Porcelain Berry
Identification, Ecology, and Control in the UW-Madison Lakeshore Nature Preserve

Lakeshore NATURE PRESERVE
UNIVERSITY OF WISCONSIN
Porcelain berry  
*Ampelopsis brevipedunculata*

A perennial, deciduous woody vine in the grape family that can grow to 20’. It has tendrils to pull itself up into shrubs and trees that it uses for support.
Native Range

- Northeast Asia—China, Korea, Japan, and E. Russia

Distribution in N. America

- Introduced to U.S. 1870s
- Occurs from NH, south to AL, west to IA, and north to Ontario
- Prohibited in WI
Habitat

- Prefers moist soil; although drought tolerant
- Adaptable to poor soils
- Full sun to partial shade
- Woodland/forest edges and canopy gaps, old fields, right of ways, stream banks, shorelines other disturbed areas
Ecological Threats

- Fast growth rate/prolific fruiter/bird dispersed seeds
- High germination rate/resprouts when cut
Ecological Threats

• Grows in dense sprawling mats
• Climbs shrubs and trees where its extra weight makes the underlying plants more susceptible to wind and ice damage
• Alternate host for *Xylella fastidiosa* and host for the European grapevine moth; both affect cultivated grapes
Leaves

- Simple/alternate/dark green
- Cordate base
- Broadly ovate; palmate; 3-5 lobed, some deeply dissected with round sinuses
- 1½-4” wide and 1½-5” long
Leaves
Leaves

• Margins have coarse rounded teeth with short, slender tips
Leaves

- Petioles and underside of leaves are soft hairy
Stems/Bark

- Young twigs hairy
- Stems smooth with lenticels
- Older bark is ridged and furrowed
Flowers

- Small, greenish-yellow, inconspicuous
- Branched, slightly rounded clusters (cymes)
- Flower clusters develop opposite the leaves
- Bloom from July to Sept.
Fruits

- Hard, small ($\frac{1}{4}$ to $\frac{1}{3}$ inch in diameter)
- Appear late summer through October
- Crackled or speckled look resembling porcelain
Fruits

• Colors change from greenish-yellow through a series of pastel shades—green, lilac, amethyst to sky blue or bright turquoise
Fruits

• All colors present simultaneously
• 2-4 seeds per fruit
Roots

• Taproots; easily broken
• May or may not resprout from root fragments
Cultivar

• *Ampelopsis brevipedunculata* var. ‘Elegans’
• Prohibited in WI
• Shorter and less vigorous than species
Look-alikes

*Ampelopsis arborea*

Native to IL/IN/OH

James H. Miller & Ted Bodner

*Robin R. Buckallew*

*Ampelopsis cordata*

Native to IA/IL/IN/OH

Roland E. Barth
## Look-alikes

<table>
<thead>
<tr>
<th></th>
<th>Porcelain berry</th>
<th>Riverbank grape</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pith</strong></td>
<td>White and continuous across nodes</td>
<td>Brown and not continuous across nodes</td>
</tr>
<tr>
<td><strong>Bark</strong></td>
<td>Stems have lenticels; bark ridged and furrowed, does not peel</td>
<td>Stems smooth, no lenticels; bark shreds and peels</td>
</tr>
<tr>
<td><strong>Flowers</strong></td>
<td>A flat-topped flower cluster</td>
<td>An elongated panicle</td>
</tr>
<tr>
<td><strong>Fruit</strong></td>
<td>Hard berries, multiple pastel colors</td>
<td>Juicy berries, purple to dark blue</td>
</tr>
<tr>
<td><strong>Leaves</strong></td>
<td>3-5 lobed, some deeply dissected, rounded teeth</td>
<td>Usually 3 lobed, pointed teeth</td>
</tr>
</tbody>
</table>
Porcelain berry found in the Preserve in 1997.

In 2006, contractor basal barked mature vines where the initial discoveries were made.

No follow up until 2010.
Porcelain berry is found in approximately 50 acres of the 300 acre Preserve.
Mechanical Control

• Hand pull small plants —roots break easily, fragments may start new plants
• Repeated mowing or cutting will prevent flowering but will not eradicate it
# Chemical Control

<table>
<thead>
<tr>
<th>Cut Stump</th>
<th>% active ingredient</th>
<th>% control (4 months after treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>triclopyr amine</td>
<td>13.0%</td>
<td>93%</td>
</tr>
<tr>
<td>triclopyr ester + bark oil</td>
<td>18.5%</td>
<td>92%</td>
</tr>
<tr>
<td>glyphosate</td>
<td>14.2%</td>
<td>67%</td>
</tr>
<tr>
<td>Basal Bark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>triclopyr ester + bark oil</td>
<td>1.8%</td>
<td>89%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Foliar Spray</th>
<th>% active ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>triclopyr amine</td>
<td>2.0-2.5%</td>
</tr>
<tr>
<td>glyphosate</td>
<td>5.0%</td>
</tr>
</tbody>
</table>
Monitoring and Follow Up
Other Controls

FIRE—Little is known; Because of its ability to resprout vegetatively, produce abundant seed, and establish on open sites, it is thought that fire may favor its spread.

BIOLOGICAL—None

Prevention is the best control!
Questions?

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