



*Fallopia x bohemica*, *F. sachalinensis*, & *F. japonica*

WA – Class B Noxious Weed, Prohibited Plant List

OR – Class B Noxious Weed

## **Knotweed spp.**

Bohemian Knotweed, Giant Knotweed & Japanese Knotweed

**Family:** Polygonaceae

**Origins:** Native to Japan, China, and Eastern Asia. Knotweed was introduced to the United States as an ornamental in the 1800s.

**Range:** Found throughout the Western United States, from Alaska to California. In Washington and Oregon, it is found along the coast and west of the Cascade Mountains.

**Habitat:** Riparian areas, floodplains, forest edges, neglected gardens, waste areas, and right-of-ways.

**Impact:** Knotweed has extremely vigorous rhizomes that form a deep, dense mat. The plant can readily sprout from plant fragments; along streams, plant parts may fall into the water to create new infestations downstream, forming dense colonies and eliminating native plant life. Knotweed causes bank erosion, lowers the quality of riparian habitat for fish and wildlife, and changes nutrient cycling in rivers and soils. In urban areas, these species can damage pavement and interfere with drainage and septic systems.

**Description:** Knotweed is a shade-tolerant, deciduous, perennial species growing 4 to 15 feet tall or more. Leaves are bright green and arranged alternately on the stem. Generally, the leaves are 4 to 18 inches, ovate to heart-shaped with an abruptly tapered tip. The branching stems are smooth, waxy, and hollow (resembling bamboo), with reddish-purple splotches. Small, white to greenish flowers form drooping clusters on the upper portion of stems from July to September. Male and Female flowers are on different plants; typically, Knotweed plants are seen as a female clone. Triangular fruits are shiny, brown, and 1/8 inch long.

Size is the typical factor used to distinguish Japanese Knotweed (most common) from Bohemian Knotweed from Giant Knotweed. Japanese Knotweed grows 4 to 8 feet tall, with leaves 4 to 6 inches long. Giant Knotweed grows from 12 to 15 feet tall, with leaves more than 12 inches long. Bohemian Knotweed is a hybrid between the Japanese and Giant Knotweeds, with features generally sized in the middle of the two species. The flower clusters on Japanese Knotweed are typically longer than the leaves, while the clusters are typically the same length as the leaves on Bohemian Knotweed and about half the length of the leaves on Giant Knotweed.

**Common Look-Alikes:** Bamboo, Dogwood, Himalayan Knotweed.



## **Integrated Pest Management - Control Methods**

Integrated Pest Management (IPM) combines various methods such as mechanical, cultural, biological, and chemical controls to manage pests. IPM offers the possibility of improving the efficiency of pest control while reducing its negative environmental impacts. For more information, see the Cowlitz County Noxious Weed's IPM Resources & Strategy Guide or contact your local Noxious Weed Control Board to develop a customized IPM plan.

*Continued...*

## Non-Herbicide Control

<b>Mechanical</b> (pulling, cutting, digging, etc.)	Not recommended; cutting plants encourages growth. The plants are extremely difficult to dig up due to a high density of deep rhizomes. Care must be taken with any mechanical removal methods; <u>improper disposal of plant material can further spread the species</u> . <b>DO NOT COMPOST</b> any part of the plant.
<b>Cultural</b>	Not recommended; loosely covering small infestations with a thick landscape fabric after cutting plants to the ground may provide some control if monitored weekly for 5 years or more; flatten any new growth weekly, and ensure the fabric is free of punctures or debris.
<b>Biological</b>	The Knotweed Psyllid, <i>Aphalara itadori</i> , is highly successful at controlling Knotweed species in its native home of Japan and was approved in 2020 for distribution in the United States. The Knotweed Psyllid feeds on the sap of the plant, depleting the plant's energy supply.

## Herbicide Control: Foliar Broadcast Treatment

<b>Glyphosate</b> (Rodeo, Killzall, Kleenup, Roundup)	<b>Timing:</b> Mid through late summer to actively growing plants, at bud to early flowering stage. <b>Remarks:</b> Spray complete uniform coverage, but not to the point of runoff; dust on plants may reduce effectiveness; Glyphosate is nonselective, it injures or kills any vegetation it contacts; refer to the label for use in aquatic areas.
<b>Imazapyr</b> (Imazapyr, Arsenal, Habitat)	<b>Timing:</b> Midsummer after seed head forms, through fall up to killing frost. <b>Remarks:</b> Spray complete uniform coverage, but not to the point of runoff; dust on plants may reduce effectiveness; refer to the label for use in aquatic areas; may be harmful to some tree species.
<b>Triclopyr +2,4-D</b> (Crossbow, Crossroad)	<b>Timing:</b> Midsummer to actively growing plants. <b>Remarks:</b> Observe all grazing and harvesting restrictions; avoid drift to sensitive crops; dust on plants may reduce effectiveness; refer to the label for use in aquatic areas.
<b>Triclopyr Ester / Triclopyr Amine</b> (Garlon 4, Remedy / Garlon 3A)	<b>Timing:</b> Midsummer to actively growing plants. <b>Remarks:</b> Spray complete uniform coverage; dust on plants may reduce effectiveness; Garlon products are registered for rights-of-way, industrial sites, and forestry sites; Remedy can be used on rangeland and pastures; refer to the label for use in aquatic areas.
<b>Dicamba</b> (Banvel, Rifle, Clarity)	<b>Timing:</b> Apply in late August to new regrowth. <b>Remarks:</b> Before herbicidal treatment, cut plants back in June; apply as a basal spray to the stems at ground level; do not apply in areas where roots of desirable plant species are growing; refer to the label for use in aquatic areas.

*For best results, add a surfactant to the herbicide mixture.*

## Herbicide Control: Stem Injection Treatment

<b>Glyphosate Concentrate</b> (AquaNeat, Rodeo, Roundup Pro Concentrate)	<b>Timing:</b> Mid through late summer to actively growing plants, at bud to early flowering stage. <b>Remarks:</b> Do not exceed the maximum label rate per acre; this method is best for small patches of Knotweed; Glyphosate is nonselective. It injures or kills any vegetation it contacts; refer to the label for use in aquatic areas.
---	---

\* Cowlitz County Noxious Weed Control Board does not endorse any product or brand name. Brand names are listed as an example only. Other commercial products may contain the listed active chemical for herbicide control. Always read and follow the safety protocols and rate recommendations on the herbicide label. **The Label is The Law.**

This control sheet includes excerpts from the Written Findings of the Washington State Noxious Weed Control Board (WSNWCB), [nwcb.wa.gov](http://nwcb.wa.gov). Herbicide information from the PNW Weed Management Handbook (ISBN 978-1-931979-22-1) and product labels.