# **Invasive Alien Plant Species of Virginia**

**Oriental Bittersweet** (Celastrus orbiculatus Thunb.)

### **Description**

Oriental bittersweet is a deciduous, twining vine with alternate, nearly round, glossy leaves. Small, greenish flowers occur in clusters in the axils. The leathery capsule surrounding the seed ripens to a bright orange. The native species, American bittersweet (*Celastrus scandens*), differs from the invasive by its leaves, which are somewhat longer than wide, and the terminal panicle of flowers. Consult a natural resource specialist for an accurate identification.

#### **Habitat**

This species grows in alluvial woods, roadsides, thickets and old home sites. From there it may spread to undisturbed mesic or dry-mesic forests.

#### **Distribution**

Oriental bittersweet, a native of Asia, was brought to the United States for cultivation during the middle of the nineteenth century. It is now naturalized in 21 of the 33 states where it was introduced, a region extending from Maine south to Georgia, and west to Iowa. Oriental bittersweet is found in over half the counties of Virginia.

## **Threats**

This plant can overrun natural vegetation in much the same way as kudzu (*Pueraria lobata*), over-topping all other vegetation and forming thick, nearly pure stands. It can strangle shrubs and tree limbs, and weaken a

tree by girdling the trunk and weighting the crown, making the tree more susceptible to wind and ice damage. There is some evidence that it can hybridize with American bittersweet, thus threatening genetic integrity of the native species.

#### **Control**

Light infestations of a few small plants can be controlled by cutting the vines and handpulling the roots. Dense infestations can be treated by cutting the vines followed immediately by application of a glyphosate herbicide to the stumps. Merely cutting vines without removing or killing the roots will only stimulate vigorous re-growth. To ensure rootkill, a late-season foliar application of herbicide may be necessary. Glyphosate herbicides are recommended because they are biodegradable. However, glyphosate is a nonselective, systemic herbicide that affects all green vegetation. To be safe and effective, herbicide use requires careful knowledge of the chemicals, appropriate concentrations, and the effective method and timing of their application. Contact a natural resource specialist for more information about controlling invasive plant species.

## **Alternative Plants for Cultivation**

Many native species of vines are available through local nurseries or mail order. American bittersweet (*Celastrus scandens*) is our native bittersweet and does not exhibit the



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invasive tendencies of Oriental bittersweet. Crossvine (Bignonia capreolata), trumpet honeysuckle (Lonicera sempervirens), and trumpet creeper (Campsis radicans) are all climbing vines which produce bright red-orange flowers attractive to hummingbirds. Virgin's bower (Clematis virginiana) is a climbing vine which blooms in clusters of fragrant white flowers. Virginia creeper (Parthenocissus quinquefolia) grows well in the shade and its cluster of dark purple berries are an important food for birds. For more information on native plants for cultivation contact the Virginia Native Plant Society (see address below).

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Virginia Native Plant Society

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For more information, contact the Department of Conservation and Recreation or the Virginia Native Plant Society.



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