considerations have led us to start an investigation on the present distribution and ecology of C. panormitana. This note refers to some populations that were found both in the Sicilian *locus classicus* (the Oreto) and in south-east Sardinia, along the Flumendosa river (Muravera) and the Rio Picocca (Sette Fratelli Mts.). Two of these populations were found after about a century from their last report, while the last one is here reported for the first time. The Oreto population is located downstream, from 50 to 90 m above sea level, where the relatively clear and perennating waters flow for about a kilometre through the citrus groves of the Conca d'Oro. The river bed is embedded and the caespitose C. panormitana is often found close to the banks, on silty-clayey alluvial soils with a high skeleton content. Also along the Rio Picocca it grows from 60 to 80 m above sea level, while along the Flumendosa it grows further downstream reaching altitudes of about 10 to 15 m above sea level. Both these river beds are wider and are not embedded and the plants grow either on alluvial soil, often of large grain size, or among large boulders (Rio Picocca). The average annual rainfall at the examined stations is between 661 and 692 mm and the average temperatures fluctuate between 18 and 18.6 °C. According to the classification by RIVAS-MARTINEZ (Anales Jard. Bot. Madrid, 37 (2): 251-268, 1981), the bioclimate is of the subhumid thermo-mediterranean type. It was observed that C. panormitana is a caespitose hemicryptophyte that is fairly (Oreto) to markedly heliophilous (Sardinia). It can be found close to riparian aspects of Salicetea purpureae, but also in patches of biocoenosis of Salix alba L. and Alnus glutinosa (L.) Gaertner or near populations of *Nerium oleander* L. Flowering time in all stations is in March-May and is followed immediately by fructification. Dissemination is completed in the first half of July. It was observed both in the field and in the laboratory that the seeds have a high and prompt germinability. As early as June several plantules can be found growing close to older plants. Many are later washed away by floods, that in winter time may submerge even some of the largest clusters, while the greater part of the aerial portions of the plants may be destroyed. Considering that this species is both rare and sporadic - it is recorded as "vulnerable" (CONTI F. et al., Libro rosso delle piante d'Italia 167, 1992) and as a "threatened" in Sicily (RAIMONDO F.M. & al., Quad. Bot. Ambientale Appl. 3 (1992): 65-132, 1994) - and considering the weekness typical of its habitat as well as the state of degradation of some of its stations, its precarious state of conservation is pointed out. This is particularly evident at the Oreto station in Sicily, where intense anthropic activity on the territory calls for urgent protective measures to preserve the species from extinction.

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