



# CROWN VETCH

*Coronilla varia* L.

**Common Names:** crown vetch, purple vetch

**Native Origin:** Europe, southwest Asia and northern Africa

**Description:** Crown vetch is a perennial legume in the pea/legume family (Fabaceae or Leguminosae). It can form large clumps from creeping stems. The stems can be up to 6 feet long. Crown vetch has rhizomes up to 10 feet long which allow the plant to spread rapidly. The vegetative growth habit can rapidly cover and shade out native vegetation. A single plant may fully cover 70 to 100 square feet within a four year period. Compound leaves consist of 15-25 pairs of oblong leaflets. Pinkish flowers are clustered in umbels on long stalks. The flowers develop into narrow, flattened pods. The seeds are reported to be poisonous. Crown vetch blooms from May through August. It spreads both vegetatively through rhizomes and through the dispersal of seeds.



**Habitat:** Crown vetch has been grown extensively in the northern two-thirds of the United States for temporary ground cover, erosion control, and as a green fertilizer crop. It is also used as a bank stabilizer along roads and waterways. It occurs along roadsides and other rights-of-way, in open fields and on gravel bars along streams. It can survive in a variety of environmental conditions, but has the highest yields in areas with 18 inches or more annual precipitation. It can tolerate up to 65 inches of annual precipitation, as well as withstand long periods of drought, but cannot tolerate flooded or anaerobic soil conditions. It prefers sunny, open areas, as it is intolerant of shade, and mature plants can withstand minimum temperatures of -28° F.

**Distribution:** This species is reported from states shaded on Plants Database map. It is reported invasive in CT, IN, KY, MD, MI, MO, NC, NJ, OR, TN, VA, and WI.



**Ecological Impacts:** Crown vetch is a serious management threat to natural areas due to its seeding ability and rapid vegetative spreading by rhizomes. This aggressive exotic is now widespread along roadsides and natural areas. It becomes problematic when it invades into natural areas, such as grassland prairies and dunes, where it works to exclude native vegetation by fully covering and shading native plants. It can climb over small trees and shrubs, and eventually form large single-species stands.

### Control and Management:

- **Manual-** pulling out the entire plant; mowing; prescribed burning may be effective against seedlings or in slowing the spread of crown vetch, but will not control large populations
- **Chemical-** It can be effectively controlled using any of several readily available general use herbicides such as glyphosate, triclopyr, or clopyralid at recommended label rates on the cut stems and foliage. Follow-up treatment with herbicide is likely required to control any surviving stems or new seedlings. Follow label and state requirements.

**References:** <http://plants.usda.gov>, [www.conservation.state.mo.us](http://www.conservation.state.mo.us), <http://tncweeds.ucdavis.edu/esadocs/documnts/corovar.html>, [www.forestimages.org](http://www.forestimages.org), [www.nps.gov](http://www.nps.gov)