# Country reports

### Overview of the Invasive Alien Species in Kosovo

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#### **Abstract**

Invasive alien species have direct impact on biodiversity across the globe and cost to the global economy billions of dollars every year. Kosovo is also vulnerable to biological invasions, because of the geographical context and the biogeographical specifics in central part of the Balkan Peninsula. However, there are still insufficient data regarding lists of alien species in Kosovo. Moreover, the potential invasion routes are not assessed and concrete management measures are not in place.

#### Keywords

Invasive alien species, Kosovo, nature protection

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## Legal and administrative background

Because of the political circumstances Kosovo is not a signatory party of any convention or any agreement in the area of nature protection and invasive alien species (IAS), which would legally oblige Kosovo to these conventions and agreements.

On the national level, the issue of alien species is under the competence of several sectors and is governed by different regulations in the area of environmental and nature protection, agriculture, forestry, hunting, freshwater fisheries, animal welfare, etc.

The new Kosovo Law on Nature Protection (Official Gazette No. 85/2010), which entered into force on 18 October 2010, improves the national policy framework on IAS in order to minimise the risk of alien species that enter and become established in Kosovo. According to the Law on Nature Conservation, article 19, introductions of new species of flora and fauna, whose origin is not from within the territory of Kosovo, is prohibited. According to the Law on Nature Protection, article 92, in cases when incidental introduction of alien species into the territory of the Republic of Kosovo has occurred, or if there is a grounded suspicion that such introduction is to occur, the Minister shall by an order prescribe the measures for proceeding with the scope of destroying or preventing further propagation of the introduced alien species.

Another important strategic document is the *Strategy and Action Plan for Biodiversity 2011-2022*, which defines the strategic objectives and action plans in relation to IAS. According to the strategy, inventories of invasive alien species of plants and stimulation of productions that cover agro-biodiversity, as well as the ban on the introduction of invasive alien species and GMO into natural habitats are recognised as critical issues. According to this strategy, one of the priorities and strategic actions for this period are measures for forbidding the introduction of invasive alien species into natural habitats.

In addition, there are other sector regulations,

which contain provisions dealing with alien species issues and prohibit the introduction of alien species into nature, such as:

- Law on Fisheries and Aquaculture (Official Gazette of the Republic of Kosovo – Law No. 02/ L-85);
- Law on Hunting (Official Gazette of the Republic of Kosovo – Law No. 02/ L-53);
- Law on Animal Welfare (Official Gazette of the Republic of Kosovo – Law No. 02/ L-10);
- Law on Protection of Plant Varieties (Official Gazette of the Republic of Kosovo – Law No. 02/L-98);
- Law on Plant Protection (Official Gazette of the Republic of Kosovo – Law No. 02/L-95).

In line with these laws and regulations, the Ministry of Environment and Spatial Planning is obliged to follow the introduction and distribution of invasive alien species and accordingly, to prescribe and undertake measures for the protection of native biodiversity.

### Review of the alien species

Kosovo does not have yet an official list of IAS. Based on current literature (Gashi 2006; Grapci-Kotori 2006; Mehmeti et al. 2009; Maxhuni et al. 2010; Krasniqi et al. 2011; Ibrahimi et al. in preparation,), the number of officially known invasive alien species is 11 although this number is far from being complete (Table 1).

### Review of current activities on IAS in Kosovo

Activities on IAS were conducted or are on-going:

a. Related to the registration of invasive alien species, currently there is an ongoing project for verification of the presence and distribution of harlequin ladybird *Harmonia axyridis* in Kosovo. This project aims at determining the patterns of distribution of this alien insect species in Kosovo and its impact on the native coccinellid species.

Table 1. Preliminary list of invasive alien species in Kosovo.

Taxon	Family
Plant Species	
Ambrosia artemisiifolia <b>L.</b>	Asteraceae
Datura stramonium L.	Solanaceae
Robinia pseudoacacia L.	Fabaceae
Amorpha fruticosa	Fabaceae
Fallopia japonica	Polygonaceae
Helianthus tuberosus	Asteraceae
Fish species	
Oncorhynchus mykiss (Walbaum, 1792)	Salmonidae
Carassius gibelio (Bloch, 1782)	Cyprinidae
Pseudorasbora parva (Temminck & Schlegel, 1842)	Cyprinidae
Ctenopharyngodon idella (Valenciennes, 1844)	Cyprinidae
Lepomis gibossus (Linnaeus, 1758)	Centrarchidae

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