



# LIFE IAP-RISK

Newsletter 1 – August 2016

## Introduction

Welcome to the first Newsletter of the LIFE funded project mitigating the threat of Invasive Alien Plants in the EU through pest **RISK** analysis to support the EU Regulation 1143/2014 – better known as LIFE IAP-RISK,

IAP-RISK aims to mitigate the threat of invasive alien plants to the EU by producing high quality assessments that meet the requirements of the EU Regulation 1143/2014. In total, the IAP-RISK project will pest risk analyse 16 invasive alien plants over the course of the project.

The European and Mediterranean Plant Protection Organization (EPPO) is responsible for the overall management of the project and our project partner, The NERC Centre for Ecology and Hydrology (CEH) will be working with us to model and map the potential distributions of 16 priority invasive alien plants.

## Background

To mitigate the on-going threat of invasive alien species to the EU, the European Commission adopted the EU Regulation (1143/2014) on the prevention and management of the introduction and spread of invasive alien species. This Regulation came into force on the 1st January 2015.

The Regulation aims to address the negative impact invasive alien species have on biodiversity, ecosystem services, human health, and the economy in the EU Member States. The Regulation is centred on three main themes (1) prevention, (2) early detection and rapid eradication and (3) management. The Regulation foresees the adoption of a list of invasive alien species of EU concern, on the basis of risk assessments. The species on this list will be subject to restrictions, including on their use, trade and transport.

Invasive alien species (plants, animals, fungi or micro-organisms) are recognised as one of the greatest threats to biological diversity inflicting irreversible damage to the ecosystems they invade. There are an estimated 12 000 alien species present within Europe of which 10-15 % are considered invasive, and it is these species that cost the EU around €12-billion per year.

Invasive alien plant species are one of the largest groups of invasive alien species both in terms of sheer numbers of individual species but also the area they occupy. When invading a habitat, invasive alien plant species can outcompete native flora, degrade and alter ecosystem services, deplete biodiversity, cause negative impact on human health, incur high economic costs both in control and management programmes.

View our website for more details on the project [www.IAP-RISK.eu](http://www.IAP-RISK.eu)

If you have any questions please do not hesitate to contact Rob Tanner: [rt@epo.int](mailto:rt@epo.int)





## The project

The project is divided into three distinct stages:

### **Stage 1: Selecting species for risk assessment**

**Action A1** will select 16 high priority invasive alien plant species from the EPPO List of Invasive Alien Plants and the horizon scanning EU study for risk assessment. EPPO and the Panel on Invasive Alien Plants will meet for a 3-day workshop to modify the Prioritization Process. Modifications are required to prioritise the top 16 species from a list of 37, in full compliance with the Regulation.

**Stage 1 will produce a risk-based list of invasive alien plants prioritised in compliance with the Regulation from which the top 16 will undergo risk analysis.**

### **Stage 2: Risk assessment of 16 invasive alien plant species**

**Action A2** will update the EPPO Express DSS to include all requirements set out in the Regulation. Modules on ecosystem services and climate change, along with socio-economic aspects will be incorporated into the scheme.

**Action A3** will select seven international experts for each expert working group. Through this action international experts will be identified and invited to an expert working group which will assess two plant species.

**Action A4** will model (map) the current and potential distribution of each of the 16 invasive alien plant species based on current and future climatic conditions. Using data on species environmental niche and available distributions in the native and invaded range, models will be built using the most up to-date computer programmes.

**Action A5** will draft a risk assessment document for each species ahead of the expert working groups. Through literature and data reviews all available information on a species will be compiled into one working document that will act as the foundation for discussions during meetings.

**Action A6** involves the meeting of the expert working group to conduct the risk assessments. All information on the species will be compiled using robust scientific judgement and the experts will assign rating scores for the likelihood of the species entering the pest risk area, the likelihood of establishment, the rate of spread, the magnitude of impact in the current area of distribution and the magnitude of impact in the area of potential distribution.

**Stage 2 will produce 16 risk assessment documents compiled by leading experts which are fully compliant with the Regulation (EU) no. 1143/2014.**

### **Stage 3: Peer review process**

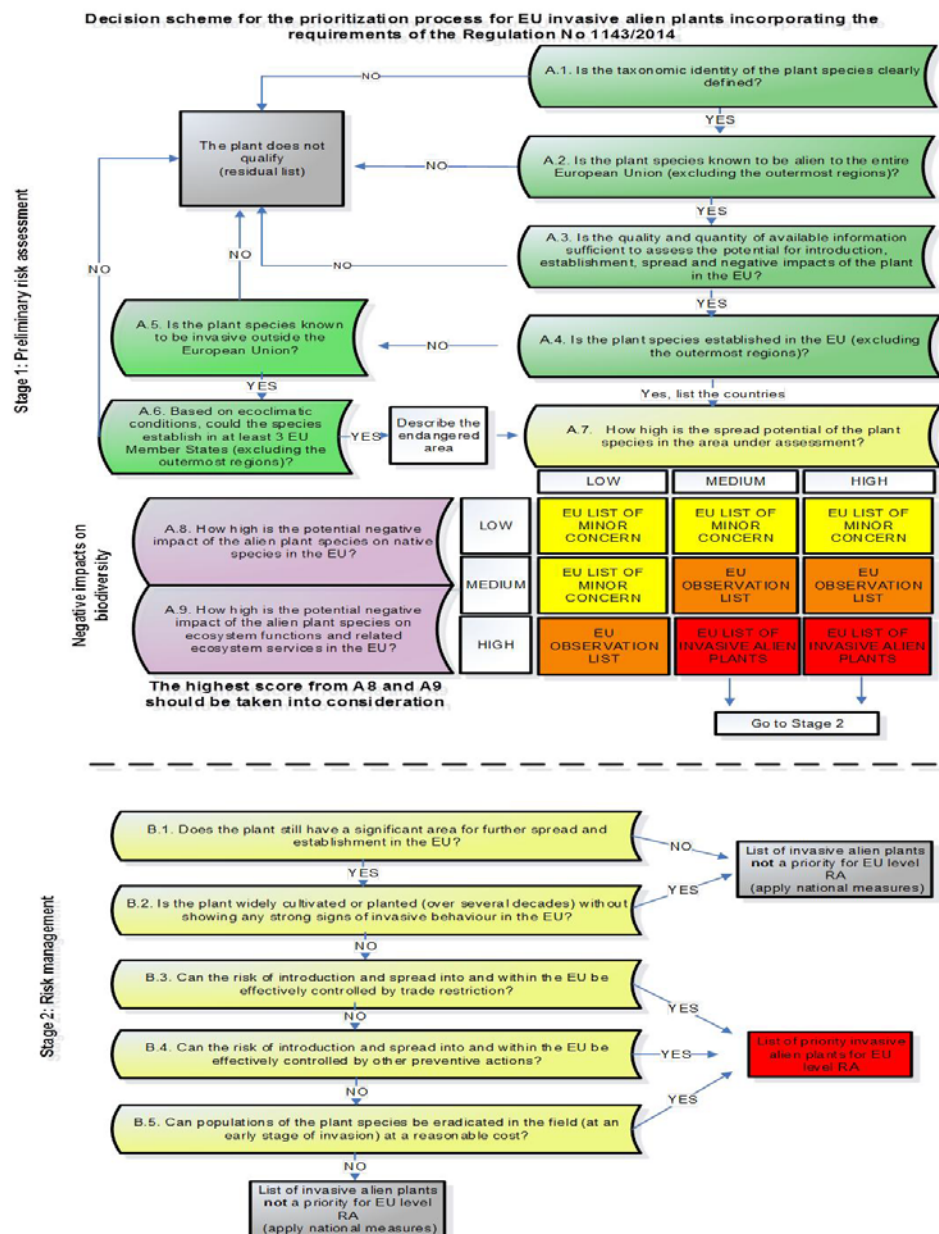
**Action A7** involves the peer review process in which each risk assessment will under-go a peer-review by (a) the EPPO Core Members Group for PRA, (b) the Panel on Invasive Alien Plants, and (c) the EPPO Working Party on Phytosanitary Regulations.

**This stage will produce the main output of the IAP-RISK project – a scientifically sound, robust, fully peer-reviewed risk assessment for each of the 16 species.**

## Progress to-date: Prioritizing species for risk assessment

A workshop was initiated in March 2016, to amend the EPPO prioritization process into a scheme specifically for use by this project by incorporating requirements of the Regulation 1143/2014. Amendments included adding questions on taxonomic status, the quality of available information, impacts on biodiversity and ecosystem services, absence of invasiveness and rewording other questions to be compliant with the EU. The resulting prioritization process for EU invasive alien plants has two stages (1) preliminary risk assessment and (2) risk management (Fig.1). The output of Stage 1 is to categorise each species into one of four lists: Residual List of species, EU List of Minor Concern, EU Observation List and EU List of Invasive Alien Plants. Only those in the latter list proceed to Stage 2. The output of Stage 2 has two possible outcomes where either the species is included in a list of priority invasive alien plants for a EU level RA or the species is included in a list of invasive alien plants that are not a priority for a EU level risk assessment (RA) and national measures should be applied. In total, 37 plant species (see below for a full list of species) from a recent horizon scanning exercise and the EPPO lists of invasive plants were prioritized using the new scheme where information was gathered for each species in order to answer each question in the prioritization process. Maps and graphics were compiled detailing the current and potential occurrence of each species in Europe.

Fig. 1







**The 37 species prioritized were:**

*Acacia dealbata*, *Albizia lebeck*, *Ambrosia confertiflora*, *Ambrosia trifida*, *Andropogon virginicus*, *Cardiospermum grandiflorum*, *Celastrus orbiculatus*, *Chromolaena odorata*, *Cinnamomum camphora*, *Clematis terniflora*, *Cornus sericea*, *Cortaderia jubata*, *Crypostegia grandiflora*, *Egeria densa*, *Ehrharta calycina*, *Euonymus fortunei*, *Euonymus japonicus*, *Fallopia baldschuanica*, *Gymnocoronis spilanthoides*, *Hakea sericea*, *Humulus scandens*, *Hygrophila polysperma*, *Hydrilla verticillata*, *Lespedeza cuneata*, *Ligustrum sinense*, *Lonicera maackii*, *Lonicera morrowii*, *Lygodium japonicum*, *Oxalis pes-caprae*, *Pennisetum setaceum*, *Pistia stratiotes*, *Prosopis juliflora*, *Prunus campanulata*, *Rubus rosifolius*, *Sapium sebiferum*, *Salvinia molesta* and *Sphagneticola trilobata*,

**Stage 1 Preliminary risk assessment:**

**15 species were filtered out of the process due to:**

- Taxonomic status (A1) - *Cornus sericea*,
- Native range (A2) - *Hydrilla verticillata*,
- Low quality of information (A3) - *Albizia lebeck*, *Clematis terniflora*, *Euonymus japonicus*, *Lonicera morrowii*, *Prunus campanulata*, *Rubus rosifolius*,
- Unlikely to establish (A6) - *Chromolaena odorata*, *Crypostegia grandiflora* and *Sphagneticola trilobata*,
- Low impacts or spread potential (A7,A8,A9) - *Ambrosia trifida*, *Egeria densa*, *Fallopia baldschuanica* and *Oxalis pes-caprae*,

**22 species were included in the EU List of Invasive Alien Plants and proceeded to Stage 2.**

**Stage 2 Risk management:**

- 3 species were not considered a priority for EU level RA as all are widely cultivated without invasive tendencies - *Euonymus fortunei*, *Ligustrum sinense*, *Lonicera maackii*,
- 19 species were identified as having a high priority for RA
- Two species were excluded from the 19, as RAs are planned by other organisations - *Celastrus orbiculatus* and *Pennisetum setaceum*,
- *Acacia dealbata* was also excluded due to logistical reasons,
- **16 species will undergo RA in the project:** *Ambrosia confertiflora*, *Andropogon virginicus*, *Cardiospermum grandiflorum*, *Cinnamomum camphora*, *Cortaderia jubata*, *Ehrharta calycina*, *Gymnocoronis spilanthoides*, *Hakea sericea*, *Humulus scandens*, *Hygrophila polysperma*, *Lespedeza cuneata*, *Lygodium japonicum*, *Prosopis juliflora*, *Sapium sebiferum*, *Pistia stratiotes* & *Salvinia molesta*.