

ID Guide

Dwarf Japanese Knotweed

(Fallopia japonica var. compacta)

HIGH RISK

Common Names
Dwarf Japanese Knotweed, Fallopia japonica var. japonica, Polygonum compactum, Polygonum cuspidatum, Reynoutria japonica var. compacta.

Family: Polygonaceae (Buckwheat family)

Status in Ireland
Highly invasive and listed under the European Communities (Birds and Natural Habitats) Regulations 2011, which makes it illegal to spread this species.

Description / Profile
Dwarf Japanese knotweed is a highly invasive species that can cause significant ecological and structural damage. It is a highly resilient plant with its extensive rhizome system making it very difficult to eradicate, and enabling it to spread rapidly in disturbed areas from very small fragments.

Dwarf Japanese knotweed (*Fallopia japonicus* var. *compacta*) is a related to other knotweeds such as Japanese knotweed (*Fallopia japonica*). Its features are similar those of Japanese knotweed, only smaller.



Size
Can grow up to 1 metre tall during the summer months.

Leaves
Heart or spade-shaped with a pointed tip, 2-5 cm wide and 5-8 cm long with a shallow lobed base. Leaves are arranged alternately along the stem.



Dwarf Japanese Knotweed Leaf

Stems
Hollow, bamboo-like stems with distinct reddish-brown spots. Stems have a zig-zag growth pattern and are smooth with a green colour, sometimes purple-tinged. Stems become brittle and woody, brown in colour as the plant dies back in winter but persist upright.



Dwarf Japanese Knotweed Stem

Flowers
Small, pink/pale green or white flower clusters (panicles) called racemes appear in late summer (August-October), up to 10 cm long. Dwarf Japanese knotweed is not known to produce viable seeds in the Ireland. It can spread from cuttings and fragments and via its extensive rhizomes.

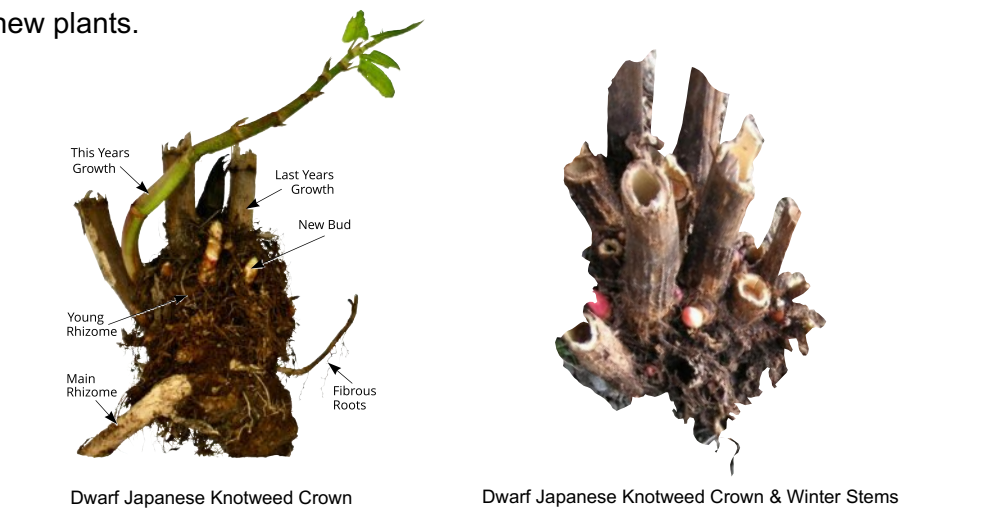


Dwarf Japanese Knotweed Flower

Rhizomes
Underground rhizomes are orange/yellow in colour and can spread horizontally up to 7 metres and reach depths of 3 metres. Rhizomes are highly regenerative: even small fragments can give rise to new plants.



Dwarf Japanese Knotweed Rhizome



Habitat
Native to Japan and parts of East Asia, in it's native environment it can be found growing in extremely harsh conditions and has a very hardy perennial growth cycle. In Ireland, it can be frequently found on railway sidings, roadsides, riverbanks, brownfield sites, and urban areas. Dwarf Japanese Knotweed prefers moist, well-drained soils, often thriving in disturbed areas.

Control & Management
Effective management requires a well-planned herbicide treatment programme combined with mechanical and biosecurity measures, particularly in protected areas.

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

Chemical Control
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 rhizomes. If near watercourses, use only aquatic-approved herbicides to prevent contamination and consider stem injection technique for a more precise application. Maintain a buffer zone (at least 10 metres) and avoid herbicide run-off.

Note: *Herbicide treatment is not suitable where an area infested with Dwarf Japanese knotweed is designated for development. Excavation will be required to clear the area before development can commence.*

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 done carefully to ensure all rhizomes are removed. Excavated soil containing knotweed must be managed and disposed of at authorised landfill sites.

S.O.S.™ - JKC soil screening service is an option to reduce landfill costs. Screened solis can be re-used on site to minimising materials requiring disposal to a licensed facility.

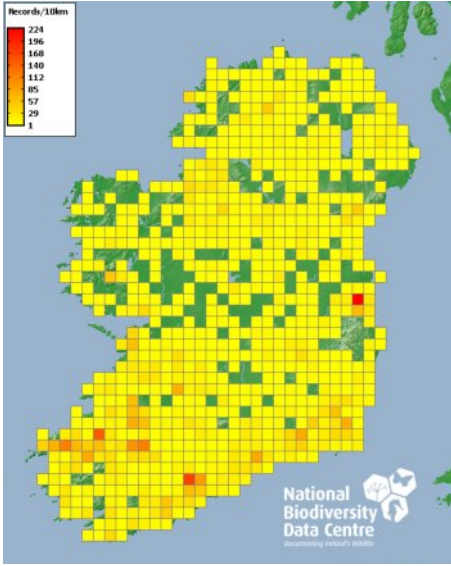
Deep Cell Burial - If there is space on the site, a burial cell can be considered. Vector material should be buried in a prepared cell that is lined with root barrier at a depth no less than 3m.

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.

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

Herbicide Treatment Timetable

Month	Treatment	Herbicide Type	Herbicide Rate	Considerations
March - April	Early Growth Foliar Application	Glyphosate-based herbicide (e.g., Roundup ProActive)	4-5 L/ha of 360g/L formulation	Apply when new shoots are actively growing and reach 0.5m in height. Ensure full coverage of leaves.
May - June	Mid-Growth Foliar Application	Glyphosate or Triclopyr (e.g., Garlon 4)	Glyphosate: 5-6 L/ha; Triclopyr: 4-5 L/ha	Apply when plants are at least 1m tall. Avoid application during flowering.
July - August	Cut & Spray Method	Glyphosate	10-15 ml of 360g/L solution per cut stem	Cut plants to ground level and apply herbicide directly to cut stems. Suitable for dense patches.
September - October	Late Season Foliar Application	Glyphosate	5-6 L/ha	Apply to any regrowth before the onset of dormancy. Ensure thorough coverage of all foliage.
November - February	Physical Removal & Site Maintenance	N/A	N/A	Remove any remaining plant material and roots. Monitor the site for any new shoots or seedlings.



This map shows the current (2024) distribution of Dwarf Japanese Knotweed in Ireland, recorded by the National Biodiversity Data Centre.

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 labels.

Herbicide Application Method - Use foliar spraying for large infestations and the stem injection method for smaller stands or in sensitive areas. Ensure accurate calibration of spraying equipment to avoid over-application.

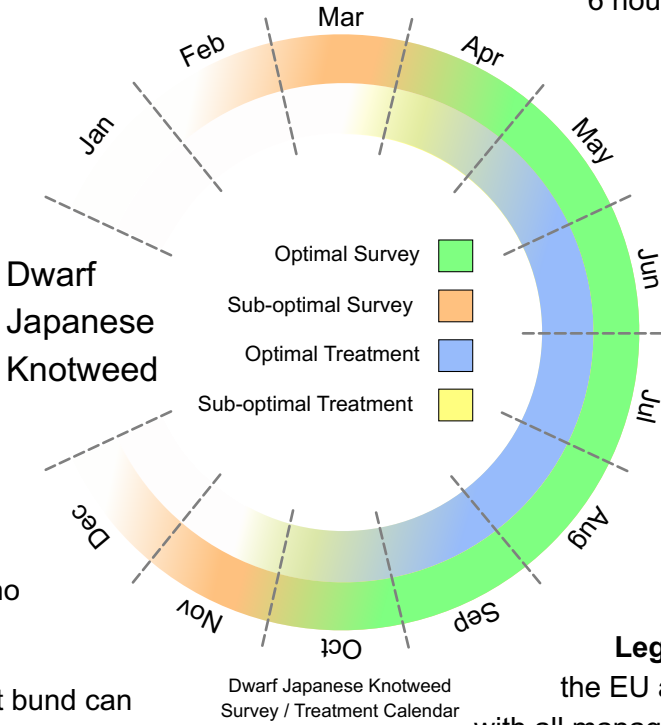
Weather Conditions - Apply during calm, dry conditions to minimise drift. Avoid application during heavy rainfall or when rain is forecast within 6 hours to reduce run-off.

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

Watercourses - Knotweed spreads easily along rivers and streams in Ireland, where water can carry rhizome fragments downstream.

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

Proximity to Infrastructure - Dwarf Japanese Knotweed has the potential impacts on roads, walls, and buildings.
Legal Requirements - Follow legal requirements under the EU and Irish regulations, ensuring compliance with all management and disposal practices. Under Irish law, it is illegal to cause or allow the spread of Dwarf Japanese Knotweed. Special care must be taken to manage and prevent its spread during construction and landscaping projects.



Knotweed Leaf Comparison					
Leaf					
Species	Giant knotweed (<i>Fallopia sachalinensis</i>)	Bohemian knotweed (<i>Fallopia × bohemica</i>)	Japanese knotweed (<i>Fallopia japonica</i>)	Dwarf Japanese knotweed (<i>Fallopia japonica</i> var. <i>compacta</i>)	Himalayan knotweed (<i>Persicaria wallichii</i>)
Flower					
Stem					
Plant Size	4m to >5m tall	2m to >4m tall	1.5m to >3m tall	1m to <1.5m tall	2m to >3m tall
Leaf Size L/W	15cm to 40cm 2/3 as wide	12cm to 23cm 2/3 as wide	10cm to 17cm 2/3 as wide	5cm to 8cm 2/3 as wide	10cm to 20cm 1/2 as wide
Sex	Perfect and fertile, usually produces seed	Female or Perfect, occasionally produces seed	Female or Perfect (rare), occasionally produces seed	Female or Perfect (rare), occasionally produces seed	Perfect and fertile, usually produces seed
Flower Colour & Arrangement	Green-white to cream-white with compact, drooping arrangement	Green-white to cream-white with erect or loose, drooping arrangement	Green-white to cream-white with a loose, drooping arrangement	Pink-white with erect or loose, drooping arrangement	Pinkish-white to pink with a loose, spreading arrangement