The European and Mediterranean Plant Protection Organization

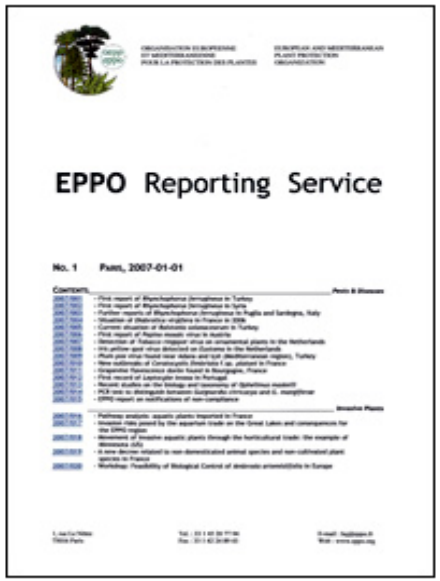
Updates from EPPO

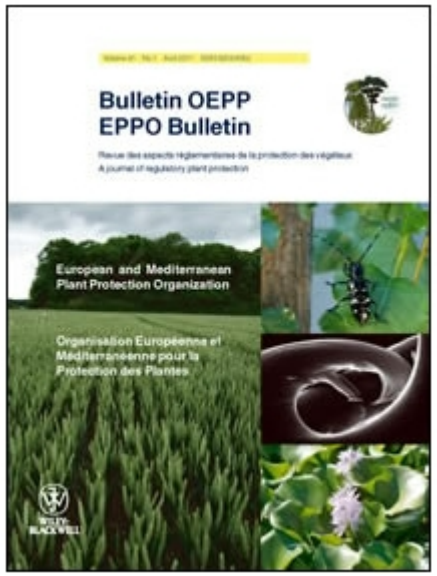
Rob Tanner

12th meeting Bern Convention Group of Experts on Invasive Alien Species

Madeira, 2017-06-1/3

Information dissemination





Parthenium hysterophorus (PTNHY)

MENU

- Overview →
- Distribution
- Categorization
- Reporting
- Photos

Overview

Basic information

- **EPPO code:** PTNHY
- **Preferred name:** Parthenium hysterophorus
- **Authority:** Linnaeus

more photos...

Notes

Tropical America. Introduced into and invasive in other continents, including specifically India, Australia and parts of Africa

WSSA list of weeds in North America
EPPO Alert List

Taxonomy

Kingdom	Plantae (1PLAK)
Phylum	Magnoliophyta (1MAGP)
Class	Angiospermae (1ANGC)
Category	Campanulids (1CMPD)
Order	Asterales (1ASTO)
Family	Asteraceae (1COMF)
Genus	Parthenium (1PTNG)
Species	Parthenium hysterophorus (PTNHY)

Common names

Name	Language
Search...	- select -
bastard feverfew	English
congress weed	English
Santa Maria feverfew	English
whitetop weed	English
parthenium weed	English (AU)

EPPO Observation List of invasive alien plants

The EPPO Observation List was created by the EPPO Panel on Invasive Alien Plants in 2012. 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. It is stressed that inclusion in the Observation List is not definitive, and changes can be made when additional information is recorded, particularly when information on invasiveness becomes available, or when a significant change in the invasive behaviour is observed.

Plant name (link to EPPO Global Database)	Added in	Data sheets	PRA and priorization documents
Akebia quinata	2012	mini ds	-
Andropogon virginicus	2014	mini ds	priorization
Araujia sericifera	2012	mini ds	-
Asparagus asparagoides	2013	mini ds	priorization
Azolla filiculoides 💧	2012	-	-
Bidens frondosa	2012	-	-
Cenchrus incertus	2012	draft ds	-
Eragrostis curvula	2012	mini ds	
Eriochloa villosa	2012	mini ds	-
Gymnocoronis spilanthoides 💧	2012	mini ds	-
Limnophila sessiliflora 💧	2013	mini ds	priorization
Lupinus polyphyllus	2012	-	-
Lysichiton americanus (A2 in 2005 - deleted in 2009)	2012	Final ds	PRA - PRA report
Nassella trichotoma, *N. neesiana* and *N. tenuissima*	2012	mini ds	-
Rhododendron ponticum	2012	draft ds	-
Sesbania punicea	2012	mini ds	-
Solidago nemoralis	2012	mini ds	-
Verbesina encelioides	2012	mini ds	-

💧 Aquatic plants

LIFE IAP-RISK

LIFE15 PRE FR 001

Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

And

NERC CENTRE FOR ECOLOGY AND HYDROLOGY

Centre for Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

Project overview

- **Title:** Mitigating the threat of invasive alien plants in the EU through pest risk analysis to support the EU Regulation 1143/2014
- **Theme:** Invasive plant species – risk assessment
- **Funder:** LIFE Programme; DG Environment
- **Duration:** 01.02.2016 - 30.06.2018.
- **Financial:** total project costs EUR 433 328; EPPO will receive EUR 215 690.

LIFE IAP-RISK

- **To prioritise plant species from the EPPO List of Invasive Alien Plants and the horizon scanning study (ENV.B.2/ETU/2014/0016) for risk assessment,**

- **To risk assess 16 IAPs by performing pest risk analysis compliant with the Regulation (EU) no. 1143/2014,**

- **To facilitate knowledge transfer and capacity building in pest risk analysis within the EU.**

List of 37 species for prioritisation

Species	
Acacia dealbata (Fabaceae)	*Hakea sericea* (Proteaceae)
Albizia lebbeck (Fabaceae)	*Humulus scandens* (Cannabaceae)
Ambrosia confertiflora (Asteraceae)	*Hydrilla verticillata* (Hydrocharitaceae)
Ambrosia trifida (Asteraceae)	*Hygrophila polysperma* (Acanthaceae)
Andropogon virginicus (Poaceae)	*Lespedeza cuneata* (Fabaceae)
Cardiospermum grandiflorum (Sapindaceae)	*Ligustrum sinense* (Oleaceae)
Celastrus orbiculatus (Celastraceae)	*Lonicera maackii* (Caprifoliaceae)
Chromolaena odorata (Asteraceae)	*Lonicera morrowii* (Caprifoliaceae)
Cinnamomum camphora (Lauraceae)	*Lygodium japonicum* (Lygodiaceae)
Clematis terniflora (Ranunculaceae)	*Oxalis pes-caprae* (Oxalidaceae)
Cornus sericea (Cornaceae)	*Pennisetum setaceum* (Poaceae)
Cortaderia jubata (Poaceae)	*Pistia stratiotes* (Araceae)
Cryptostegia grandiflora (Apocynaceae)	*Prosopis juliflora* (Fabaceae)
Egeria densa (Hydrocharitaceae)	*Prunus campanulata* (Rosaceae)
Ehrharta calycina (Poaceae)	*Rubus rosifolius* (Rosaceae)
Euonymus fortunei (Celastraceae)	*Salvinia molesta* (Salviniaceae)
Euonymus japonicus (Celastraceae)	*Sapium sebiferum* (Euphorbiaceae)
Fallopia baldschuanica (Polygonaceae)	*Sphagneticola trilobata* (Asteraceae)
*Gymnocoronis spilanthoide*s (Asteraceae)	

Regulation 1143/2014

- Regulation 1143/2014: on the prevention and management of the introduction and spread of invasive alien species, which came into force on the 1st January 2015

- Centred on three main themes (1) prevention, (2) early warning and rapid response, and (3) management.

- A key feature in the Regulation is: list of IAS of Union concern

REGULATION (EU) No 1143/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 22 October 2014
on the prevention and management of the introduction and spread of invasive alien species

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee (1),

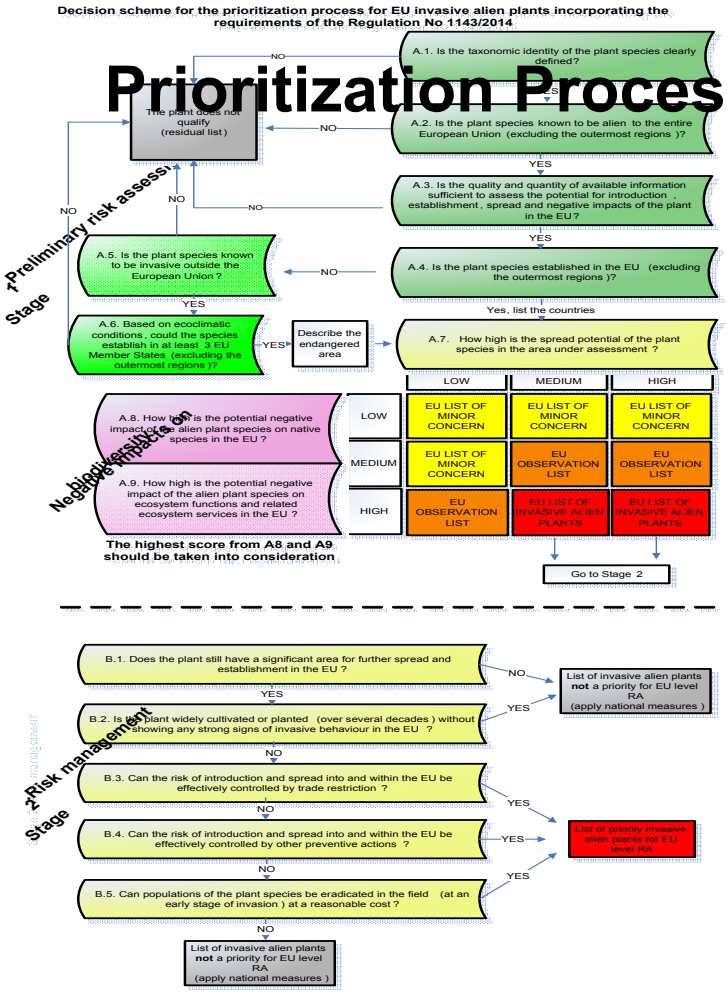
After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure (2),

Whereas:

(1) The appearance of alien species, whether of animals, plants, fungi or micro-organisms, in new locations is not always a cause for concern. However, a significant subset of alien species can become invasive and have serious adverse impact on biodiversity and related ecosystem services, as well as have other social and economic impact, which should be prevented. Some 12 000 species in the environment of the Union and in other European

Prioritization Process for EU invasive alien plants



produces lists of plant species for the EU, the most important being the list of invasive alien plants

to determine which of these IAP have the highest priority for a risk assessment

(= quick screening tool)

Bulletin OEPP/EPPO Bulletin (2016) **46** (3), 603–617 ISSN 0250-8052. DOI: 10.1111/epp.12336

A prioritization process for invasive alien plant species incorporating the requirements of EU Regulation no. 1143/2014

E. Branquart[1], G. Brundu[2], S. Buholzer[3], D. Chapman[4], P. Ehret[5], G. Fried[6], U. Starfinger[7], J. van Valkenburg[8] and R. Tanner[9]

The main components of stage 1

A1 – Plant taxonomic identity

A2 – Alien to the entire EU

A3 – Availability of scientific information

A4 + A6 – Establishment capacity

A5 – Invasive behaviour outside EU

A7 – Spread capacity

A8 – Negative impacts on native species

A9 – Negative impacts on ecosystem functions and services

		A7 - Spread potential		
		Low	**Medium**	**High**
Negative impacts (maximum from questions A8 and A9)	**Low**	EU List of Minor Concern	EU List of Minor Concern	EU List of Minor Concern
	Medium	EU List of Minor Concern	EU Observation List of Invasive Alien Plants	EU Observation List of Invasive Alien Plants
	High	EU Observation List of Invasive Alien Plants	**EU List of Invasive Alien Plants. Go to B.**	**EU List of Invasive Alien Plants. Go to B.**

The main components of stage 2

B1 – Significant area available for further spread

B2 – No sign of invasive behaviour in the EU

B3 – Risk reduction by trade restriction

B4 – Risk reduction by other preventive actions

B5 – Risk reduction by population control

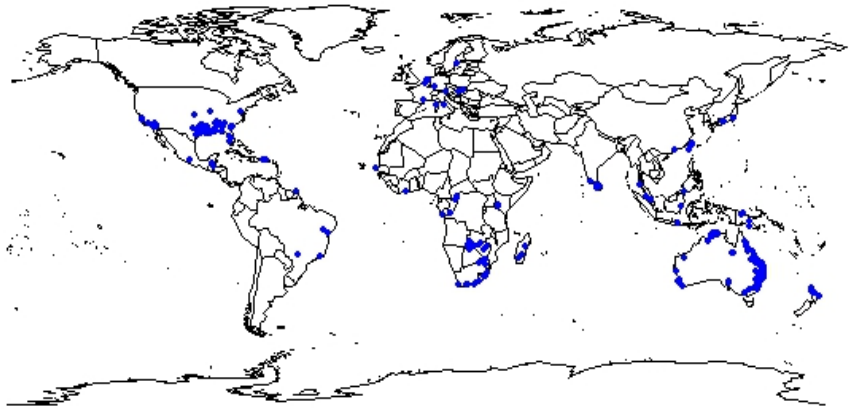
Species	A.1. Clear taxonomy	A.2. Alien in EU	A.3. Quality information	A.4. Established in the EU	A.5. Invasive outside the EU	A.6. Potential establishment in the EU	A.7. Spread	A.8. Impact on native plant species	A.9. Impact on ecosystem functions services	Conclusion of stage 1
Acacia dealbata	Yes	Yes (Aus.)	High	Yes (ES, FR, IT)	Yes (Afr., Asia, Oce.)	38%	Medium	High (M): forms dense stands displaces native species (Lorenzo et al., 2012)	Medium (L): Nitrogen cycle modifications (Weber, 2003)	List IAP
Albizia lebbeck	Yes	Yes (Asia)	Low (STOP)	----	----	----	----	----	----	----
Ambrosia confertiflora	Yes	Yes (N.Am.)	Medium/High	No	Yes (C.Asia, Oce.)	8.80%	High	High (M): forms dense stands displaces native species (EPPO, 2014)	Medium (H): Ecosystem modifier (EPPO, 2014)	List IAP
Ambrosia trifida	Yes	Yes (N.Am.)	Medium/High	Yes (ES, GE, NL, RO, RU, PL, FR, IT, BK, RS)	Yes (Asia, N.Am.)	90%	High	Medium (L): allelopathic and competes with native spp. for nutrients/light	Low (M): No recorded impacts	Obs List
Andropogon virginicus	Yes	Yes (N.Am.)	High	Yes (FR)	Yes (Asia, N.Am., Oce.)	70.10%	High	High (H): Alleopathic impacts (Stone, 1985)	Medium (H): Promotes fire (Stone, 1985)	List IAP
Cardiospermum grandiflorum	Yes	Yes (Afr., S.Am.)	Medium	Yes (IT)	Yes (Afr.)	5.10%	High	High (M):Smothers native spp. (McKay et al., 2010)	Medium (M): Habitat transformer ((Henderson, 2001)	List IAP
Celastrus orbiculatus	Yes	Yes (Asia)	High	Yes (GB)	Yes (N.Am., Oce.)	77%	High	High (H): Suppression native spp. (Fike & Niering, 1999)	Medium (H): Negatively affects aesthetics (CABI, 2016)	List IAP
Chromolaena odorata	Yes	Yes (S.Am.)	High	No	Yes (Afr., N.Am., Oce.)	No (STOP)	----	----	----	----
Cinnamomum camphora (Lauraceae)	Yes	Yes (Asia)	High	Yes (GB, FR, IT)	Yes (N.Am., Oce.)	35.10%	High	High (H): Forms moncultures/ Alleopathic impacts (Firth, 1979)	Medium (H): Ecosystem modifier (CABI, 2016)	List IAP
Clematis terniflora (Ranunculaceae)	Yes	Yes (Asia)	Low (STOP)	----	----	----	----	----	----	----
Cornus sericea (Cornaceae)	No (STOP)	----	----	----	----	----	----	----	----	----
Cortaderia jubata (Poaceae)	Yes	Yes (S. Am.)	High	No	Yes (N.Am., Oce.)	55.80%	High	High (M): Strongly competes for resources (Lambrinos, 2000)	High (M): Alters trophic levels/reduces aesthetics (Bossard et al., 2000)	List IAP
Cryptostegia grandiflora (Apocynaceae)	Yes	Yes (Afr.)	High	No	Yes (Oce., S.Am.)	No (STOP)	----	----	----	----
Egeria densa (Hydrocharitaceae)	Yes	Yes (S. Am.)	High	Yes (FR, BE, IT, NL, UK)		80.90%	High	Medium (H): Displaces native spp. (CABI, 2016)	Medium (H): Reduces recreation actvities (CABI, 2016)	Obs List
Ehrharta calycina (Poaceae)	Yes	Yes (S. Afr.)	High	Yes (ES, PT)	Yes (N.Am.)	15.30%	High	High (M): Outcompetes native plant spp. (Bossard et al., 2000)	Medium (M): Alter fire regimes (Fisher et al., 2006)	List IAP
Euonymus fortunei (Celastraceae)	Yes	Yes (Asia)	High	Yes (FR, LV)	Yes (N.Am.)	70.10%	High	High (M): Outcompetes native plant spp. (Bauer & Reynolds, 2016)	Medium (H): Ecosystem modifier (Bauer & Reynolds, 2016)	List IAP
Euonymus japonicus (Celastraceae)	Yes	Yes (Asia)	Low (STOP)	----	----	----	----	----	----	----
Fallopia baldschuanica (Polygonaceae)	Yes	Yes (Asia)	High	Yes (widespread)	Yes (N.Am.)	67.90%	Medium	Medium (M): Smoothers native spp. (EPPO, 2012)	Medium (M): Ecosystem modifier (EPPO, 2012)	Obs List

Salvinia molesta Des.

Perennial floating aquatic fern (Harley & Mitchell, 1981)

EPPO Code: SAVMO

Native: Brazil



EPPO Expert Working Group: CHAPMAN Daniel (Dr), COETZEE Julie (Dr) HILL Martin (Dr) HUSSNER Andreas (Dr) NEWMAN Jonathan (Dr) PESCOTT Oliver (Dr) STIERS Iris (Dr) VAN VALKENBURG Johan (Dr) TANNER Rob (Dr). Paris (FR), 2016-05-23/27

High priority species for PRA

Ambrosia confertiflora
Andropogon virginicus
Cardiospermum grandiflorum
Cinnamomum camphora
Cortaderia jubata
Ehrharta calycina
Gymnocoronis spilanthoides
Hakea sericea
Humulus scandens
Hygrophila polysperma
Lespedeza cuneata
Lygodium japonicum
Pistia stratiotes
Prosopis juliflora
Salvinia molesta
Sapium sebiferum

The prioritization of invasive alien plants for risk assessment within the framework of the Regulation (EU) No. 1143/2014

Robert Tanner[1], Etienne Branquart[2], Giuseppe Brundu[3], Serge Buholzer[4], Daniel Chapman[5], Pierre Ehret[6], Guillaume Fried[7], Uwe Starfinger[8], Johan van Valkenburg[9]

EWG *Humulus scandens* and *Lygodium japonicum*

EPPO PRA Schemes

- **EPPO decision-support scheme for quarantine pests (PM 5/3 (5))**
- EPPO decision-support scheme for an express pest risk analysis (PM 5/5 (1))
- EPPO working document for an express PRA for invasive alien plant species compliant with the Regulation (EU) No. 1143/2014.

Provisioning services

Spanish bluebells reducing genetic diversity in native UK bluebells

Provisioning services
- Fresh water
- Genetic resources
- Food production (crop and livestock)
- Commodity production (fiber, timer etc.)

Supporting services

Invasive aquatic plants reducing water quality below monocultures

Supporting services
- Nutrient cycling
- Primary production
- Habitat stability

Regulating services

Invasive grass species altering fire regimes in invaded habitats

Regulating services
- Soil formation
- Pollination
- Water regulation
- Air quality

Cultural services

Invasive vines smothering historical sites of importance

Cultural services
- Aesthetic experiences
- Cultural heritage
- Tourism
- Recreation

12.01.Consider the negative impact the pest may have on categories of ecosystem services (examples of ecosystem service under each main category are detailed in the highlighted box). The categories of ecosystem services are based on the Millennium Ecosystem Assessment (2005).
http://www.unep.org/maweb/documents/document.356.aspx.pdf

Examples of ecosystem services to consider under each category include:

- *Provisioning services*
  - Fresh water
  - Genetic resources
  - Food production (crop and livestock etc.)
  - Commodity production (fibre, timber etc.)
- *Regulating services*
  - Soil formation
  - Pollination
  - Natural hazard regulation (fire, erosion, flooding)
  - Water regulation
  - Biodiversity
  - Decomposition
  - Photosynthesis and primary production
  - Air quality regulation
  - Pest and disease regulation
- *Supporting services*
  - Nutrient cycling
  - Primary production
  - Habitat stability
- *Cultural services*
  - Aesthetic experiences
  - Cultural heritage
  - Tourism
  - Recreation (fishing, nature enjoyment etc.)
  - Spiritual wellbeing

Ecosystem service	**Does the IAS impact on this Ecosystem service?** Yes/No	**Short description of impact**	**Reference**
Provisioning			
Regulating			
Supporting			
Cultural			

Rating of the magnitude of impact in the current area of distribution	*Low* ☐	*Moderate* ☐	*High* ☐
Rating of uncertainty	*Low* ☐	*Moderate* ☐	*High* ☐

15. Climate change

*Consider the influence of projected climate change scenarios on the pest. Specifically consider the influence of climate change on the **introduction, establishment, spread** and **impact** of the pest in the PRA area.*
In particular, consider the following aspects

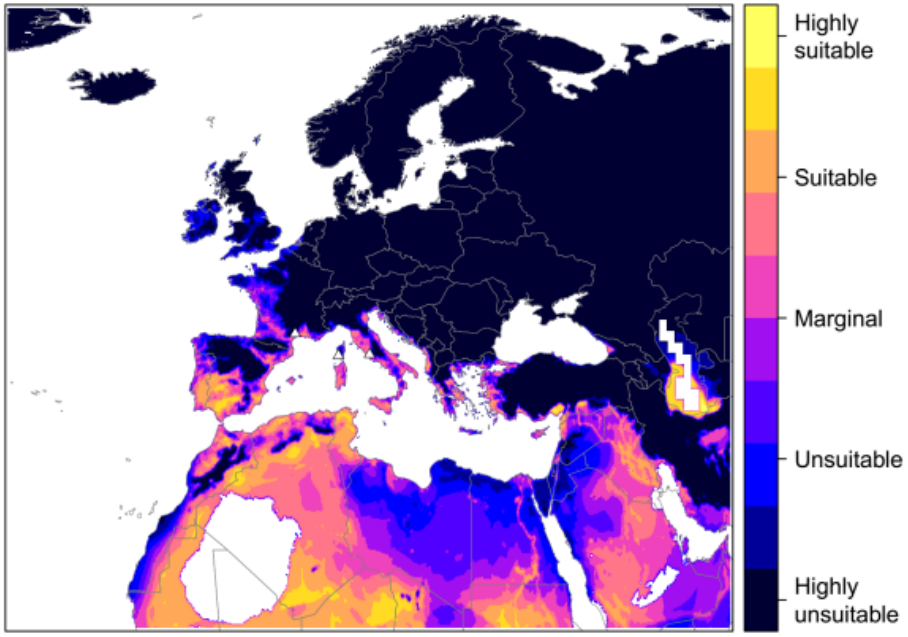
- *Introduction*
  Pathways (see point 8)
- *Establishment*
  - Day degree requirements
  - Climate limitations
  - Changes in reproduction/growth
  - Inter-specific competition
- *Spread*
  - Density dependent dispersal
  - Extreme weather events
- *Impact*
  - Increased fitness
  - *Per capita* effects

*15.01. Define which climate projection you are using from 2050 to 2100**

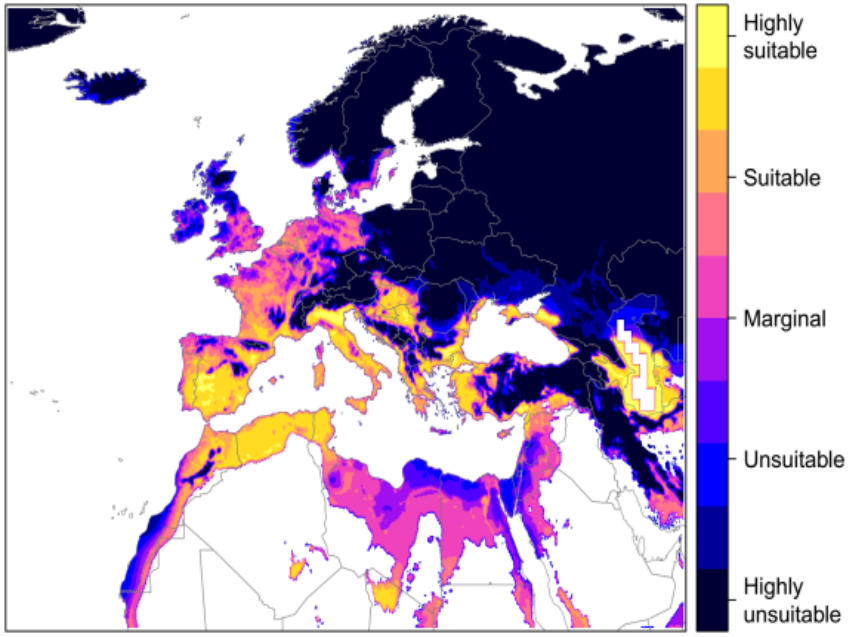
*Climate projection*_____

** following the IPCC projections (http://www.ipcc.ch/)*
***Reference:** IPCC, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, et al.,(eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.https://ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf*

Species distribution modelling



Projected current suitability for *Salvinia molesta* establishment in Europe and the Mediterranean region



Projected suitability for *Salvinia molesta* establishment in Europe and the Mediterranean region in the 2070s under climate change scenario RCP8.5

Information dissemination and training activities

Social media

Training workshops

Project website

Going forward

- Twelve risk analysis conducted (six EWGs),
- Final two EWGs planned for September and October 2017,
- To do: Datasheets and PM9 Standards for each species or group of species.

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-22049

Pest Risk Analysis for *Cardiospermum grandiflorum*

2016

EPPO
21 Boulevard Richard Lenoir
75011 Paris
www.eppo.int
hq@eppo.int

This pest risk analysis scheme has been specifically amended from the EPPO Decision-Support Scheme for an Express Pest Risk Analysis document PM 5/5(1) to incorporate the minimum requirements for risk assessment when considering invasive alien plant species under the EU Regulation 1143/2014. Amendments and use are specific to the LIFE Project (LIFE15 PRE FR 001) 'Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014'.

Cite this document as:
EPPO (2016) *Pest risk analysis for Cardiospermum grandiflorum*. EPPO, Paris.
Available at:

Photo: *Cardiospermum grandiflorum* (Photo by Johannes J.Le Roux)

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-21701

Pest Risk Analysis for

Pistia stratiotes

2016

EPPO
21 Boulevard Richard Lenoir
75011 Paris
www.eppo.int
hq@eppo.int

This risk assessment follows the EPPO Standard PM 5/5(1) Decision-Support Scheme for an Express Pest Risk Analysis (available at http://archive.eppo.int/EPPOStandards/pra.htm) and uses the terminology defined in ISPM 5 Glossary of Phytosanitary Terms (available at https://www.ippc.int/index.php).

Cite this document as:
EPPO (2016) *Pest risk analysis for Pistia stratiotes*. EPPO, Paris.
Available at:

Photo: *Pistia stratiotes*. Courtesy: Andreas Hussner

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-21984

Pest Risk Analysis for

Salvinia molesta

2016

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This risk assessment follows the EPPO Standard PM 5/5(1) Decision-Support Scheme for an Express Pest Risk Analysis (available at http://archive.eppo.int/EPPOStandards/pra.htm) and uses the terminology defined in ISPM 5 Glossary of Phytosanitary Terms (available at https://www.ippc.int/index.php).

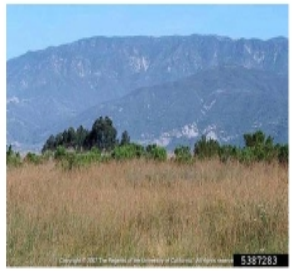
Cite this document as:
EPPO (2016) *Pest risk analysis for Salvinia molesta*. EPPO, Paris.
Available at:

Photo: *Salvinia molesta* in Florida USA Courtesy: Michael D. Netherland

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

17-22405 (17-22312)

Pest Risk Analysis for *Ehrharta calycina*



2017

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Cite this document as:
EPPO (2017) *Pest risk analysis for Ehrharta calycina*. EPPO, Paris.
Available at:

Photo:

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ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

17-22406 (17-22361)

Pest Risk Analysis for *Andropogon virginicus*

2017

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hq@eppo.int

This pest risk analysis scheme has been specifically amended from the EPPO Decision-Support Scheme for an Express Pest Risk Analysis document PM 5/5(1) to incorporate the minimum requirements for risk assessment when considering invasive alien plant species under the EU Regulation 1143/2014. Amendments and use are specific to the LIFE Project (LIFE15 PRE FR 001) 'Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014'.

Cite this document as:
EPPO (2017) *Pest risk analysis for Andropogon virginicus*. EPPO, Paris.
Available at:

Photo: *Andropogon virginicus* Makiki Quick, Maui, Hawaii (Forest and Kim Starr)

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-22125

Pest Risk Analysis for *Cinnamomum camphora*

2016

EPPO
21 Boulevard Richard Lenoir
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This pest risk analysis scheme has been specifically amended from the EPPO Decision-Support Scheme for an Express Pest Risk Analysis document PM 5/5(1) to incorporate the minimum requirements for risk assessment when considering invasive alien plant species under the EU Regulation 1143/2014. Amendments and use are specific to the LIFE Project (LIFE15 PRE FR 001) 'Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014'.

Cite this document as:
EPPO (2016) *Pest risk analysis for Cinnamomum camphora*. EPPO, Paris.
Available at:

Photo: Cinnamomum camphora (Forest and Kim Starr, Starr Environmental, bugwood.org)

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-22073

Pest Risk Analysis for *Hygrophila polysperma*

2016

EPPO
21 Boulevard Richard Lenoir
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hq@eppo.int

This pest risk analysis scheme has been specifically amended from the EPPO Decision-Support Scheme for an Express Pest Risk Analysis document PM 5/5(1) to incorporate the minimum requirements for risk assessment when considering invasive alien plant species under the EU Regulation 1143/2014. Amendments and use are specific to the LIFE Project (LIFE15 PRE FR 001) 'Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014'.

Cite this document as:
EPPO (2016) *Pest risk analysis for Hygrophila polysperma*. EPPO, Paris.
Available at:

Photo: *Hygrophila polysperma* (Andreas Hussner)

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES

16-22051

Pest Risk Analysis for *Gymnocoronis spilantholdes*

2016

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This pest risk analysis scheme has been specifically amended from the EPPO Decision-Support Scheme for an Express Pest Risk Analysis document PM 5/5(1) to incorporate the minimum requirements for risk assessment when considering invasive alien plant species under the EU Regulation 1143/2014. Amendments and use are specific to the LIFE Project (LIFE15 PRE FR 001) 'Mitigating the threat of invasive alien plants to the EU through pest risk analysis to support the Regulation 1143/2014'.

Cite this document as:
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Photo: Gymnocoronis spilanthoides encroaching into a rice field in Italy (Claudio Ballarini).

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17-22543

Pest Risk Analysis for *Lygodium japonicum* (Thunb.) Sw

2017

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Available at:

Photo: Bernardy Behr

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17-22546

Pest Risk Analysis for *Humulus scandens* (Lour.) Merr.

2017

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Photo: G. Fried