Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara

JAPANESE KNOTWEED

Fallopia japonica

Invasive Plant Information Note

What is it?

Japanese knotweed (*Fallopia japonica)* is an invasive herbaceous perennial plant which is native to Japan and northern China. It was introduced to Ireland as an ornamental plant in the 19th Century. Since then, it has established wild populations in a variety of habitat types across the country, including river banks, roadsides and waste ground. Please see link to its widespread distribution: http://maps.biodiversityireland.ie/#/Home.

Fig. 1: Japanese knotweed flowers (© EPPO)

Fig. 2: Aggressive growth (www.odonovanagri.com)

Why should we be worried about it?

Japanese knotweed poses a number of threats to farms across Ireland. It grows rapidly and growth rates of up to 40mm a day have been recorded. One tiny particle blowing in the wind or transported on a car tyre is enough to create an infestation. Japanese knotweed consumes fertiliser and water intended for crops. The species can seriously damage houses, buildings and hard surfaces because it has the ability to grow through concrete and tarmac (See Fig. 2). It cost an estimated £88m to remove Japanese knotweed from the London Olympic Village site in 2012. Japanese knotweed disrupts agricultural processes because livestock often avoid eating invasive plant species. Instead, they selectively feed on native plants, which in turn reduces the competition for the Japanese knotweed and allows it to colonise the site quickly. Litter can accumulate in the dense thickets formed by the plant and this build-up of waste material also encourages vermin. Japanese knotweed grows vigorously and out-competes native plants. Its tall thickets exclude all other vegetation and shade the area below. Native plants can rarely compete with this invasive species and local biodiversity is reduced.

How do we recognise Japanese knotweed?

Fig. 3: Early growth (www.online-valuations.com)

It produces fleshy red-tinged, asparagus-like shoots when it first breaks through the ground in early spring (See Fig. 3).

As the canes grow, the leaves unfurl. The leaves are oval with a pointed-tip, and have a distinctive zig-zag pattern along the stem (See Fig. 4). Leaves are 10 to 18cm long.

The stem structures are also distinctive with a green hollow/bamboo-like appearance and are dotted with dark blue-purple speckles. It forms small clusters of off white/yellow cream coloured flowers in late summer, typically forming from late July onwards (See Fig. 1).

The roots are tough, thick and wood-like in their appearance. If snapped, they show a bright orange colour inside and have a consistency similar to that of a carrot (See Fig. 6). The root structures usually extend up to 5 metres in a lateral direction and 2 metres deep from the over ground plant.

During the winter season the stems die back and become an orange-brown colour (See Fig. 5). These canes remain upright throughout the winter and can still be seen amongst new stands the following spring or summer.

Fig. 4: Zig-zag pattern on foliage (www.invasiveplantcompany.com)

Fig. 5: Winter canes (www.online - valuations.com)

How does Japanese knotweed spread?

Japanese knotweed has an extraordinary ability to spread vegetatively from crown, stem and rhizome if disturbed. Small sections of rhizome (See Fig. 6), as little as 0.7g, can re-grow into a new plant.

Fig. 6: Bright orange, carrot-like colour (www.japaneseknotweedsurvey.co.uk)

How to manage Japanese knotweed

Japanese knotweed is highly invasive and extremely difficult to eradicate completely. When it becomes established it may take a number of years to eliminate from a site. A combination of physical and chemical treatment is usually the most effective option. Do not uproot Japanese knotweed yourself as this exposes the underground rhizomes. Do not attempt to cut, strim or mow Japanese knotweed. This results in more vigorous growth from the cut infestation. The viable debris can then be spread by wind to unaffected sites. Please note that a fragment the size of a finger nail can spread this species. Rhizome fragments can easily be transported unintentionally on clothes and shoes. It is illegal to allow Japanese knotweed spread to the wild. **It is recommended that any attempt to control Japanese knotweed should only be carried out by trained and qualified persons.**

For Further Information please visit:

- Invasive Species Ireland http://invasivespeciesireland.com/
- European Commission http://ec.europa.eu/environment/nature/invasivealien/index_en.htm