

**ON THE ALLEGED PRESENCE OF *CAREX ATHERODES*
(CYPERACEAE) IN SERBIA**

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Carex atherodes Spreng. (Cyperaceae) is a species from the Subarctic and Temperate Northern Hemisphere, which occurs in N America, Europe and northern Asia (Govaerts *et al.*, continuously updated). From E and N Europe and the Caucasus it is known from eleven countries, in most of which it is a rare species: Armenia, Belarus, Estonia, Finland, Georgia, Germany, Latvia, Poland, Russia, Sweden, and Ukraine (Koopman 2015). It is absent in W and S Europe. However, Jiménez-Mejías *et al.* (2012) mentioned it for Bosnia-Herzegovina and Serbia. Peculiarly they mentioned that “*Both studied vouchers showed short hairs only over the ligule; while, in contrast, utricles, stems, leaves and remains of basal sheaths were complete glabrous.*” Both authors of the current communication know *C. atherodes* well from Poland, where it is in the northwestern Province of Zachodniopomorskie rather abundant at some places (Rutkowski 2014). The cited sentence above drew our attention and curiosity, as in Poland we have never seen such glabrous material. Therefore we asked for a loan of

the Serbian material in BUNS: *Carex atherodes*, SERBIA: Vojvodina, Novi Sad, Petrovaradin, Tekije Rit.; 23 June 1971, leg. Branislawa Butorac; originally inserted as *C. pseudocyperus* L.; rev. P. Jiménez-Mejías, June 2010, as *C. atherodes*.

Based on the comparison of the Serbian material with material of *Carex atherodes* from Poland we have come to the conclusion that the Serbian material is not *Carex atherodes*. The Serbian plant is bold, no hairy leaf

Table 1. Comparison of Serbian specimen with *C. atherodes*.

Character	Serbian plant	<i>Carex atherodes</i> from Poland	<i>Carex atherodes</i> (according to Reznicek & Catling 2002)
Hairiness of leaf sheaths	bold	hairy	hairy
Ligule	10 mm long, rounded at the top		(6-)11-45 mm
Inflorescence length	17 cm	up to 45 cm	12-60 cm
Number of male spikes	2	3-4	2-6
Number of female spikes	3	3	2-5
Female glumes	very narrow, dark violet, with green midrib, not aristate	pale with a very long arista	lanceolate to narrowly ovate, apex acute, conspicuously scabrous-awned
Utricles	5 mm, ribbed, teeth of beak upright, not spreading; empty; bold	10 mm; teeth of beak 3 mm, spreading, sparsely hairy	7-12 mm

sheaths, the utricles are half as long as those of *C. atherodes* and the female glumes differ (see Table 1). On the other hand it is very probably not *Carex pseudocyperus* either, with two male spikes at the top and with the weird, very small female glumes. As the utricles are empty, we suppose it may concern a hybrid, with *Carex pseudocyperus* involved. According to Koopman (2015) there are two hybrids known of *C. pseudocyperus*, namely with *C. rostrata* Stokes [*C. ×justi-schmidtii* Junge] and with *C.*

vesicaria L. [*C. ×wolteri* Gross]. Because of the dark glumes maybe even *C. acutiformis* Ehrh. is involved, although the hybrid of *C. acutiformis* and *C. pseudocyperus* is so far unknown to science, so not very probable. All three mentioned species, *C. rostrata*, *C. vesicaria* and *C. acutiformis* occur in Serbia, as does *C. pseudocyperus*. It is hard to say which hybrid it really concerns, as the material in BUNS is just one single flowering stem, some poorly collected material. However, Jermy *et al.* (2007) give a description and drawing of *C. ×justi-schmidtii* and at least our material does not look like that hybrid. Besides, the presence of *Carex rostrata* in Vojvodina is doubtful. There are a few old records (Zorkóczy 1896, as *C. ampullacea*; Prodán 1915). It has not been found in Vojvodina recently. In Serbia, *C. rostrata* has only been recorded for mountainous areas (pers. com. M. Niketić). It should not be excluded either that the material discussed here concerns some weird material of one of the mentioned species above, apart from *C. pseudocyperus*. Anyway, it is for sure not *C. atherodes*.

CONCLUSION

The Serbian material is not *Carex atherodes*. Originally it was determined as *C. pseudocyperus*, so we assume that it was growing in a clump, like *C. pseudocyperus* does, whereas *C. atherodes* grows rhizomatous. As long as there is no convincing material of *C. atherodes* from Serbia, this species should not be added to An Annotated Checklist of Vascular Flora of Serbia (Niketić & Tomović 2018), being mentioned erroneously by Jiménez-Mejías *et al.* (2012).

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О НАВЕДЕНОМ ПРИСУСТВУ *CAREX ATHERODES* (CYPERACEAE) У СРБИЈИ

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РЕЗИМЕ

Ревизијом хербарског материјала (BUNS) установљено је да је претходни навод о присуству врсте *Carex atherodes* Spreng. у Србији погрешан. Прегледани примерак првобитно је био идентификован као *C. pseudocyperus*, због чега претпостављамо да је биљка формирала компактне бусенове, као што је случај код *C. pseudocyperus*, насупрот *C. atherodes* који образује дуге пузеће ризоме. У Jiménez-Mejías *et al.* (2012) погрешно је поменуто да је биљка уврштена у Критичку листу васкуларне флоре Србије (Niketić & Tomović 2018). Све док не постоји уверљиви материјал о присуству ове врсте у Србији, њу не треба уврстити у поменуто публикацију.