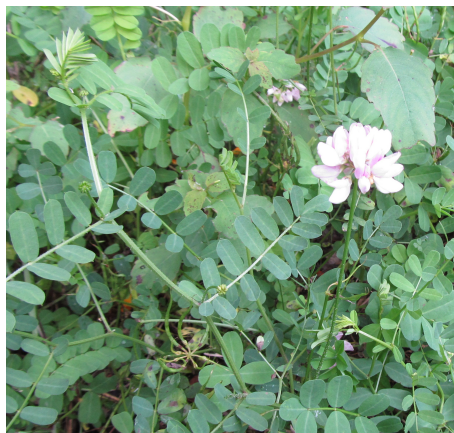


Invasive Plants in Pennsylvania

Crown-vetch

Coronilla varia



Deric Case, DCNR - BOF

Background:

Crown-vetch was introduced throughout North America in the 1950s for erosion control, particularly along roadways. It is still being sold and used in many states that have not officially declared it to be invasive.

Range:

Crown-vetch is native to Europe, Asia and Africa. Since its introduction to the U.S., it has spread throughout the country.



Chris Evans, River to River CWMA

Habitat:

Crown-vetch prefers disturbed, open areas, especially with gravelly or sandy soils. Openings and disturbed areas such as fields, waste areas, roadsides and embankments are perfect habitats for this species.

Description:

Crown-vetch is an herbaceous vine that usually forms sprawling mats or thickets up to three feet tall. The leaves are alternate and pinnately compound, with 15 to 25 pairs of leaflets. The pea-like flowers range in color from white to pink or purple, and bloom during the summer. It has a branched, fibrous root system.



Deric Case, DCNR - BOF

Biology and Spread:

Crown-vetch spreads through both seeds and rhizomes. The rhizomes can extend up to 10 feet, and an individual plant can cover 70 to 100 square feet within four years.

Ecological Threat:

Crown-vetch's main impact is the displacement of native plant species from their habitats. Although it can provide forage for some species, it prevents native flowers and shrubs from establishing in open areas. This, in turn, can be detrimental to native animals and insects which rely upon those native plants or the conditions they provide for food or shelter.

How to Control this Species:

Crown-vetch can be controlled with a variety of methods, although some may prove more successful than others.

Manual control can be effective on younger or smaller populations. This can include pulling entire plants (making sure to include as much of the rhizomatous roots as possible). Mowing is another potential method of controlling crown vetch. The mowing should occur in late spring and then multiple times through the growing season, for several consecutive years.

Prescribed burning can also be effective when conducted in late spring and for several consecutive years.

For areas where crown vetch has established large, dense populations, chemical controls can be used. Glyphosate, triclopyr and metsulfuron were shown in experiments to be effective at treating crown vetch. Herbicides can also be used after removing the aerial portion of the plant by mechanical means, which may improve results.

Look-A-Likes:

Many plants in the pea family, like the native American vetch (*Vicia americana*) - **shown below** - can look similar to crown-vetch, so be sure to positively identify this species prior to controlling it.



Dave Powell, USDA Forest Service