

## Japanese hops

Japanese hop or hops, *Humulus japonicus* Sieb. & Zucc., is an attractive but rapidly growing vine from the Hemp family, originally from East Asia. Like many invasive plants, it was deliberately introduced to North America as an ornamental species, in the late 1800s, and it is still sold commercially in many places, including Ohio. It is closely related to the more familiar common hops used for beer brewing, but Japanese hops is mostly inedible.

A climbing vine, Japanese hops can grow rapidly, up to about 35 feet in a growing season. Its opposite leaves are toothed with about 5-7 palmate lobes with distinctive bracts at the base of the leaf petioles, and both the stems and leaves have hooked hairs. Japanese hops is usually an annual but can occasionally be perennial. It has separate male and female plants which both produce greenish flowers. Male flowers are in panicles, while female flowers are in short spikes. Reproduction is mainly by seeds, which germinate in early spring. Seeds are then mainly dispersed in late summer/early fall by wind and water, but also by wildlife, vehicles and equipment.

Japanese hops is typically found along rivers, lakeshores and floodplains, due to rapid spread by water. It grows best in moist soils with little or partial shade, which is why it is often grows best in edges and light gaps. It is now found in most states and provinces eastern half of the United States and Canada. In Ohio, it has mostly been reported in counties near cities (Cuyahoga, Summit, Lucas, Franklin, Hamilton) as well as counties in the northeast and along the Ohio River.

This species is considered harmful due to its rapid growth; it can overtop understory trees, and outcompete native plants. Some people are allergic to the pollen, and the hairs on stems and leaves have been reported to cause dermatitis. Japanese hops is considered invasive or is prohibited in many states, including Connecticut, Massachusetts, Wisconsin, New York, Michigan and Missouri. In Minnesota, it is prohibited and landowners are required to remove it under noxious weed laws.

Japanese hops is responsive to several types of management but long-term management may be more difficult. Small populations may be best managed by physically removing the plants. A recent study by Guyon and Cosgriff in the Journal of Forestry recommended the use of glyphosate for short term control. It does not seem to establish long-term seedbanks, with estimated viability at around three years, but extensive water dispersal can quickly lead to re-establishment. It is unlikely that there will be biocontrol options for Japanese hops, because it is so closely related to an agricultural species, common hops.

If you see this invasive on you own property, consider pulling it out earlier rather than later! Also, it's always a good idea to report occurrences using the GLEDN app.

## Resources

Lyle J Guyon, Robert J Cosgriff, Japanese Hops (*Humulus japonicus*) Control and Management Strategies in Large River Floodplains, *Journal of Forestry*, Volume 120, Issue 2, March 2022, Pages 156–169, <https://doi.org/10.1093/jofore/fvab055>

<https://www.invasive.org/alien/fact/huja1.htm>

<https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist/japanesehops>

**Images** (taken by Leslie J. Mehrhoff from invasives.org):

