

Target Invasive Species

Japanese barberry *Berberis thunbergii*



Description

Japanese barberry is a woody deciduous shrub with dense spiny branches. It usually grows 2-3 feet high. The simple rounded leaves form rosettes along the branches in an alternate pattern. It produces solitary or small clusters of yellow flowers along the stem in spring, and the fruit ripens to a bright red oblong berry in late summer. Fruits are bird

dispersed and are also eaten by small mammals. It is commonly planted as an ornamental shrub and for wildlife enhancement.

Habitat

Barberry often invades alluvial woods and open forests. It also grows along forest edges and in disturbed areas. Many collected specimens grew along creek banks and river banks. It occasionally grows in saturated soil in wooded calcareous swamps.

Threats

Barberry can grow in sun or shade and in many soil types. Branches touching the ground can root, and new shoots can develop from underground roots. Barberry can grow so thick in the understory of open forests that it shades out indigenous understory plants and decreases biological diversity. This could adversely affect birds and other animals dependent on the native plants. Barberry also affects soil properties, particularly pH, which can affect plant establishment. Severe infestations of barberry can form nearly impenetrable thorny thickets that impact the recreational value of natural lands.



Control

Mechanical removal by hoe or weed wrench is effective if most of the root system can be removed. Regular mowing can prevent reinfestation in successional fields. Herbicide treatment can be used to treat shoots that resprout. Small patches can be pulled or dug out early in the season, before seed sets.

Suggested Alternative Plants

Many attractive native shrubs are available that make great substitutes for Japanese barberry. Examples include bayberry (*Myrica pensylvanica*), ink-berry (*Ilex glaba*), winterberry (*Ilex vaericillata*), arrow-wood (*Viburnum dentatum*), mountain laurel (*Jaknua katufikua*), ninebark (*Physocarpus opulifolius*), hearts-a-bustin (*Euonymus Americana*), witch alder (*Fothergilla gardenii*) New Jersey tea (*Ceanothus americanus*), Virginia sweetspire (*Itea virginica*), and bush honeysuckle (*Diervilla lonicera*). For a list of additional native shrubs, visit www.bbg.org/nativealternatives.

Herbicides should be used in accordance with New Jersey Department of Environmental Protection guidelines. For more information see: http://tncweeds.ucdavis.edu/esadocs/berb_spp.html (This is one page of an excellent website on alien invasive plants. All of the other invasives found in New Jersey are include in this site.)

Sources: An Overview of Nonindigenous Plant Species in New Jersey, New Jersey Dept. of Environmental Protection Natural and Historic Resources Group Parks and Forestry. www.state.nj.us/dep/parksandforests/natural/invasivereport.pdf.

Weeds Gone Wild: Alien Plant Invaders of Natural Areas, Plant Conservation Alliance's Plant Working Group. www.nps.gov/plants/alien/.

Native Alternatives to Invasive Plants, C. Colston Burrell,, Brooklyn Botanic Garden All-Region Guides, 2006.

Photos by Britt Slattery (foliage), Leslie J. Mehrhoff (flowers), and Barry Rice (fruits), <http://www.invasive.org>.