

Weed Information Sheet:



deadly nightshade

Solanum dulcamara

Identification:

Solanaceae (Tomato family)

Common Perennial vine

Height: 1-10' **Width:** 2-8'

Leaf Arrangement: alternate

Flower: Indigo, Yellow, Lavender **Blooms:** Early summer to Late-summer **Fruit:** Red berry **Fall Color:** Maroon, Burgundy

This semi-woody vine has young leaves which are heart or water-drop shaped, but as they mature they develop into three asymmetrical lobes. The most distinctive features of this plant are the purple flowers with reflexed pedals and a yellow cone at the center which blooms from late-May to August. The abundant berries are initially green, but mature to a bright red color and persist on the plant into winter. Overall this plant could best be described as a vine. On its own it may grow to about 2.5' in height. However it can climb on other vegetation or structures up to about 10'.



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Solanum dulcamara

AKA: climbing nightshade, bittersweet nightshade, European nightshade

Description & Impact:

Deadly nightshade is a weedy member of the tomato family originally from Europe and northern Africa. It inhabits disturbed areas such as gardens, urban waste areas, field edges, fence lines and shorelines in both shade and sun. It can inhabit dry and wet sites, but is most aggressive in moist soils. This species will spread and dominate in disturbed conditions. Though it is not particularly competitive against native perennials, it can be invasive on shorelines and wetland areas. The leaves are particularly poisonous and known to be deadly to animals if ingested. The bright red berries are less toxic, they tend to attract the attention of children and pets and can cause severe illness if consumed. For this reason we recommend removing deadly nightshade wherever it is found.



Control Methods:

Hand Removal: In early summer when its distinctive flowers make it easy to spot, but before fruit develop. If berries are present when you are removing deadly nightshade it is critical that all plant material be carefully removed so as to avoid spreading the berries around the site. The plants should then be bagged and put in the trash in order to prevent seed spread. Fortunately, populations of this plant are usually small, making hand pulling the simplest and most effective method of control. When pulled the stems often break-off at ground level. Use a trowel or shovel to grub out and remove the root, otherwise the plant will resprout. Then repeatedly monitor the area for new sprouts and carefully remove those roots.

Cut and Treat: Clipping the stems close to ground level and applying a small amount of concentrated herbicide, as one does for removing invasive brush, is a more effective method for control that is also less labor intensive. Apply Glyphosate (Round-Up®, etc.) mixed 1:1 in water is effective and has the lowest potential for negative impacts to surrounding vegetation. Or use a solution of triclopyr (Garlon® 4, etc.) in mineral oil. Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

Mowing: Larger populations can be managed by repeated mowing/cutting, starting when the plants begin to flower and repeated every 3-4 weeks through the growing season.

Repeated mowing may not be able to fully eradicate a population. Follow up options for survivors include a foliar application of herbicide such as triclopyr (Vastlan®, Garlon® 3A) or glyphosate, applied to new leaves as the plants resprout from the roots. Another option, if you are preparing the area for planting is smothering the area where the plants are found by spreading cardboard or newspaper and then covering that with 4-6 inches of mulch in order to prevent sprouts and seedlings. The area should be left undisturbed for at least one growing season before replanting.

Revegetation Recommendations: There are many native species which could replace deadly nightshade; prairie or woodland species can be selected depending on light conditions. Virgin's bower (*Clematis virginiana*) is a herbaceous vine with lovely late-summer clusters of white flowers and interesting fluffy seedheads which persist into winter. American bittersweet (*Celastrus scandens*) is a woody vine with attractive orange and red berries which hang on the vine through winter providing color and wildlife food and winter color. Virginia Creeper (*Parthenocissus quinquefolia*) and Wild Grape (*Vitis riparia*) are great food sources for wildlife and have attractive fall foliage, however these species are aggressive, a factor that should be considered before they are planted.

Citations: