

***Carex* × *moravica* (*C. caryophyllea* × *C. fritschii*), a new nothospecies identified by morphological and anatomical characters**

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ŘEPKA R., ŠTĚRBA T. & ROLEČEK J. 2013: *Carex* × *moravica* (*C. caryophyllea* × *C. fritschii*), a new nothospecies identified by morphological and anatomical characters. *Acta Musei Moraviae, Scientiae biologicae* (Brno) 98(1): 105–116. – Hybrids in the genus *Carex* occur quite frequently. However, only one hybrid with *C. fritschii* as a parental species has been reported to date. In 2010, plants with an appearance transitional between *C. caryophyllea* and *C. fritschii* were found at two sites in southern Moravia, Czech Republic. The results of morphological and anatomical analysis show that the plants are in many respects similar to *C. caryophyllea* in morphology, but some plants possess a combination of characters indicating an intermediate position between *C. caryophyllea* and *C. fritschii*. The fertility of the hybrid plants varies widely, between fully sterile and completely fertile. The anatomical characters of the leaf cross-section correspond largely to *C. caryophyllea*, but the teeth on the adaxial side of the leaf demonstrate the hybrid's position closer to *C. fritschii*. Based on the results of analysis, the plants discovered are considered the new nothospecies *Carex* × *moravica* between members of two different sections of the subgenus *Carex* (*Mitratae* and *Acrocystis*).

Keywords. *Cyperaceae*, anatomy, hybridization, morphology, taxonomy, Czech Republic, southern Moravia

Introduction

Rich in species and of wide geographical distribution, the genus *Carex* is a rather exceptional genus of angiosperms (YEN & OLMSTEAD 2000). Such a large number of taxa, their morphological similarity, the great variability of some taxa, and relatively frequent hybridisation between species combine to render the entire genus taxonomically difficult (STACE 1986; KUKKONEN & TOIVONEN 1988). Hybrids in the genus *Carex* occur quite frequently (STACE 1986), although the number of such cases is often overestimated. Their actual frequency varies widely among the different subgenera and sections. In some sections they are found more frequently (e.g. *Phacocystis*, *Ceratocystis*, *Paludosae*, *Glareosae*, and *Vesicariae*) (CAYOUILLE & CATLING 1992), in others they have been found in only a few cases. Some species, or rather species of some sections, simply do not hybridise with others. Data from the literature mention complete sterility for hybrids of the subgenus *Vignea* (KUKKONEN & TOIVONEN 1988), whereas hybrids of other sedge subgenera may be sterile, partly fertile or fully fertile. Sterility in some *Carex* plants is not necessarily an indication of hybridisation. Identification of hybrids, whether sterile or fertile, demands considerable application in distinguishing their parental species and