## Himalayan Balsam

(Impatiens glandulifera)

Common Names: Himalayan balsam, Indian balsam, Balsam

Family: Balsaminaceae (Balsam family)

### Status in Ireland

Himalayan Balsam is an Invasive species, listed under the European Communities (Birds and Natural Habitats) Regulations 2011. It is illegal to plant or cause its spread.

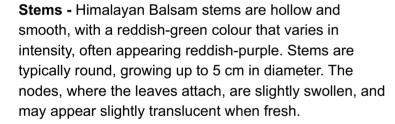
### **Description / Profile**

Himalayan balsam is invasive species in Ireland and listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011, which makes it an offence to plant, disperse, or allow the species to grow in the wild. It poses significant threats to native biodiversity, primarily in riparian areas, wetlands, and along riverbanks. The plant spreads rapidly, outcompeting native vegetation and leading to a loss of plant diversity. Its shallow root system can also contribute to soil erosion along waterways once the plant dies back in winter, leaving riverbanks exposed.



**Size -** Himalayan Balsam can grow over 3 metres in height.

Leaves - distinctive long and narrow lance-shaped leaves pointed at the tips. They are between 6 and 15 cm in length and arranged oppositely or in whorls of three along the stem. Leaf edges are serrated, with noticeable teeth, and a reddish tint on the midrib. Surfaces are smooth, with a prominent central vein, and they can appear glossy when the plant is flowering.



Flowers - Flowers are typically pink to purplish in colour, occasionally white, up to 4 cm across, and have a shape resembling a bonnet, with a hooded upper sepal and a broader, open lower lip. Flowers have five petals, with three larger outer petals and two smaller inner ones. They grow in clusters on long stalks, emerging from the leaf axils. They produce a sweet, fragrant scent.

Seeds - Himalayan balsam produces small, elongated seed pods, typically measuring 2 to 3 cm in length. Each pod contains several round, black seeds, about 2 to 4 mm in diameter. Seed pods are highly sensitive to touch and burst open explosively, ejecting seeds up to 7 metres, helping it to spread rapidly.

Roots - Himalayan Balsam has a shallow root system consisting of fine, fibrous roots. The roots are relatively weak and do not penetrate deeply into the soil, which makes the plant easy to pull up manually. However, this shallow rooting contributes to soil instability, especially along riverbanks. When the plant dies back in winter, the exposed soil becomes more susceptible to erosion, leading to further habitat degradation.



Habitat

riparian areas, where it can quickly dominate due to its rapid growth. The plant also grows in wetlands, damp woodlands, ditches, and hedgerows. Its preference for wet soils allows it to establish dense stands, outcompeting native species and

In Ireland, Himalayan balsam is classified as an invasive alien species due to its to plant or cause the spread of the species in the wild. Control efforts often focus on mechanical removal, grazing, or herbicide treatments, especially in areas near

### **Control & Management**

Effective management requires a combination of herbicide application, mechanical removal, and careful monitoring, particularly in sensitive or protected

**Note:** Herbicide use near watercourses requires special permission from the local council or the Environmental Protection Agency (EPA).

Herbicide treatment (such as our Green Matters™ foam treatment) - is the most effective method, particularly when applied in late summer/early autumn when the plant is storing energy in its roots. If near watercourses, use only aquatic-approved herbicides to prevent contamination and consider manual pulling of the plant in sensitive areas. Maintain a buffer zone (at least 10 metres) and avoid herbicide run-off.

**Growth Stage** - Use appropriate herbicide formulations depending on the growth stage, example, in early growth (spring), full height (summer), flowering (late summer), or dying back (autumn/winter).

### **Mechanical Control**

Excavation - mechanical removal can be effective and can be conducted all year round but must be

**S.O.S.**<sup>™</sup> - JKC soil screening service is an option to reduce costs. Screened soils can be re-used on site to

Manual Removal - For small infestations, manual removal of plants, including roots, can be effective. Ensure

**Treatment Bund** - If there is space on the site, a treatment bund can be considered. Vector material should be placed in a prepared bund that is lined with root barrier and monitored / treated until new growth is completely suppressed.







Himalayan balsam (Impatiens glandulifera) typically thrives in moist, nutrient-rich habitats in Ireland. It is most commonly found along riverbanks, streams, and other

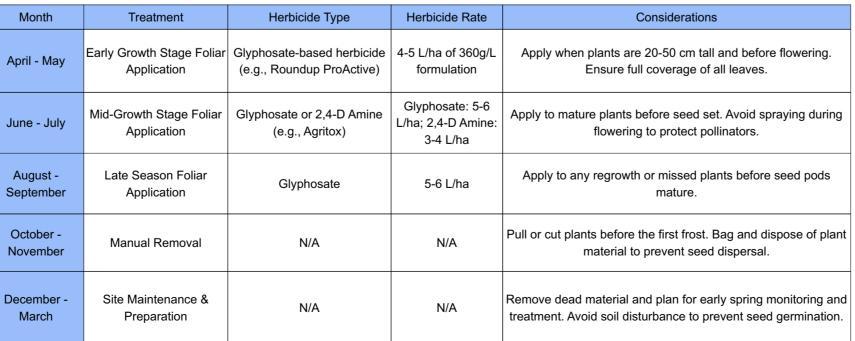
aggressive spread and negative ecological impacts. It is listed under the European Communities (Birds and Natural Habitats) Regulations 2011, which make it illegal

areas.

done carefully to ensure all roots are removed.

minimising materials requiring disposal.

Root Barriers - Barriers can be installed to prevent the spread of roots into adjacent properties. Installing root barriers can help contain the spread of roots, particularly near infrastructure or sensitive areas.



Reporting sightings of invasive species in Ireland to the National Biodiversity Data Centre and/or the relevant local authority.

https://records.biodiversityireland.ie/start -recording.

### Monitoring and Maintenance

Regular monitoring of the site is essential, particularly after initial treatment or excavation. Plan for follow-up inspections of treated / excavated areas for at least 2-3 years to check for regrowth or new infestations.

### Himalayan Balsam in Ireland, recorded by the National Biodiversity Data Centre.

This map shows the current (2024) distribution of

### **Environmental Considerations**

Herbicide Handling - Use PPE, including gloves, goggles, and long-sleeved clothing. Avoid skin and eye contact and inhalation. Follow all safety instructions on

**Herbicide Application Method** - Use foliar spraying for large infestations mecanical removal method for smaller stands or in sensitive areas. Ensure accurate calibration of spraying equipment to avoid over-application.

**Weather Conditions** - Apply during calm, dry conditions to minimise drift. Avoid application during heavy rainfall or when rain is forecast within 6 hours to reduce run-off.

> Storage & Disposal - Store herbicides securely in a dry, wellventilated area away from water sources. Dispose of containers and unused herbicides according to local regulations to prevent environmental contamination.

> > Watercourses - Himalayan Balsam can spread easily along rivers and streams in Ireland, where water can carry seeds downstream.

Soil Movement - Soil movement or excavation might cause further spread, such as during construction

**Proximity to Infrastructure** - Himalayan balsam's shallow root system provides minimal soil reinforcement, which can increase the risk of erosion, especially along riverbanks and steep slopes. When the plant dies back in winter, the absence of vegetation cover leaves the soil exposed, potentially destabilising banks and

Himalayan Balsam Survey / embankments. This can affect infrastructure such as roads, railways, and bridges by undermining foundations and increasing

Communities (Birds and Natural Habitats)

management practices is crucial.

Regulations 2011, it is illegal to cause the spread of

Himalayan Balsam. Adhering to invasive species

# maintenance costs. **Legal Requirements** - Under the European

### Safety Protocols

Herbicide Handling - Use PPE, including gloves, goggles, face mask and long-sleeved clothing, Coveralls. Avoid skin and eye contact and inhalation.













Follow all safety instructions on herbicide labels. If the infestation is in a public area, signage may be required to warn the public and prevent soil disturbance.

### **On-site Biosecurity Measures**

**Prevent Spread** - Avoid disturbing the plant unnecessarily, as seeds / root fragments can easily spread and establish new colonies. Remove and bag all cut material for proper disposal.

**Equipment Cleanliness -** Clean all tools, equipment, footwear, and clothing before leaving the site to prevent the spread of roots and plant material.

**Transport of Plant Material -** Transport all plant material in sealed containers to an authorised disposal site.

Do not compost or leave on-site, as this can lead to further spread.

**Monitoring & Follow-Up** - Regular monitoring of the site is essential, particularly after initial treatment or excavation.

Plan for follow-up inspections of treated / excavated areas for at least 2-3 years to check for regrowth or new infestations.

Follow-up treatments may be necessary for several years due to the persistent nature of the root system.

### Long-Term Management

**Site Rehabilitation -** Following successful control, implement a long-term monitoring and rehabilitation plan to restore native vegetation and prevent reinvasion.

**Re-vegetation** - Replant treated areas with native species to restore ecological balance and prevent re-invasion by Himalayan Balsam.

Community Engagement - Engage local communities in identification and reporting of infestations. Educate on its ecological impacts and promote the use of native alternatives for landscaping.

### For further information and free advice, please contact: Japanese Knotweed Control Ltd.

Email: mail@jkc.ie Tel: +353 (0)86 250 8805 Web: www.jkc.ie





Himalayan Balsam Leaf

Himalayan Balsam Flower

Himalavan Balsam Seed Pod

altering the natural habitat.

N.B. This Species Identification Guide is intended to outline the key identification factors and treatment options only and should not be used as a definitive method for species ID. Legislation and its interpretation is constantly

Optimal Survey

Sub-optimal Survey

**J**OOt

Sub-optimal Treatment

Optimal Treatment

evolving. A variety of other IAPS may be encountered, which may require specific survey and mitigation. Please contact Japanese Knotweed Control Ltd (mail@jkc.ie) for the latest position & advice.

waterways where its spread can be facilitated by flowing water.

all root fragments and seeds are removed to prevent regrowth.

### Herbicide Treatment Timetable for Himalayan Balsam

	WOTH	Heatment	ricibicide Type	Tierbicide reate	Oorisiderations
	April - May	Early Growth Stage Foliar Application	Glyphosate-based herbicide (e.g., Roundup ProActive)	4-5 L/ha of 360g/L formulation	Apply when plants are 20-50 cm tall and before flowering.  Ensure full coverage of all leaves.
	June - July	Mid-Growth Stage Foliar Application	Glyphosate or 2,4-D Amine (e.g., Agritox)	Glyphosate: 5-6 L/ha; 2,4-D Amine: 3-4 L/ha	Apply to mature plants before seed set. Avoid spraying during flowering to protect pollinators.
	August - September	Late Season Foliar Application	Glyphosate	5-6 L/ha	Apply to any regrowth or missed plants before seed pods mature.
	October - November	Manual Removal	N/A	N/A	Pull or cut plants before the first frost. Bag and dispose of plant material to prevent seed dispersal.
ſ	December - March	Site Maintenance & Preparation	N/A	N/A	Remove dead material and plan for early spring monitoring and treatment. Avoid soil disturbance to prevent seed germination.

Himalayan

Balsam