

## Midwest Premium Germplasm American Plum

*Prunus americana*, American plum is a native woody shrub or a small tree with spreading or hanging branches. It is one of the first shrubs to bloom in woodlands. Its showy white flowers appear before the leaves have unfolded and while woods are mostly bare of foliage. It can reach a maximum height of approximately 20 feet.

Midwest Premium Germplasm American Plum was collected from counties in the states of Missouri, Illinois and South Dakota and is being made available through the USDA Plant Materials Program. In addition to being used for wildlife food and cover, it can also be used in windbreaks as a medium size shrubby tree. American plum thickets can be used to help prevent soil erosion.

The Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture has announced the selected release of American Plum called Midwest Premium Germplasm (*Prunus americana*, Marsh.). The sources of this selection are from the counties of Phelps, Dallas, and Livingston in Missouri; Ogle and Moultrie counties in Illinois; and eastern South Dakota. This composite release was made in 2006.

### Description

American plum, *Prunus americana*, Marsh. is a native small tree reaching a maximum height of approximately 20 feet. It is one of the first shrubs or small trees to flower in the woodland. The showy clusters of fragrant white flowers are blooming while most of the woods are bare of foliage. American plum flowers from April through May and produces fruit from July to September. The flowers are 3/4 to 1 1/4 inches broad and normally have five white petal and 15 to 20 stamens. Pollination of the flowers is achieved by insects. Flowers are solitary, in umbellike clusters and usually appear before the leaves. Leaves alternate and are somewhat oval, long and narrow-pointed. The leaves are doubled-toothed

along the edge and have a dark green top and a paler bottom. The length is 2 to 5 inches and width is about 2 inches for each leaf. The fruit is thick and fleshy consisting of a one-seeded drupe that has a bony pit. The fruit size ranges from 3/4 to 1 inch; however with this composite selection, some fruit could be 2 inches in size. American plum is very prone to root suckering and can form a thicket from a single tree. Bark from American plum is thin, reddish-brown and broken into thin plates. Thorny extrusions are often found on the trunk and branches.



### Adaptation

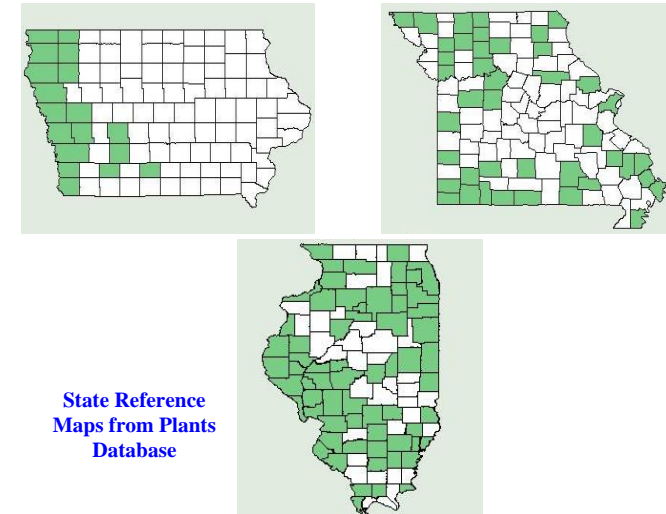
American plum can be found in thickets, occurs at edge of woodlands and grasslands. It grows well in rich soil or in moist locations, but also has a hardiness that will withstand severe locations. It performs best in a well drained soil and a sunny location. *Prunus americana* is present from Florida to New Mexico and Arizona, North to Massachusetts, New York, Ontario, Michigan, Wisconsin, Minnesota, Manitoba, West to Wyoming, Utah., Northwest to Washington.

### Evaluation and Performance

From 2001-2003, thirty-four field plantings were done with 16 in Missouri, 9 in Illinois and 9 in Iowa with the selections from Midwest Premium Germplasm American Plum. The survival rate ranged from 100% in Illinois, 70% in Missouri, and 66% in Iowa. Overall, there was good to excellent survival of the bare root seedlings, with the majority

of the field plantings receiving minimal maintenance with moderate weed and grass competition. The average vigor for all the field plantings was rated as fair. Growth rates were slowed by competition. In field plantings where the canopy was open to sunlight, there was no shading, and competition of weeds was controlled; it was documented that flowering and fruit development occurred within the third year after planted. Deer and rabbit pressure did affect the vigor and survival of some of the plantings. Trials are being conducted with direct seeding of the seed from Midwest Premium Germplasm American Plum for establishment of wildlife habitat for shrub/small trees for quail covey headquarters.

### Native Area of Documented Adaptation for American Plum



The maps indicate documented sites but this plant is native to more counties than indicated on these maps.

### Area of Intended Use for Midwest Premium Germplasm American Plum

Midwest Premium Germplasm American Plum originated from six collections harvested in counties

within the states of Missouri, Illinois, and South Dakota. Area of intended use is primarily Missouri, Illinois, and Iowa. These counties serve both the geographic area represented by the genetic materials of the parent seed and the potential market of the end product, which is commercially available as a selected release.

### **Establishment**

Seedlings may be planted by hand or with a tree planter. Soaking roots in water an hour or so just prior to planting usually increases survival. If planted in rows where equipment can be used, allow enough room to mow or cultivate for weed control. According to 'Shrubs and Woody Vines of Missouri', wild plum can propagate by root sprouts to form thickets or small trees. Space plants eight feet within rows and 16 feet between rows for farmstead and feedlot windbreak plantings. American plum can tolerate a wide range of soil types from sandy soils to poorly drained soils. Best conditions are a well-drained soil and sunny site for fruit production; however American plum can tolerate shade. Flowering occurs from April to May and fruit ripens from July to September. The plant has fruit every year and branches can be pruned back to increase production. Propagation from seed can be accomplished by harvesting the fruit in the summer when ripe (the fruit turns dark purple), usually in late August. Remove the pulp or fruit from the seed. Seeds can be extracted by maceration and recovered by flotation. Natural



germination predominately occurs in the first or second year after seed fall. Sow the seed in early fall. It is important to sow early enough so seed can prechill before seedbeds freeze.

### **Management**

Weed control is necessary for good establishment and uniform growth. Control weeds the first few years by tilling, or suppression of vegetation with herbicides before planting, or with the addition of mulch/weed barrier mat. Selective approved herbicides provide good weed control after establishment year; follow the instructions on the label. Protect from broadleaf type herbicides, fires, grazing and trampling by livestock. Plastic netting, irritants or similar protective devices could be used to prevent deer and rodent damage the first five years.

### **For More Information**

Visit our Plant Materials website at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

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United States Department of Agriculture  
Natural Resources Conservation Service

## **Midwest Premium Germplasm American Plum (*Prunus americana*, Marsh.)**



**An Improved  
Conservation Plant  
Developed by  
Elsberry  
Plant Materials Center  
Elsberry, Missouri**