

Invasive Plants in Pennsylvania

Pale and Black swallow-worts

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



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.

Habitat:

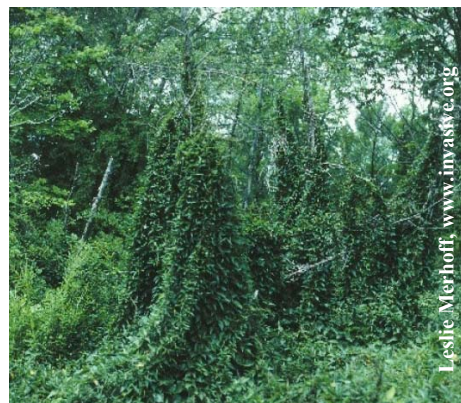
Swallow-worts prefer lime-stone based soils, are drought tolerant and will thrive in a wide range of soil, moisture and light conditions, with the exception of extremely wet soils. Populations growing under dense wooded canopy may have inadequate resources to produce flowers or seeds. Swallow-wort dies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

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.

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.



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.



pale swallow-wort seed pods

Brett Pifer, DCNR - BOF

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.

Black and Pale swallow-wort (*Vincetoxicum nigrum* & *V. rossicum*)



Black swallow-wort leaves and seed pods (Photo by A. Cortilet)



Black swallow-wort flowers (Photo by A. Cortilet)

Black and Pale swallow-wort (*Vincetoxicum nigrum* & *V. rossicum*)



Pale swallow-wort (Photo by Brett Pifer)

Swallow-worts Treatment Guidance

If populations are small, digging of plants and root material can be effective, but is difficult and all material must be removed from the site. 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.

Glyphosate can be effective against swallow-worts, but must be applied twice in a season, first in June then again in August. When using glyphosate, a surfactant is required. Triclopyr can also be used as a foliar application once per growing season and has the advantage of only targeting broadleaf plants.

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.

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.

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.