

Oriental Bittersweet (*Celastrus orbiculatus*)



DESCRIPTION:

Oriental bittersweet is one of the most alarming “up and coming” invasive species in our region. This fast growing woody vine climbs over, twines around and smothers ground layer vegetation and can climb into the forest canopy strangling and eventually toppling large trees. This species is still being sold as an ornamental plant, though agencies are working to ban or discourage its sale in our area. Distribution in the Midwest is currently spotty and scattered; it is just as likely to be found in your backyard as it is to be found in a wild woodland. It is most common in heavily shaded sites but can grow in full sun as well. Though it is not yet ubiquitous like more well known invasive species such as buckthorn and garlic mustard, where it is found has shown itself to be equally, if not more aggressive than other invasive species.

Oriental bittersweet is a woody vine with dark green, glossy, oval-shaped leaves. Red berries, with 3-lobed, hard orange outer casings which fling open when ripe, are dispersed along the stem, and are present on the plant in fall and winter. This vine climbs by twining the main stem around vegetation and objects rather than by tendrils or clinging roots.

American bittersweet (*Celastrus scandens*) is similar in many ways to oriental bittersweet, aside from a few key factors. American bittersweet has its red and orange berries in clusters at the tip of stems, though male plants of both species do not have berries. The leaves of American Bittersweet are more likely to be elongated (nearly twice as long as they are wide) with a long pointed tip. The leaves of Oriental Bittersweet are typically more rounded in shape with only a short stubby tip. Be certain of which species you are dealing with before eradicating or planting bittersweet vines.

CONTROL METHODS:

Organic: Smaller plants and infestations can be removed by hand pulling and digging the roots of the plants out of the ground. They have the potential to resprout from any root fragments that remain. If there are any berries present or forming on the plant then the entire vine should be removed from the site and disposed of in the landfill.

Chemical: The easiest way to control oriental bittersweet is to cut the vine off where it roots into the ground and treating the stump with a concentrated solution of triclopyr (Garlon®, etc.). For larger infestations consider adding aminopyralid (Milestone®) to the triclopyr mix to improve translocation through the entire root system. Oriental bittersweet will resprout vigorously if it is simply cut. Again, any berries should be removed from the site. Diligent and repeated cuttings of this new growth will be needed to control any plants which are cut but not treated with herbicide.

Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

NATIVE ALTERNATIVES:

American Bittersweet (*Celastrus scandens*) does not grow as quickly or aggressively as Oriental Bittersweet, but is otherwise an ideal replacement. Both male and female plants should be planted together in order to provide cross pollination and thus produce the attractive seeds which serve as a winter food source for wild birds.

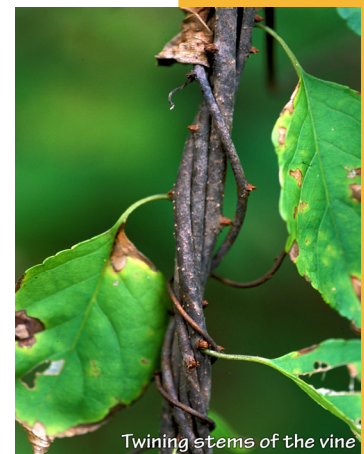
Virgin’s bower (*Clematis virginiana*), moonseed (*Menispermum canadense*) and carrion flower (*Smilax lasioneura* & *S. herbacea*) are all herbaceous native vines which could substitute for Oriental bittersweet in landscape and wildland situation. Virginia Creeper (*Parthenocissus quinquefolia*) and Wild Grape (*Vitis riparia*) are fairly aggressive native vines that can provide a ground cover and a “green wall” covering for fences and other structures or can be used as a ground cover. Both species have attractive fall foliage and produce berries that feed songbirds and other wildlife.



Leaves
Photo by: C. Evans, River to River CWMA, Bugwood.org UGA5269042



Fruit in fall
Photo Courtesy: Chris Evans, River to River CWMA, Bugwood.org UGA5125082



Twining stems of the vine
Photo by: J. H. Miller, USFS, Bugwood.org UGA0016100