

Asiatic & Giant Knotweeds

Reynoutria japonica & sachalinensis

Asiatic Knotweed is a Progressive Control Plants under the West Coast Regional Pest Plant Management Strategy



National Pest Plant Accord Status

Both Asiatic and Giant Knotweed are listed in the 2008 National Pest Plant Accord (NPPA) and are banned from sale, propagation and distribution in New Zealand. For more information refer to the MAF Biosecurity New Zealand website at www.biosecurity.govt.nz/nppa

Where has it come from?

Knotweeds are native to eastern Asia (Japan, Korea, northern China). After being taken to many parts of the as ornamental plants they are both now major pest in many parts of the world and beginning to have an impact now in New Zealand. Alternative names for Asiatic Knotweed are Japanese Knotweed and Mexican Bamboo.

Both Asiatic Knotweed and Giant Knotweed have been found on the West Coast, with the former being more prevalent. A hybrid of the two (*Fallopia x bohemica*) has also been identified at sites around Greymouth.

What do these plants look like?

Both plants are perennials with Giant Knotweed having both larger leaves and growth habit but plants of either species can grow anywhere from 1m—3m tall. The plants die back in winter then come away again in spring with reddish-purple shoots. These grow to become hollow cane-like stems, reddish early on then flecked with purple as they mature. Leaves are bright green, broadly ovate, pointed at the tip and flat at the base except for the hybrid form whose leaves are heart-shaped at the base. Both knotweeds have creamy white flowers in panicles from December through until March. Plant reproduction can be by seed, if both male and female flowers are present, but is more often by revegetation from root fragments.



Why are they Pest Plants?

As in other parts of the world, knotweeds are rapidly invading open spaces and wasteland in many parts of New Zealand to the exclusion of all other plants. The West Coast climate seems to suit their vigorous growth habit in particular. Infestations along roadsides and creekbanks have increased both in number and size over recent years as root fragments are washed downstream or moved to other sites via machinery (mowers, diggers, trucks). Asiatic Knotweed in particular has moved rapidly from being scarcely known to a major pest plant.

*Top right: Asiatic Knotweed in flower [EW]
At left: Giant Knotweed in full growth [ARC]*

What are the best methods of control?

The best method of control is to ensure that knotweeds never become established, because once they do they are extremely difficult to eradicate. If any type of manual control is carried out, all care should be taken as all species are capable of revegetating from extremely small root fragments.

Manual Methods

Small patches of the plant can be eradicated if the area is dug over systematically and EVERY piece of root removed from the ground. Once removed all parts of the plant should be laid out in full sun on black plastic to rot down OR disposed of to a lined landfill in black plastic rubbish bags. Remember any root fragment left behind can re-grow.

Herbicide Methods

The alternative is to spray the plants with an appropriate spray at the optimum time for at least 2 seasons in a row. Worldwide knotweeds have proved resistant to all but the most persistent spraying regimes. The optimum times for spraying are after the plants have flowered or after cutting them right back down to short stalks. This will ensure that the spray gets down well into the root system. Follow-up work should be carried out again the next season, and even a third time.

Trials conducted by Environment Waikato in 2004 showed that effective control was gained for knotweed from a mixture of the active ingredients *Glyphosate* and *Mesulphuron methyl*. The optimum mix used was:

- Glyphosate 360 2L/100L water + Escort 20g/100L water

Glyphosate products available are Robust, Roundup, Watkins Weedkiller, Glyphosate 360 etc and Metsulfuron products available are Escort, Ultimate, Meturon etc. For more information on other brands available see www.weedbusters.co.nz/weed_info/herbicides.asp or search the Internet.

Tordon Brushkiller has also been used with some success for knotweed control. Apply by:

- Knapsack at 100ml/10L water + 20ml penetrant
- Handgun at 1L/100L water + 200ml penetrant.

For personal safety please use all herbicides as per manufacturer's labelling

Biocontrols

No biocontrol agents are available for knotweed species in New Zealand. However a biocontrol agent, the Japanese Knotweed *psyllid* (*Aphalara itadori*), is to be released in Britain. Landcare Research NZ will maintain a watching brief on this to see if the same biocontrol may be of benefit here.

Where can I get more help?

For further information call either of the Regional Weedbusters Co-ordinators. They are:

Mary Traves: Environmental Information Officer, West Coast Regional Council (768 0466 or 0508 800 118)

Tom Belton: Technical Support Officer Biosecurity & Weeds, Department of Conservation, West Coast - Tai Poutini Conservancy, Hokitika (03 756 9100)



www.weedbusters.org.nz

The West Coast Regional Council does not accept liability for any advice given on this sheet regarding application of herbicides for pest plant control. The brand names listed imply neither endorsement of those brands, nor criticism of any other brands not listed.