MITIGATING THE IMPACTS OF INVASIVE ALIEN PLANTS IN THE EUROPEAN AND MEDITERRANEAN PLANT PROTECTION



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European and Mediterranean Plant Protection Organization

- EPPO Created in 1951 by 15 countries
- International cooperation in plant protection (plant quarantine and plant protection products)



EPPO and the European Union

28 EU members are all EPPO members EU prepares regulations EPPO makes recommendations e.g. regional standards 11.

The EPPO Panel on Invasive Alien Plants

- Created in 2002 with the following tasks:
 - ✓ to collect data on invasive alien plants in the EPPO region,
 - ✓ to collect information on official control measures existing in the EPPO region for invasive alien plants,
 - ✓ to conduct pilot studies on pest risk assessment and pest risk management of specific invasive alien plants.
- About 20 Panel members nominated by the National Plant Protection Organization of their countries.





The EPPO prioritization process for IAP **General principles**





MEDIUM

Lower priority for PR/

Not a priority for PRA

Priority for PRA

The EPPO process is designed:

- A. to produce a <u>reference list</u> of IAP that are established or could potentially establish in the EPPO region.
- B. to determine which Invasive Alien Plants (IAP) have the highest priority for an EPPO risk analysis quick pest (= screening tool to identify potential quarantine organisms).

See EPPO PM 5/6(1) EPPO Prioritization process for invasive alien plants

Outcome of the first stage of the process: Invasiveness categories (Combination of spread and impacts)



EPPO Alert List



Species included in the Alert List have been selected by the EPPO Secretariat or proposed by EPPO member countries, because they may present a risk to the EPPO region. Most species are still of limited distribution, or absent from the EPPO region.



Miscanthus sinensis



Amaranthus palmeri







Ambrosia trifida

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EPPO Observation List of Invasive Alien Plants



This list contains plant species (absent or present in the EPPO region) which present a medium risk or for which information currently available is not sufficient to make an accurate assessment.



Akebia quinata



Araujia sericifera



Azolla filiculoides



Gymnocoronis spilanthoides



Sesbania punicea



Stipa neesiana



Verbesina encelioides

Etc.

EPPO List of Invasive Alien Plants

46 terrestrial and aquatic species for which EPPO strongly recommends countries to take measures to prevent their introduction and spread or to manage unwanted populations



Cortaderia selloana



Carpobrotus edulis & acinaciformis



Fallopia spp.



pepp

Amorpha fruticosa



Baccharis halimifolia



Ambrosia artemisiifolia



Ailanthus altissima

Etc.

Among these species, which ones should be prohibited?

Second stage of the process: Identify (potential) invasive alien plants for which a PRA is a priority



Species that represent priorities for PRA (a PRA needs to be done)

Acacia dealbata, Alternanthera philoxeroides, Hakea sericea, Humulus japonicus, Hydrilla verticillata, Lagarosiphon major, Microstegium vimineum, Myriophyllum heterophyllum, Pennisetum setaceum, Pistia stratiotes, Salvinia molesta, Hygrophila polysperma

Species recommended for regulation by EPPO (an EPPO PRA is available)

Baccharis halimifolia (in 2013), Crassula helmsii, Hydrocotyle ranunculoides, Eichhornia crassipes, Heracleum persicum, Heracleum sosnowskyi, Ludwigia grandiflora, Ludwigia peploides, Polygonum perfoliatum, Pueraria lobata, Solanum elaeagnifolium

What is Pest Risk Analysis (PRA)?

PRA: The process of evaluating biological or other scientific and economic evidence to determine whether an **organism** is a **pest**, whether it should be regulated, and the strength of any **phytosanitary measures** to be taken against it [FAO definition].

ISPM No. 11: Pest risk analysis for quarantine pests including analysis of environmental risks and living modified organisms [FAO, 2004].

The objective of PRA is to answer these 'simple' questions:

- Can the pest studied be considered as a quarantine pest?
- Can phytosanitary measures (prohibitions, restrictions on trade ...) be taken to reduce the risk to an acceptable level?

Express Pest Risk Analysis

- Need for shorter PRAs to help NPPOs to make quicker scientifically-based decision.
- A scheme for such "express" PRAs existed in France, Germany, the Netherlands and the UK.
- The EPPO Express PRA scheme is based on existing national schemes and was further elaborated within EPPO Panels.
- The EPPO Express PRA scheme was approved as an EPPO Standard in 2012.

Express PRA: Covers all sections of ISPM 11

Stage 1. Initiation

- Reason for performing the PRA
- PRA area

Stage 2. Pest risk assessment

- Taxonomy
- Pest overview
- Host plants
- Need for vector
- Geographical distribution
- Possible pathways for entry
- Likelihood of establishment outdoors, protected conditions in the PRA area
- Spread in the PRA area
- Impact in the current area of distribut
- Potential impact in the PRA area
- Identification of the endangered area



PRA tools

Climate matching studies to predict pest establishment



Stage 3. Pest risk management

Phytosanitary measures







Uncertainties

A computerized version is in preparation



PRATIQUE CAPRA - Computer Assisted Pest Risk Analysis



CAPRA is a software developed by the European and Mediterranean Plant Protection Organization in the Framework of the European Union 7th Framework Programme project PRATIQUE (Grant Agreement No. 212459). It is intended to assist pest risk analysts in running the EPPO dedision-support scheme for Pest Risk Analysis (PRA), and the decision support scheme for generating contingency plans and prioritizing action during outbreaks.

Standalone mode

Begin a new analysis

New analysis



analysis

Open existing analysis on your computer

Analysis recently oper Baccharis halimifolia REV.capra

CAPEA version 7.2

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Standards for invasive alien plants

- National regulatory control systems
 Specific EPPO Standards on the management of invasive alien plants
- Phytosanitary procedures
 'Guidelines for the management of invasive alien plants or potentially invasive alien plants which are intended for import or have been intentionally imported' (EPPO, 2006).

'Invasive alien aquatic plants' (EPPO, 2014).

'EPPO guidelines on the development of a code of conduct on horticulture and invasive alien plants' (EPPO, 2009).

THANK YOU



EPPO Headquarters, Paris