Scientific name: *Fallopia japonica*

Also known as: Japanese Bamboo, Pysen Saethwr

**Key Facts**

- Japanese knotweed (*Fallopia japonica*) is an invasive plant that can cause damage to property, and is very difficult to control once established.

- It is listed under schedule 9 of the Wildlife and Countryside Act 1981 and it is an offence to plant or cause this species to grow in the wild.

- Plant material is a ‘controlled waste’ under the Environmental Protection Act 1990.

- It was introduced as an ornamental plant in the mid 19th century.

- Located throughout Wales, it is most commonly found on sites that are disturbed by human activity such as railway lines, rubbish tips, old allotments and derelict land: it is also found along river banks.

- Both roots and stems can grow through weaknesses in asphalt and concrete, damaging structures.

- Established plants spread into new areas through large underground creeping roots (rhizomes). Small fragments of root or stem can establish rapidly into new plants.

**Description**

Japanese knotweed is a tall (2-3m) plant with bamboo like stems. It has large, shield-shaped leaves and creamy white clusters of flowers from June to September. It often develops into dense thickets. It is a perennial plant so, although it dies back over winter, it regrows from the base in the spring. It doesn’t produce seed in the UK but spreads through rhizomes (underground stems) or parts of cut stems.

**Lifecycle**

In March/April it produces red tinged fleshy shoots, which grow to 2-3m in height, before flowering between July to October. The leaves die back in winter and fall off leaving brown stems visible.
Identification

Leaves – Japanese knotweed leaves are 10-15cm long with flattened base and a pointed tip (shield shaped). They are arranged on the stem in a zigzag pattern. They turn brown and fall off in the autumn.

Stem – In spring and summer the branches grow to 2-3m high. Stems are hollow like bamboo and are green with purple speckles. In the winter the plant dies back and stems turn brown.

Flowers – Japanese knotweed flowers are small and creamy-white and are present from late July to October. They hang in clusters from the leaf axils.

Roots (Rhizomes) – Thick and woody with a knotty appearance, bright orange when cut.

Seeds – Does not produce seed.

Lookalikes

There are two close relatives of Japanese knotweed that may cause confusion, however both lookalikes are invasive and should be treated in the same way.

- Giant knotweed (*Fallopia sachalinensis*) is often a similar height (can be up to 5m) but has much larger leaves up to 40cm long with a lobed shaped base.
- Hybrid Japanese knotweed (*Fallopia x bohemica*) has leaves up to 23cm long.
Why is it a concern?

Japanese knotweed grows rapidly, up to 4cm per day, and can reach 3m tall by June. Native vegetation dies out underneath it due to lack of light and water. Being an alien species means that none of our native wildlife feed on it.

Along riverbanks when the plant dies back in the winter it leaves bare areas which are more susceptible to erosion which can lead to large sections being eroded.

In urban areas both roots and stems can grow through weaknesses in asphalt and concrete and damages structures. It can also affect property values and the ability to get a mortgage.

Where it is found in Wales

Spread throughout Wales, it is most commonly found on sites that are disturbed by human activity such as railway lines, rubbish tips, old allotments and derelict land, it is also found along river banks.

The plant is spread through rhizome segments or cut stems. A plant can regenerate from as little as 1 cm of rhizome. Dispersal is mainly due to human activity such as moving contaminated soil and transportation on vehicle wheels. Along riverbanks, floods can dislodge the rhizomes which are carried downstream to form new colonies.

Legislation and responsibilities

Japanese knotweed is listed under schedule 9 of the Wildlife and Countryside Act 1981. It is an offence to plant or cause this species to grow in the wild.

There is no obligation to eradicate this species from your land or to report its presence to anyone. However, if this species spreads to the wild or to a neighbour’s property then you could be liable.

The plant material is also classified as ‘controlled waste’ under the Environmental Protection Act 1990. Plant material can only be transported and disposed of by someone licenced. Natural Resources Wales holds a register of licence holders see: https://www.wastecarriersregistration.naturalresourceswales.gov.uk/en/registrations/search

Management Control Options

Eradication of Japanese knotweed is very difficult for the general public to attempt. Non-chemical methods can take up to 10 years to kill the weed. Chemical control is the preferred method which is best undertaken by a contractor.

Under the Environmental Protection Act 1990, Japanese knotweed plant material is classed as controlled waste and must be disposed of safely at a licensed landfill site according to the EPA (Duty of Care) Regulations 1991.

The control methods aim is to kill existing plants and prevent the movement of any material off site.

**Pulling and cutting**

Small or new infestations where only a few stems have established can be controlled by pulling and cutting. The plant should be cut cleanly at the base of the stem adjacent to the crown. Stems should not be cut, and strimmers should never be used as this can increase risk of spread and regrowth from small parts.

Cutting should be done at least 4 times per year, the 1st cut when the stems first appear and every 6-8 weeks with the final cut before the plant dies back in the autumn.
Management Control Options - Continued

The site should be revisited annually in the spring and cutting repeated. The aim is to weaken the plant by repeated cutting. It may take up to 10 years to achieve full control.

Cut stems should be left to dry out on a hard surface such as concrete or plastic. Once the stems turn dark brown they are dead and can be burnt or left to rot. Do not remove any material from the site to avoid risk of spread.

Do not attempt to dig up the plants unless they are small enough to dry out, then burn on site. There are no specific laws preventing a householder from having a bonfire but there are laws for the nuisance they cause. For further information see https://www.gov.uk/garden-bonfires-rules

Herbicide control

Herbicides can be used for control, but can often take up to 3 years of repeat treatment to be fully effective.

Herbicides are applied to the foliage regularly through the growing season as soon as there is new growth – this could be as many as 4 to 5 applications per season. Triclopyr is the preferred product early in the season as it is selective (does not kill grasses) and has an effect for 6 weeks after application, but it will still need repeat applications throughout the season. It is taken into the plant via the leaves and stems and moved to the roots (translocated). Glyphosate can be used later in the season usually during flowering but it is non-selective so will kill all other vegetation, it is also translocated to the roots. Herbicides can be applied via a knapsack or injected into the stems via a gun.

Selecting a contractor

It may be appropriate to employ a specialist contractor for assessing the best method of control and to apply any pesticides. Good contractors will have the following:

- A BASIS certified practitioner with knowledge of control of invasive weed control to recommend appropriate chemical control options.
- A spray operator who holds the appropriate National Proficiency Tests Council (NPTC) certification for herbicide use or work under the direct supervision of a certificate holder.
- If sprays are to be applied in or near water, the person carrying out or supervising the spraying must have the appropriate aquatic part of the qualification.

If the Japanese knotweed is near a water course, permission for treatment with herbicides must be given by Natural Resources Wales prior to application.

If the Japanese knotweed is on a designated site such as a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) or Special Area of Conservation (SAC) then written permission will be required before treatment from Natural Resources Wales.

References and further sources of information

Find the Environmental Protection Act 1990 on the Legislation.gov.uk website.


The Control of Japanese knotweed (Fallopia japonica) in Construction and Landscape Contracts
http://www.nonnativespecies.org/downloadDocument.cfm?id=1064

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Centre for Aquatic Plant Management (CAPM) (2004) Information sheet 5, Fallopia japonica Japanese knotweed. Centre for Ecology and Hydrology
https://secure.fera.defra.gov.uk/nonnativespecies/downloadDocument.cfm?id=1049
