

Plant Guide

AMERICAN PLUM

Prunus americana Marshall

Plant Symbol = PRAM

Contributed by: USDA, NRCS, Plant Materials Program

Alternate Names

Wild Plum, Wild Yellow Plum, and Red Plum

Description

American plum, *Prunus Americana*, 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. American Plum is a shrub or small tree 3-8 m (10-24 ft) tall, and is usually forming thickets. The small branches are sometimes spiny. Leaves are alternate narrow to wedge-shaped, 1-5 inches long somewhat long-pointed, sharply and often doubly toothed. The upper leaf surface is shiny green and the lower surfaces are slightly hairy. Buds are red-brown, mostly about 1/8 inch in length. Leaf scars are not abnormally enlarged. Flowers are white, three-five inch clusters, appearing March – May. Fruits are red and yellow, usually 7/8 to 1 1/4 inches, seed are somewhat flattened and ripen June – October.

Status

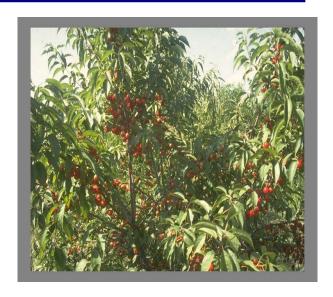
Threatened in the states of New Hampshire and Vermont.

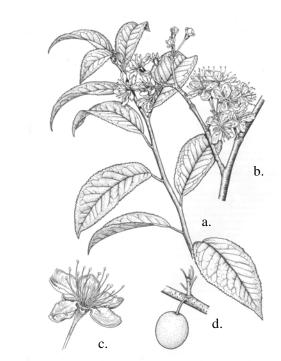
Cultivars, Improved, and Selected Materials (and area of origin)

Blackhawk, Hawkeye, and Desoto are descendents of the wild species (Kindscher 1987). Midwest Premium American Plum is a recent release from the Elsberry Plant Materials Center. Many of the cultivars are from western plains' states, and not many cultivars from the mid-western states.

Uses

American plum is an excellent species for wildlife food and habitat, effective in erosion control because their roots hold the soil, windbreak plantings, landscape and beautification. Plum thickets often furnish wildlife valuable protective shelter. The fruit is eaten by white-tail deer, raccoons, squirrels, and many other species of birds and mammals. The fruit makes excellent jellies and preserves, or may be eaten raw or cooked.



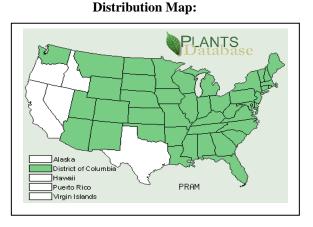


a. Growth form, b. Branch with flowers, c. Flower, d. Fruit

From Shrubs and Woody Vines of Missouri. Copyright by the Conservation Commission of the State of Missouri. Used with permission. Paul Nelson, illustrator

Evaluation and Performance

From 2001-2003, thirty-four field plantings were made 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. Additional field plantings are being applied in 2006 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.

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 tickets or a small tree to 20 feet with spreading more or less hanging branches. 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, sunny site for fruit production; however American plum can tolerate shade. Flowering occurs from March-May and fruit ripens from August to September. The plant has fruit every year and branches can be pruned or cut back to increase production.

Propagation from Seed: Harvest 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 seedfall. Sow the seed in early fall, it is important to sow early enough so seeds can prechill before seedbeds freeze. Seedlings reach suitable size for transplanting in one to two years. Cold stratifying up to six months in a moist environment can break seed dormancy.

Management

Weed control is necessary for good establishment and uniform growth. Control weeds the first years by tilling or suppression of vegetation with herbicides before planting, with the addition of mulch/weed barrier mat for weed control. Selective approved herbicides provide good weed control after establishment year; follow the instructions on the label. Protect from broadleaf or non-selective type chemicals, 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.

Control

Contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.

Pests and Potential Problems

Eastern Tent Caterpillar worms, *Malacosoma americanum*, occasionally infest the prunus species, which if untreated, can prevent flower and fruit production. A severe infestation can defoliate and stunt the plants for the growing season. A recommendation for control measures would be the insecticide Malathion 57 EC liquid. (Follow label recommendations.)

Weediness

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use. Weed information is also available from the PLANTS Website at http://plants.usda.gov. Please consult the Related Web Sites on the Plant Profile for this species for further information.

Environmental Concerns

American plum can spread by seed but mainly by underground roots. It does not seem to spread from its original plantings and when it does spread by seed, the rate is not alarming. American plum is cross-pollinated.

Seeds and Plant Production

Fruit production of American plum has been very successful in a spaced plant nursery. In 100 pounds of fruit of American plum there is an average of 19 pounds of seed. Cleaned seeds per pound averages 1500. A matured American plum tree can produce approximately 100 to 150 pounds of fruit (19 - 28.5 pounds of seeds).

Plants are available in limited number from the Elsberry Plant Materials Center, Elsberry, Missouri.

References

Shrubs and Woody Vines of Missouri; pp. 172-173; Kurz, Don; The Missouri Department of Conservation, Jefferson City, Mo., 1977.

A Field Guide to Trees and Shrubs; p. 310; Peterson, R. T. and McKenny; M. Houghton Mifflin Company, Boston, Mass., 1968.

Seeds of Woody Plants in the United States; pp. 278-280; Schopmeyer, C. S.; Forest Service, U. S. Department of Agriculture, Washington, DC, 1974

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For more information about this and other plants, contact your local NRCS field office or Conservation District, or brows the Web at http://Plants.usda.gov (Plant Materials) or http://Plants.usda.gov (PLANTS database)

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