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## THE VARIABILITY OF SPECIES CAREX SECALINA WILLD. EX WAHLENB. V. CIOCÂRLAN\*

**Summary**: the autor is showing the variability of the species *Carex secalina* and is depicted here a new subspecies, as well a new variety, both of them being new for science.

Key words: Carex secalina, variability

In the botanical reference material (1, 2, 3, 4, 5), *Carex secalina* does not present any sistematic infraspecific units. From ecological point of view, the same botanical reference material is unitary, keeping – wet and slightly salted meadows.

Contrary to these statements, inside the Danube Delta, on Caraorman Sand Bank, I have discovered on the baren sands, at the base of a dune, a small population of *Carex secalina*. Analysing this material, having particularly morphologic and ecologic features, led us to describe a new taxon for the science, namely *Carex secalina* subsp. *sabulosa* (Fig. No 2).

Also, on Letea Sand Bank (Danube Delta), on wet and slightly salted meadows, between Letea and C. A. Rosetti, I have identified some phytoindividuals of *Carex secalina*, having particularly morphologic features, namely female spikelets arranged on secondary axis, tightly, as glomerules. We consider these typical features represent a new variety, namely *C. secalina* var. *glomerata* (Fig. No. 1).

In conclusion, we present here the variability of species *Carex secalina* and the diagnosis of the infraspecific taxon:

Carex secalina Willd. ex Wahlenb.

- subsp. *secalina* – plants of 10-30 (-40) cm in height, having male spikelets 2-3 in number, the female spikelets 2-5 in number, inserted by one in a row, distanced, on stems, or are inserted tightly, 2-5 in a row on secondary branches;

var. *secalina* – female spikelets grouped one in a row, on the stem;

var. *glomerata* Ciocârlan var. nova (Fig. No 1) – female spikelets situated on secondary axis (peduncles), 2-5 in a row, making glomerules;

var. glomerata Ciocârlan var. nova (Fig. 1) – spiculae femineae supra axes secundarios, 2-5 in glomerulis

- subsp. sabulosa Ciocârlan subsp. nova (Fig. No. 2) – low plants, of 5-8 cm in height, with a radicular system quite developed, of ca. 12-15 mm in length; male spikelets 1, with peduncle of 2-3 cm in length; female spikelets 1-3, of ca. 8-10 mm in length and 3-4 mm wide; small utricles, of 4,5-5 mm in length; it is growing on low wet sands, at the base of the sand dunes.

On Caraorman Sand Bank, inside the Danube Delta.

- subsp. sabulosa Ciocârlan subsp. nova (fig. 2)- plantae pumilae, 5-8 cm. Radices longissimae, 12-15 cm. Spicula mascula 1, cum pedunculo 2-3 cm. Spiculae femineae 1-3, 8-10 mm longa et 3-4 mm lata. Utriculi 4,5-5 mm longi. Delta Danubii, Romania, Grindul Caraorman, in sabulosis ad basem arenae. Holotypus in Herb. Univ. Şt. Agron. Bucureşti conservatur.

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## References

- BÄSSLER M., 2002 Genul *Carex* in Rothmaler Exkursionsflora von Deutschland. Berlin HEGI G., 1925 Genul *Carex* in Illustrierte Flora von Mitteleuropa, II. München OSWALD K., 1994 Genul *Carex* in Exkursionsflora von Österreich. Stuttgart und Wien ŞERBĂNESCU I., 1960 Genul *Carex* în Flora R. S. România XI. București SOÓ R., 1980 Genul *Carex* in Conspectus Florae Vegetationisque Hungariae. Budapest 1. 2.
- 3. 4.
- 5.



Fig. 1 – Carex secalina Willd. ex Wahlenb. ssp. secalina var. glomerata Ciocârlan var. nova



Fig. 2 – Carex secalina Willd. ex Wahlenb. ssp. sabulosa Ciocârlan ssp. nova