

Invasive Plants of Wisconsin



Black Swallow-wort (*Vincetoxicum nigrum*)

Authors: Brendon Panke, , Ryan deRegnier and Mark Renz¹

Perennial, herbaceous spreading or climbing vine. Typically 3-6' long depending on supporting structure. Dominates shrub layer and can also form mats on ground or grow into tree canopy.

Legal Classification in WI: 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. Flowers are purple to black in color and are 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 & 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 forest, grasslands, riparian areas, woodland edges, old fields, fence rows, active pastures, roadsides and residential and 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 readily spread under standard right-of-way maintenance regimens

¹ Associate research specialist, research assistant and assistant professor of agronomy, College of Agricultural and Life Sciences, University of Wisconsin-Madison, and Cooperative Extension, University of Wisconsin-Extension.

CONTROL METHODS:**Non-Chemical control**

Removal –Tilling the infestation for multiple years can control existing plants and prevent seed production. Tilling can also spread the infestation if root and vine material are spread to other areas. Cutting after seed pods begin formation, but before elongation is effective at preventing viable seed production. All cut or pulled material should be removed as roots and vines can re-root. Existing mature seed pods must be removed and burned or properly disposed of in a landfill.

Mowing – Mowing is typically ineffective at eradicating existing populations due to the growth habit, but can be done to prevent seed production. Mow after the formation of seed pods but before pods elongate. Mowing is a useful way to prepare a site for a later herbicide application.

Prescribed burning – Spring burns can kill germinating seedlings and young plants. Fire can also suppress above ground growth of established plant depending on fire intensity. After the fire, established plants will quickly re-sprout or re-root 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 hand-held propane torch can be effective for treating seedlings.

Manipulation of the Environment - Mulching to a depth of 3” or more will reduce growth of black swallow-wort as well as 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 control²

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. Typically, several years of herbicide application will be needed to control an established population.

Active Ingredient (A.I.):
glyphosate

Rate – *broadcast*: 1.2 – 2.75 lb a.e./A
spot: 3 - 5% (0.09 - 0.15 lb a.e./gal)

Common product name:
Roundup

Timing – Apply when plant begins to flower.

Remarks - Most effective in shaded areas.

Caution – Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.

² 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 over a similar product. You are responsible for using pesticides in accordance with the label directions. *Read the label before any application.*

<p>Active Ingredient (A.I.): imazapyr</p> <p>Common product name: Arsenal</p>	<p>Rate – <i>broadcast</i>: 48-96 fl oz/A (0.75-1.5 lb a.e./A) <i>spot</i>: 5% (0.1 lb a.e./gal)</p> <p>Timing – Apply when plant begins to flower.</p> <p>Caution - Applications can result in bare ground as imazapyr is not selective and can remain active in the soil for several months to over a year depending on application rate. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): triclopyr</p> <p>Common product name: Tahoe 4</p>	<p>Rate – <i>broadcast</i>: 36-49 fl oz/A (1.13-1.53 lb a.e./A) <i>spot</i>: 2% (0.08 lb a.e./A)</p> <p>Timing – Apply when plant begins to form seed pods.</p> <p>Remarks – The addition of a methylated seed oil (MSO) often improves effectiveness.</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Overspray or drift to desirable plants should be avoided, as even minute quantities of the spray may cause severe injury.</p>
<p>Cut stump – Cut a stem of a plant near the base and apply herbicide to the cut surface that remains rooted in the ground. Do not use this method if there is heavy sap flow or snow covers the cut surface. Use lower rates on smaller plants and higher rates on larger plants.</p>	
<p>Active Ingredient (A.I.): glyphosate</p> <p>Common product name: Roundup</p>	<p>Rate – 50-100% (1.5-3 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Remarks - Mix with water. In temperatures below freezing solution can become unusable.</p> <p>Caution – Applications can result in bare ground as glyphosate is not selective. Use aquatically labeled product if potential exists for solution to contact open waters.</p>
<p>Active Ingredient (A.I.): triclopyr</p> <p>Common product name: Tahoe 4</p>	<p>Rate – 25-30% in oil (1.0-1.2 lb a.e./gal)</p> <p>Timing – Anytime of year.</p> <p>Caution – Can volatilize, avoid application during high temperatures and low humidity, especially when the application contacts impervious surfaces. Use aquatically labeled product if potential exists for solution to contact open waters.</p>

This series of fact sheets was created in cooperation with University of Wisconsin-Extension team Horticulture.

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under Award No. 2009-45060-06000.

University of Wisconsin-Extension, Cooperative Extension, in cooperation with the U.S. Department of Agriculture and Wisconsin counties, publishes this information to further the purpose of the May 8 and June 30, 1914, Acts of Congress. An EEO/AA employer, the University of Wisconsin-Extension, Cooperative Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. If you need this information in an alternative format, contact Equal Opportunity and Diversity Programs, University of Wisconsin-Extension, 432 N. Lake St., Rm. 501, Madison, WI 53706, diversity@uwex.edu, phone: (608) 262-0277, fax: (608) 262-8404, TTY: 711 Wisconsin Relay.