

JAPANESE HOPS

Humulus japonicus



Description: Japanese hops is a herbaceous annual vine that twines counter-clockwise. The leaves are opposite, 2-5 inches long, toothed, and palmately divided, typically with 5 lobes. Leaf stems are as long as or longer than leaf length, and the leaves and stems have hooked climbing hairs. The plant flowers in mid to late summer, with male and female flowers on separate plants.



Native range: Eastern Asia
(extension.missouri.edu/explore/wildthing/japanesehops.htm)



Ecological threat:

This plant threatens wet forests and Japanese hops can form dense stands in floodplains and along streambanks and lakeshores, but it can also thrive in disturbed areas. It can thrive in both full sun and shaded areas.

Current North American Range: Japanese hops has been observed in Missouri, Illinois, Michigan, southern Indiana, Ohio, and Wisconsin, southeastern Minnesota, and into southern Canada.

Current Midwest general distribution, including southern Ontario Not Known Isolated Locally Abundant Widespread

Early Detection and Rapid Response Can Help Stop the Spread!

JAPANESE HOPS, *Humulus japonicus*

Management options: (http://www.dcnr.state.pa.us/forestry/invasivetutorial/japanese_hops_M_C.htm)

The seedbank of *H. lupulus* is typically exhausted in approximately three years. Similar longevity should be expected for *H. japonicus*. The first two years of Hop control will be the most time-consuming. After that, the number of plants will drop dramatically.

Manual and Mechanical Control

If *H. japonicus* is acting as an annual, pulling the plants any time of the year should be effective. The plants should be pulled before they set seed (they flower August-September). When pulling the plants, attempt to remove as much of the rootstock as possible. It is likely that resprouts could occur from both the rootstock and the bines (the leafy portion of the plant), so the pulled plants should be removed or left where they cannot reroor. If the plants are acting as perennials, experiment with pulling either during May-June when the rootstock is most exhausted and small, or just prior to flowering when the rootstock should be plump and robust.

Biological Control

Because of the commercial value of *H. lupulus*, biocontrols are unlikely to be developed against *H. japonicus*.

Chemical Control

When farmers wish to eradicate *H. lupulus*, they spray with glyphosate (i.e., Roundup). Both Dr. Alfred Haunold (USDA Hops Research Geneticist, Corvallis Oregon) and the horticulturists at Legendary Ethnobotanical Resources (Homestead, Florida) agree that glyphosate should be deadly against *H. japonicus*. If the plant is behaving as an annual, spot applications of glyphosate any time during the year (prior to flowering) should damage the plant enough so it will not be able to flower and set seed. If it is growing as a perennial, the best time to apply glyphosate would be when the rootstock is most rapidly accumulating carbohydrates, that is July-September. Applying glyphosate earlier in the year would not be effective as it would not be translocated into the rootstock.

For more information on control and management of this species, please visit the following Web sites: www.usda.plants.gov, www.nps.gov/plants/alien/factmain.htm, tncweeds.ucdavis.edu/control.html, www.invasivespeciesinfo.gov/plants/main.shtml

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