

at a glance

- White bryony is listed as a noxious weed by the Idaho State Department of Agriculture. Property owners must control, reduce, or eliminate infestations, when possible.
- All parts of white bryony are poisonous and should be handled with gloves.
- Vines reach lengths up to 50 feet.
- White bryony can kill trees or bushes by smothering them, preventing light from reaching the host plant's canopy.
- The tuberous root, which can be larger than a football, serves as a source of new growth and makes control difficult.
- Birds spread the seed.
- Control procedures include a combination of severing the root and applying glyphosate herbicide.

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White Bryony

Introduction

White bryony (*Bryonia alba*) is listed as “noxious” by the Idaho State Department of Agriculture. One criterion that defines a weed as noxious is its potential to cause injury to public health, crops, livestock, land, or other property as deemed by Idaho law. As a result, homeowners and other landowners are required to control, reduce, or eliminate white bryony infestations on their property when possible.

Plant Identification

White bryony, a member of the cucumber family, is a climbing perennial plant with vines that can reach lengths of 50 feet. Vines have tendrils used for climbing, much like those on pea plants. Leaves are dark green, with five lobes, up to 5 inches long, and rough to the touch (figure 1). Flowers are yellow-green to greenish-white, have five petals, measure ½ inch across, and grow in clusters. Seeds are contained in green, ⅝-inch diameter spherical berries that turn black when mature. A fully developed root is quite massive, reaching 18 inches in length and easily weighing 5 pounds or more (figure 2).

Plant Characteristics

White bryony grows very rapidly, covering poles, fences, and structures, and has the potential to smother and kill smaller trees and shrubs (figure 3). It also outcompetes nearby plants for water and space.

All plant parts are poisonous to humans and livestock, particularly the roots and berries. It is not known how many berries or other plant parts need to be ingested to result in poisoning or how much external contact needs to



Figure 1. White bryony foliage, flowers, and berries. Photo by Danielle Gunn.



Figure 2. White bryony root. Photo by Danielle Gunn.



Figure 3. White bryony vines covering a lilac bush. Photo by William Bohl.

occur. For that reason, do not eat any plant parts and wear protective clothing and gloves when handling plants.

Birds feed on the plant's berries, and are not affected by the toxin. Seeds pass through a bird's digestive system unharmed and are deposited wherever birds perch, thus producing more plants.

Control Options

To minimize seed spread, remove vines prior to seed set. Place vines in heavy-duty garbage bags and discard them.

Well-established white bryony may be at least partially controlled by severing the root crown 3 to 4 inches below the surface where the vine attaches to the root. This procedure will likely need to be repeated because an established white bryony root can be quite large, with extensive food reserves for sending up new shoots. Alternatively, the entire root structure could be removed and destroyed.

A combination of chemical and mechanical control measures has proven to be most effective. Trace the vine to the ground and use a shovel to sever the vine and root 3 to 4 inches below the soil surface. Apply a thin coat of an undiluted glyphosate product that is labeled for cut-surface application to the in-ground portion of the severed root. Some plants may need another treatment. Do not let glyphosate come in contact with any desirable plants.

Applying an herbicide containing glyphosate to white bryony leaves may be effective, but will also damage a host plant. Before applying an herbicide, pull the vines away from the host plant and from other plants and grasses you do not want to damage. Applying an herbicide only to the vines may not kill the entire plant and may need to be repeated.

ALWAYS read and follow the instructions printed on the pesticide label. The pesticide recommendations in this UI publication do not substitute for instructions on the label. Pesticide laws and labels change frequently and may have changed since this publication was written. Some pesticides may have been withdrawn or had certain uses prohibited. Use pesticides with care. Do not use a pesticide unless the specific plant, animal, or other application site is specifically listed on the label. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Trade Names—To simplify information, trade names have been used. No endorsement of named products is intended nor is criticism implied of similar products not mentioned.

Groundwater—To protect groundwater, when there is a choice of pesticides, the applicator should use the product least likely to leach.

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