

Guidance on the Control of Japanese Knotweed in Guernsey (Home and Garden Situation)

Recent UK trials (Jones et al, 2018) have concluded that glyphosate based herbicides give the best control when applied to Japanese Knotweed (JKW) between June and October. This is when JKW is actively, producing more rhizomes and will direct the herbicide downwards into the plant's roots. This timing is better than spring applications when transport systems within the plant favour new top growth away from the roots so less herbicide is translocated to the roots.

Dos and Don'ts when Controlling Japanese Knotweed:-

Do not strim or chop JKW as this creates small fragments that can root and spread the problem.

Do not move soil contaminated with JKW as this will just spread the problem.

Do not fly-tip or place any JKW in household or green waste as it will spread the problem.

Do not pull JKW unless you can dispose of it safely. Pulling can tear pieces of the crown out which are very persistent and difficult to kill by composting, drying or burning.

Do not apply herbicides on vulnerable areas*

Do start treating JKW as soon as you see it and keep at it till it's gone. This may take several years.

Do, wherever possible dispose of JKW on the infected site (details below). Moving them to another site will increase the risk of initiating new infestations.

Do, ensure that any herbicides are used safely and responsibly.

CONTROL OPTIONS

1. Cutting & Disposal

There may be situations where herbicides cannot be used e.g. near water or livestock.

In such cases regular cutting can eventually give control but may take many years.

Cut the individual stems at ground level e.g. with a knife, secateurs or shears. Collect the stems and dry them on a polythene sheet, or similar, to prevent rooting until they are dark brown before burning in situ if practical and will not cause a nuisance.

Where burning is not possible the cut stems can be placed fresh or dried in strong black polythene sacks to compost. To ensure that no live plant material escapes use two plastic sacks one inside the other.

There is no longer any facility to dispose of Japanese Knotweed in landfill so every attempt to dispose of on site should be made. For off-site disposal options contact Guernsey Waste Management on 231234.

2. Use & Choice of herbicide

ALWAYS READ THE PRODUCT LABEL FIRST, FOLLOW THE INSTRUCTIONS AND USE ANY PERSONAL PROTECTIVE EQUIPMENT SPECIFIED.

Before spraying with any herbicide check that you are complying with The Prevention of Pollution (Guernsey) Law 1989 (see below).

For best results, treat between late May and early October and cut and safely dispose of any old JKW canes from the previous season before application. Ensure the leaves are well covered on both sides with the spray as long as it is safe to do so.

Types of Herbicide

A. Glyphosate:

Glyphosate is a total weed control product so will kill all plants in an area and should not be used near any you wish to keep.

There are several different formulations of Glyphosate available but **Roundup Tree Stump & Root Killer** is an example of a product that has a recommendation for knotweed control. As a spray it is easiest to apply when the plants are 0.5 – 1m. This is usually late May / early June. Another treatment late August – October should then be applied. Single treatments will not give total control and you should plan to treat for at least 3-4 years in both spring and autumn.

If the stand of JKW is very tall when you first come to treat it can be cut back first then the regrowth treated at 0.5-1m height.

Roundup Tree Stump and Root Killer also has a recommendation as an autumn stem treatment to mature stems but is only approved for use until 30 June 2020 at the time of writing.

B. Triclopyr, 2,4-D/Dicamba/MCPA/Mecoprop-P

These herbicides are selective, only killing broad leaved plants and can be used without killing plants like grasses. Check the relevant product detail for its approved uses, number of applications permitted and application method.

These active ingredients form the basis of several selective weed killer products for lawns. If small knotweed plants are present in lawns then the use of these products may give some control.

As with glyphosate repeated applications will be needed over several years.

Safe use of Pesticides

***At the time of writing Guernsey Water have identified vulnerable areas which are high risk of pollution to the to the water catchment of the island as “stream banks, ponds, wet meadows,**

marshy areas, ditches, drainage ditches, underground culverts or paved areas". Pesticide applications must be at least 3m away from a vulnerable area. This can be reduced to 1m if weed-wiper or gel applications are being used. (The Prevention of Pollution (Guernsey) Law 1989).

See <http://www.water.gg/CHttpHandler.ashx?id=108839&p=0> for further details

For further advice contact Guernsey water on 239500 or www.water.gg

For more general advice contact The States Analytical Laboratory on 707612.

3. Other Options

- i) If you would like additional help in controlling Japanese Knotweed on your property then a professionally trained contractor could be engaged to apply the herbicides for you. They will need to have a certificate of competence to apply any professional herbicide products.
- ii) If you have large areas or commercial sites infested with Japanese Knotweed you may need to engage a qualified contractor who can draw up and oversee a knotweed management plan in conjunction with Planning, Guernsey Water and the Guernsey Waste Management team, where applicable. This could involve excavating and sieving the soil to remove most of the rhizomes or there are also techniques for burying the knotweed under barrier materials. Plans will have to be site specific to protect any vulnerable areas or sites of special scientific interest.
- iii) Recent Developments:-
 - a) **MESHTECH:** The use of mesh technology looks interesting especially in areas close to water where herbicides cannot be used. The Knotweed is cut back to ground level and a strong metal mesh is secured over the area the mesh is large enough to allow new shoots to grow through but small enough to strangle the knotweed stem as it increases in girth thereby killing it. See <https://www.jksl.com/meshtech-2/> for more details.
 - b) **ROOTWAVE** is a weed control system based on the use of an electric current to destroy plant tissue - <http://rootwave.com/> but has yet to be tested locally.

References

'Optimising physiochemical control of invasive Japanese knotweed': Jones, D., Bruce, G., Fowler, M.S. et al. Biol Invasions (2018) 20: 2091

'Japanese Knotweed Guidance for Identification & Control': Cornwall Knotweed Forum (Undated).