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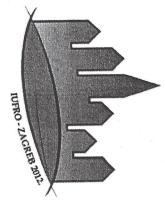
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Abstracts of Poster Presentations

Invasive plants in urban forests - case study of Belgrade

Dragica OBRATOV – PETKOVIù, Ivana BJEDOV¹, Verica STOJANOVIò, Jelena TOMIĆEVIù, Marija NEŠIù

Invasive species represent great problem and barrier for conservation of floristic diversity in different habitats. They differ in the degree of aggressiveness. Also, some types of habitats are invaded more easily than other. The disturbed sites are vulnerable, particularly. In that sense the urban areas are of great interest for investigation of invasive plants influence on floristic structure. Serbia is one of the few countries in Europe that has not established a national list of invasive plants.

Belgrade's urban forests, especially those along coastal streams and rivers Sava and Danube are ideal habitats for invasive species spreading due to disrupted coenological relationships. Most urban forests are located near rivers and river flows are recognized as the most important corridors for the spreading of invasive species. The invasive species spreading lead to decrease of the floristic diversity of urban forests. In the same time invasive plants are present in the forest edges. Forest edges are transition zones between different habitats. Forest edges have a different species composition and community structure when compared with forest interiors, a phenomenon known as the "edge effect". The width of this zone ranges from several meters until several tenth of meter.

In this paper the results of invasive species monitoring of several Belgrade's urban forest ecosystem are presented. The aim of paper was to establish diversity of invasive species, the degree of invasiveness and got the basis for the formation of a national list of invasive species.

The forest types investigated in Belgrade area are: Salicetum albae inundatum, Populeto Salicetum, Salicetum triandrae, Rubeto-Salicetum albae, Populetu x robusta, Populetum nigro-albae, Salicetum albae fragilis, Salici-Populetum, Populetum nigrae, Populetum albae, Sambucetum ebuli, Salicetum albae-amygdalinae and Salicetum albae. Invasive species developed in these forest types can be devoted in two classis. In the first class-high potential of invasiveness are: Acer negundo, Ailanthus altissima, Amorpha fruticosa, Asclepias syriaca and Robinia pseudacacia. In the second class-sporadic invasive species are Phytolacca americana, Parthenocissus quinquefolia, Lycium barbatum and Fraxinus pennsylvanica.

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The high potential invasive species described in the forest edges are Aster lanceolaus, Bidens frondosa, Echinochloa crus-galli Echinocystis lobata, Reynoutria japonica and potential invasive are Erigeron annuus, Erigeron canadensis, Solidago canadensis and Xanthium strumarium.

The increasing of number of non-native species and their tremendous costs to the environment and society. Invasions are the result of a very complex set of processes. Many of these processes are economically motivated – including the use of non-native species in various economic activities, habitat change and its fragmentation, liberalized and non-regulated market, booming trade in goods and services, as well as the increasing mobility of both people and things.

Keywords: invasive plant, urban forest, forest edge, monitoring of invasive

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