Ampelopsis glandulosa var. *brevipedunculata*, **Porcelain Berry**

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Common Name:	Porcelain Berry (Amur peppervine)
Scientific Name:	*Ampelopsis glandulosa* var. *brevipedunculata*
ID Description:	Porcelain berry is a perennial, woody vine in the grape family (Vitaceae). It grows to 15- 20 feet; the leaves are alternate and simple, with coarsely-toothed margins. Leaves can be either heart-shaped or deeply lobed with 3-5 divisions, depending on location along stem. The undersides of the leaves and new wood have small hairs. Flowers are tiny, greenish-white, and borne on umbrella-shaped cymes which face upwards. Fruit is a distinctive speckled berry, with widely variable coloring ranging from blue, pink, purple, and cream. Berries are borne on long panicles, and each berry holds 2-4 seeds.
Current Distribution in US and VT:	Porcelain Berry is widespread in the eastern US from New England to North Carolina and west to Michigan (USDA Plants) and is reported to be invasive in twelve states in the Northeast: Connecticut, Delaware, Massachusetts, Maryland, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, Washington D.C., West Virginia, and Wisconsin. iNaturalist reports 9 locations in Vermont, 3 of which are research grade confirmed
Habitat:	Porcelain Berry grows well in most soils, especially forest edges, pond margins, stream banks, thickets, and waste places, where there is full sunlight to partial shade, and where it is not permanently wet. Porcelain Berry appears to be less tolerant of heavily shaded areas, such as those found in mature forest interiors.
Regulated/restricted in these Northeastern states:	CT, MA, NH, NY, ME, RI
Concern:	Porcelain berry is a vigorous invader of open and wooded habitats where it shades out native shrubs and young trees. As it spreads, it climbs over and blankets existing plants and weakens/ kills them by blocking sunlight. In the US Forest Service's Eastern Region, Porcelain Berry is classified as a Category 1 invasive species. Plants in this category are "nonnative, highly invasive plants which invade natural habitats and replace native species". (FEIS)
Means of Introduction and Spread:	Porcelain Berry is native to Asia and was introduced to the U.S. in the 1870s as an ornamental landscape plant. Initially only found in the eastern U.S., in recent years, it has been found in a few scattered locations in Minnesota, Wisconsin, and Iowa. Porcelain Berry is spread primarily through seeds; dispersal is assisted by birds and other small animals that eat the fruit. Evidence shows that Porcelain Berry sprouts readily after the aboveground stem is cut.

Plant Pest Designation Rationale

Ecological Threat:

Porcelain Berry (*Ampelopsis glandulosa* var. *brevipedunculata*) poses a significant ecological threat to the northeastern United States due to its invasive characteristics and rapid spread. Porcelain Berry exhibits aggressive growth patterns, quickly outcompeting native vegetation by forming dense thickets that cover and smother existing plants. Its ability to climb and overtop native trees and shrubs further exacerbates its impact, altering the structure and composition of native plant communities. This alteration can lead to the loss of biodiversity and disrupt crucial ecological processes such as nutrient cycling and habitat provision.

The ecological threat of Porcelain Berry is compounded by its prolific seed production and dispersal mechanisms. Each plant can produce hundreds of berries annually, which are readily eaten and dispersed by birds, aiding in its spread over large distances. Furthermore, porcelain berry exhibits a high tolerance to a variety of environmental conditions, allowing it to thrive in diverse habitats ranging from forests to disturbed areas.

Economic Impact:
The economic impact of Porcelain Berry in the northeastern US stems primarily from its invasive behavior, which can result in significant costs associated with control and management efforts, as well as potential damage to agricultural and forestry industries. The aggressive growth and spread of porcelain berry can lead to the degradation of natural habitats, reducing their value for recreational activities such as hiking, hunting, and birdwatching. Additionally, Porcelain Berry's ability to outcompete native vegetation can impact ecosystem services, such as water filtration and soil stabilization, which are essential for maintaining healthy landscapes and supporting local economies.

Porcelain Berry's impact on agriculture and forestry in the northeastern US can result in economic losses for farmers and landowners. The vine's ability to climb and smother trees and shrubs can interfere with timber production and reduce crop yields by shading out desirable vegetation and competing for resources. This can necessitate costly control measures, such as herbicide applications or manual removal, to mitigate the spread of Porcelain Berry and minimize its economic impact on agricultural and forestry operations.

Feasibility of control and spread prevention:
Controlling and preventing the spread of Porcelain Berry in Vermont presents significant challenges but is feasible with targeted management strategies. Mechanical removal, including cutting, mowing, and hand-pulling, can effectively reduce existing populations of porcelain berry, especially when combined with follow-up treatments to prevent regrowth. Chemical control methods, such as herbicide application, may also be employed. Preventing the introduction and establishment of porcelain berry in new areas is essential for minimizing its impact and reducing the need for costly control measures.

Infestation of Porcelain Berry

Photo credit: Joe Boggs, OSU Extension (https://bygl.osu.edu/node/1129)

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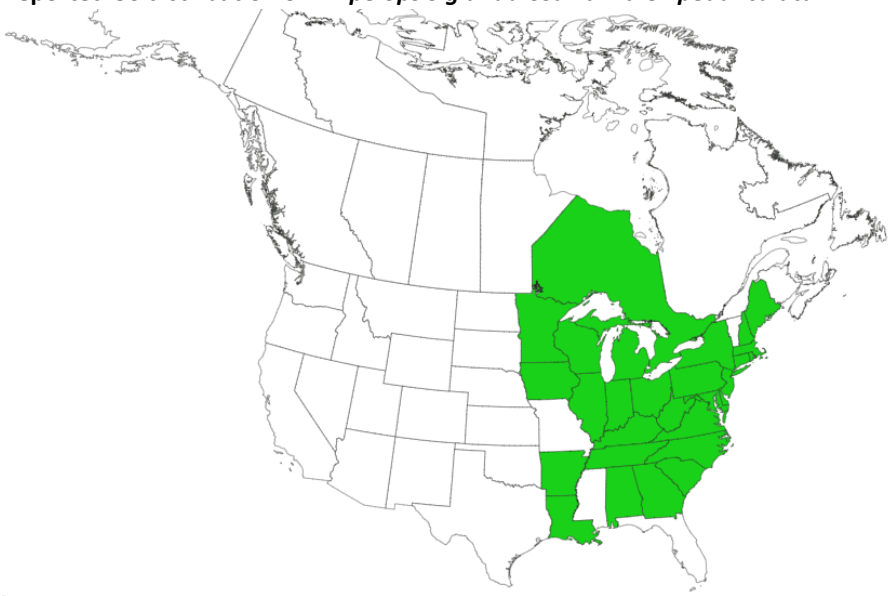
Reported US distribution of *Ampelopsis glandulosa var. brevipedunculata* in EDDMaps



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*This content was edited with the assistance of a generative artificial intelligence, ChatGPT. The content has been reviewed and verified to be accurate and complete and represents the intent of the Plant Health Section of the VT Agency of Agriculture, Food and Markets.

Other Resources:

Ontario Invasive Species Management
University of Maryland