

INVASIVE PLANTS  
IN WISCONSIN

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**I**nvasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The *Management of Invasive Plants in Wisconsin* series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more information, go to: [fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin](http://fyi.uwex.edu/weedsci/category/invasive-plants-of-wisconsin).

# Black swallow-wort

## (*Vincetoxicum nigrum*)

**B**lack swallow-wort is a perennial, herbaceous, spreading or climbing vine. This species can form mats on the ground or over small shrubs and in some cases, it can grow into tree canopies. Dominates shrub layer and can also form mats on ground or grow into tree canopy.

### Legal classification in Wisconsin:

Prohibited

**Leaves:** Leaves are opposite and oblong to oval, narrowing to a point at the tip. Leaves are glossy, hairless, and grow from 2–4" in length. The leaf edge (margin) lacks teeth.

**Flowers:** Late spring to midsummer. Star-shaped flowers are 0.25" across with five purple to black petals borne in clusters where the leaf attaches to the stem (leaf axil). Flowers are covered in fine white hairs and have the smell of rotting fruit.

**Fruits and seeds:** The seed pods are 1.5–3" in length and split open lengthwise. Tufted, windborne seeds are released from late summer through fall.

**Roots:** Fleshy, white perennial roots.

**Similar species:** A number of plants (e.g., common milkweed, butterfly weed) produce seed pods similar to black swallow-wort, but none grow as vines.

### Ecological threat:

- Invades upland areas of forests, grasslands, riparian areas, woodland edges, old fields, fence rows, active pastures, roadsides, and residential or commercial lots.
- Forms dense tangled thickets, suppressing other plants.
- Plants in sunny areas form more seed pods than those in shaded.
- Plants thrive and seeds are readily spread under standard right-of-way maintenance regimens.



## Non-chemical control

### Removal

**Effectiveness in season: 50–70%**  
**Season after treatment: < 50%**

Pulling and cutting after seed pods begin formation, but before elongation, are effective at preventing viable seed production. To control individual plants, dig up the root crown. Do not pull, because stems will break off above the root crown. All cut or pulled material should be removed since roots and vines can reroot. Existing mature seed pods must be removed and burned or properly disposed of in a landfill.

### Cultivation

**Effectiveness in season: 50–70%**  
**Season after treatment: < 50%**

Intensive cultivation controls newly emerged seedlings and may reduce established populations, especially if integrated with other control methods. Timely cultivations every three weeks—beginning when the plant is in bud stage, but before any flowers open—will deplete the root reserves of established plants and can eradicate populations after at least five years.

### Mowing

**Effectiveness in season: 50–70%**  
**Season after treatment: < 50%**

Mowing is typically ineffective at eradicating existing populations because of the growth habit, but can be done to prevent seed production. Mow after the formation of seed pods, but before pods elongate. Monitor populations and repeat mowing if concerned about seed production. Mowing is a useful way to prepare a site for a later herbicide application.

### Prescribed burning

**Effectiveness in season: < 50%**  
**Season after treatment: < 50%**

Spring burns can kill germinating seedlings and young plants. Fire can also suppress above-ground growth of established plants, depending on fire intensity. After the fire, established plants will quickly resprout or reroot and reinvade areas. This management method is not recommended unless integrated with other techniques. Burning is a useful way to prepare a site for a later herbicide application. A handheld propane torch can be effective for treating seedlings.

## Manipulation of the environment

**Effectiveness in season: 90–100%**  
**Season after treatment: < 50%**

Mulching to a depth of 3" or more will reduce growth and prevent seed germination. Organic or synthetic mulches or a tarp can be used. Populations should remain covered for at least two years to suppress the population.

## Chemical control

### Foliar

Apply directly to individual plants or broadcast across an infested area. Broadcasted foliar applications are typically the most cost-effective treatment in dense infestations. Use lower rates on smaller plants and less dense populations and higher rates on larger plants and denser populations. Absorption of herbicide can be limited with this species, resulting in reduced effectiveness. Including a recommended surfactant at 0.25–0.5% can alleviate any potential reduction in effectiveness.

#### glyphosate\*

**Effectiveness in season: 50–70%**  
**Season after treatment: < 50%**

**Common name:** Roundup

**Rate:**

**broadcast:** 1.2–2.75 lb a.e./A

**spot:** For a 3 lb a.e./gal product: 3–5% (0.09–0.15 lb a.e./gal)

**Timing:** Apply when plant begins to flower.

**Remarks:** Most effective in shaded areas.

**Caution:** Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided, since even minute quantities of the spray may cause severe injury to plants.



\*Active ingredient (a.i.)

### imazapyr\*

**Effectiveness in season: 70–90%**  
**Season after treatment: 50–70%**

**Common name:** Arsenal

**Rate:**

**broadcast:** 48–96 fl oz/A  
(0.75–1.5 lb a.e./A)  
**spot:** 5% (0.1 lb a.e./gal)

**Timing:** Apply when plant begins to flower.

**Caution:** Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since imazapyr is not selective and can remain in the soil for several months to more than a year, depending on application rate. Overspray or drift to desirable plants should be avoided, since even minute quantities of the spray may cause severe injury to plants.

### triclopyr\*

**Effectiveness in season: 70–90%**  
**Season after treatment: 50–70%**

**Common name:** Garlon

**Rate:**

**broadcast:** 36–49 fl oz/A  
(1.13–1.53 lb a.e./A)  
**spot:** 2% (0.08 lb a.e./A)

**Timing:** Apply when plant begins to form seed pods.

**Remarks:** The addition of a methylated seed oil (MSO) often improves effectiveness.

**Caution:** Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.

## Cut stump

Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Apply as soon as possible after cutting, but no later than one hour after cutting. Do not use this method if there is heavy sap flow or if snow is covering the cut surface. Use lower rates on smaller plants and higher rates on larger plants.

### glyphosate\*

**Effectiveness in season: 90–100%**  
**Season after treatment: 50–70%**

**Common name:** Roundup

**Rate:** For a 3 lb a.e./gal product: 50–100% in water (1.5–3 lb a.e./gal)

**Timing:** Apply any time of year.

**Caution:** Use product labeled for aquatic use if potential exists for solution to contact surface waters. Applications can result in bare ground since glyphosate is not selective. Overspray or drift to desirable plants should be avoided, since even minute quantities of the spray may cause severe injury to plants.

### triclopyr\*

**Effectiveness in season: 90–100%**  
**Season after treatment: 50–70%**

**Common name:** Garlon

**Rate:** 25–30% in oil (1.0–1.2 lb a.e./gal)

**Timing:** Apply any time of year.

**Remarks:** Products containing this active ingredient can have different instructions for mixing. Labels will recommend mixing the product in a water- or oil-based carrier (e.g., basal bark oil). Consult the label to determine the appropriate carrier.

**Caution:** Use product labeled for aquatic use if potential exists for solution to contact surface waters. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Overspray or drift to desirable plants should be avoided since even minute quantities of the spray may cause severe injury to plants.



Herbicide information is based on label rates and reports by researchers and land managers. Products known to provide effective control or in common use are included. Those that do not provide sufficient control or lack information for effectiveness on target species have been omitted.

References to pesticide products in this publication are for your convenience and not an endorsement of one product instead of a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

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