

ORIENTAL BITTERSWEET

[*Celastrus orbiculatus* Thunb.]
CEOR7



UGA0016241

Habit: Deciduous, woody, twining vine.⁶

Reproduction: By seed and vegetatively⁶ by root suckering;³ dioecious; some perfect;⁶ some plants monoecious.^{8,3}

Leaves: Alternate, entire leaves with shallow teeth; shape variable but most often less than twice as long (5-12.5 cm; 2-5 in) as wide, round with an abruptly pointed tip.^{6,2}

Stems: Light brown;² may reach up to 5-10 cm (2-4 in) in diameter and up to 18 m (59 ft) long;^{2,9,4} may impact host species by reducing photosynthesis and causing structural damage.^{3,11}

Flowers: Short, axillary inflorescences with only a few flowers (whitish-greenish); each inflorescence subtended by a leaf longer than the inflorescence;⁶ May-June;¹⁵ insect or wind pollinated.^{1,21}

Fruits/Seeds: Fruit, adjacent to a vegetative bud, matures late summer/early fall, often remaining on the vines through winter; most fall to the ground by early winter;⁷ yellowish outer skin covers a red, fleshy aril containing 3-6 seeds;³ dispersal by humans, birds (131 m; 430 ft),¹⁶ or small mammals;³ most often ingested in winter; defleshed seeds have higher germination rates than scarified (due to ingestion) seeds;⁷ no apparent seed bank.¹⁹

ORIENTAL BITTERSWEET



UGA0016097



UGA2307125

Celastrus orbiculatus Thunb.

Habitat: Native to Japan, China, and Korea; not a forest species in native habitat;¹⁷ introduced into the U.S. in 1860;⁷ open areas; early/late-successional forests;^{3,17} USDA hardiness zones 4-7.²

Comments: “Sit and wait” strategy of invasion; germinates best in shade, but prolific growth may not take place without light;^{7,13} hybridizes with the native *C. scandens*, producing a sparingly fertile hybrid²⁰ that is more vigorous than the native;¹⁴ very low root pressure, but conducts water at rates equal to native vines with high root pressure; despite evident embolism, keeps leaves for ~1 month after first frost; greater rates of secondary growth than a native grape species;¹⁸ may facilitate grape vine growth;⁵ evidence of medicinal properties for rheumatoid arthritis¹² and reversing cancer cell resistance to treatment drugs.¹⁰

Similar Native Species: Bittersweet (*C. scandens*); leaves tend to be more than twice as long as wide; inflorescences terminal and not next to a vegetative bud.^{8,15}