TWO NEW NEOPHYES IN THE FLORA OF MONTENEGRO: Artemisia verlotiorum AND Sporobolus vaginiflorus

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During the field work on ruderal flora of Podgorica, in the city area two new alien and obviously established species, hitherto not recorded in Montenegro, were found: Artemisia verlotiorum Lamotte and Sporobolus vaginiflorus (Torrey) Wood.

Artemisia verlotiorum (chinese mugwort) is an East Asian species closely related to superficially resembling A. vulgaris (common mugwort) (Watson et al. 2001) which is considered native in European flora (Tutin et al 1976). Due to the similarity between the mentioned two species, which usually also share the same habitat type, they are often confused (http://www.fr.ch/pna/de/neophytes_d/dossier_neophyten_d.pdf). We believe that these are the main reasons why occurrence of A. verlotiorum in the flora of Montenegro was neglected until recently. Comparing the distribution of these two species over the territory of Podgorica we noticed that A. verlotiorum is even more widespread than A. vulgaris and as more aggressive species it seems that is out-competing the indigenous one. So most probably, we can expect that A. verlotiorum is already more widespread also in other part of Montenegro as its first records in the neighboring countries date back to 1970’s (Flora Croatica Database, http://hirc.botanic.hr/fcd/) and today several localities are known along the E Adriatic coast of Croatia.

Artemisia vulgaris
- long underground stolons absent
- basal leaves forming rosette not persistent over the winter
- leaflets of upper leaves pinnately divided
- bracts big and 3-lobed
- flowering from VII to X
- stronger unpleasant smell

Artemisia verlotiorum
- plant with horizontal underground stolons
- rosette is persistent over the winter
- leaflets of upper leaves usually simple
- bracts are small and simple
- flowering from (1) X to XI
- smells milder resembling camphor

Sporobolus vaginiflorus, a North American annual grass species has been recorded in early autumn 2006 in the city lawns at urban area of Podgorica as well as in the pavement cracks and near the road verges. In the flora of Montenegro only two species of genus Sporobolus have been recorded so far: S. pungens and S. indicus (=S. poiretti auct.). From these two S. vaginiflorus can be easily distinguished by annual life form, shape and the length of the panicles and by the presence of inflorescences with cleistogamous spikelets hidden in all upper leaf-sheaths and not exposed until late autumn. In this feature S. vaginiflorus resembles the other N American closely related neophyte S. neglectus Nash. It is important to mention both of them as they share not only superficial similarity but also ecology, biology and history of spreading in Europe, so it is highly probable that also the second mentioned species is occurring or will appear soon in Montenegro. Invasion of Europe by both species started just after the WW2 when scattered localities were recorded in the vicinity of Zagreb (Croatia, Horvatić & Gospodarić 1959) and Nova Gorica (Slovenia, Jogan 1992) but their populations exploded in the last 20 years when they are spreading and forming dense communities along the roads, especially highways. Today they are both reported for France (Aeschimann 2005), N Italy (Poldini 1991), S Austria (Fischer & al. 2005), Slovenia and Croatia and it was just a question of time when they will reach other neighboring countries.

Despite close resemblance, they can be easily distinguished from each other as S. vaginiflorus has distinctly longer spikelets (4-7 mm) with palea being the longest bract and both lemma and palea with tightly appresed hairs. In S. neglectus spikelets is 2-3 mm long, palea as long as or just slightly longer than lemma, both glabrous.

Sporobolus vaginiflorus: habitus, panicle and spikelets
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Literature:


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