

Invasive Plants in Pennsylvania

Pale and Black Swallow-worts

Cynanchum louiseae and *C. rossicum* (previously *Vincetoxicum* spp.)



Photo: Leslie Mehrhoff, www.invasive.org

Background:

Swallow-worts were likely introduced for ornamental purposes into New York, Massachusetts and Illinois. Records of occurrences include Pennsylvania in 1927. Indications of naturalized populations include records of collections from roadsides and natural areas in New York State in the 1800s and 1900s.

Range:

Originally from Europe and Eurasia, it is now established in CT, IN, MA, MI, MO, NH, NJ, NY, PA and WI.

Description:

Black and pale swallow-worts are perennial, twining herbaceous vines, three to six feet high. The leaves are opposite, oval shaped with pointed tips. Pale swallow-wort leaves are 2.5 to 4.5 inches long and the flowers are star shaped with reddish colored petals each twice as long as wide, born in clusters. Black swallow-wort has darker green leaves three to four inches long, dark purple flowers with the five pointed petals nearly triangular, about as long as wide. Plants tend to grow in clumps of several to many stems, forming extensive patches.

Habitat:

Swallow-worts prefer limestone based soils, are drought tolerant and will thrive in a wide range of soil, moisture and light conditions, with the exception of extremely wet soils. Populations growing under dense wooded canopy may have inadequate resources to produce flowers or seeds. Swallow-wort dies back to the ground every winter. Its root crown fragments support dormant buds that readily sprout if not destroyed.

Biology and Spread:

The fruits are slender tapered pods, often paired, two to three inches long by about 1/4 inch wide, that turn from green to light brown as they mature. When ripe, the fruits open along a seam and release flattened seeds equipped with a downy parachute that aids in wind dispersal (see photo on right). In contrast to its invasive relative the black swallow-wort (*C. louiseae*), pale swallow-wort does not have rhizomes.



Ecological Threat:

Related to milkweeds, swallow-worts are extremely toxic to livestock and monarch butterfly larvae, which are sometimes fooled into laying their eggs on this plant. Pale swallow-wort can form extensive patches that crowd out native plant species and have various impacts on native wildlife. In some instances, old-field habitats occupied by goldenrods and grasses are replaced almost exclusively by swallow-wort, disrupting natural succession and completely altering the physical structure of those habitats.

How to Control this Species:

To prevent seed dispersal, mechanical removal of the pods must be completed before they open. Hand pulling roots is labor intensive and rarely successful since the stem base is brittle.

Herbicides should be applied when plants are actively growing, after flowering has begun. DO NOT SPRAY TOO SOON. Avoid the temptation to spray the plants as soon as they emerge in May.

Look-A-Likes:

There are many native species of *Cynanchum*, including honeyvine (*Cynanchum laeve*) which occurs throughout the eastern U.S. and could be confused with pale swallow-wort. Honeyvine has white flowers, and its leaves have a distinct heart-shaped base.



Photo: Leslie Mehrhoff, www.invasive.org

Only when the plants flower will they be large enough to receive enough spray on the exposed leaf surface to deliver a killing dose to the roots. Plants sprayed before pods form will probably not produce a viable seed crop that season.

Systemic herbicides do not cause a “burn down” of plants like contact herbicides do. Within one to two weeks the plants will look sick. There may be dead tissue spots on most leaves, with many yellowing leaves.

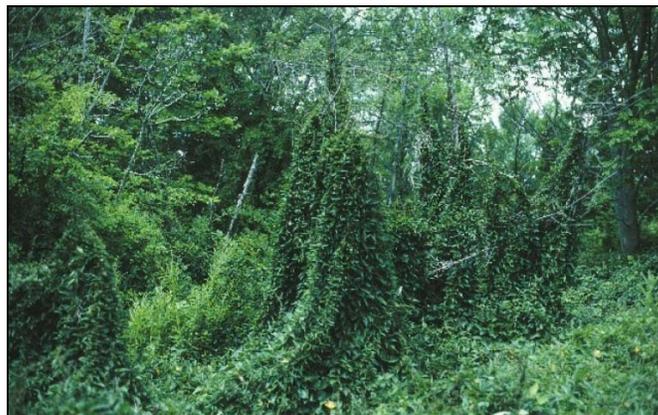


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Do not waste herbicide, money or effort by spraying plants twice. Sick plants cannot effectively absorb the herbicide through the leaf surface or move the herbicide to the roots. Swallow-wort control may take a few years and it is important not to use more herbicide than is necessary.

References:

DiTommaso, A., Lawlor, F. M. and Darbyshire, S. J. 2005. The Biology of Invasive Alien Plants in Canada

Cynanchum rossicum (Kleopow) Borhidi [= *Vincetoxicum rossicum* (Kleopow) Barbar.] and *Cynanchum louiseae* (L.) Kartesz & Gandhi [= *Vincetoxicum nigrum* (L.) Moench]. *Can. J. Plant Sci.* 85: 243–263

Swearingen, J. 2009. WeedUS Database of Plants Invading Natural Areas in the United States: Pale Swallow-wort (*Cynanchum rossicum*) <http://www.invasive.org/weedus/subject.html?sub=4260>

Weeds Gone Wild: Alien Plant Invaders of Natural Areas: www.nps.gov/plants/alien