

'McKenzie' black chokeberry

USDA Natural Resources Conservation Service, Plant Materials Center, Bismarck, North Dakota



Description

A medium-sized shrub which grows to a height of 5-10 feet, 'McKenzie' black chokeberry (*Aronia melanocarpa*) is also known as *Photinia melanocarpa* and is commonly called Aroniaberry in the nursery trade. This deciduous shrub is a member of the rose family, though not closely related to chokecherry. White flowers form in the spring and are pollinated by bees. Leaves are a deep glossy green. The fruit begins to form pendulous clusters in mid to late summer, turning a purplish-black color by September. Berries are about one-half inch or less in diameter and contain one to five very small seeds. They are quite juicy, but begin to shrivel after ripening. Juice and seeds are a deep purple in color. The berries generally persist and are not readily used by most bird species.

Uses

Conservation: Black chokeberry can be used in wildlife plantings and as a shrub row in farmstead or other multiple row plantings. It can also be alternated with other non-suckering shrubs, such as cotoneaster, nanking cherry, or currant. The short stature fits well under overhead irrigation systems.

Landscaping: Black chokeberry is attractive in landscape plantings. It has showy white flowers in the

spring. In the fall, the leaves turn a reddish-orange color and the dark purple fruit hangs in clusters.

Economic: The berries can be canned whole, or the juice extracted for jelly making or healthful fruit drinks. The juice contains high levels of anthocyanins (source of red color) and flavanoids.

Commercial producers usually blend Aronia juice with other juices.

This plant is grown extensively in Europe, where yields of up to 38 pounds of fruit per bush are harvested.

Historical: The Forest Potawatomi knew this plant as 'nikiminun' and steeped the berries to make a tea to cure a cold.



Adaptation

Black chokeberry is native to eastern North America and has been extensively planted in Europe and Asia. It is hardy to zone 3. In its native habitat, it grows in moist woods, but is also found in drier thickets or clearings on bluffs and cliffs. The plant material used to develop McKenzie (PI 323957) was made available by the USDA-ARS Plant Introduction Station at Ames, Iowa. It has been planted at various arboretums since 1976. It performed well in North Dakota and Minnesota, south to Kansas, and east to central Illinois. At some of the more southern locations, it reached a height of ten feet, with

a canopy spread being somewhat less. It is long-lived; the original plants have performed well for more than 25 years at the Bismarck Plant Materials Center. McKenzie black chokeberry performs best on well-drained to moderately well-drained sites with combinations of silty or loamy textured soils. The minimum precipitation required is approximately 16 inches. Good weed control may allow for fair performance on drier sites.

Establishment and Management

Nursery-grown seedlings establish readily when planted at locations free of competing vegetation, and having 16 inches or more of annual precipitation. Bareroot seedlings should be planted in the spring, once the threat of frost is past. The optimum spacing between plants is four to six feet. Plants grown for fruit production may benefit from ten-foot spacing which gives more room and light to each plant. Rabbit browse on seedling plants can be an initial establishment problem. Control of invading weeds and grasses is important for plant growth.

Black chokeberry has very little suckering or layering. It appears to have very few disease and pest problems, although various leaf spot diseases have been reported in the eastern United States.



Production

Seeds of black chokeberry are small. There are approximately 276,000 seeds per pound. The berries can be processed into a pulp, using a blender or a macerator. Once the pulp dries, it is easy to separate the seeds from the pulp. Separating the seed from the pulp improves germination. Approximately 100 pounds of fruit yield a pound of seed. Chokeberry seeds have an internal

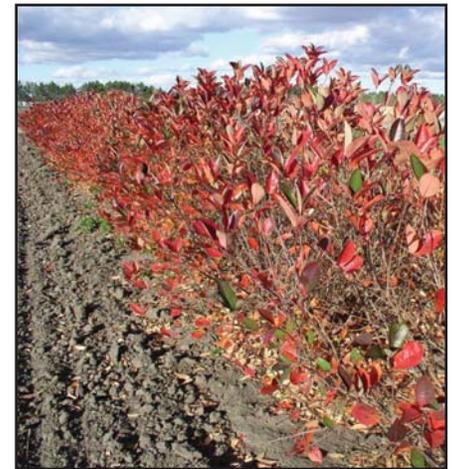
dormancy that can be overcome by stratification in moist peat for three months at temperatures between 33 and 41 degrees F. For nursery-scale production of seedlings, it is recommended that clean seed be sown in September.

Conservation Plant Characteristics

Growth Habit	perennial shrub
Flower Color	white
Foliage Color	glossy green/red (fall)
Fruit Color	purple
Growth Rate	slow/medium
Mature Height	5 - 10 feet
Anaerobic Tolerance	medium
Salt Tolerance	low
Drought Tolerance	medium
Precipitation Minimum	16 inches
Shade Tolerance	tolerant
Commercially Available	yes

Availability

McKenzie black chokeberry is available as bareroot seedlings from conservation nurseries in the Upper Midwest. Seed is available from conservation nurseries and the USDA-NRCS Plant Materials Center, Bismarck, North Dakota. For more information on the availability and use of McKenzie black chokeberry, contact your local Soil Conservation District or USDA-NRCS office.



For more information, contact:
USDA-NRCS Plant Materials Center
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Bismarck, ND 58504
Phone: (701) 250-4330
Fax: (701) 250-4334
<http://Plant-Materials.nrcs.usda.gov>

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