



# Les espèces exotiques envahissantes

## Réglementation européenne et enjeux pour le Luxembourg

**Luxembourg, 20 mars 2018**  
**Musée national d'histoire naturelle**



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère du Développement durable  
et des Infrastructures

Département de l'environnement

# Invasive alien neophytes targeted by EU regulations



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**Invasive alien species**  
**EU regulations and challenges for Luxembourg**  
**Luxembourg, 20 March 2018**  
**National Museum of Natural History**



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61 neophytes on the [list of Luxembourg concern](#)

23 neophytes on the [list of EU concern](#)

7 neophytes of Luxembourg and EU concern

Black list	<i>Heracleum mantegazzianum</i> SOMMIER & LEVIER
	<i>Elodea nuttallii</i> (PLANCH.) ST. JOHN
	<i>Impatiens glandulifera</i> ROYLE
Watch list	<i>Myriophyllum aquaticum</i> (VELL.) VERDC.
Alert list	<i>Myriophyllum heterophyllum</i> MICHAUX
	<i>Hydrocotyle ranunculoides</i> L. f.
	<i>Lagarosiphon major</i> (RIDLEY) MOSS



14 invasive neophytes  
of EU concern not  
listed in Luxembourg  
are briefly introduced.

*Alternanthera philoxeroides* (Mart.) Griseb.

*Asclepias syriaca* L.

*Baccharis halimifolia* L.

*Cabomba caroliniana* Gray

*Eichhornia crassipes* (Martius) Solms

*Gunnera tinctoria* (Molina) Mirbel

*Ludwigia grandiflora* (Michx.) Greuter & Burdet

*Ludwigia peploides* (Kunth) P.H. Raven

*Lysichiton americanus* Hultén and St. John

*Microstegium vimineum* (Trin.) A. Camus

*Parthenium hysterophorus* L.

*Pennisetum setaceum* (Forssk.) Chiov.

*Pueraria montana* (Lour.) Merr. var. *lobata* (Willd.)

*Persicaria perfoliata* (L.) H. Gross

# *Heracleum mantegazzianum* (1)



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*Heracleum mantegazzianum* Sommier & Levier

EN: Giant hogweed

LU: Risebireklo

DE: Riesenbärenklau

FR: Berce du Caucase

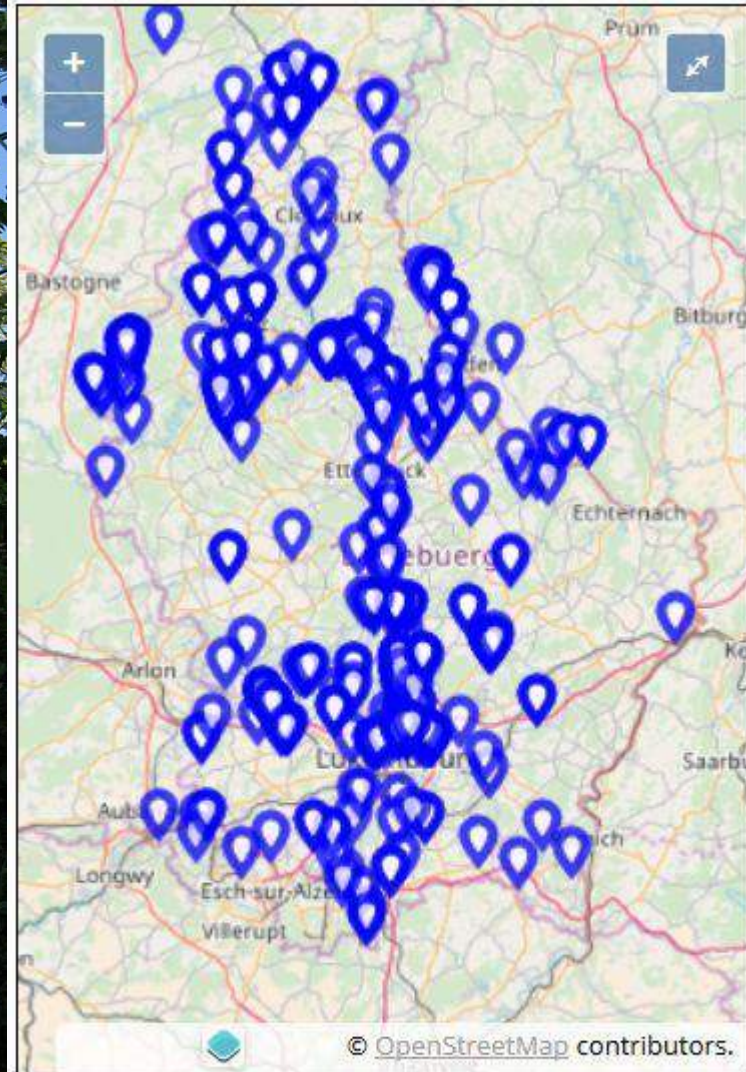
<https://neobiota.lu/heracleum-mantegazzianum/>



# *Heracleum mantegazzianum* (2)



LE GOUVERNEMENT  
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Distribution map of *Heracleum mantegazzianum*  
SOMM. et LEV. in Luxembourg. [Recorder database](#),  
[MNHNL](#), 06.03.2018.

# *Heracleum mantegazzianum* (3)

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Origin: Caucasus (Eurasia)

Habitat: Terrestrial (ruderal)

Lifespan: biennial (or more)

Pathway: beekeepers, rivers, railways, roads

1st introduction LU: 1935

Status LU: ISEIA A3 - **Black list**

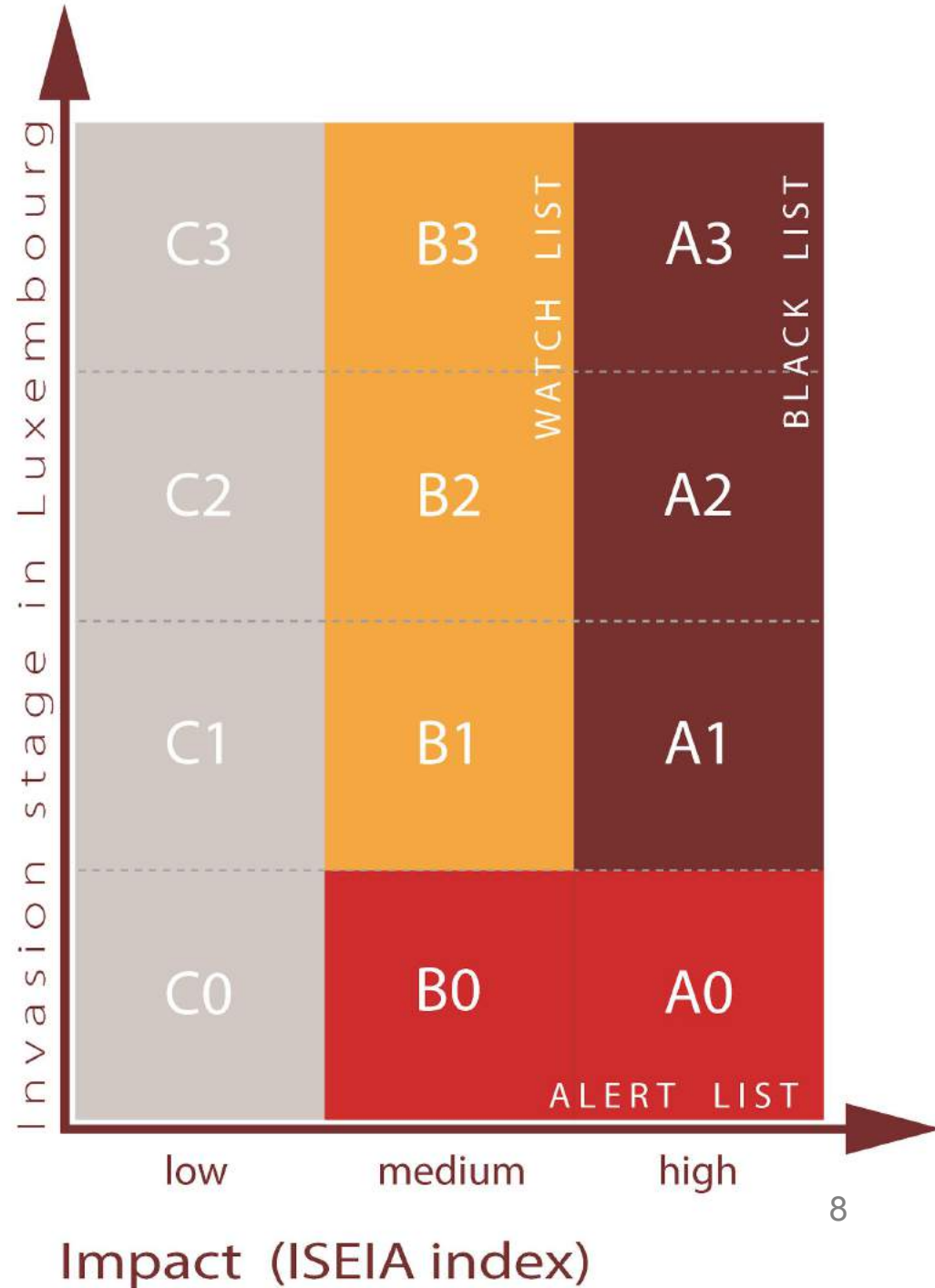


## Reminder on the ISEIA Index

After Branquart (2009 : 1)  
in Ries et al. 2013.

Branquart, E. (ed.), 2009. Guidelines for environmental impact assessment and list classification of non-native organisms in Belgium. Version 2.6. 4 pp. [http://ias.biodiversity.be/documents/ISEIA\\_protocol.pdf](http://ias.biodiversity.be/documents/ISEIA_protocol.pdf)

Ries, C., Y. Krippel, M. Pfeiffenschneider & S. Schneider, 2013. Environmental impact assessment and black, watch and alert list classification after the ISEIA Protocol of non-native vascular plant species in Luxembourg. *Bull. Soc. Nat. luxemb.* 114: 15-21.





## Impacts:

- environmental: (-) competition, erosion
- economic: (-) medical costs, control measures, (+) former use in beekeeping
- social: (-) skin burning

Measures: eradication ongoing in LU since 2008. Since 2013 the species seems under control and could be downgraded to A1 (ISEIA).

# *Heracleum mantegazzianum* (5)



LE GOUVERNEMENT  
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Hybridisation: x with native *H. sphondylium*

Similar species:

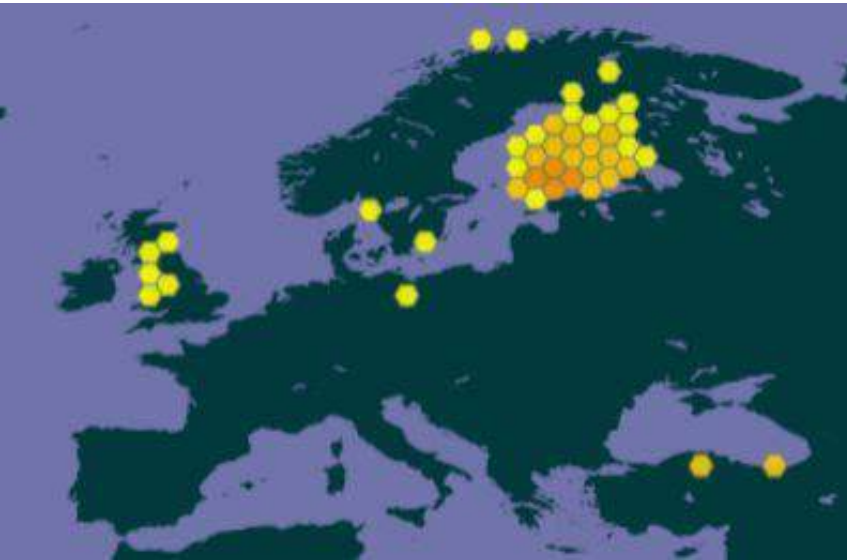
- *Heracleum sphondylium* (LU native)
- *Heracleum persicum* [a] (⚠, EU concern)
- *Heracleum sosnowskyi* [b] (⚠, EU concern)



# *Heracleum mantegazzianum* (5)



LE GOUVERNEMENT  
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*Heracleum persicum*



*Heracleum sosnowskyi*



a



b

# *Elodea nuttallii* (1)



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*Elodea nuttallii* (Planch.) St. John

EN: Nuttall's Waterweed

LU: Schmuel Waasserpescht

DE: Schmalblättr. Wasserpest

FR: Elodée de Nuttall

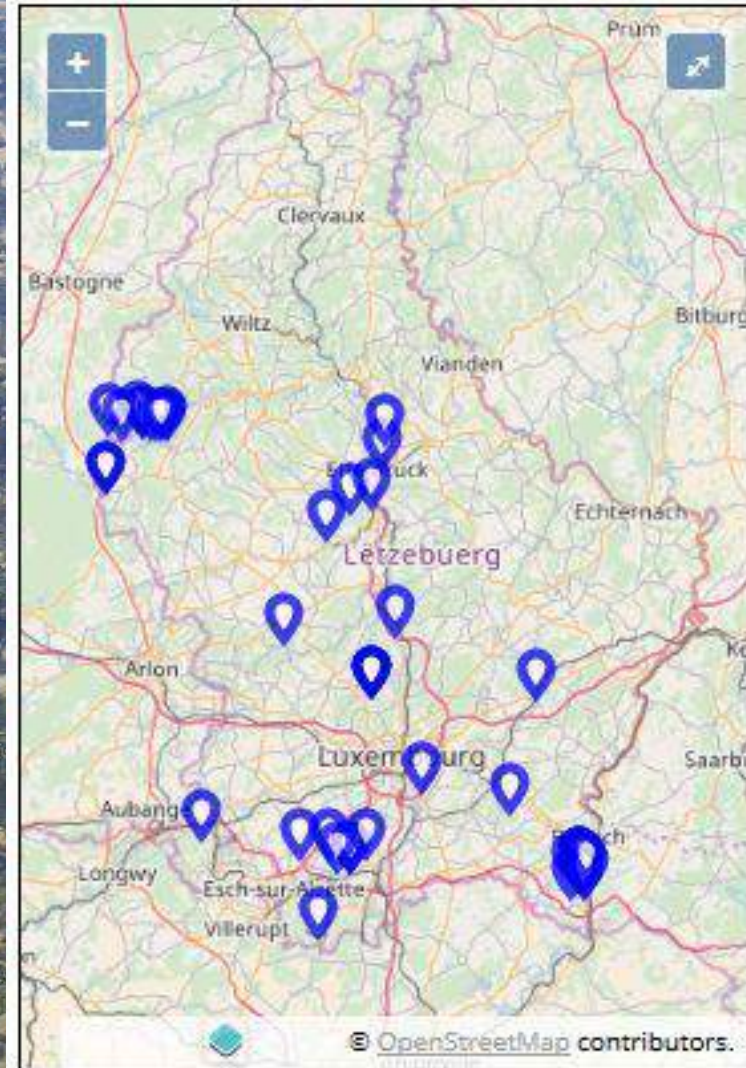
<https://neobiota.lu/elodea-nuttallii/>



# *Elodea nuttallii* (2)



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Distribution map of *Elodea nuttallii* (PLANCH.) H. ST. JOHN in Luxembourg. Recorder database, MNHNL, 19.03.2018.

## *Elodea nuttallii* (3)

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Origin: North America

Habitat: aquatic (lakes)

Lifespan: perennial

Pathway: ornamental in aquaria and ponds

1st documented LU: 1975

Status LU: ISEIA A3 - **Black list**

Impact: behaves as native taxon



# *Impatiens glandulifera* (1)



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*Impatiens glandulifera* Royle

EN: Himalayan Balsam

LU: Drüse-Sprangkraut

DE: Drüsiges Springkraut

FR: Impatiente de l'Inde



<https://neobiota.lu/impatiens-glandulifera/>

# *Impatiens glandulifera* (2)



LE GOUVERNEMENT  
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Distribution map of *Impatiens glandulifera* ROYLE in Luxembourg. Recorder database, MNHNL, 19.03.2018.

## *Impatiens glandulifera* (3)

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LE GOUVERNEMENT  
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Origin: Himalaya (India, Nepal)

Habitat: Terrestrial (ruderal)

Lifespan: annual

Pathway: rivers, railways, roads

1st documentation LU: 1966

Status LU: ISEIA A3 - **Black list**





## Impacts:

- environmental: (-) competition (outshading, pollination)
- economic: (-) erosion
- social: (- & +) landscape (tourism)

## Measures:

Since 2017 pilot project of Nature Park Our to free the small river Bleeps (20 km).

# *Myriophyllum aquaticum* (1)



*Myriophyllum aquaticum* (Vell.) Verdc.

EN: Parrot's-feather

LU: Brasilien-Waassergras

DE: Brasilianisches  
Tausendblatt

FR: Myriophylle du Brésil



## *Myriophyllum aquaticum* (2)

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LE GOUVERNEMENT  
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Origin: Southern & Central America

Habitat: aquatic | Lifespan: perennial

Pathway: ornamental in aquarium & gardens

Status LU: ISEIA B1 - **·Watch list·**

Impact: strong negative environmental (competition, light, oxygen), social (tourism, mosquitoes) and economic impact (navigation, pipes and pumps, hydro-electric systems)



# *Myriophyllum heterophyllum* (1)



LE GOUVERNEMENT  
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*Myriophyllum heterophyllum* Michaux

EN: Various-leaved water-milfoil

LU: Wiesselblat-Waassergras

DE: Verschiedenblättriges

Tausendblatt (FR: n/a)



<https://neobiota.lu/myriophyllum-heterophyllum/>



FIG. 28.—Various-leaved water milfoil (*Myriophyllum heterophyllum*). Found in ponds, Ontario and New York to Florida, Texas, and Mexico. (After Britton & Brown.)

## *Myriophyllum heterophyllum* (2)

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LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG

Origin: South-Central USA

Habitat: aquatic | Lifespan: perennial

Pathway: ornamental (aquatic gardens, aquarium)

Status LU: ISEIA B0 - **Alert list**

Impact: strong negative environmental  
(competition, light, oxygen) and economic impact



# *Hydrocotyle ranunculoides* (1)



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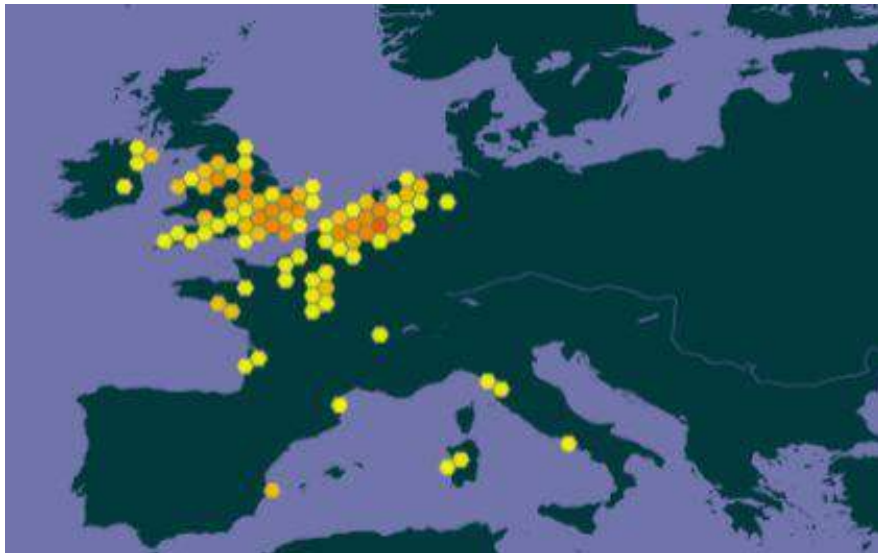
*Hydrocotyle ranunculoides* L. f.

EN: Floating pennywort

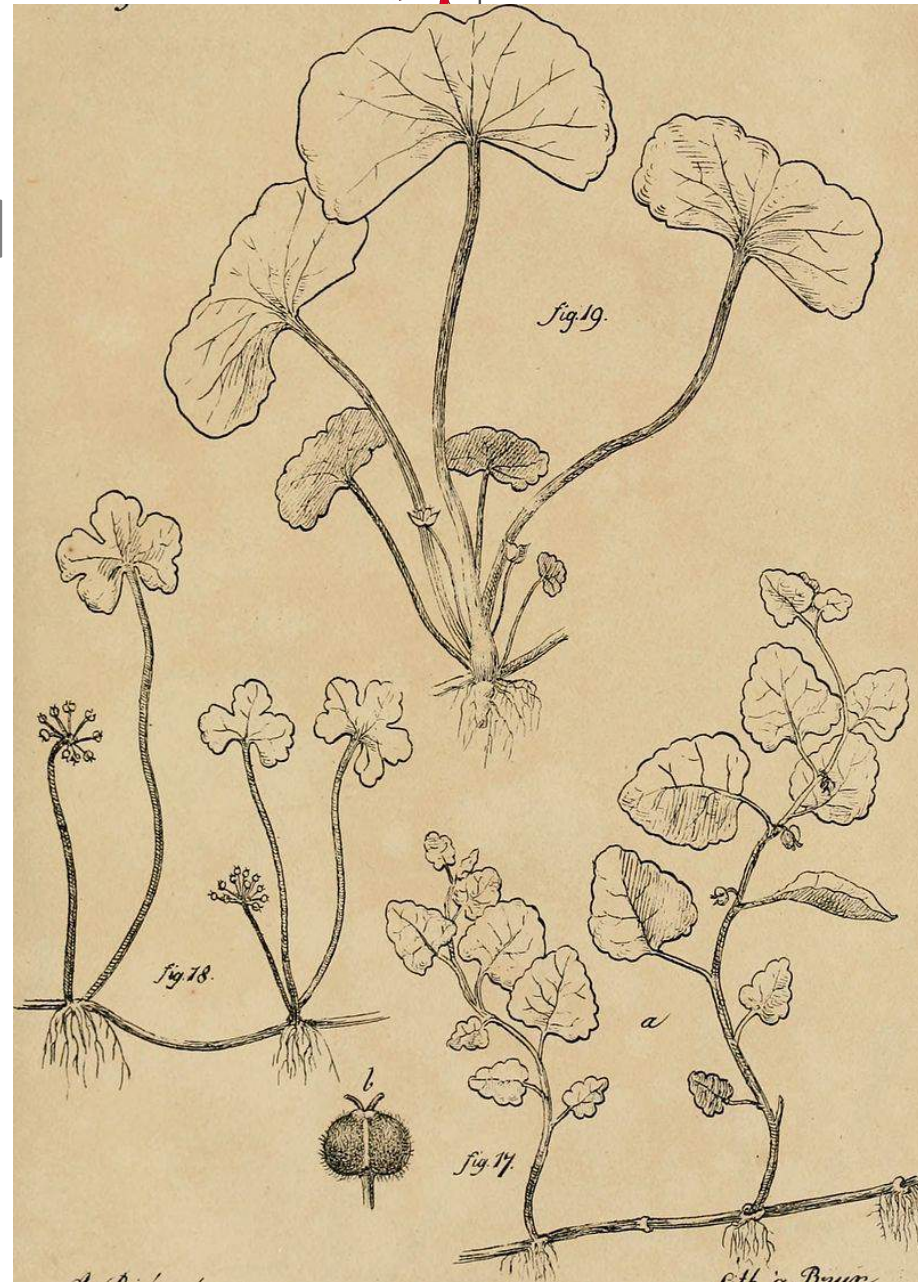
LU: Grousse Waassernuebel

DE: Großer Wassernabel

FR: Hydrocotyle fausse  
renoncule



<https://neobiota.lu/hydrocotyle-ranunculoides/>



## *Hydrocotyle ranunculoides* (2)



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Origin: North & South America & Africa

Maybe native to Mediterranean Europe

Habitat: aquatic (lakes) | Lifespan: perennial

Pathway: ornamental in ponds & aquarium

Status LU: ISEIA A0 - **Alert list**

Impact: strong negative environmental (competition, light), social (tourism) and economic impact (navigation, pipes and pumps)



# *Lagarosiphon major* (1)



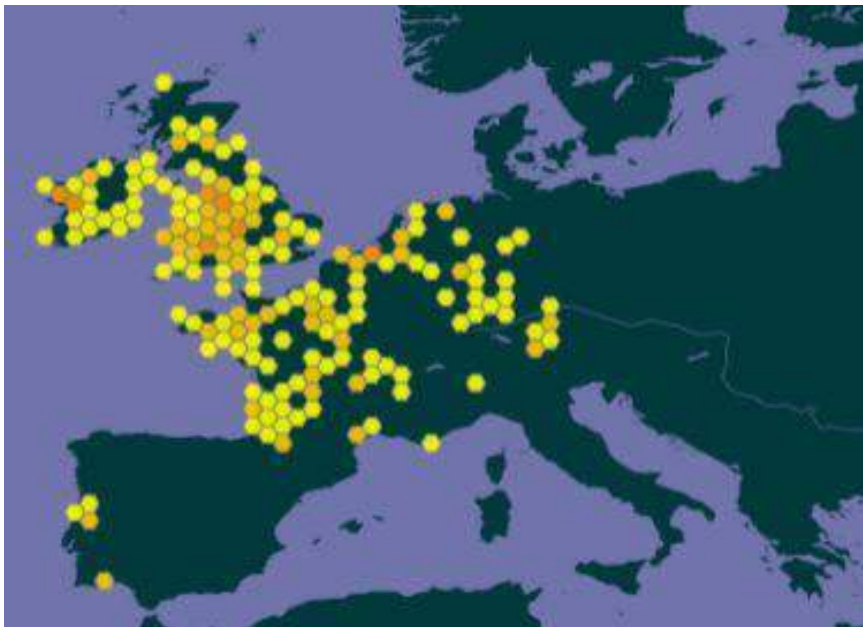
*Lagarosiphon major* (Ridley) Moss

EN: Curly waterweed

LU: Gekréngelt Waasserpescht

DE: Wechselblatt- Wasserpest

FR: Elodée crépue



<https://neobiota.lu/lagarosiphon-major/>



## *Lagarosiphon major* (2)

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LE GOUVERNEMENT  
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Origin: southern Africa

Habitat: aquatic | Lifespan: perennial

Pathway: ornamental in ponds (~~aquarium~~)

Status LU: ISEIA A0 - **Alert list**

Impact: strong negative environmental (competition, light, oxygen), social (tourism) and economic impact (navigation, pipes and pumps, intakes of hydro-electric systems, reservoirs)



# *Alternanthera philoxeroides*



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*Alternanthera philoxeroides* (Mart.) Griseb.

EN: Alligator weed

DE: Alligatorkraut

FR: n/a



# *Asclepias syriaca*



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*Asclepias syriaca* L.

EN: Common milkweed

DE: Gew. Seidenpflanze

FR: Asclépiade de Syrie



# *Baccharis halimifolia*



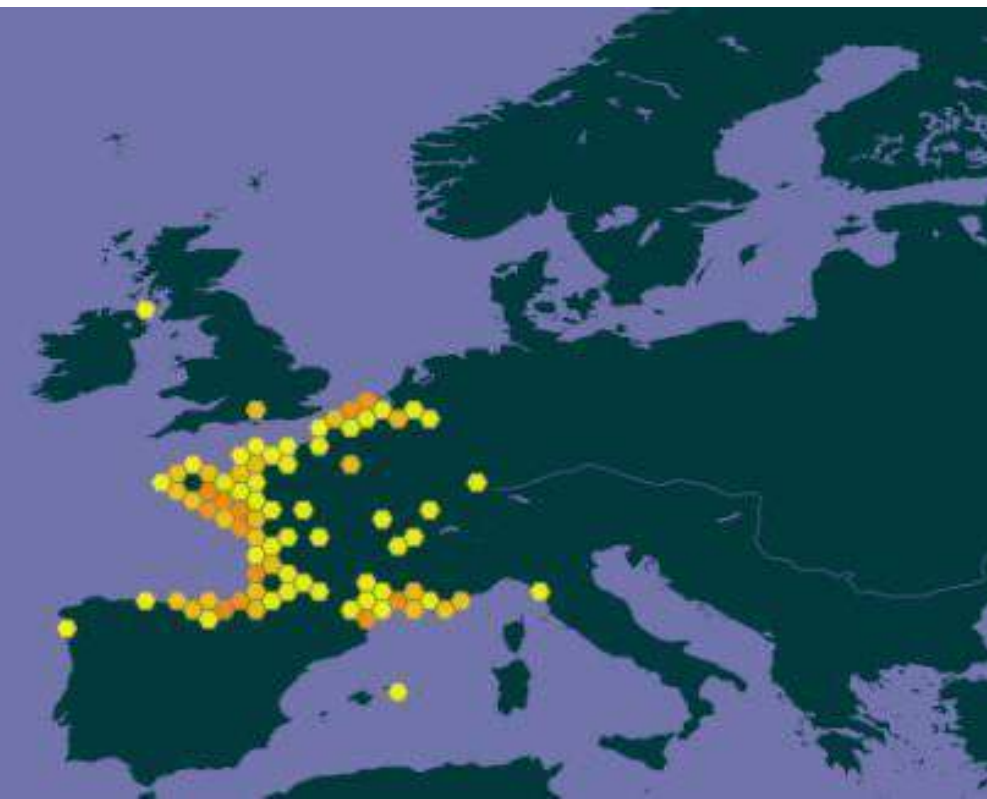
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*Baccharis halimifolia* L.

EN: Eastern baccharis

DE: n/a

FR: Séneçon en arbre



# *Cabomba caroliniana*



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*Cabomba caroliniana* Gray

EN: Green cabomba

DE: Karolina-Haarnixe

FR: n/a



# *Eichhornia crassipes*



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*Eichhornia crassipes* (Martius) Solms

EN: Water hyacinth

DE: Dickstielige

Wasserhyazinthe

FR: Jacinthe d'eau

*Eichhornia Crassipes*



# *Gunnera tinctoria*



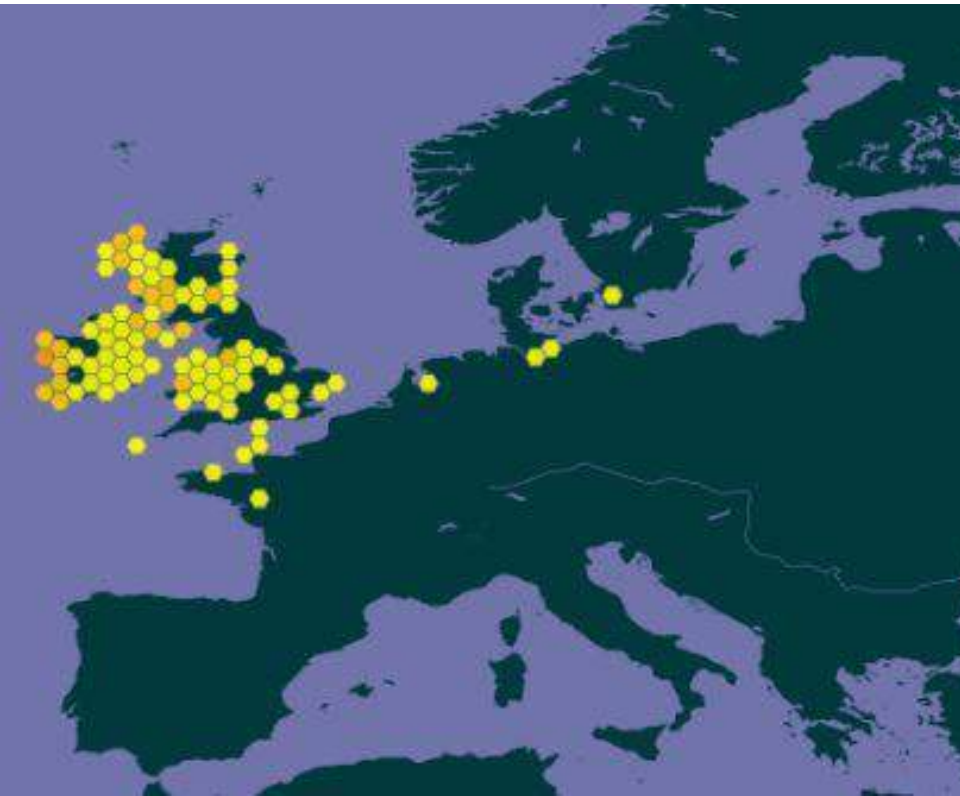
LE GOUVERNEMENT  
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*Gunnera tinctoria* (Molina) Mirbel

EN: Chilean rhubarb

DE: Färber-Mammutblatt

FR: Nalca, pangué



# *Ludwigia grandiflora*



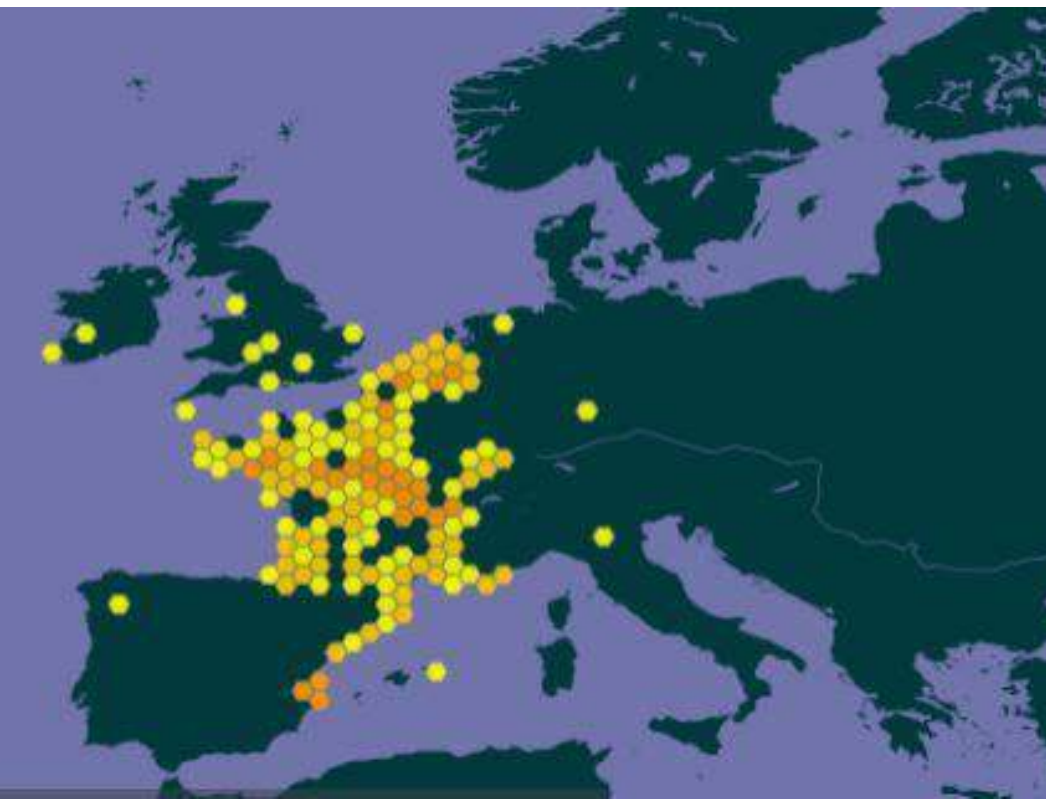
LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG

*Ludwigia grandiflora* (Michx.) Greuter & Burdet

EN: Water primrose

DE: Großblüt. Heusenkraut

FR: Grande Jussie



# *Ludwigia peploides*



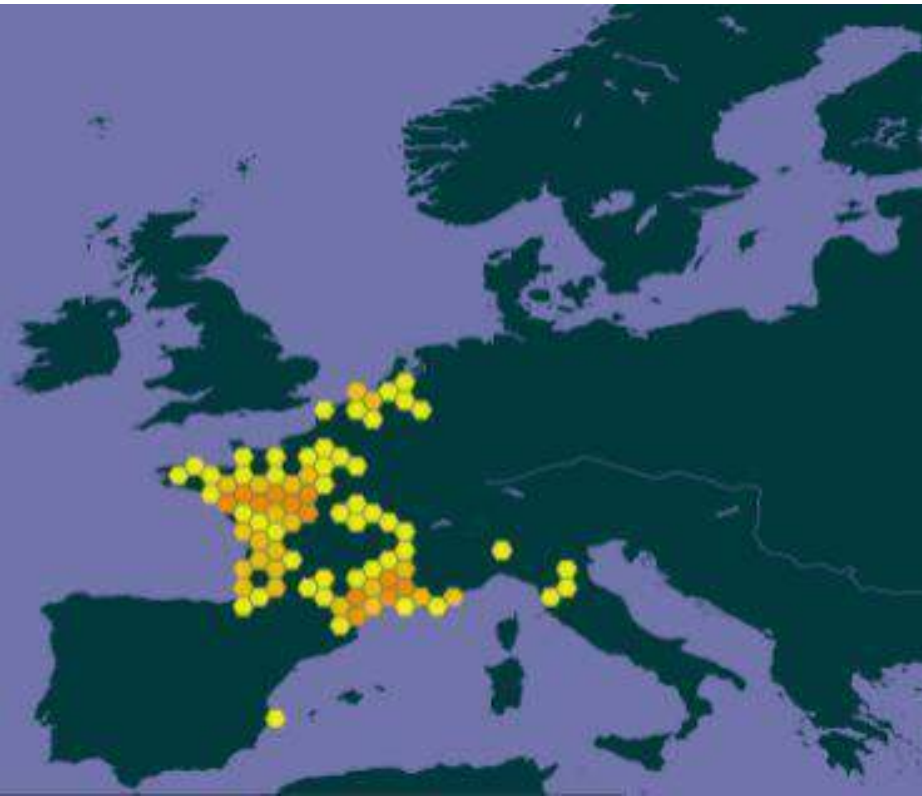
LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG

*Ludwigia peploides* (Kunth) P.H. Raven

EN: Floating primrose

DE: Kriech. Heusenkraut

FR: Jussie rampante



# *Lysichiton americanus*



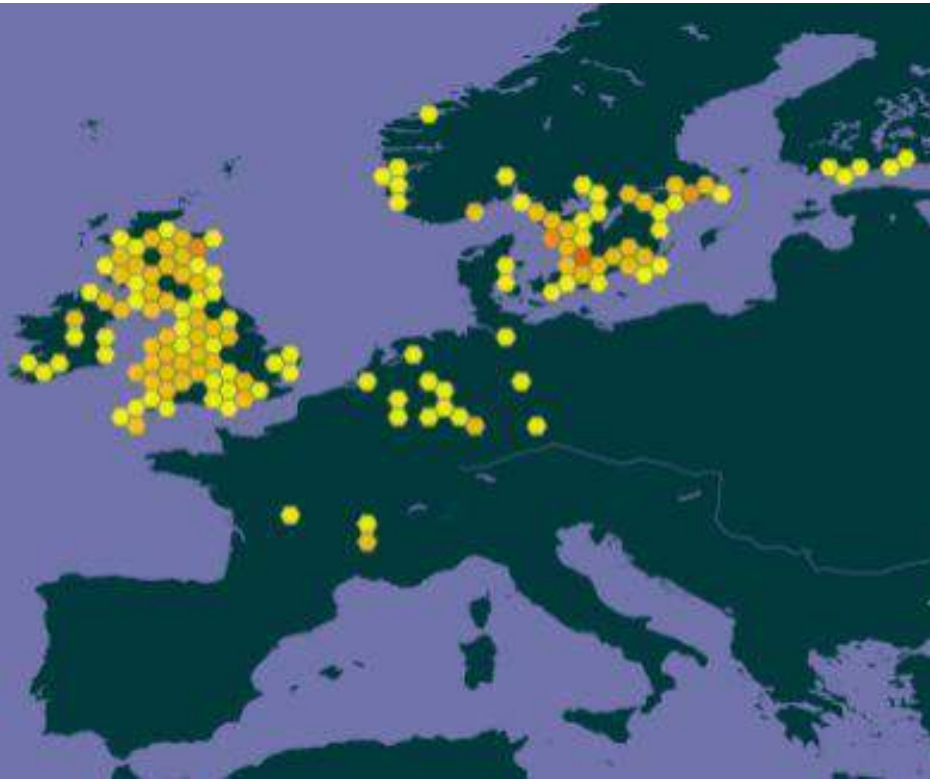
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*Lysichiton americanus* Hultén and St. John

EN: Amer. skunk cabbage

DE: Amer. Stinktierkohl

FR: Lysichiton américain



# *Parthenium hysterophorus*



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*Parthenium hysterophorus* L.

EN: Whitetop weed

DE: n/a

FR: Parthénium matricaire



# *Pennisetum setaceum*



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*Pennisetum setaceum* (Forssk.) Chiov.

EN: Crimson fountaingrass

DE, FR: n/a



# *Pueraria montana*



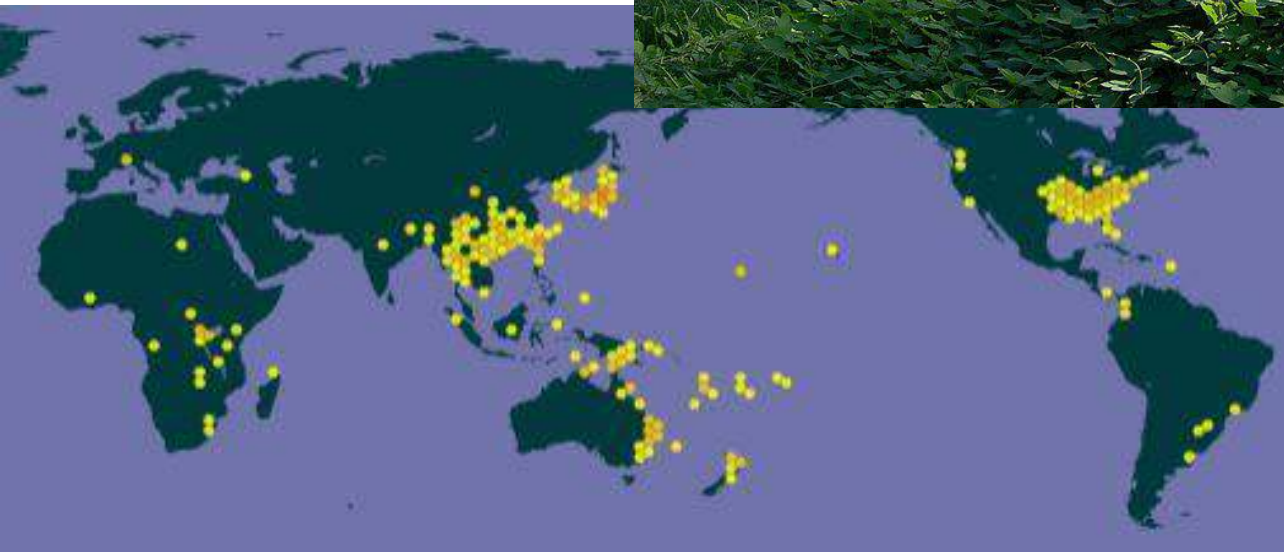
LE GOUVERNEMENT  
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*Pueraria montana* (Lour.)  
Merr. var. *lobata* (Willd.)

EN: Kudzu vine

DE: Kudzu

FR: n/a



# *Persicaria perfoliata*

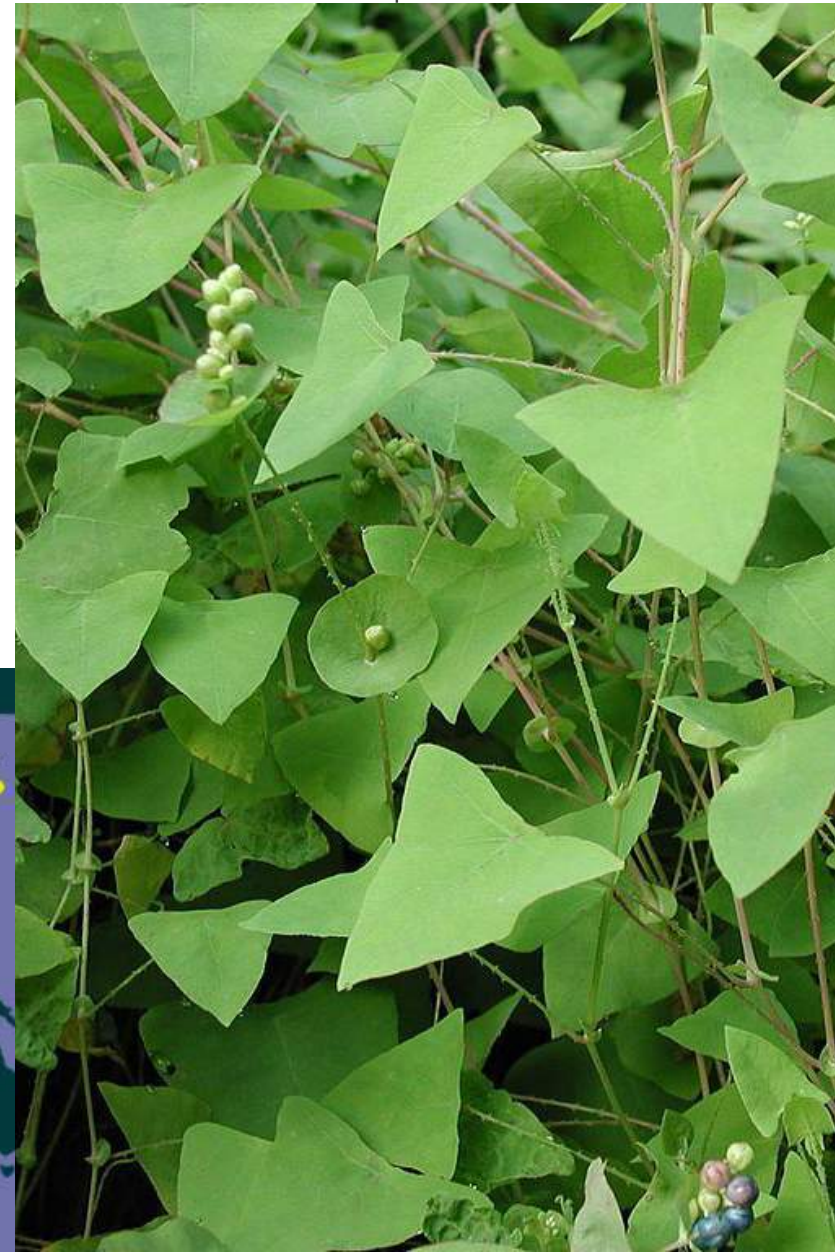


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*Persicaria perfoliata* (L.) H. Gross

EN: Asiatic tearthumb

DE, FR: n/a



# *Microstegium vimineum*

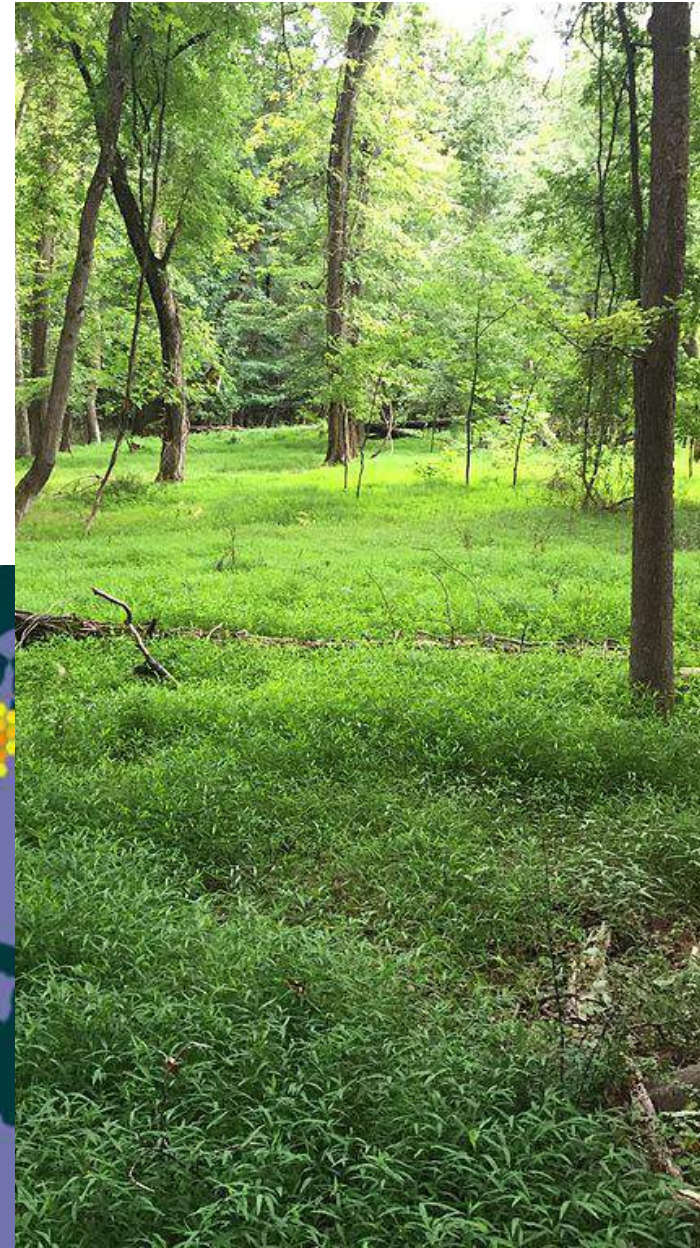


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*Microstegium vimineum* (Trin.) A. Camus

EN: Japanese stiltgrass

DE, FR: n/a



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Merci de votre attention  
-> [www.neobiota.lu](http://www.neobiota.lu)

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