

207. *CAREX ELATA* ALL. SSP *ELATA* NEW FOR ALGARVE IN THE LOWER GUADIANA BASIN

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Carex elata All. ssp. *elata* novedad para el Algarve en la cuenca del río Guadiana

Palabras clave. *Cyperaceae*, Península Ibérica, Portugal, ríos mediterráneos.

Key words. *Cyperaceae*, Iberian Peninsula, Portugal, Mediterranean rivers.

Carex elata* All. ssp. *elata

PORTUGAL. ALGARVE: Concelho de Tavira, freguesia do Cachopo, Cerro do Porto, in ash-willow riparian forest, 37°16'32.7" N, 7°48'43.5" W, 220 msm, 25.IV.2009, Patricia Rodríguez-González & António Albuquerque, LISI 158/2010, 3820 UPOS.

A population of *Carex elata* ssp. *elata* has been identified in Southern Portuguese Guadiana hydrographic basin. The new location was found in the margins of a seasonal Mediterranean river (Ribeira de Odeleite) developed over schist coarse substrate. This population is growing within a termophilous ash-willow riparian community, where the dominant woody species are *Fraxinus angustifolia*, *Salix salviifolia* and *Nerium oleander*. *Carex elata* represents 4% percentage cover within the community, extending over a surface of 60 m² on a 100m river reach.

This taxon belongs to the taxonomically difficult sect. *Phacocystis* Dumort., a group of taxa with faint morphological boundaries and a trend to hybridize. The samples studied showed the typical characters of subsp. *elata* (fig. 1): yellowish basal sheaths, lower bract shorter than the inflorescence and greyish-green papillose utricles, features which clearly



Figure 1. *Carex elata* ssp. *elata*. (a) detail of ligule, (b) female inflorescence, (c) male inflorescence, (d) habit, (e) male bract, (f) female bract, (g) utricule. Illustrated by Patricia Rodríguez-González from LISI 158/2010.



Figure 2. Distribution of *C. elata* ssp. *elata* in SW Iberian Peninsula. Grey larger circle shows the new discovered population; black smaller circles depict populations previously reported in the literature (Luceño & Aedo, 1994; Jiménez-Mejías *et al.*, 2007).

distinguish this taxon from the close subspecies *reuteriana* and *tartessiana* (cf. Luceño & Jiménez Mejías, 2008). Taxonomy of sect. *Phacocystis* in the Iberian Peninsula have been confused until the monographic revision of Luceño & Aedo (1994). They refused the presence of *C. elata* ssp. *elata* in Portugal, criterion followed by Franco & Afonso (2003). Latter Jiménez Mejías *et al.* (2007) identified some problematic populations from Portugal as ssp. *elata*, the southernmost one in the Concelho de Elvas, also in the Guadiana basin.

Carex elata ssp. *elata* is widely distributed in central and western Europe, northward to southern Fennoscandia, with scattered occurrences in NW Africa (Middle Atlas), being replaced by ssp. *omskiana* (Meinsh.) Jalas in eastern Europe (cf. Chater, 1980; Maire, 1957). In the Iberian Peninsula is mainly known from the eastern regions, growing on limestone substrates, although it has been also reported from Doñana area, Atlantic Portuguese strip and Guadiana basin (Jiménez Mejías *et al.* 2007). This new locality constitutes the single occurrence of *C. elata* s.l. in Algarve province, and also the southwestern limit of the subspecies *elata* in Europe, 60 km W from the Laguna

de las Madres population in Huelva, and more than 150 km S from the Elvas population of the Guadiana river shores (fig. 2).

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