

## *Ampelopsis brevipedunculata* 简体中文

**System:** Terrestrial

正體中文

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Rhamnales	Vitaceae

**Common name** amur peppervine (English), porcelain berry (English), creeper (English), wild grape (English)

**Synonym** *Ampelopsis brevipedunculata* , var. *maximowiczii* (Regel) Rehd.  
*Ampelopsis heterophylla* , (Thunb.) Sieb. & Zucc.

**Similar species** *Ampelopsis* spp.

**Summary** *Ampelopsis brevipedunculata* is a deciduous, climbing vine of the grape family. It is a hardy species that can adapt to a variety of environmental conditions, growing especially well in moist soils exposed to full sunlight or partial shade. It is however drought-tolerant and adaptable to poor soils of varying pH. In spite of its aggressiveness, it continues to be spread *via* the horticultural trade. Birds and other small mammals disperse its seeds, and evidence exists that water acts as a secondary method of dispersal.



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### Species Description

According to Young (2000), *Ampelopsis brevipedunculata* is a deciduous, woody, perennial vine of the grape family: Vitaceae. It is related to the North American raccoon-grape and peppervine, and is sometimes referred to as Amur peppervine or porcelain ampelopsis. The simple, heart-shaped leaves are dark green with coarsely toothed edges and are shiny underneath with delicate hairs along the veins. The leaves vary from slightly 3-5 lobed to deeply dissected, the latter being distinctively recognisable. The leaves are arranged alternately on vines that grow to heights of 4.5 to 6 metres. The plant climbs by tendrils that grow opposite the leaves on the stem. Small, greenish-white flowers appear in clusters on *A. brevipedunculata*. The colourful berries are its most distinguishing feature, about 60mm in diameter, and range in colour from white to yellow, pastel shades of green, lilac to amethyst purple, and turquoise to sky blue. All colours of the berry are often found simultaneously on the same plant while it is still in full foliage. In North America several native species of *Ampelopsis* could be confused with this exotic.

### Uses

Young (2000) states that in North America *Ampelopsis brevipedunculata* was originally cultivated as a bedding and landscape plant. In spite of its aggressiveness in some areas, it is still used in the North American horticultural trade. Its variegated foliage is attractive and makes an excellent cover for a trellis, arbour, fence, or rock pile. It is also used to sprawl over an outcropping or wall.

### Habitat Description

Young (2000) notes that *Ampelopsis brevipedunculata* grows especially well in moist but not permanently wet soils, such as pond margins, streambanks, thickets, and waste places exposed to full sunlight or partial shade. Like its grape relative, *A. brevipedunculata* appears less tolerant of heavily shaded areas, such as that found in mature forest. *A. brevipedunculata* is drought-tolerant. It is adaptable to poor soils of varying pH (OSU 2000).

## Reproduction

*Ampelopsis brevipedunculata* reproduces by seed and vegetatively from stem or root segments (RIWPS 2003). Birds and other small mammals disperse seeds, and evidence exists that water acts as a secondary method of dispersal (Young 2000). Each berry has 2 - 4 seeds, which have a high germination rate, aiding the rapid establishment of *A. brevipedunculata* (Young 2000).

## Nutrition

*Ampelopsis brevipedunculata* is adaptable to soils of average fertility (OSU 2000).

## General Impacts

Young (2000) reports that *Ampelopsis brevipedunculata* is a vigorous vine that is slow to establish but grows and spreads quickly in open areas of the urban landscape. After natural or human disturbance, seeds germinate readily in the soil bed. Once established, the vine quickly overwhelms native vegetation by shading out smaller plants and competing for water and nutrients. The vine smothers native plants as it surrounds them and burdens them with extra weight, which causes the natives to become susceptible to wind and ice damage. Especially vulnerable to invasion in North America, are urban parks with extensive wooded borders, neighbouring landscaped residential and private property. Although attractive to landscapers, the thick mats of *A. brevipedunculata* spatially usurp other plants (VDCR/VNPS UNDATED).

## Management Info

**Preventative measures:** This invasive plant is still popular in the horticultural trade, and Young (2000) reports the most effective control is removal from commercial trade and the use of alternative plants for landscaping and gardening. In North America some alternative species include trumpet honeysuckle, goldflame honeysuckle, and jackman clematis. Though flowers are produced on the current season's growth, hand pruning in the fall or spring will not prevent flower buds from forming the following season.

**Physical:** Where feasible, plants should be pulled up by hand before fruiting to prevent the spread of seeds. If the plants are pulled while in fruit, the fruits should be bagged and burned before they ripen. Because the roots of *A. brevipedunculata* plants often merge with shrubs or other desirable vegetation, this type of manual removal is difficult in well-established patches without damaging the desirable vegetation as well.

**Chemical:** The herbicides triclopyr (e.g., Garlon 3a and Garlon 4) and glyphosate (Roundup and Rodeo) have been used with varying success to battle infestations of *A. brevipedunculata*. Application of a water-based solution of 2.5% Garlon 3A (triclopyr amine) to foliage should be done from summer to fall. For basal bark application, a mixture of 20-30% Garlon 4 (triclopyr ester) with an equal volume of commercially available basal oil, diesel fuel, No. 1 or 2 fuel oil, or kerosene can be used. Other oils, such as horticultural oil can be substituted if the label for the oil recommends it for basal bark application.

Smaller infestations can be controlled to some extent with spot applications of glyphosphate to leaves. Or the vine can be cut first, allowed to regrow, and then triclopyr can be applied to new growth. Application should be during any season when temperatures are around 15 deg C or more for several days, around the basal portions of vines. Vines can grow as long as 4.5m in a single growing season, so repeated applications in the same growing season and in subsequent years may be necessary to fully eradicate the plant. Herbicide treatment is most effective when applied toward the end of the growing season when plants are actively transporting nutrients from stems and leaves to root systems (VDCR&VNPS UNDATED).

## Pathway

*Ampelopsis brevipedunculata* was cultivated in North America as an ornamental bedding and screening plant.

**Principal source:** [Young, J. 2000. Porcelainberry. Washington, D.C.: National Park Service, Plant Conservation Alliance, Alien Plant Working Group](#)  
[Virginia Department of Conservation and Recreation and Virginia Native Plant Society \(VDCR/VNPS\). UNDATED. Invasive Alien Plant Species of Virginia: Porcelain-berry. Richmond, Virginia.](#)

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** Dr. Jean Gerrath, Assoc. Professor Department of Biology University of Northern Iowa, USA

**Publication date:** 2005-01-24

## ALIEN RANGE

[1] CANADA

[3] UNITED STATES

## BIBLIOGRAPHY

9 references found for *Ampelopsis brevipedunculata*

### Management information

[European and Mediterranean Plant Protection Organization \(EPPO\), 2006. Guidelines for the management of invasive alien plants or potentially invasive alien plants which are intended for import or have been intentionally imported. EPPO Bulletin 36 \(3\), 417-418.](#)

Rhode Island Wild Plant Society (RIWPS). 2003. *Porcelain Berry*. Peacedale, Rhode Island.

**Summary:** Short summary on description, history, and control.

[Virginia Department of Conservation and Recreation and Virginia Native Plant Society \(VDCR/VNPS\), UNDATED. Invasive Alien Plant Species of Virginia: Porcelain-berry. Richmond, Virginia.](#)

**Summary:** Detailed report on description, habitat, background, distribution, ecological threat and management.

Available from: [http://www.dcr.virginia.gov/natural\\_heritage/documents/fsambr.pdf](http://www.dcr.virginia.gov/natural_heritage/documents/fsambr.pdf) [Accessed 28 July 2008]

[Young, J. 2000. Porcelainberry. Washington, D.C.: National Park Service, Plant Conservation Alliance, Alien Plant Working Group.](#)

**Summary:** Detailed report on description, habitat, background, distribution, ecological threat and management.

### General information

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database \*Ampelopsis brevipedunculata\*](#)

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: [http://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=28632](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=28632) [Accessed December 31 2004]

[Ohio State University \(OSU\). 2000. Ampelopsis brevipedunculata. The Ohio State University: OSU Pocket Gardener.](#)

**Summary:** Short summary on features and uses.

University of Connecticut (Uconn). 2001. *Invasive Plant Atlas of New England, Catalog of Species: Ampelopsis brevipedunculata*. Storrs: Ecology & Evolutionary Biology Department and the University of Connecticut Libraries.

**Summary:** Brief report on distribution, history and background, threats, description and habitat in New England.

[USDA, ARS, 2009. Taxon: Ampelopsis brevipedunculata \(Maxim.\) Trautv. National Genetic Resources Program. Germplasm Resources Information Network - \(GRIN\) \[Online Database\]. National Germplasm Resources Laboratory, Beltsville, Maryland.](#)

**Summary:** Available from: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?2964> [Accessed 17 August 2009]

[USDA, NRCS. 2009. Ampelopsis brevipedunculata \(Maxim.\) Trautv. Amur peppervine. The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.](#)

**Summary:** Available from: <http://plants.usda.gov/java/profile?symbol=AMBR7&mapType=nativity&photoID=> [Accessed 17 August 2009]