Invasive alien plants and nature conservation – current situation in Slovakia

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Biodiversity – Invasive Alien Species

- geografic position of Slovakia on the boundary of the Carpathians and Pannonian Lowland – biodiversity richness
- invasive alien species threat to biodiversity also in Slovakia
- proposals how to deal with the threats caused by invasive alien species (plants) appeared in 1990s:
- first in the academic institutions,
- later with practical implementation in the state nature conservation institutions (1997)

- The first complete inventory of alien flora (alien vascular plants) for the Slovak Republic (SR) was published in 2012 in Preslia (Medvecká J. & al.)
- There were several papers presenting list of alien and invasive vascular plants in 2002 (Gojdičová E. & al.) or even earlier (Marhold K. & Hindák F., eds., 1998)



According to the inventory of alien flora of SR (Medvecká J. & al. 2012) in the Slovakian flora you can find:

- > 916 alien vascular plant species
- > 634 of them are neophytes
- > 24 vascular plant species are considered as invasive







- Issue of invasive alien species is covered by the Act No. 543/2002 Coll. on nature and landscape protection
- Since 2002 the Act has been amended several times and last amendments in 2014 tackled also IAS issues.

§ 7 – Protection of natural species composition of ecosystems covers:

- regulation of dissemination of alien species,
- recording of the occurrence, population size and ways of spread of alien species,
- elimination of invasive alien species.

- § 7a alien animal species and invasive animal species (new in the Act on nature and landscape protection)
- § 7b alien plant species and invasive plant species
- It is prohibited to import, possess, grow, reproduce and trade in both invasive species and their parts or products made of them that could cause spontaneous dissemination of the invasive species.

- > Owners (administrators, tenants) are obliged to eliminate invasive species from their land
- Nature Conservation Authority informs owners (administrators, tenants) about the occurrence of invasive species on their land
- These provisions apply only on selected (the most problematic) invasive species

Order of the Ministry of Environment of SR No. 24/2003 (amended several times, last amendment No. 158/2014)

- Provides list of invasive alien species and ways of their elimination:
- Annex 2) invasive animal species
- Annex 2a) invasive plant species



| a) Herbs | | | | | | | |
|--------------------------------|----------------------------|--------------------------|-------------------------|--|--|--|--|
| Scientific nomenclature | Slovak nomenclature | Propagation | Identification of group | | | | |
| Ambrosia artemisiifolia | ambrózia palinolistá | generatívne | В | | | | |
| Asclepias syriaca | glejovka americká | generatívne, vegetatívne | С | | | | |
| Fallopia sp. (syn. Reynoutria) | rod pohánkovec (krídlatka) | vegetatívne | А | | | | |
| Heracleum mantegazzianum | boľševník obrovský | generatívne | В | | | | |
| Impatiens glandulifera | netýkavka žliazkatá | generatívne, vegetatívne | С | | | | |
| Solidago canadensis | zlatobyľ kanadská | generatívne, vegetatívne | С | | | | |
| Solidago gigantea | zlatobyľ obrovská | generatívne, vegetatívne | С | | | | |
| b) Wood species | | | | | | | |
| Scientific nomenclature | Slovak nomenclature | Propagation | Identification of group | | | | |
| Ailanthus altissima | pajaseň žliazkatý | generatívne, vegetatívne | D | | | | |
| Amorpha fruticosa | beztvarec krovitý | generatívne, vegetatívne | С | | | | |
| Lycium barbarum | kustovnica cudzia | generatívne, vegetatívne | С | | | | |
| Negundo aceroides | javorovec jaseňolistý | generatívne | В | | | | |

Ways of the elimination depend on:

type of reproduction, population size, type of the site and phenology

Mechanical ways of the elimination:

- small populations, in protected areas, water bodies buffer zones
- b digging up, mowing, mulching, cutting, prunning, trimming of inflorescences and fruits, grazing, ploughing

Chemical ways of the elimination:

- Iarge and dense populations
- using of the herbicides



Combined ways of the elimination:

combined mechanical and chemical methods







Alien Plant Species

- Annex 3 of Order of the Ministry of Environment of SR No. 24/2003
- presents the list of alien plant species, which may be disseminated outside of municipalities without any special permition:

Aesculus hippocastanum Castanea sativa Juglans regia Morus alba Morus nigra

Information sharing

- > Alien and especially invasive plants are being mapped in Slovakia since 1997.
- There are several databases gathering information on alien and invasive plants.
- State Nature Conservancy of SR has developed the Complex Information and Monitoring System (KIMS) within the EU Structural Funds projects – www.biomonitoring.sk



Information sharing

KIMS

- covers gathering data on IAS in one of its modules (occurrence data)
- is providing for experts as well as general public, e.g. on-line or mobile phone application for sending the data into the system

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Information sharing

- There are several options for finding some information on IAS in Slovakia.
- More detailed information on IAS in Slovakia as well as KIMS mobile application can be downloaded from the homepage of the State Nature Conservancy of SR:

www.sopsr.sk





New EU legislation - implementation in SR

Regulation EU No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species

provides good platform for involvement of other sectors in solution of invasive species issues

In 2015 in Slovakia:

the analysis of implementation of the regulation in the conditions of SR was done

New EU legislation - implementation in SR

- Ministry of the Environment of SR led a series of negotiations with other relevant ministries and institutions in order the share duties (border control, inspection, plant and animal health, monitoring, early detection, eradication, management)
- New amendment of the Act on nature and landscape protection reflecting the the EU regulation is ready for approval.

> New option after March 5th, 2016 – a new Act on IAS

Thank you for your attention

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