

Bohemian Knotweed

(*Fallopia x bohemica*)



Family name: Polygonaceae (Knotweed family)

Common name/s: Bohemian Knotweed, Hybrid Knotweed, Japanese Knotweed Hybrid



Bohemian Knotweed (*Fallopia x bohemica*) is a highly invasive perennial hybrid between Japanese and Giant Knotweed, known for its rapid growth and ability to spread through rhizome and stem fragments.

In Ireland, it poses a significant threat to biodiversity and infrastructure, particularly in riparian areas and disturbed sites. Management strategies include mechanical and chemical control methods, with an emphasis on long-term treatment to exhaust the plant's regenerative capacity. Preventing the spread of plant fragments and public awareness are crucial for controlling its impact on local ecosystems.

Description - Bohemian Knotweed is a perennial herbaceous plant that is a hybrid between Japanese Knotweed (*Fallopia japonica*) and Giant Knotweed (*Fallopia sachalinensis*). It exhibits characteristics intermediate between its parent species, including vigorous growth, large leaves, and hollow stems.

Like other knotweed species, it is known for its invasive nature and ability to spread rapidly, making it a significant environmental concern.

Key characteristics include:

Height: Can grow to a height of 2 to 4 metres, depending on environmental conditions.



Leaves: The leaves are broadly oval to heart-shaped, with a pointed tip, measuring 10-25 cm in length.

They are typically larger than Japanese Knotweed leaves but smaller than Giant Knotweed leaves, with a slightly rough texture and wavy edges.



Flowers: Produces small, creamy-white flowers in clusters (panicles) in late summer to early autumn. The flowers are arranged in branched sprays at the ends of the stems.



Stems: The stems are hollow, bamboo-like, and green, with reddish or purple speckles. They are arranged in a zigzag pattern and can reach up to 4 cm in diameter.



Root / Rhizomes: Has a deep, extensive rhizome system that can spread horizontally up to 7 metres and penetrate vertically to a depth of 3 metres.

The rhizomes are woody and brown, with a bright orange interior when cut.

Habitat - Bohemian Knotweed is found in a variety of habitats due to its adaptability. It prefers disturbed or open areas, such as:

- **Riverbanks and Riparian Zones:** Commonly found along watercourses, where it can spread quickly due to soil disturbance and waterborne dispersal of rhizome fragments.
- **Roadsides and Railway Embankments:** Frequently establishes in disturbed areas, such as roadsides and railways, where soil movement facilitates its spread.
- **Gardens and Urban Areas:** Can grow in urban environments, particularly in gardens, parks, and wasteland where it has escaped cultivation.

The plant thrives in moist, well-drained soils but can grow in a wide range of soil types, from sandy to clay-rich soils. It prefers full sun but can tolerate partial shade.

Status in Ireland - In Ireland, Bohemian Knotweed is considered a highly invasive species, particularly in riparian areas, roadsides, and disturbed habitats.

It poses a threat to biodiversity by outcompeting native species and can cause significant structural damage when it grows near buildings, roads, and other infrastructure. The plant is subject to strict regulations to prevent its spread.

Reproduction and Spread - Bohemian Knotweed spreads primarily through vegetative propagation:

- **Rhizome Fragments:** The main method of spread is through rhizome fragmentation, where even small pieces of the root system can regenerate into new plants. This allows the plant to rapidly colonise new areas.
- **Stem Cuttings:** The plant can also spread through stem fragments, which can take root if they come into contact with moist soil.
- **Seed Production:** Although seed production is less common, hybridisation with other knotweed species can occur, potentially increasing genetic diversity and invasiveness.

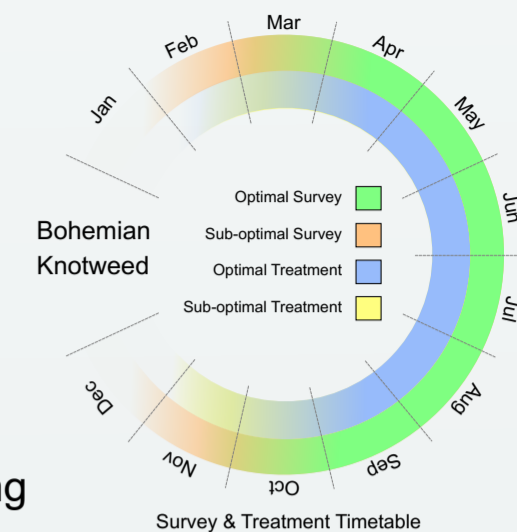
Management and Control - Managing Bohemian Knotweed requires a long-term approach due to its vigorous growth and regenerative capabilities:

- **Mechanical Control:** Cutting or mowing can reduce biomass, but it must be done repeatedly, as the plant can regrow from fragments. Excavation may be effective for small infestations but requires removing all rhizome material to prevent regrowth.

- **Chemical Control:** Herbicides such as glyphosate are commonly used to treat Bohemian Knotweed. Multiple applications over several years may be needed for effective control, especially on established infestations.

- **Integrated Management:** Combining mechanical and chemical methods often yields the best results. For example, cutting the stems before applying herbicide can improve herbicide uptake.

- **Preventative Measures:** Preventing the movement of contaminated soil and educating the public about the risks of knotweed spread can help reduce the introduction of the plant into new areas.



Ecological Impact - Bohemian Knotweed can have significant ecological impacts in invaded areas:

- **Competition with Native Species:** Forms dense stands that outcompete native plants, reducing biodiversity, especially in riparian zones.
- **Alteration of Habitat Structure:** The dense growth can change the structure of plant communities, affecting wildlife that depends on native vegetation for habitat.
- **Soil Erosion and Riverbank Destabilisation:** When dense stands die back in winter, they can leave riverbanks exposed to erosion, increasing the risk of sedimentation in watercourses.

Species	Leaf	Flower	Stem	Plant Size	Leaf Size LW	Sex	Flower Colour & Arrangement
Giant knotweed (<i>Fallopia sachalinensis</i>)	15-40cm			4m to >5m tall	15cm to 40cm 2/3 as wide	Perfect and fertile, usually produces seed	Green-white to cream-white with compact, drooping arrangement
Bohemian knotweed (<i>Fallopia x bohemica</i>)	Up to 25cm			2m to >4m tall	12cm to 23cm 2/3 as wide	Female or Perfect, occasionally produces seed	Green-white to cream-white with erect or loose, drooping arrangement
Japanese knotweed (<i>Fallopia japonica</i>)	Up to 17cm			1.5m to >3m tall	10cm to 17cm 2/3 as wide	Female or Perfect (rare), occasionally produces seed	Green-white to cream-white with loose, drooping arrangement
Dwarf Japanese knotweed (<i>Fallopia japonica</i> var. <i>compacta</i>)	Up to 8cm			1m to <1.5m tall	5cm to 8cm 2/3 as wide	Female or Perfect (rare), occasionally produces seed	Pinkish-white with erect or loose, drooping arrangement
Himalayan knotweed (<i>Pterisantha wallichii</i>)	10-20cm			2m to >3m tall	10cm to 20cm 1/2 as wide	Perfect and fertile, usually produces seed	Pinkish-white to pink with a loose, spreading arrangement

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

