Section 1
Woody Plants:
Trees & Shrubs
Acer spp.

Native trees

Fruits of sugar maple (Acer saccharum)

Fruits of red maple (Acer rubrum)

Photos: Virginia Tech Dendrology Program
Acer spp.
Leaf comparison of native & invasive trees

Leaf comparison of several Acer species.
Photo: USDA PLANTS database
Acer ginnala – Amur Maple
Potentially invasive tree

Photo: Stacy Leicht, IPANE

Photo: Virginia Tech Dendrology Program
Acer platanoides – Norway Maple
Invasive tree

Flowers with young leaves. Photo: Les Mehrhoff, IPANE

Fruits. Photo: Virginia Tech Dendrology Program

Photo: Les Mehrhoff, IPANE

The leaf petioles secrete a milky sap. Photo: Les Mehrhoff, IPANE
Acer pseudoplatanus – Sycamore Maple
Potentially invasive tree

Photo: Virginia Tech Dendrology Program

Photo: Stacy Leicht, IPANE
Ailanthus altissima – Tree-of-heaven
Invasive tree

A patch of tree-of-heaven. Photo: Les Mehrhoff, IPANE

Leaf underside showing basal glands. Photo: James H Miller, USDA Forest Service, Bugwood.org

Flowers. Photo: Les Mehrhoff, IPANE, Bugwood.org

Leaflets. Photo: Les Mehrhoff, IPANE
Ailanthus altissima – Tree-of-heaven
Invasive tree

Tree-of-heaven in Haddam, CT. Photo: Donna Ellis, UConn
**Amorpha fruticosa** – False Indigo
Potentially invasive shrub

False indigo infestation.
Photo: Robert Vidéki, Doronicum Kft., Bugwood.org

False indigo has fragrant purple flowers.
Amorpha fruticosa – False Indigo
Potentially invasive shrub

False indigo foliage and flowers. Photo: Les Mehrhoff, IPANE

Fruits. Photos: Les Mehrhoff, IPANE
*Berberis thunbergii* – Japanese Barberry

Invasive shrub

Seedlings from purple cultivars may be purple or green.
*Photo: Les Mehrhoff, IPANE*

Flowers (left) and fruits (right). *Photos: Les Mehrhoff, IPANE*

Japanese barberry invasion. *Photo: Donna Ellis, UConn*
**Berberis vulgaris** – Common Barberry

Invasive shrub

*Flower clusters. Photo: Les Mehrhoff, IPANE*

*Fruit clusters. Photo: Les Mehrhoff, IPANE*

*Top: Berberis vulgaris. Middle: hybrid. Bottom: Berberis thunbergii. Photo: Les Mehrhoff, IPANE*

*Note serrated leaf margins. Photo: Stacy Leicht, IPANE*
Elaeagnus angustifolia – Russian Olive
Potentially invasive shrub
Elaeagnus umbellata – Autumn Olive
Invasive shrub

Left: Flowers. Middle: Close-up of stem with brown lenticels. Photos: Les Mehrhoff, IPANE.
Right: Some branches have sharp thorns. Photo: Nicole Gabelman, UConn

Autumn olive invasion. Photo: Les Mehrhoff, IPANE
Elaeagnus umbellata – Autumn Olive
Invasive shrub

Leaves are dull green with silvery undersides. Photo: James H. Miller, USDA Forest Service, Bugwood.org
Elaeagnus umbellata – Autumn Olive
Invasive shrub

Autumn olive produces high numbers of fruits. Photo: Les Mehrhoff, IPANE
### Comparison

*Elaeagnus umbellata* vs. *Elaeagnus angustifolia*

**Autumn Olive** vs. **Russian Olive**

<table>
<thead>
<tr>
<th>Autumn olive traits:</th>
<th>Russian olive traits:</th>
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<tbody>
<tr>
<td><strong>Flowers</strong>: white to pale yellow</td>
<td><strong>Flowers</strong>: yellow</td>
</tr>
<tr>
<td><strong>Leaves</strong>: oval to lanceolate; glabrescent top surface</td>
<td><strong>Leaves</strong>: narrow/lanceolate; hairy on all surfaces</td>
</tr>
<tr>
<td><strong>Fruits</strong>: red, succulent with metallic flecks</td>
<td><strong>Fruits</strong>: white to red, mealy with silver scales</td>
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</table>
Euonymus alatus – Winged Euonymus (Burning Bush)
Invasive shrub

A planting of winged euonymus in Storrs, CT. Photos: Donna Ellis, UConn
Euonymus alatus – Winged Euonymus (Burning Bush)
Invasive shrub

Foliage changes to a bright scarlet in the fall.
Photo: Les Merhoff, IPANE.

Red-purple ovary walls split open to reveal seeds encased in a red-orange fruit.
Photo: Nicole Gabelman, UConn

Winged euonymus is a problematic invader in forest understories.
Photo: Les Merhoff, IPANE
Euonymus alatus – Winged Euonymus (Burning Bush)
Invasive shrub

Close-up showing corky protrusions along stems. Photo: Barry Rice, sarracenia.com, Bugwood.org
Frangula alnus – Glossy Buckthorn
Invasive shrub

Photos: Les Mehrhoff, IPANE
*Rhamnus cathartica* – Common Buckthorn
Invasive shrub

Left: Note fruits and leaf venation. Right: Branches end in a single thorn. Photos: Les Mehrhoff, IPANE
Rhamnus cathartica – Common Buckthorn
Invasive shrub

Common buckthorn foliage. Photo: Donna Ellis, UConn

Invasion of common buckthorn.
Photo: John M. Randall, The Nature Conservancy, Bugwood.org
Frangula alnus – Glossy Buckthorn

Glossy buckthorn flowers. Top photo: Les Mehrhoff, IPANE. Bottom photo: Rob Routledge, Sault College, Bugwood.org

Rhamnus cathartica – Common Buckthorn

Common buckthorn flowers. Top photo: Les Mehrhoff, IPANE. Bottom photo: Rob Routledge, Sault College, Bugwood.org
**Comparison**

*Frangula alnus vs. Rhamnus cathartica*

Glossy Buckthorn vs. Common Buckthorn

<table>
<thead>
<tr>
<th>Glossy buckthorn traits:</th>
<th>Common buckthorn traits:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leaves</strong>: glossy; oblong to elliptical; alternate</td>
<td><strong>Leaves</strong>: dull green; oblong; opposite</td>
</tr>
<tr>
<td><strong>Leaf venation</strong>: five or more pairs of veins that run parallel from the midrib; smooth or wavy along margins</td>
<td><strong>Leaf venation</strong>: three to four pairs of veins which curve toward the tip from the mid-vein; tiny teeth along margins</td>
</tr>
<tr>
<td><strong>Flowers</strong>: greenish-yellow with five petals</td>
<td><strong>Flowers</strong>: greenish-yellow with four petals</td>
</tr>
<tr>
<td><strong>Fruits</strong>: ripen from red to purple-black fruit with two to three seeds</td>
<td><strong>Fruits</strong>: black fruit with three to four seeds</td>
</tr>
<tr>
<td><strong>Twigs</strong>: thornless</td>
<td><strong>Twigs</strong>: spike-like thorns at the tips</td>
</tr>
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</table>

Ligustrum spp. – Privets
Potentially invasive shrubs

L. obtusifolium infestation. Photo: Les Mehrhoff, IPANE
L. vulgare (left) and L. obtusifolium (right) flowers are yellow to white. Left photo: Nova Tabak, IPANE, Bugwood.org. Right photo: Les Mehrhoff, IPANE
L. vulgare has opposite leaves. Photo: Les Mehrhoff, IPANE
L. obtusifolium (left) and L. ovalifolium (right) fruits are dark blue to black. Photos: Les Mehrhoff, IPANE
*Lonicera morrowii* – Morrow’s Honeysuckle
Invasive shrub

*Top photo:* Les Mehrhoff, IPANE. *Bottom photo:* Donna Ellis, UConn

L. *morrowii* shrub. *Photo:* Nicole Gabelman, UConn
*Lonicera tatarica* – Tatarian Honeysuckle
Potentially invasive shrub

Top: *L. tatarica* flowers. Photos: Les Mehrhoff, IPANE.
Bottom: *L. tatarica* fruits. Photo: Chris Evans, River to River CWMA, Bugwood.org
Comparison
Lonicera spp.

Left: Lonicera morrowii, Center: L. x bella, Right: L. tatarica
Rubus phoenicolasius – Wineberry
Invasive shrub