

Invasive Plants in Pennsylvania

Chocolate Vine

Akebia quinata



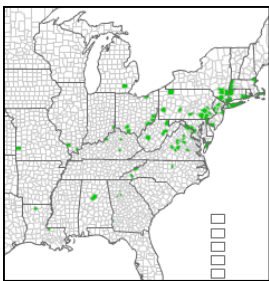
Photo: Nancy Loewenstein, Auburn U.,
www.invasive.org

Background:

Also known as fiveleaf akebia, chocolate vine is from eastern Asia. It was first introduced into the U.S. in 1845 as an ornamental plant.

Range:

Chocolate vine is found in scattered spots up and down the east coast of the U.S. from Michigan south to Georgia.



Map courtesy of
www.eddmaps.org

Description:

This is a deciduous to evergreen (in warmer climates) woody climbing or trailing vine. Vines are green when young, turning brown as it ages. Leaves are palmately compound with up to five, one to three inch long, oval leaflets. Small purple to red, fragrant flowers appear in mid-spring. The fragrance is said to be like chocolate. The uncommonly-produced fruits are purple seed pods with small black seeds.



Photo: Nancy Loewenstein, Auburn U.,
www.invasive.org

Habitat:

Chocolate vine is shade tolerant and invades forested habitats.

Biology and Spread:

This vine spreads primarily by vegetative means and can grow 20 to 40 feet in one growing season. Fruits are not always produced and it is not clear whether birds play a role in dispersal. Humans are the primary means of chocolate vine's spread.

Ecological Threat:

Dense mats of this vine can displace and kill native understory species. It can also climb into, smother, and kill small trees and shrubs. Once established, its dense growth prevents native seed germination and seedling establishment.



Photo: Shep Zedaker, Virginia Polytechnic Institute, www.invasive.org

How to Control this Species:

Manual and Mechanical

Small infestations can be controlled by repeated cutting throughout the growing season. Vines may also be dug up, removing as much of the roots as possible. Regular monitoring and repeated removal is necessary.



Photo: James Miller, USFA FS, www.invasive.org

Chemical

For larger infestations, use a systemic herbicide like glyphosate or triclopyr. These can be used any time of year as long as the air temperature is between 50 and 85 degrees F. A 20 percent triclopyr and basal oil solution can be applied to the exposed stem, a 25 percent water and herbicide solution can be applied to a freshly cut stump, or a two to five percent water and herbicide solution can be sprayed on the leaves. Repeated treatments are likely.

References:

Center for Invasive Species and Ecosystem Health: <http://www.invasive.org/browse/subinfo.cfm?sub=10090#images>

Invasive Exotic Plant Tutorial for Natural Lands Managers: <http://www.dcnr.state.pa.us/forestry/invasivetutorial/Akebia.htm>

Plant Conservation Alliance's Least Wanted List: <http://www.nps.gov/plants/alien/fact/akqu1.htm>

For More Information:

Plant Invaders of Mid-Atlantic Natural Areas, National Park Service: <http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

Invasive Plants Field and Reference Guide, U.S. Forest Service: http://na.fs.fed.us/pubs/misc/ip/ip_field_guide.pdf

Native Alternatives:

There are many great native vines that can be used in place of chocolate vine, including:

Cross Vine (*Bignonia capreolata*)



Photo: Rebekah Wallace, U. of Georgia, www.forestryimages.org

Trumpet Creeper (*Campsis radicans*)



Photo: Charles Bryson, USDA, www.forestryimages.org

Virginia Creeper (*Parthenocissus quinquefolia*)



Photo: University of Georgia Press, www.forestryimages.org