



THE CONTROL OF JAPANESE KNOTWEED WITH ROUNDUP BY STEM INJECTION



The problem

Japanese Knotweed was introduced to the UK in 1825 and widely planted as an exotic garden ornamental before the invasive nature of the plant became clear. Japanese Knotweed is probably the most invasive plant in Britain and is scheduled under the 1981 Wildlife and Countryside Act so that it is an offence to plant or cause it to grow in the wild. In addition, under the Environment Protection Act (1990) Japanese Knotweed is classified as 'Controlled waste' and must be disposed of at a licensed landfill site in accordance with the Environment Protection Act (Duty of Care) Regulations 1991.

Growth habit

Fleshy, red shoots appear in the early spring from an extensive underground network of stems (rhizomes). The shoots can reach 1.5m by May and 3m by June.

Long racemes of cream flowers appear in late summer and dieback occurs at the first frost of the autumn, leaving the leafless stems to remain throughout the winter. The rhizomes from one plant can be 2m deep and 7m across.

Thankfully in the UK the plant does not produce viable seed, except in the rare instances of hybridisation with other similar introduced species.



Many areas of the country have campaigns to eradicate the alien weed and Roundup plays an important role by controlling the weed with maximum safety to operators, the public and the environment.

Spread is via fragments of roots and stem, (often referred to as propagules), which are transported from the original parent plant either naturally, along rivers and watercourses, or with human assistance, as plant material or as fragments in soil. Pieces of rhizome as small as 1cm can produce new plants and the cut green stems readily regenerate too. Japanese Knotweed can colonise most habitats and can grow through walls, tarmac and concrete, but it has become infamous mainly due to spread along watercourses.

CONTROL WITH ROUNDUP PROACTIVE / ROUNDUP PROVANTAGE

- Any chemical control in aquatic areas needs Environment Agency approval. You will need to fill in form Aqherb01 and submit it to your local EA office.
- Where possible clear the previous year's growth during the winter. This evens up the new stems and makes treatment easier.
- Treated plants may take several weeks to show symptoms. Only re-treat if there are no visible signs of dieback after 6 weeks. Missed stems can be visually identified and treated after two weeks.
- As with most broad-leaved perennials, optimum control will be achieved from treatment from flowering onwards in August or September but before die-back. Treatment late in the season is the most effective because the glyphosate is transported deep down into the underground rhizome structure along the natural flow of plant nutrients down for winter storage. Japanese Knotweed is sensitive to frost so late season applications should be made in advance of the first frosts.
- For established stands it is important to plan an effective management programme over several years as repeat applications may well be necessary to control those plants which were missed by earlier applications and those stems which arise from previously dormant rhizomes whose dormancy is released by removal of the initial stem population. Sites should be monitored for at least three years.

STEM INJECTION

Use of a stem injection gun can be especially useful for treating small stands, new invasions and to tidy up escapes from eradication control programmes. It is particularly useful where plants are growing intimately with desirable plants or near water. The JK1000 Injection System which originated in the US uses a needle to inject Roundup directly into the stem. The technique is covered on the Roundup label by the same chemical thinning method used in forestry and stem filling.

<http://www.steminjectionsystems.com/>



JK 1000 injection system

RATES & TIMINGS

Product	Dose rate	Timing
Roundup ProActive	2ml per stem Either neat or as 10ml of 20% solution	Apply to flowering stems from late summer through October for best results.
Roundup ProVantage	1.5ml per stem Either neat or as 8 ml of 20% solution	

For more information telephone the Monsanto Hotline on (01954) 717575

Roundup contains glyphosate.

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USE HERBICIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE

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