

CAREX PULICARIS L. (CYPERACEAE), A NEW SPECIES IN CROATIAN FLORA

JASENKA TOPIĆ & LJUDEVIT ILIJANIĆ

Institute of Botany, Faculty of Sciences, Marulićev trg 20/II, Zagreb, Croatia
(e-mail: jtopic@yahoo.com)

Topić, J. & Ilijanić, Lj.: *Carex pulicaris* L. (Cyperaceae), a new species in Croatian flora. Nat. Croat., Vol. 10, No. 4., 423–426, 2001, Zagreb.

The species *Carex pulicaris* L. was found on Trstenik Moor (Gorski kotar). This is the first finding of this plant species in Croatia, lying on the southern border of its range.

Key words: *Carex pulicaris*, Croatia

Topić, J. & Ilijanić, Lj.: *Carex pulicaris* L. (Cyperaceae), nova vrsta hrvatske flore. Nat. Croat., Vol. 10, No. 4., 423–426, 2001, Zagreb.

Vrsta *Carex pulicaris* nađena je na na cretu u Trsteniku (Gorski kotar). To je prvi nalaz te vrste u Hrvatskoj, a to je ujedno i južna granica njezina areala.

Ključne riječi: *Carex pulicaris*, Hrvatska

According to CHATER (1980:323) the species *Carex pulicaris* L. grows in damp places in N., C. & W. Europe, southwards to N. Spain and eastwards to Estonia (Au Be Br Cz Da Fa Fe Ga Ge Hb He Ho Hs Is It Ju No Po Rs (B) Su. It grows in lowlands as well as at alpine levels up to 2275m a.s. (HEGI, 1980), on different wet habitats, such as swamp meadows, wet forests, moors, and sometimes also on drier slopes with clay soil.

Although HEGI (1980) notes that the south border of its area extends from Central Russia, through Hungary, Croatia, the Italian Alps, to southeast France and the Pyrenees, we could not find any mention of this species in either herbarium or literature data for Croatia (ILIJANIĆ & TOPIĆ, 2000).

Due to the disturbance of wet habitats *Carex pulicaris* is very rare and endangered in some neighbouring countries, such as in Austria, where it grows near springs and in peat bogs (ADLER *et al.*, 1994) and in the Slovenian flora (MARTINČIČ, 1999). PIGNATTI (1982) notes its status for Italy as RR (very rare). However, *Carex pulicaris* is a common plant in British moor flora (KEBLE MARTIN, 1972).

The species *Carex pulicaris* (Fig. 1) was recently found for the first time in Croatia. The locality is Trstenik in the Gorski kotar region (Fig. 2), UTM VL54, MTB 0452. The habitat is a little stream on a moor. Only one large tuft was found, about 60 cm



Fig. 1. *Carex pulicaris* L. (Photo: J. Topić)

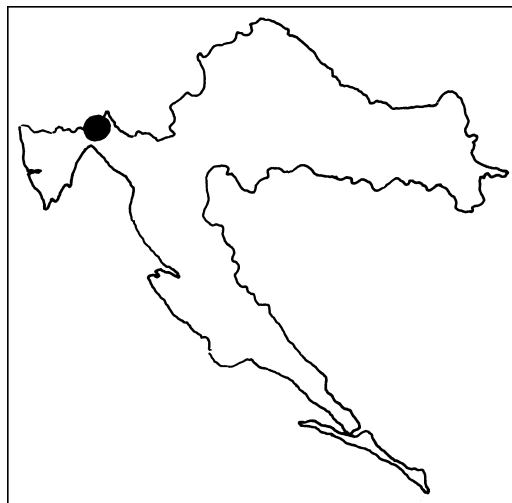


Fig. 2. Locality of *Carex pulicaris* in Croatia

in diameter, which suggests the taxon to be *Carex pulicaris* L. var. *caespitosa* Vollm. (HEGI, 1980). In addition to *Carex pulicaris*, some *Sphagnum* species, *Thrichophorum caespitosum*, *Eriophorum angustifolium*, *Eriophorum latifolium*, *Carex hostiana*, *Carex flava*, *Molinia caerulea*, *Salix repens*, *Trolius europaeus* and others also occur there. The recent moor vegetation of Trstenik was partially described by HORVAT (1962:102). This is one of the largest moors in Croatia, in the area of zonal forest *Abieti-Fagetum*. Its altitude is about 900 m a.s.l., and the area of the moor is a few hectares. The depth of peat is more than 2 metres. Palynological research was carried out by GIGOV & NIKOLIĆ (1960) and ŠERCELJ (1971).

Croatia is geographically situated on the southern border of moor vegetation in Europe, and climate changes, as well as an unfavourable maritime pluvial regime (a relative summer drought), accompanied by several canals dug out there for water drainage (to improve the »forest habitat«), have resulted in severe degradation of this specific habitat.

According to many of its features, it seems so far that Trstenik is the last relic of the only high moor habitat in Croatia, now remaining only in fragments. The nearest localities of *Carex pulicaris* were noted in Slovenia (MARTINČIČ, 1999). Considering the recent status of the habitat there is only a very feeble chance of maintaining *Carex pulicaris* in Croatian flora. It will probably follow another moor plant species, *Eriophorum gracile* (ILIJANIĆ, 1978), which has been considered extinct for the last ten years.

Received September 24, 2001

REFERENCES

- ADLER, W. K., OSWALD, K. & FISCHER, R., 1994: Exkursionsflora von Oesterreich, Verl. E. Ulmer, Stuttgart und Wien.
- CHATER, A. O., 1980: *Carex*. In TUTIN *et al.* (Eds.): Flora Europaea, Vol. 5, Cambridge Univ. Press., Cambridge
- GIGOV, A. & NIKOLIĆ, V., 1960: Rezultati analize polena na nekim tresavama u Hrvatskoj. Glasn. Prirodnj. Muz., Beograd, Ser. B, knj. 15, 3–25.
- HEGI, G., 1980: Illustrierte Flora von Mitteleuropa, Band III, Teil 1, Dritte Aufl., Paul Parey, Berlin-Hamburg.
- HORVAT, I., 1962: Vegetacija planina zapadne Hrvatske. Acta Biologica II, Prirodoslovna istraživanja 30, JAZU, Zagreb.
- ILIJANIĆ, Lj., 1978: *Eriophorum gracile* Koch, neu fuer Kroatien. Acta Bot. Croat. 37, 203–205.
- ILIJANIĆ, LJ. & TOPIĆ, J., 2000: *Cyperaceae*. In NIKOLIĆ, T. (Ed.): Index florae Croaticae, Pars 3, Nat. Croat. 9, Suppl. 1, 123–129.
- KEBLE MARTIN, W., 1972: The Concise British Flora in Colour. Book Club Associates, London.
- MARTINČIČ, A., 1999: *Cyperaceae*. In MARTINČIČ, A. (Ed.): Mala flora Slovenije. III izd. Tehniška založba Slovenije, Ljubljana.
- PIGNATTI, S., 1982: Flora d'Italia, Vol. 3, Edagricole, Bologna.
- ŠERCELJ, A., 1971: Postglacijalni razvoj gorskih gozdov v severozahodni Jugoslaviji. Razprave 14 (9), 265–294. Slov. akad. znan. umetn., Ljubljana.

SAŽETAK

Carex pulicaris L. (Cyperaceae), nova vrsta hrvatske flore

J. Topić & Lj. Ilijanić

Vrsta *Carex pulicaris* L. nađena je na cretu u Trsteniku (Gorski kotar), UTM VL54, MTB 0452, unutar zonalnog pojasa bukovo-jelovih šuma. Tamo smo našli veliki busen, promjera oko 60 cm, u odvodnom jarku, usred ceta. Cret u Trsteniku predstavlja fragmentarni ostatak nekadašnjeg nadignutog ceta u Hrvatskoj, s dubinom treseta od preko 2m. Iako je recentnu vegetaciju toga ceta istraživao već odavno HORVAT (1962), a palinološki GIGOV & NIKOLIĆ (1960) i ŠERCELJ (1971) ništa nije poduzeto za njegovo spašavanje. Naprotiv, kopanjem nekoliko odvodnih kanala kroz cret, vjerojatno za stvaranje povoljnijeg staništa za razvitak šume, uz prirodne procese vegetacijske sukcesije, nastali su nepovoljni uvjeti za cretnu vegetaciju koja je stoga već jako degradirana. Taj se proces sve više ubrzava pa je u razdoblju od ljeta 2000. do ljeta 2001. uočeno smanjivanje populacije posebno nekih vrsta mahova tresetara.