

Vermont Invasive Exotic Plant Fact Sheet

Swallow-wort

Pale Swallow-wort *Vincetoxicum hirundinaria* Medikus,
(*Cynanchum vincetoxicum* (L.) Pers.) &
Black Swallow-wort *Vincetoxicum nigrum* (L.) Moench.
(*Cynanchum louiseae* Kartesz & Gandhi)

Milkweed Family

Description: Black and pale swallow-wort are both herbaceous perennial twining vines that can grow 3 to 6 feet (1 to 2 meters) in height depending on habitat and available support. They have opposite leaves that are 2-4 inches (5-10 cm) long, hairless and smooth, oblong to ovate in shape, narrowing to a point at the tip. Their twining habit and opposite, smooth leaves with their somewhat shiny or reflective quality, distinguish these two *Vincetoxicum* species from other native and introduced species in the northeastern quarter of the U.S. and adjacent Canada.

Flowers of both species are small, .2-.4 inches (5-9 mm) wide and borne in small clusters in the leaf axils. Black swallow-wort flowers are purple-black, with the petals about as wide as long (1.5-3 mm) with straight white hairs on the dorsal surface. Pale swallow-wort flowers are pale to dark maroon, purple or pinkish, glabrous, and longer than wide.

Both species produce slender, 1.5-2.5 inches (4-7 cm) long pods that split open lengthwise along one side to release many tufted, windborne seeds. The fruits are often borne in pairs, somewhat reminiscent of the forked tail of a swallow. The fruits of black swallow-wort are 2-2.5 inches (5-7 cm) long by .3 inches (0.8 cm) wide. Pale swallow-wort fruits are 1.5-2 inches (4-6 cm) long by .2 inches (0.5 cm) wide. Senescing plants turn a golden yellow in late summer. The dehisced pods persist on the dried vines, especially in brushy areas.

Subterranean buds on the root crown may produce one to several shoots. Black swallow-wort is reported to have rhizomes, but investigators have been unable to verify such connections among pale swallow-wort. The fibrous roots of both species can hold tenaciously to the soil substrate.

Habitat: Both black swallow-wort and pale swallow-wort are associated with disturbances, particularly with human disturbances such as highway, rail, utility and other transportation corridors, limestone quarries, abandoned pastures



Black Swallow-wort

(Gleason, Henry A. 1952. *New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, Hofner Press, New York. Vol. 3.)

Habitat continued: and old fields, Christmas tree plantations, nursery crops and other perennial crops. *Vincetoxicum* species can successfully invade natural areas with some type of disturbance regime. Rivers and streams that experience spring flood scouring are extremely vulnerable to invasion. Black and pale swallow-wort are ecologically similar, flourishing in sunny open areas, shrub habitats and hedges, as well as under fully shaded forest canopies.

Threats: Black and pale swallow-wort can both form dense stands that displace desirable native species. Their light and moisture tolerances are wide, and both species can occupy sites from full sun and dry soils over exposed bedrock, to wooded and shady riparian streamsides. Large monocultures can form in open, fully-exposed areas. In brushy areas, these vines can over-top and smother shrubs, outcompeting desired, native plants. Seed production is profuse and seed is wind-dispersed.

Some scientists are concerned about the impact of *Vincetoxicum* species on the Monarch butterfly (*Danaus plexippus*), whose reproduction is obligate on the genus *Asclepias*, also of the *Asclepiadaceae* or milkweed family.

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Swallow-wort Milkweed Family (*Asclepiadaceae*)

Distribution: Pale swallow-wort is native to the Ukraine and southwestern European Russia, and is apparently endemic to regions north of the Black Sea. The plant was first noted in Monroe and Nassau counties, New York State, in 1897. It has now been recorded in Massachusetts, Pennsylvania, New Jersey, Indiana, Connecticut, New Hampshire, Wisconsin and Michigan. Very large populations are known from central New York and the Toronto, Ontario region.

Black swallow-wort is native to western European Mediterranean regions. It occurs in New York, Michigan, Ohio, Rhode Island, Vermont, Pennsylvania, Illinois, Missouri, Connecticut, Maine, Maryland, New Jersey, New Hampshire, Indiana, Wisconsin, Kansas, Kentucky, Nebraska and California.

Control: The prevention of new infestations is the best management method and like many invasive herbaceous perennial plants, successful management once it is established can be difficult. Mechanical cutting is inadequate, as mature plants readily re-sprout. Herbicide choice will depend on site conditions, and repeated herbicide applications followed by careful monitoring are usually required. Cut-stem glyphosate (the active ingredient in Round-up) applications is a good control method for adult plants. Herbicide choice for foliar spray treatments will depend on site conditions. In degraded patches with little desirable vegetation, glyphosate (which is non-specific) may be preferred. At sites with desirable grasses that should be conserved, triclopyr ester (the active ingredient in Garlon 4, Pathfinder II) would be the herbicide of choice.

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For more information about Vermont's invasive exotic plant species or if you would like to know how you can help, please contact:

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