# Invasive Plants in Pennsylvania Bristled Knotweed

Persicaria longiseta



Photo: Leslie Mehrhoff, U. of Connecticut, www.invasive.org

## Background:

Also known as Oriental lady's thumb, Asiatic smartweed, Asiatic waterpepper, bunchy knotweed, bristly lady'sthumb, long-bristled smartweed and tufted knotweed.

#### Range:

This plant is native to southeast Asia where it is a common weed of rice paddies. It was first discovered in North America near Philadelphia in 1910. Now it can now be found throughout the eastern U.S. and Canada as well as some Midwestern and southwestern states.

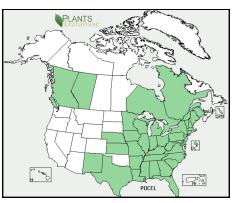


## **Description:**

This annual plant has stems that can reach over three feet in height. Leaves are thin, up to three inches in length, and alternate along the stem. Flowers are small, dark pink and arranged in thin spikes at the tips of the stems.

#### Habitat:

This plant occurs mainly in moist habitats including wetlands, wet meadows and riparian areas, including forested areas. However, it has also been reported in upland forests in parts of the U.S., including at Valley Forge National Historical Park and Gettysburg National Military Park. It also grows in disturbed areas along train tracks and roads.



Map courtesy of USDA PLANTS Database

## **Biology and Spread:**

This plant produces many small, smooth seeds that may spread as a result of wildlife. Seeds can survive five or more years in the soil before sprouting. Railroads may have played a role in its dispersal across the U.S. The plant also spreads by a fibrous root and shallow taproot structure.

## **Ecological Threat:**

Little is known about this species' specific impact on the environment but some suggest that it can displace native species by outcompeting them for sunlight and space, especially in disturbed areas.



Photo: Leslie Mehrhoff, U. of Connecticut, www.invasive.org

#### How to Control this Species:

The most cost-effective method for managing any invasive plant species is to prevent its establishment and spread by maintaining healthy natural communities and by frequently monitoring the area for new occurrences. When that is not possible, there are several control options available:

Bristled knotweed can be removed by hand pulling, digging up small infestations or frequent mowing. It can also be controlled by any general-use herbicide, though in wet areas be sure to use an herbicide that is approved for use in wetlands. As with any herbicide, be sure to follow the directions on the label.

Little information is currently available about the use of fire as a control agent, although it is assumed that fire would kill the entire plant, as it does not have deeply rooted rhizomes. Fire's affect on the seeds is unknown.

#### Look-A-Likes:

There are many *Persicaria* species that look similar, including some native ones. The key to identifying bristled knotweed is the papery sheath around the leaf joint with long, fine bristles at the top (*see photo below*).



**Pennsylvania smartweed** (Persicaria pensylvanica laevigata)



Photo: Robert Mohlenbrock, USDA

**Spotted ladysthumb** (*Persicaria maculosa* Gray)



Photo: Steve Dewey, Utah State U., www.bugwood.org

#### **References:**

U.S. Forest Service: <u>http://www.fs.fed.us/database/feis/plants/</u> forb/perlon/all.html

USDA PLANTS Database: http://plants.usda.gov

#### For More Information:

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

DCNR Invasive Species Site: http://www.dcnr.state.pa.us/conservationscience/ invasivespecies/index.htm

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

*Invasive Plants Field and Reference Guide, U.S. Forest Service:* <u>http://na.fs.fed.us/pubs/misc/ip/ip\_field\_guide.pdf</u>