

Crown Vetch

Coronilla varia



Pictures By (From top to bottom):
D. Tenaglia, D. Tenaglia and D.
Powell @ www.invasive.org.

Invasive Plants are a Threat to:

- Forests and wetlands
- Native plants
- Perennial gardens
- Wildlife
- Lakes and rivers
- Human Health
- Farmland

Date Updated: 10/06

Description:

Crown vetch is a perennial herb in the pea/legume family. It has spreading to diffuse, creeping stems that can reach two to six feet in length. The leaves are dark green, compound and bear fifteen to twenty-five leaflets. The seed pods are narrow, segmented, pointed, borne in crown-like clusters and may be two to three inches long. The pea-like, pinkish-white to deep pink flowers occur in clusters at the end of extended stalks and appear from late spring through summer. Crown vetch has a multi-branched root system and can spread by its strong rhizomes.

Distribution:

Crown vetch prefers sunny, open areas. However, it is tolerant of temperatures down to -33° C, periods of drought and periods of heavy precipitation. Since crown vetch was originally planted for erosion control, it is now located mostly along roadsides, rights-of-way, open fields, waste grounds and on gravel bars along streams. It is documented as naturalized in all but four U.S. states and is found in every county in Indiana.

Problem:

Crown vetch becomes a problem when it invades natural areas, such as native grassland prairies and dunes, where it works to exclude native vegetation by fully covering and shading those native plants. It can climb over small trees and shrubs, and eventually form large monocultures. It seeds prolifically, but can also rapidly spread by rhizome growth. Due to its nitrogen fixing capabilities, it has the capacity to adversely affect the nitrogen cycle of the native communities that may depend on infertile soils. It can also alter available fuel loads in fire-adapted ecosystems, changing fire intensity.

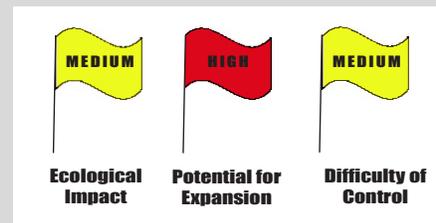
Origin:

Crown vetch is from the Mediterranean region of Europe, northern Africa and southwest Asia. It was introduced to the United States in the 1950's and was primarily used for erosion control. Its use for erosion control has greatly decreased in Indiana, given both its invasiveness and the availability of species that are much better at controlling erosion.



Picture By: D. Powell @
www.invasive.org.

IPSAWG Ranking:



IPSAWG Recommendation:

- Do not buy, sell or plant crown vetch in Indiana.
- Help by eradicating crown vetch on your property.

This ranking illustrates the results of an assessment conducted by the **Invasive Plant Species Assessment Working Group (IPSAWG)**, which is made up of many organizations and agencies concerned about invasive plant species. IPSAWG's goal is to assess which plant species may threaten natural areas in Indiana and develop recommendations to reduce their use in the state.

For more information about IPSAWG and the assessment tool used to rank invasive species, visit their website:

www.invasivespecies.IN.gov

ALTERNATIVES to crown vetch:



Roundheaded bushclover
(*Lespedeza capitata*)



Purple vetch
(*Vicia americana*)



Goat's-rue
(*Tephrosia virginiana*)



Creeping Phlox
(*Phlox subulata*)

Pictures By (Top to Bottom): K. Yatskievych, G. Monroe @ USDA-NRCS Plants Database, D. Reed @ www.2bnthewild.com and T. Barnes @ USDA-NRCS Plants Database.

Control Methods:

Herbicides are currently the most effective means to control large infestations of crown vetch. Higher rates of effectiveness can be obtained if the herbicide treatment follows the removal of the accumulated plant litter by burning, mowing or grazing. In early spring, 2, 4-D amine can be foliar-applied for good control. Glyphosate can also be foliarly applied in early spring at 1 or 2% solution. Triclopyr applied at a 2% solution reportedly kills 99% of crown vetch in large infestations. Clopyralid is an even more target-specific herbicide. A 0.25% solution of clopyralid

with 0.5% surfactant can reportedly kill 100% of crown vetch cover. Manual or mechanical methods can be used to control crown vetch. However, these methods are often time consuming and labor-intensive, as all pieces of the stems, roots, and rhizomes must be carefully removed.

Mowing can eventually control crown vetch if it is repeated several times a year for several years. Prescribed burning may also be effective in late spring but should also be repeated for several years. **Always read and follow pesticide label directions.**



Dense growth of crown vetch.
Picture By: C. Evans @ www.invasive.

Eight Easy Ways to Combat Invasive Plants

You can **help stop** the spread of **invasive plants** by following these **8 easy guidelines**:

1. Ask for only non-invasive species when you acquire plants. Request that nurseries and garden centers sell only non-invasive plants.
2. Seek information on invasive plants. Sources include botanical gardens, horticulturists, conservationists, and government agencies.
3. Scout your property for invasive species, and remove invasives before they become a problem. If plants can't be removed, at least prevent them from going to seed.
4. Clean your boots before and after visiting a natural area to prevent the spread of invasive plant seeds.
5. Don't release aquarium plants into the wild.
6. Volunteer at local parks and natural areas to assist ongoing efforts to diminish the threat of invasive plants.
7. Help educate your community through personal contacts and in such settings as garden clubs and civic groups.
8. Support public policies and programs to control invasive plants.

For More Information:

On this assessment and IPSAWG:

IPSAWG
www.invasivespecies.IN.gov

On identification and control techniques:

The Nature Conservancy's Wildland Weeds
www.tncweeds.ucdavis.edu

On native plant alternatives and sources:

Indiana Native Plant and Wildflower Society
www.inpaws.org

This grant project made possible with United States Forest Service funds administered by the IDNR, Division of Forestry.