

JAPANESE KNOTWEED

What is Japanese Knotweed?

Japanese Knotweed (botanical name *Fallopia japonica*) was introduced into Britain from Japan in the early 1800's. It was originally grown as an ornamental plant, but unfortunately in the early 19th Century escaped and began to materialise in the wild. It spreads rapidly and is commonly found today along railway lines, motorways, roads and footpaths, in graveyards, canals, rivers or anywhere that it has been dumped, dropped or deposited.

Japanese Knotweed is an invasive perennial weed that forms dense stands of tall canes during summer, which die back in the Autumn. In its mature state, Japanese Knotweed is most easily recognised by its characteristics – upright, hollow bamboo-like stems, which are pale green, often with purple speckles and its arching branches. Red/purple shoots appear in early spring. As the canes grow, the leaves unfurl and the plant turns green. Growth is rapid and mature canes can reach 3 metres (10ft) in height.

Flowering occurs in late summer/autumn and consists of clusters of creamy-white flowers. Seeds are occasionally produced from pollination from related plants such as Russian Vine (*Fallopia baldshuanica*), though it is extremely rare for these seeds to be fertile, as all Japanese Knotweed in the UK is believed to be a female clone.



During late autumn/winter the canes die off. The canes lose their leaves and turn dark brown. The dead canes remain standing and may take up to three years to decompose.



Late autumn/winter

For many years people did not see Japanese Knotweed as a threat and were not aware of its ability to reproduce itself. This was further exasperated by the fact that many people did not know how to control it successfully.

Over the years, people have not only underestimated the plant's ability to establish itself, but not calculated its effect in the landscape.



Growing through concrete



Stems have sprouted from established rhizomes



The same plant 1 week later



The same plant 3 weeks later

How is Japanese Knotweed Spread?

Japanese Knotweed can produce seeds, but it is rare for these seeds to germinate. The most common method of dispersal is by means of stem, crown and rhizome (underground stem section).

New plants grow from the nodes of pieces of green stem in soil or water. Mechanical cutters, such as flails will spread knotweed in this way. If stems are dried until they are dark brown they will not regrow unless the crown (base of the stem) is still attached.

The crown can survive drying and composting and will quickly produce new canes. If you dispose of knotweed canes by drying or composting, it is important that the stems are cut above the crown, rather than pulling the plant, which will dislodge the crown.

If local bylaws permit bonfires, canes can be pulled and dried on polythene sheets prior to careful burning.

Rhizomes are not roots, they are underground stems and can reach a depth of 3 metres (10ft) and extend up to 7 metres (23ft) away from the parent plant.

It only takes a 1cm section of rhizome or crown to propagate another plant. There is a leaf join or 'node' (growth point) roughly every 3cm on the rhizome (33 per metre). When treated some of the growth points respond by producing a new shoot.



New Shoot



Rhizome

Disposing of Japanese Knotweed

The main cause of knotweed spread has been gardeners who have illegally fly tipped green waste on road verges, lay-bys and waste ground which is highly damaging to the environment.

Disposal of Japanese Knotweed canes should be done within the confines of your garden by either composting or burning. Cut stem cannot regrow once it has dried to a dark brown colour. Dried cut stems can be safely composted. Pulled stems, which will include crowns are not suitable for composting.

Spreading knotweed outside of your property can lead to prosecution.

Knotweed stems that cannot be disposed of within the confines of your garden, must be taken to a site licensed to accept such waste. When on site the waste must be buried to a depth of at least 5m to prevent regrowth. Disposal to landfill sites should be avoided wherever possible. If you have knotweed within your property, you should kill it rather than crop it.

Killing Japanese Knotweed

Japanese Knotweed is susceptible to a range of herbicides including glyphosate, the active ingredient in products such as 'Roundup'. Products such as SBK - Triclopyr, can be used but not near sources of water or drains, but glyphosate has many properties that make it more suitable for use by householders. If Glyphosate is used near water, permission from the Environmental Agency is required.

Glyphosate is a translocated herbicide meaning the plant carries the herbicide down to its rhizome. Contact herbicides may appear to kill the leaves and shoots but unless the herbicide is translocated down to the rhizome the plant will regrow.

Spraying should only be carried out during the growing season when there is green, leafy material present. Herbicide treatments take effect within 14 -21 days but eradication can take a minimum of two sprays in one growing season to achieve.

Glyphosate is usually sprayed onto the leaves of knotweed. Care must be taken not to allow drift on to other plants and lawns. A weed wiper can be used to apply the herbicide instead of a spray.

If using herbicides near lawns and shrubs, great care should be taken. Products such as 2, 4 D amine can be used at concentrations that do not harm grass. You must contact your local Environmental Agency Office prior to using herbicide in or near a stream or river or other water courses. You can use a herbicide near a contained garden pond that is not supplied by groundwater or a watercourse without Environmental Agency permission, although care must be taken to avoid damage to wildlife.

It is important to always follow the instructions on the product label, wear suitable protective clothing and dispose of packaging appropriately.

It will take at least 3 years of herbicide treatment to completely eradicate Japanese Knotweed. By the third year of treatment, growth may only be a few centimetres tall and easily disguised in grass and herbage. It is very important that treatment continues until no further growth appears. Disturbances to the rhizome will stimulate further growth, however controlled rotavation of the infested area can be used to stimulate the exhausted rhizome to produce more foliage, which can then be sprayed. If a rotavator is unavailable, a series of spade cuts will stimulate the rhizome. Tools and equipment must be thoroughly cleaned after use to prevent spread.

It is extremely difficult to dispose of without the assistance of herbicides.

Cutting and mowing gradually weakens the plant but it will take many years to exhaust the rhizome (10 years or more).



Before Glyphosate treatment



After treatment

Who is responsible for the control of Knotweed

This rests with the landowner or tenant of the land. The Environmental Agency or local government are not obliged to control knotweed on behalf of landowners.

Knotweed growing from adjoining property

The best solution is to co-operate with neighbouring landowners and share costs or labour. Where possible it is best to encourage co-operation and support within the community to control knotweed and prevent further spread.

Japanese Knotweed Do's and Don'ts

Don't

Fly-tip Japanese Knotweed or any other garden waste.

Contaminate green waste composting schemes with Japanese Knotweed material

Accept topsoil unless you have first inspected it for knotweed rhizome

Do not delay. If you find you have knotweed growing on your land you should eradicate it.

Do

Follow good practice for the control of Japanese Knotweed.

Ensure that herbicides are used safely and effectively.

Ensure that knotweed is burned or composted thoroughly within the grounds of your property

Co-operate with neighbours to co-ordinate your knotweed control programme.

KNOTWEED AND THE LAW

Japanese Knotweed (*Fallopia japonica*) is such an invasive and damaging plant it is controlled by Law:

1. The Wildlife & Countryside Act 1981:

It is an offence to plant or otherwise cause the plant to grow in the wild.

2. Environmental Protection Act 1990, Duty of Care Regulations 1991:

Cut Japanese Knotweed material and soil containing rhizomes **MUST** be disposed of as Controlled Waste, if they are to be removed from their site of origin.

3. Third party litigation:

You can be sued for costs and damages if you allow the spread of the plant from your property on to that of a neighbour.