

Asian Bittersweet

Celastrus orbiculatus



[Further
Information
and
References](#)



Photos arranged vertically 1-4,
credits on references page.

Quick Facts: Asian Bittersweet (*Celastrus orbiculatus*) is an invasive woody vine introduced to North America as an ornamental. It is still widely planted, contributing to its spread. It is illegal to buy or sell in many midwestern states, including Indiana and Ohio. Asian Bittersweet grows quickly and shades out native plants. The vines have extensive roots that send up suckers to create large colonies, which can overtake native vegetation. The vines climb trees and shrubs, weakening or killing the supporting vegetation. They can also climb fences and other infrastructure, resulting in damage to property. Asian Bittersweet is an alternative host for the bacterium *Xylella fastidiosa*, which causes crop diseases that impact vineyards and orchards like Pierce's grapevine disease, periwinkle wilt, and plum leaf scorch. Asian Bittersweet grows fastest in full sunlight, making it an effective colonizer of disturbed areas like field edges. It is also shade-tolerant and can persist in forested environments, waiting for a disturbance like a treefall to provide enough light for it to grow rapidly.

Invasion Strategy: Asian Bittersweet reproduces via seed and root suckering. Individual plants produce large numbers of seeds, which are eaten and spread by birds. The yellow and red fruits are commonly used in decorative wreaths and can also be spread by humans improperly disposing of wreaths. Plant roots produce extensive root suckers that can resprout when cut, allowing large colonies to form.

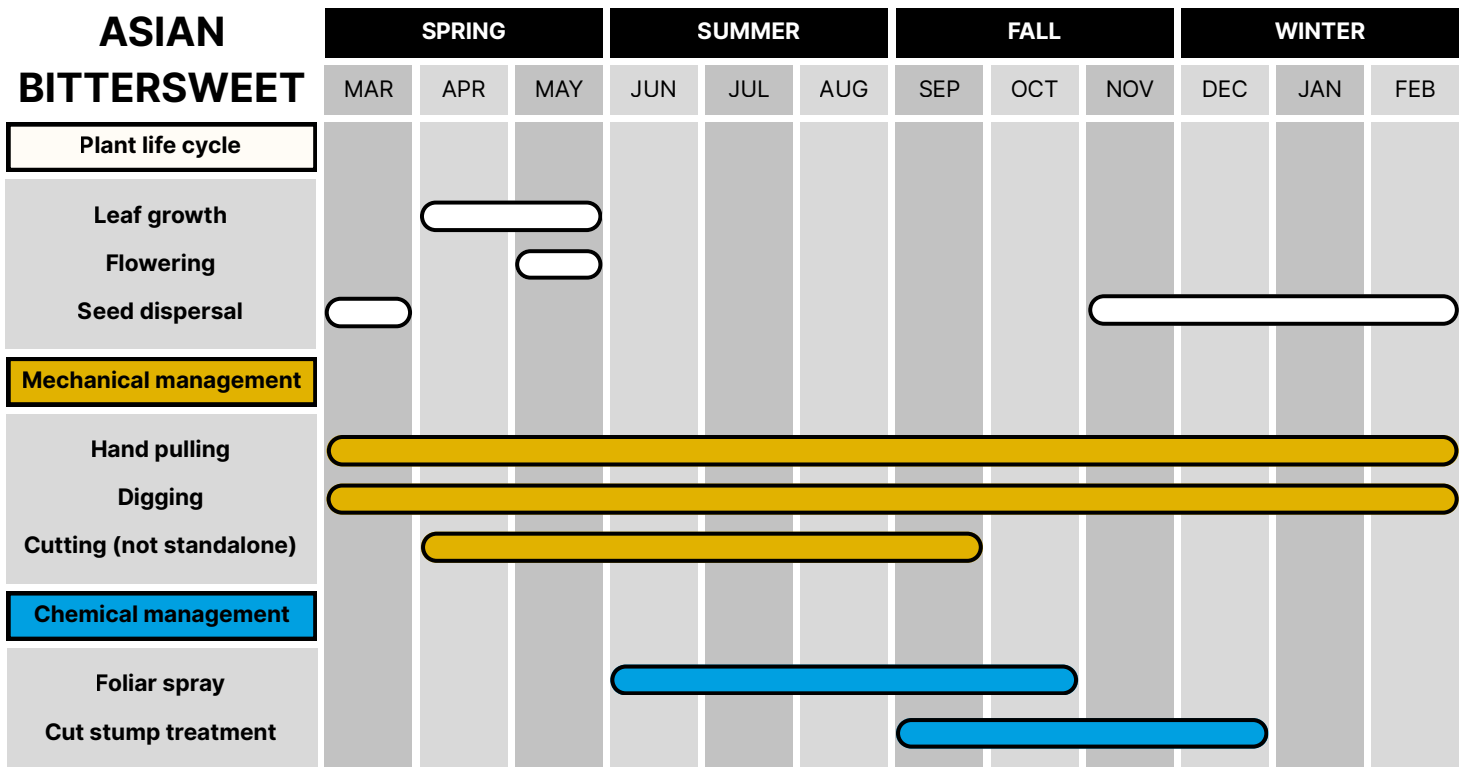
Identifying Features:

Asian Bittersweet is a woody, twining vine that can grow up to 60 feet in length.

- Young stems are green, turning brown with age. Older stems have brown, fissured bark with a distinctive diamond pattern.
- Leaves alternate along the stem.
- Leaves are often round to elliptic, with a glossy top side and fine teeth along the edges, narrowing to a point at the leaf tip.
- Leaves turn yellow in the fall and stay on the vine longer than native plants.
- Flowers occur in clusters in the leaf axils (between the leaves), not at the tips of branches.
- Flowers are small, greenish-yellow, and five-petaled.
- Male and female flowers usually occur on separate plants.
- Female flowers develop into clusters of numerous fruits.
- Fruits are covered in a yellow outer layer, peeling back to reveal bright red fruit that is often retained on vines until late in winter.

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This chart is based on USDA plant hardiness zone 6. Plant growth and treatment times vary by region.

Management methods:

Mechanical - Young, small individual plants can be pulled or dug by hand when the soil is moist. Ensure all root fragments are removed, as they can resprout. Hand pulling is not effective for large plants.

Chemical - Foliar spray can be used on large infestations and is most effective in the summer and fall. Late fall applications help avoid damage to native plants. Cut stump treatments can also be used on larger vines in late summer through early winter. Some herbicides work best above specific temperature thresholds; always check application instructions for the product used.

Disclaimer - Selecting the best management method for this plant can be site and context-specific. Check with your local USDA Service Center or University Extension agent to explore your options and determine what is most appropriate for your location and situation.

Management information: Dispose of cut plant materials where they cannot resprout. If seeds are present, bag them and dispose of them in a landfill.

Personal protective equipment is recommended when removing any invasive species, and especially when using herbicides. Always follow label instructions when using herbicide.



[Blue Box] Species present

[Grey Box] Absent

Look-Alike Species:

- American Bittersweet, *Celastrus scandens*
- American Bittersweet is a native vine that also climbs trees and shrubs, but grows less aggressively than Asian Bittersweet. The species closely resemble one another in growth form and general appearance. American Bittersweet can be differentiated by the location of flowers and fruit at the end of the vine in terminal clusters (supplemental photos 1 and 2), as compared to the smaller clusters of fruit that occur along the vine in Asian Bittersweet.



References and Additional Reading:

- Indiana Department of Natural Resources. [Terrestrial Plant Rule](#). [State law prohibiting sale].
- Michigan Department of Natural Resources. 2012. [Oriental Bittersweet](#). [Identification, mechanical, and chemical control information].
- Natural Resource Conservation Service. [Conservation Practice Job Sheet NH-314: Oriental Bittersweet – Celastrus orbiculatus](#). [Mechanical and chemical control information].
- Ohio Department of Agriculture. [Invasive Plants](#). [State law prohibiting sale].
- State of Indiana Cooperative for Invasives Management. 2024. [Calendar of Control](#). [Chemical control information].
- University of Connecticut. 2021. [Invasive Plant Fact Sheet: Asian Bittersweet](#). [Identification and mechanical control information].
- University of Illinois. 2017. [Oriental vs. American bittersweet](#). [plant lookalike information].
- Wisconsin Department of Natural Resources. [Celastrus scandens](#). [Pest host information].

Photo Credits: Photo 1: Chris Evans, University of Illinois, Bugwood.org; Photo 2: iNaturalist, Emily Summerbell; Photo 3: iNaturalist, Craig K. Hunt; Photo 4: Ecological Landscape Alliance; Range map: USDA PLANTS Database; Supplemental photo 1: iNaturalist, Rob Curtis; Supplemental photo 2: iNaturalist, LeeAnn Latremouille.

Resources:

- Find your local [University Extension Program](#)
- Find your local [USDA NRCS Service Center](#)
- Find your local [Soil and Water Conservation District](#)
- Check out [Management and Control of Woody Invasive Species](#)
- Check out [Purdue University Extension's Woody Encroachment and Woody Invasives fact sheet](#)
- Check out other invasive plant fact sheets
- Check out Pollinator Partnership's agriculture page

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