



# Invasive exotic plants in the garden - an overview



THE GOVERNMENT  
OF THE GRAND DUCHY OF LUXEMBOURG  
Ministry of the Environment,  
Climate and Biodiversity



*Fallopia japonica*

## Invasive exotic plants in the garden - an overview



## Foreword

Invasive neophytes present a significant challenge to our environment, increasingly threatening native plant and animal species. The spread of these non-native plants jeopardises biodiversity, disrupts ecosystems, and leads to substantial costs for their management and control. Our gardens, parks, and green spaces are more than just places of leisure - they are vital areas where we can actively support ecological balance. By making thoughtful, informed choices about the plants we cultivate, we can help protect and restore ecological balance.

Serge Wilmes

Minister of the Environment, Climate and Biodiversity



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*Impatiens glandulifera*

## What are invasive neophytes?

Invasive neophytes are plant species that have been introduced – intentionally or unintentionally – into regions where they are not naturally found.

When these non-native plants begin to spread and establish themselves permanently in the wild, they are considered invasive. These species can form dense populations that outcompete and displace native flora, disrupting the natural balance of ecosystems.

You can find invasive alien plants almost everywhere: in cities, forests, meadows, along roadsides, waterways, as well as ponds, parks, gardens and private grounds.

Invasive alien plants can:

- Outcompete and displace native plant species
- Spread plant diseases
- Hybridize with native species, altering genetic diversity
- Obstruct waterways
- Pose health risks to humans

## How do invasive neophytes enter the environment?

Many invasive alien plants were originally brought in as ornamental species for gardens and landscaping. Even today, some are still sold and planted in parks, gardens, ponds and aquariums – often without awareness of the ecological risks they pose.

Unintentional introductions usually take place as seed good or transport companions, often through shipping and air traffic.

## Why talk about invasive neophytes?

Invasive alien plants pose a range of threats, with different species causing various types of harm. These include:

- Displacement of native species through direct competition and the formation of dense, interconnected stands
- Loss of biodiversity as local, site-specific plant species are pushed out, leading to a more uniform and less resilient plant landscape
- Genetic homogenisation through hybridisation with native species, which can weaken the genetic diversity of local flora
- Health risks due to the introduction of plants that can trigger allergies or other adverse reactions
- Erosion damage to stream and watercourse banks, weeds in agriculture, damage to infrastructure and high removal costs

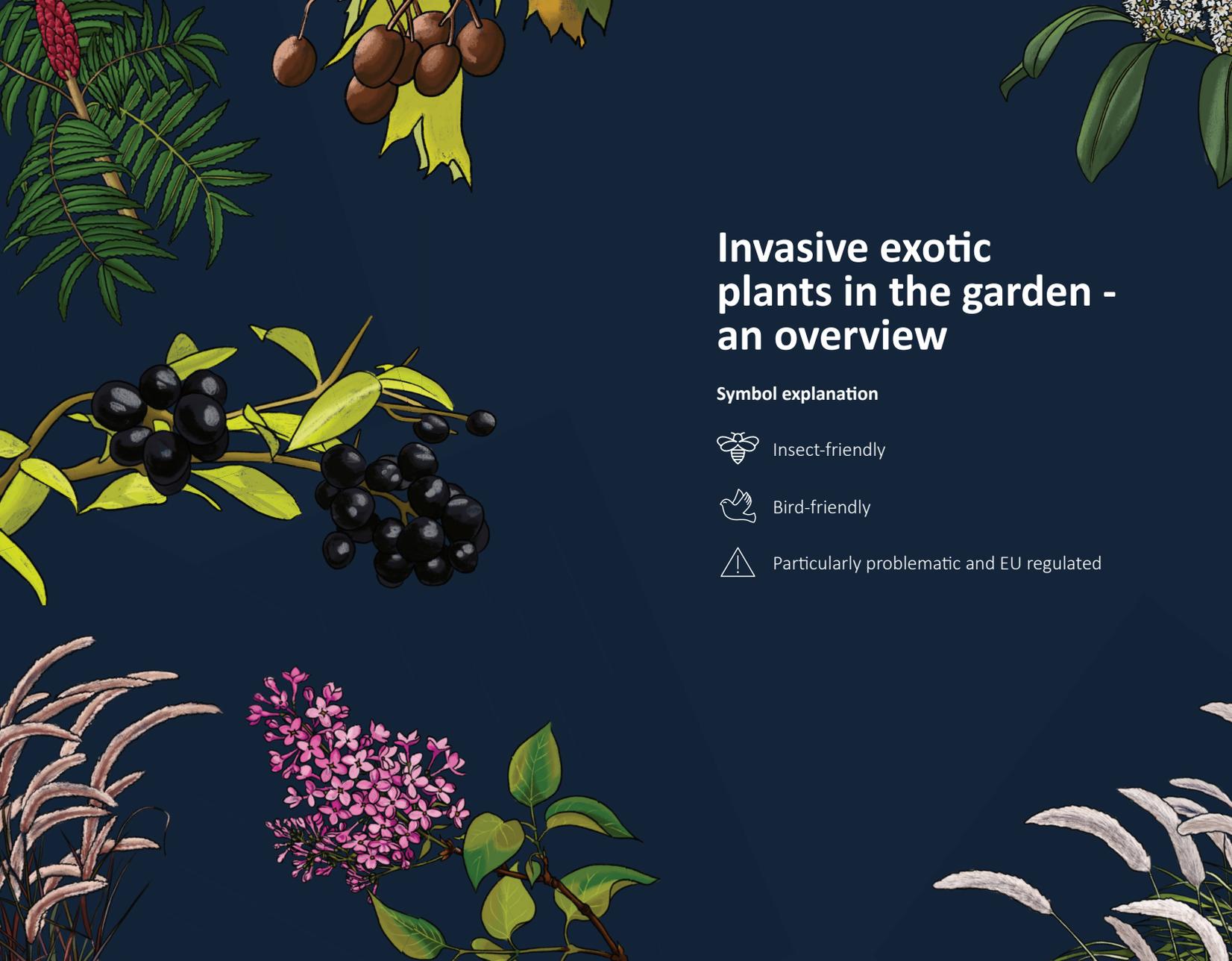
## What can we do?

To help limit the spread and impact of invasive neophytes, we can take the following actions:

- Learn to identify invasive neophytes and avoid using them in plant production, sales, landscaping, or planting
- Never dispose of garden or green waste in nature, as it may contain seeds, stems, or root fragments of invasive plants that can regenerate and spread
- Remove invasive neophytes responsibly and dispose of them correctly. Guidance on proper removal and disposal can be found in the *Guide d'identification et de gestion d'espèces de plantes exotiques envahissantes sur les chantiers*
- Choose alternatives to invasive neophytes, ideally native plants that support local biodiversity
- Compost with care

## What does the law say?

Under EU Regulation 1143/2014, the sale, planting, and intentional release of species listed as *Invasive Alien Species of Union Concern* is strictly prohibited. This regulation aims to prevent, minimise, and manage the adverse impacts of invasive species.



# Invasive exotic plants in the garden - an overview

## Symbol explanation



Insect-friendly



Bird-friendly



Particularly problematic and EU regulated



invasive neophyte

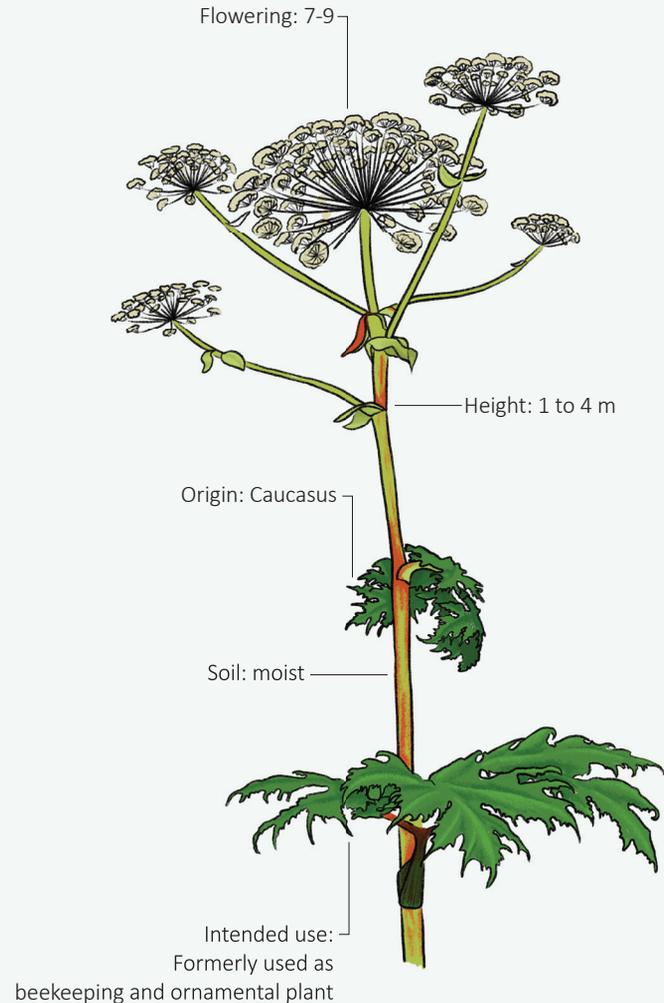


## *Heracleum mantegazzianum*

Giant hogweed – Rackebrot

**Problem:** The tall and dense-growing plant outcompetes native species. The abundant seeds can disperse over several kilometres. It may be easily mistaken for the native meadow hogweed (*H. sphondylium*).

In addition to its ecological impact, this plant poses a serious health risk to humans. Contact with its sap, combined with exposure to sunlight, can cause severe skin burns.



indigenous



## *Heracleum sphondylium*

Meadow hogweed – Schierleke

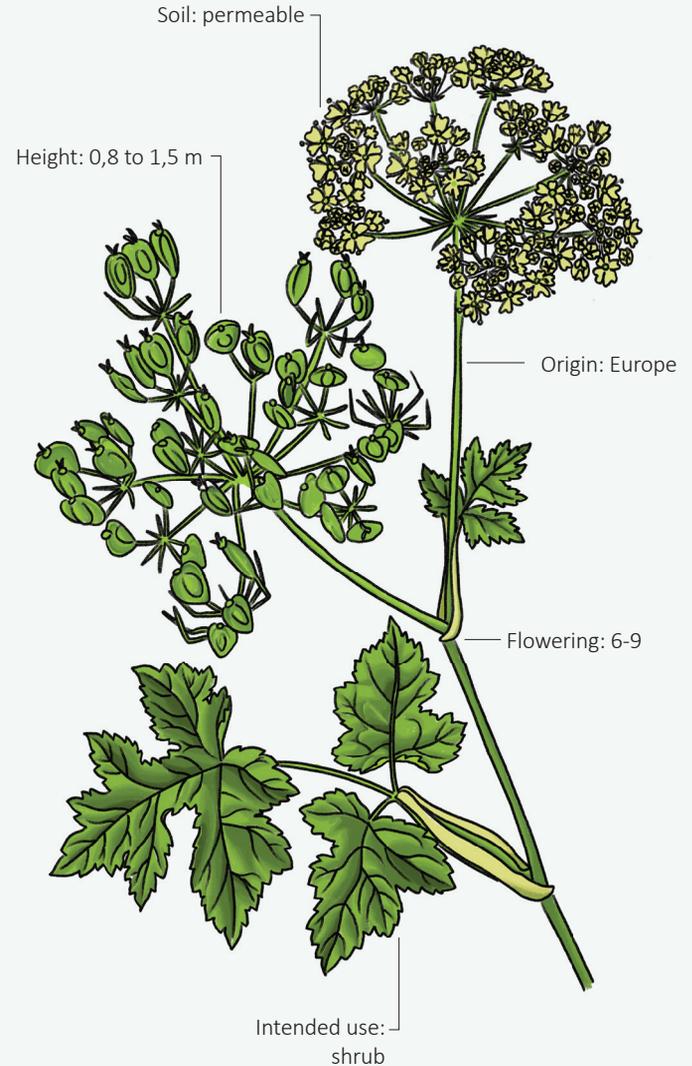
Meadow hogweed is well known from wildflower meadows, but it can also be planted decoratively alongside shrubs and hedges. It pairs well with other perennials and works beautifully as a background plant in borders or as a striking standalone feature. It is an excellent food source for bees, wild bees, beetles and butterflies, and also serves as a host plant for caterpillars.



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invasive neophyte



## *Pennisetum setaceum*

African feather grass –

Afrikanescht Lanterbotzgeras

**Problem:** *Pennisetum setaceum* thrives very well in warmer, drier areas. As it competes very effectively through sowing and vegetative growth, it threatens many native species. It also tends to increase the risk of intensive forest fires, to which it is well adapted.



Flowering: 7-8

Soil:  
permeable to humic

Height: 50 to 100 cm

Origin:  
Africa, Asia

Intended use:  
Ornamental plant





## *Pennisetum alopecuroides* 'Hameln'

*Fountain Grass*

A richly flowering ornamental grass that remains attractive throughout autumn and well into winter. 'Hameln' is a compact, vigorous cultivar known for its striking flower spikes, which turn a beautiful golden yellow in autumn. Ideal for urban settings, this grass does not spread aggressively, making it a low-maintenance and visually appealing choice for gardens and public spaces.

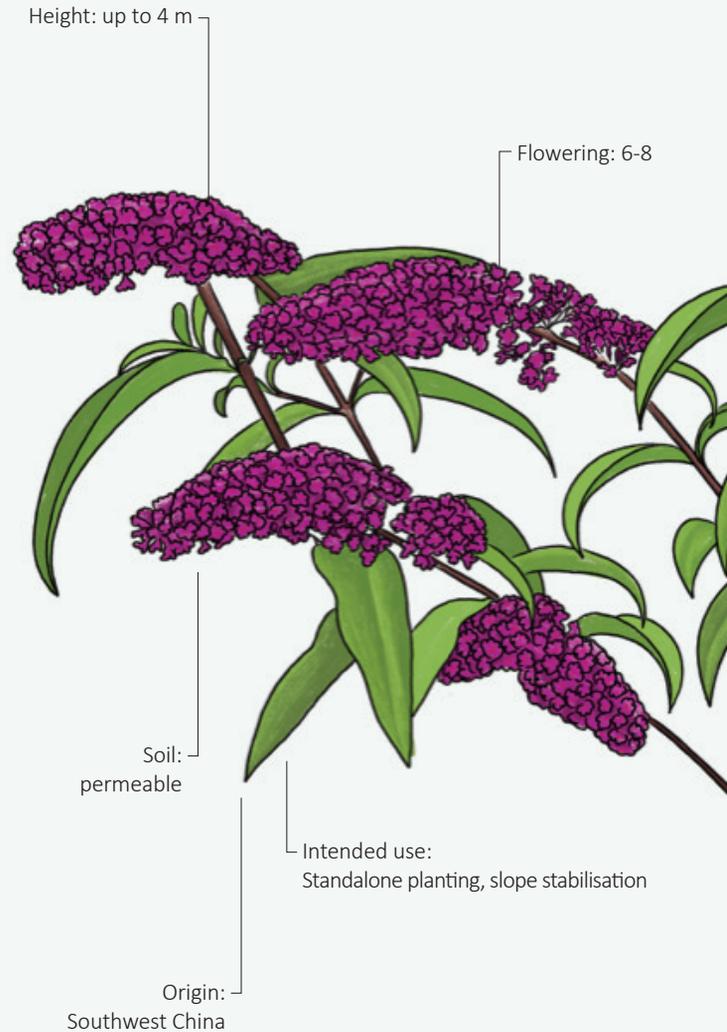


invasive neophyte

## *Buddleja davidii*

Butterfly bush – Päiperleksbam

**Problem:** *Buddleja davidii* spreads widely through its numerous lightweight seeds, which are easily dispersed by the wind. These seeds remain viable for a long time, allowing the plant to establish itself rapidly. It commonly colonises disturbed or waste ground and forms dense stands that outcompete native vegetation due to its dominant growth. Although often associated with butterflies, it actually has a negative impact on butterfly populations, as it displaces the native host plants that many rarer species rely on for food and reproduction.

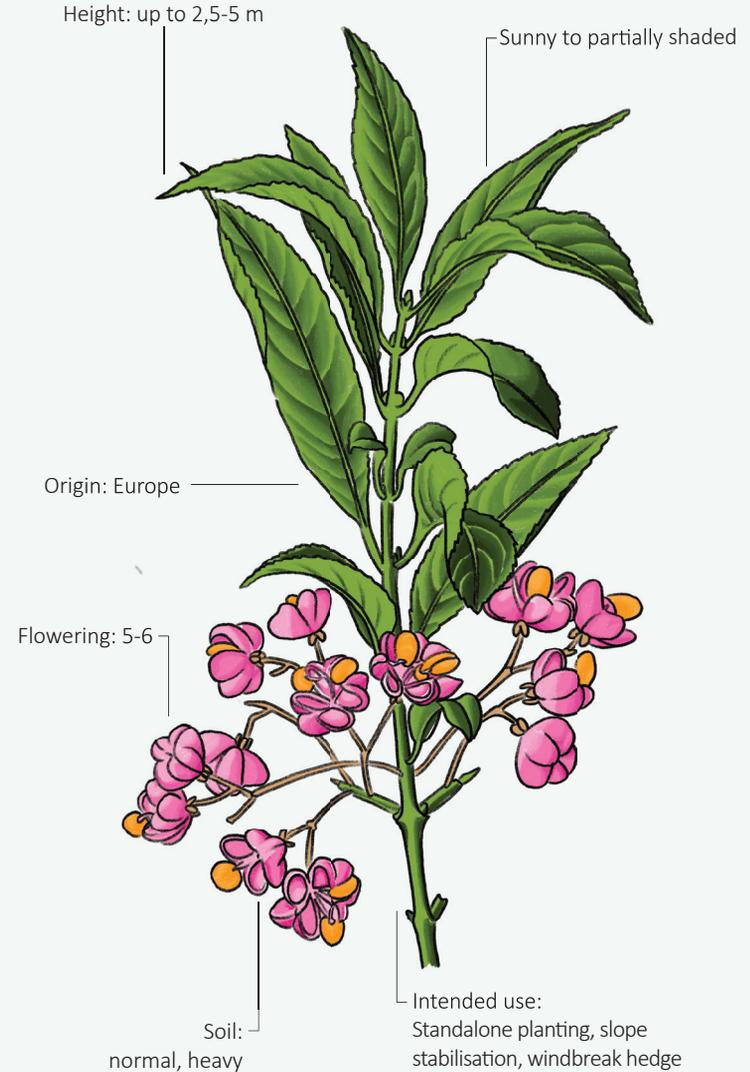


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## *Euonymus europaeus*

*Spindle – Mutzelchen*

This native wild shrub is known for its eye-catching, deep purple fruits and vibrant autumn foliage, which ranges from yellow-orange to deep red. It forms a dense, shallow-rooted structure that is highly adaptable, tolerating both drought and temporary flooding. Beyond its ornamental value, the shrub plays a vital ecological role: it provides nectar for flies and butterflies, serves as a host plant for caterpillars, and offers an important food source for birds during the autumn and winter months.





invasive neophyte

## *Syringa vulgaris*

*Common lilac – Neelchesbam*

**Problem:** There are many cultivated varieties of common lilac. This clonally growing species has a high potential for spreading, primarily through the dispersal of root fragments. It can form dense stands and become dominant, often outcompeting and displacing other plant species in the area.



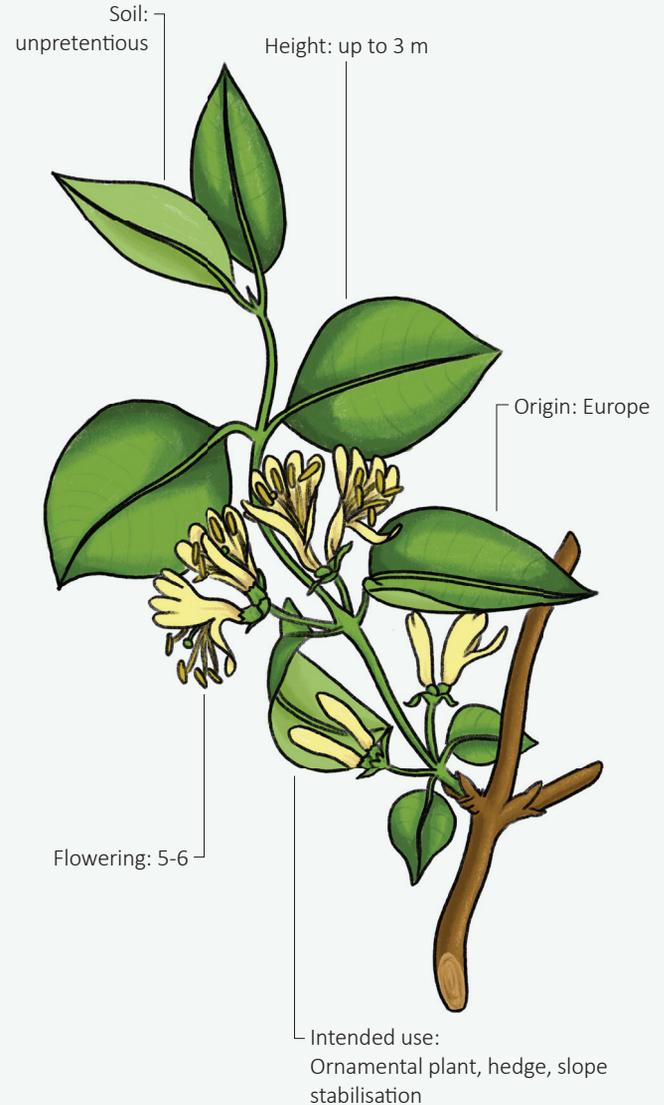


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## *Lonicera xylosteum*

Fly honeysuckle – Bënselter

A well-branched shrub with attractive flowers and striking red berries. It is tolerant of pruning and resilient to wind, heat, drought, and road salt. This plant is an excellent nectar source for bees, butterflies, and bumblebees, serves as a host plant for caterpillars, and its berries provide valuable summer food for birds.





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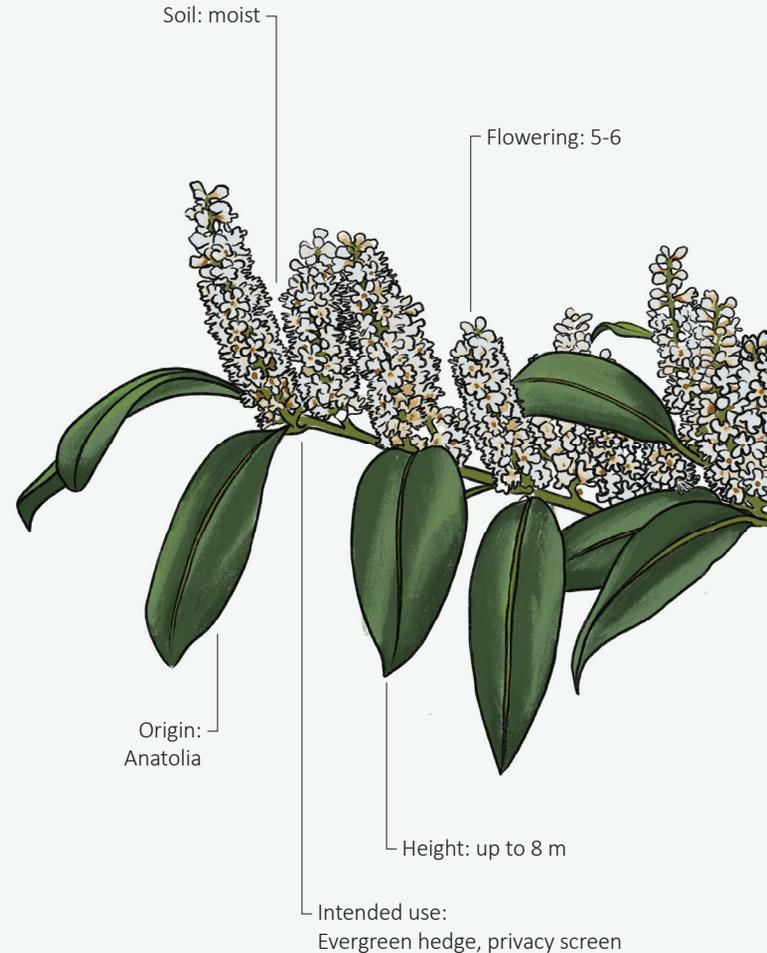
invasive neophyte



## *Prunus laurocerasus*

Cherry laurel – Lorber-Kiischtebam

**Problem:** Cherry laurel is available in many cultivated varieties, all of which present similar ecological concerns. Its fruits are readily eaten by birds, which contribute to its long-distance spread. The plant produces vigorous basal shoots, making removal particularly difficult. Highly vigorous and fast-growing, cherry laurel often escapes cultivation, especially in deciduous woodlands, where it forms dense undergrowth that suppresses native plant species.





indigenous

## **Ligustrum vulgare**

*Wild privet – Grénge Faulbam*

Evergreen, shallow-rooted shrub that tolerates drought and, temporarily, even waterlogged conditions. Highly tolerant of pruning. Numerous insect species benefit from its abundant supply of pollen and nectar. It also serves as a food plant for certain caterpillars. The fruits provide valuable food for birds and small mammals in autumn and winter. Additionally, it is an excellent nesting shrub for birds.





invasive neophyte

## *Rhus typhina*

Staghorn sumac – Essegbam

**Problem:** The dense root system, with numerous extrusion, forms thick stands that displace native vegetation. The highly competitive staghorn sumac spreads primarily through the dispersal of root fragments or shoots. As a result, it often becomes invasive in abandoned gardens, landfill sites, and other areas where waste has been deposited.



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## *Sambucus nigra*

*Black elderberry – Schwarzen Hieenner*

A large, fast-growing shrub with attractive, fragrant flowers. Exceptionally hardy and tolerant of heat. It is an excellent nectar source for bees and butterflies, a host plant for caterpillars, and its berries provide valuable winter food for birds. Humans also make use of the plant: the flowers are used to produce syrup, while the berries are commonly made into syrup and jelly.





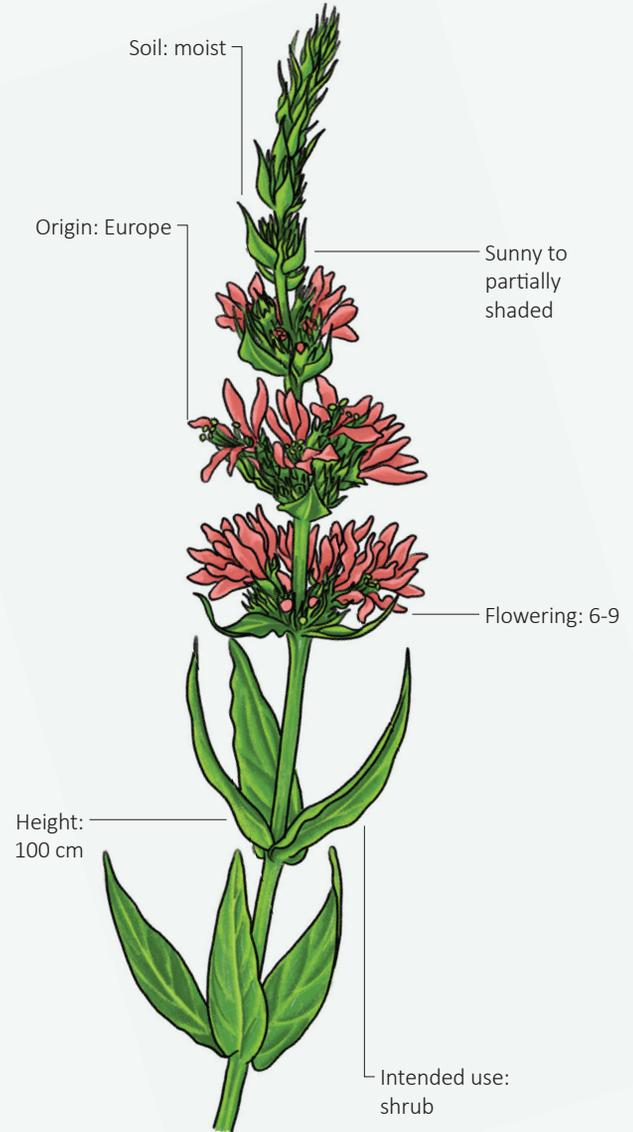
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## *Lythrum salicaria*

*Purple-loosestrife – Dausendknuet*

An impressive, robust perennial with a deep-reaching rhizome. This clump-forming plant grows in almost any fertile and moist soil. It is an important nectar source for bees and a food plant for the caterpillars of many butterflies. The extremely nectar-rich flowers are especially visited by hoverflies, bees, and butterflies. Two species of wild bees rely exclusively on the pollen of the purple loosestrife. It also serves as caterpillar food for rare butterfly species.

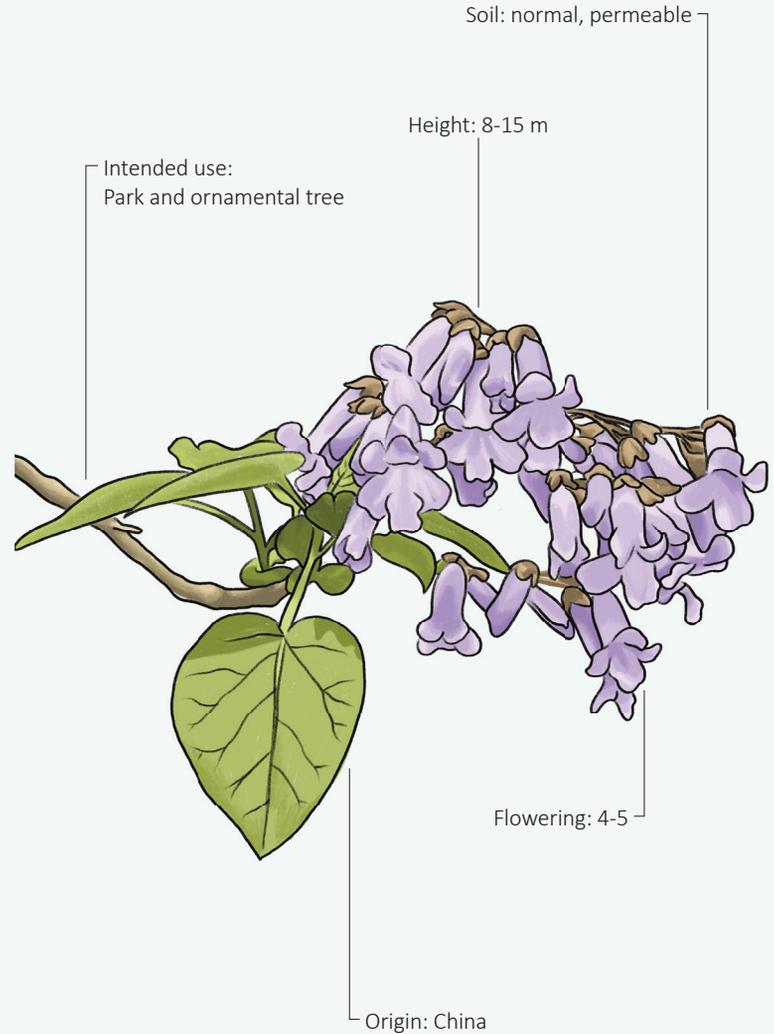


invasive neophyte

## *Paulownia tomentosa*

Foxglove tree – Fëlzege Paulownia

**Problem:** *Paulownia tomentosa*, commonly known as the foxglove tree, is an extremely fast-growing species with seeds that spread easily. It has a tendency to invade natural habitats, where it self-seeds prolifically and regenerates from roots and stumps. This aggressive growth can lead to the formation of monocultures, displacing native vegetation and posing a threat to biodiversity.



indigenous



## *Sorbus torminalis*

Wild service tree – Ielechter

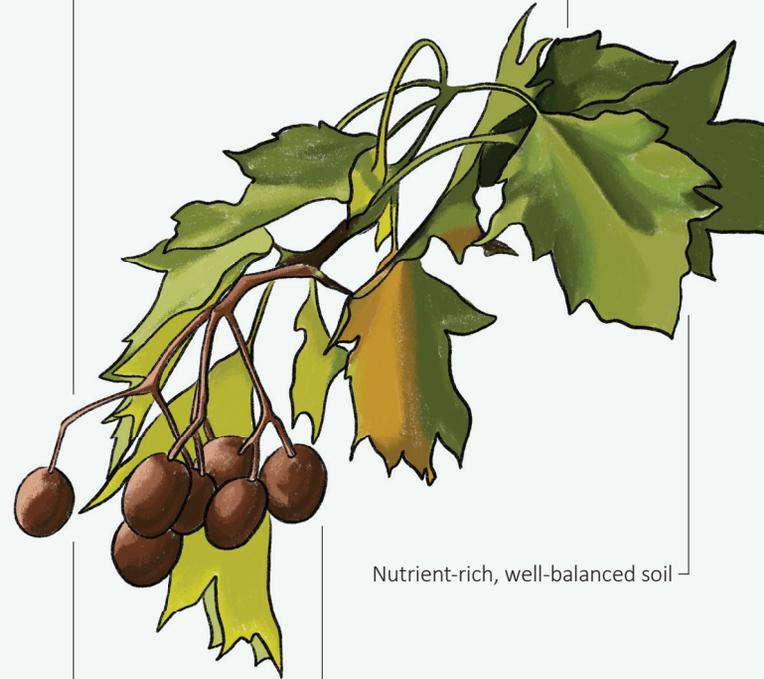
Hardy and low-maintenance, with excellent tolerance to heat, drought, and severe frost. Displays attractive bronze-yellow autumn foliage. After the first frosts, the fruits can be used to make compote, jam, or schnapps. A popular winter food source for birds, and the leaves serve as a host plant for the caterpillars of various butterfly species.



Flowering: 4

Intended use:

Tree for gardens, parks, and streets, with a compact, upright crown



Nutrient-rich, well-balanced soil

Height: 15-20 m

Origin: Europe

# Invasive neophytes and their alternatives

for gardens and green spaces

This 120-page brochure provides comprehensive information on invasive neophytes and their alternatives —plants that are particularly well-suited for designing gardens and green spaces while also promoting biodiversity.

The guide is intended for the entire horticultural and urban planning sector, as well as for municipalities and private individuals.

Publisher: Nature and Forest Agency (ANF)

Author: Ëmweltberodung Lëtzebuerg asbl (EBL)

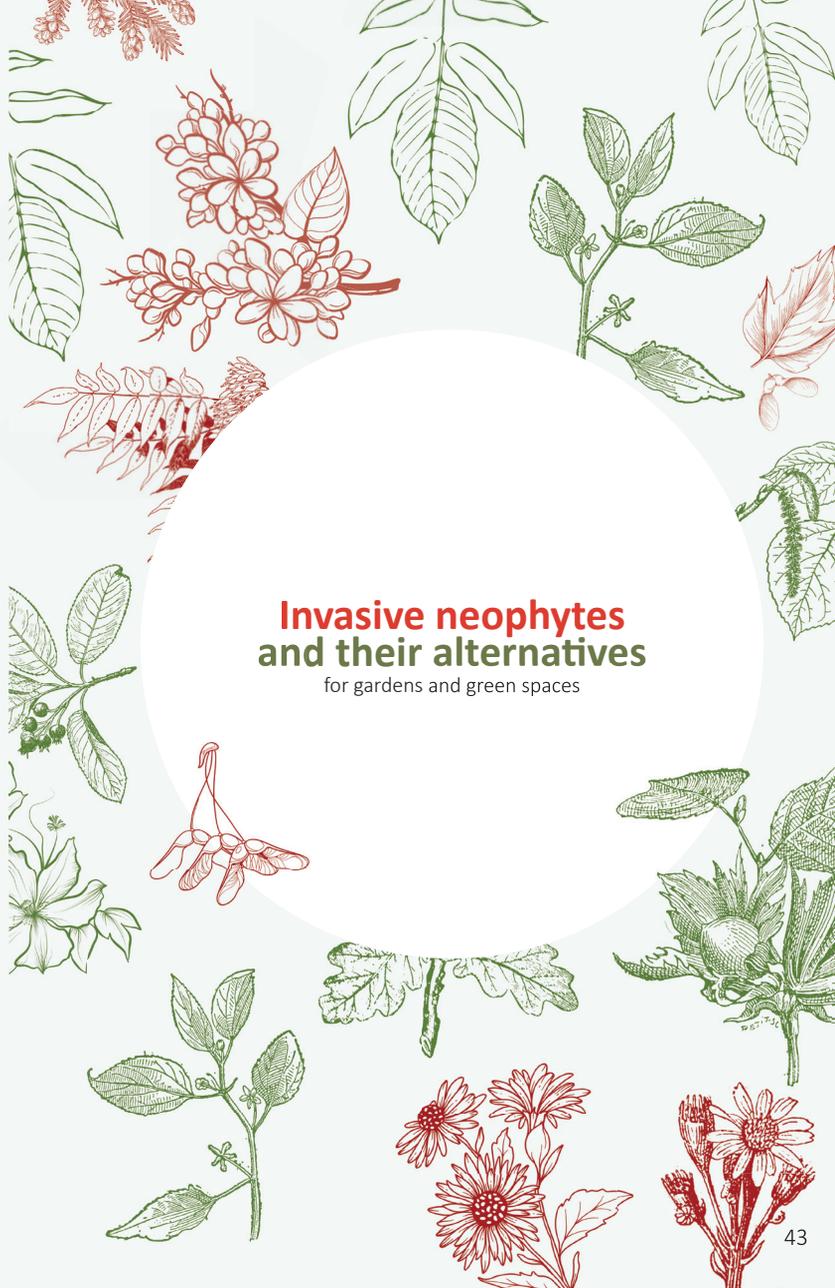
Design: Ministry of the Environment, Climate and Biodiversity (MECB)



Available for download at [emwelt.lu](http://emwelt.lu)

## Invasive neophytes and their alternatives

for gardens and green spaces



## More information on invasive neophytes



National strategy on invasive alien  
species

[emwelt.lu](http://emwelt.lu)



Guidelines for the identification and  
management of invasive alien plant  
species on construction sites

[emwelt.lu](http://emwelt.lu)



Official information platform on invasive  
alien species in Luxembourg

[neobiota.lu](http://neobiota.lu)



*Heracleum sphondylium*

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*Rhus typhina*



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