

Invasive Plants in Pennsylvania

Narrowleaf Bittercress

Cardamine impatiens L.



Photo: Leslie Mehrhoff, [IPANE](#)

Background:

Also known as bushy rock-cress, this plant in the mustard family is native to Europe. No one is quite sure how it arrived in the U.S. but it was first recorded in New Hampshire in 1916. More recent reports are from the 1990s.

Range:

This plant can now be found in the U.S. from Maine south to North Carolina and west to Minnesota, in scattered locations.

Description:

Narrowleaf bittercress is an herbaceous annual or biennial that can grow up to two feet in height. Each plant has six to twenty pinnately divided leaves on the stem. The basal leaves have three to eleven leaflets with rounded lobes. The plant's small white flowers bloom from May to September.



Photo: Leslie Mehrhoff, [IPANE](#)

Habitat:

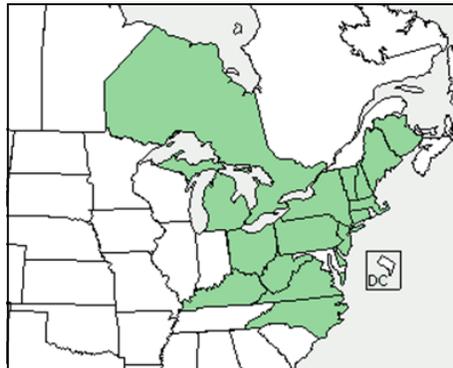
Narrowleaf bittercress grows well in woods with patchy shade and along forest edges. This plant also does well in moist soils in herbaceous wetlands and stream banks. It is also found along roadsides, in vacant lots and in backyard gardens.

Biology and Spread:

This plant is able to spread easily due to its seed-shooting ability. Each flower contains ten to 24 seeds. Seeds are also spread by water and can stick to clothing and animals.

Ecological Threat:

Narrowleaf bittercress can form dense stands that out-compete native species.



Map courtesy of [USDA PLANTS Database](#)



Photo: Leslie Mehrhoff, [IPANE](#)

How to Control this Species:

Prevention

This is the most important step in minimizing the spread of this plant. Clean all boots, clothing and equipment before leaving an infested area.

Look-A-Likes:

This species also resembles sand bittercress (*Cardamine parviflora*), Pennsylvania bittercress (*C. pensylvanica* Muhl. ex Willd.) and hairy bittercress (*C. hirsuta*). The most important distinguishing characteristic is the leaf base of narrowleaf bittercress.



Photo: Dan Tenaglia, Missouriplants.com,
www.forestryimages.org

Manual and Mechanical

Small infestations can be pulled by hand easily. Monitor the site and remove plants during the spring, summer and fall to prevent seed production. Plants with flowers and seed heads should be bagged and disposed of in a landfill. Hand pulling is not recommended for large infestations as it might cause disturbance that will result in more seed germination.

Chemical

There is little information available for chemical control of this plant. However, treatment protocols for biennials like garlic mustard may be effective. A systemic herbicide like glyphosate or triclopyr may be applied to the leaves at any time of the year, as long as the temperature is above 50 degrees Fahrenheit and it is not expected to rain for at least eight hours.

References:

Invasive Plant Atlas of New England:

<http://nbii-nin.ciesin.columbia.edu/ipane/icat/browse.do?specieId=44>

Minnesota Department of Agriculture:

<http://www.mda.state.mn.us/plants/badplants/bittercress.aspx>

For More Information:

To learn more about invasive plants in Pennsylvania and the northeast, here are some useful resources:

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