

United States Department of Agriculture

Soil Conservation Service

Program Aid Number 1406

'Centennial' cotoneaster



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'centennial' cotoneaster, *Cotoneaster integerrima* Medikus, is a large shrub that is native to Europe, western Asia, and Siberia. It is recommended for use in multiple-row farmstead and single-row field windbreaks, wildlife habitat, recreational development, and plantings along transportation and transmission corridors. The abundant fruit of Centennial provides an excellent source of food for many species of wildlife.

Centennial was released in 1987 by the Soil Conservation Service (SCS) of the U.S. Department of Agriculture in cooperation with the State Agriculture Experiment Stations of North Dakota, South Dakota, and Minnesota; and the North Dakota and South Dakota Associations of Soil Conservation Districts.

Description

Centennial cotoneaster grows to a mature height of 8 to 12 feet in 15 years. Crown width is 12 to 15 feet. This shrub is larger and more open in branching habit than hedge cotoneaster, *Cotoneaster lucida*. The underside of its dark, blue-green leaves is whitish to light gray. Although not as glossy as the leaves of the hedge cotoneaster, the leaves of the Centennial plant are lustrous. The large quantities of bright rose-red berries mature in early August and contrast strikingly with the deep-colored foliage.

Centennial appears to be resistant to the bacterial disease fireblight, which has proved to be fatal to Peking and hedge cotoneaster. Observations at test locations have shown slight symptoms of the disease, but they were not severe enough to weaken the plant. Centennial cotoneaster is a valuable conservation plant that is equal, or superior, to Peking and hedge cotoneaster, red tatarian honeysuckle, and siberian peashrub because of its resistance to fireblight.

Centennial originated in 1957 as seed from the Agricultural Experiment Station, Cheyenne, Wyoming. An import from China, it was received by the station as PI-113095. The Soil Conservation Service has evaluated the adaptation and performance of Centennial at the Plant Materials Center at Bismarck, North Dakota, and has evaluated field plantings in cooperation with State and Federal agencies in North Dakota, South Dakota, and Minnesota.

Establishment

Cultivate the planting site and keep it fallow for at least 1 year before planting Centennial seedlings in order to kill all perennial vegetation. Plant the seedlings in the spring as soon as the ground thaws and soil moisture is high. The recommended within-row spacing is 4 to 5 feet.

Use 1- or 2-year-old seedlings that are 12 to 24 inches in height and have a stem diameter of three-sixteenths to one-half inch just above the root collar. Plant the bare root seedling to the root collar, being sure the roots are well dispersed within the hole.

Control weeds by mechanical cultivation or recommended herbicides for a minimum of 5 years. Centennial forms a solid stand and begins producing fruit in 3 to 4 years.

Propagation

Centennial is propagated by seed. Mature fruit can be collected in August and processed by wet maceration. Germination requires seed scarification that is followed by warm, then cold stratification. Seedling production can be accomplished by one of three methods:

1. Midsummer planting—scarify the seed by soaking in concentrated sulfuric acid for 2 hours before planting in June. Germination will take place the following spring.
2. Fall planting—acid treat the seed for 2 hours in concentrated sulfuric acid; follow by warm stratification for 90 days at 70 °F. Plant just before freezeup. Seed will germinate the following spring.
3. Spring planting—acid treat seed for 2 hours in concentrated sulfuric acid; follow with 90 days of warm stratification at 70 °F and 120 days of cold stratification at 41 °F. Stratified seed should be planted as soon as possible and closely monitored for germination while in cold stratification.

Plant 30 to 40 viable seeds per lineal foot, one-eighth of an inch deep, and cover with one-half to three-fourths of an inch of soil. Mulching will help protect the planting and keep the soil moist. Remove the mulch as soon as germination starts.

Adaptation

Centennial performs well on a variety of soils, from deep and moderately deep loamy and silty soils that are well to poorly drained with a high water table to deep loamy and sandy soils that are well to moderately well drained and have a moderate water-holding capacity. Sites with soils that are coarse textured, extremely saline, droughty, or subject to ponding should be avoided. Centennial is winter hardy where average annual minimum temperature ranges from -40 °F to -20 °F. The primary area of adaptation is at sites within the area shown on the adaptation map. The average annual precipitation of this area ranges from 10 to 30 inches.

The average rate of survival for Centennial cotoneaster ranges from 70 to 95 percent under field conditions. Establishment and rate of growth are affected by weed competition, shade, drought, and adverse soil conditions.

Availability

Breeder seed and foundation stock of Centennial cotoneaster are maintained by the Soil Conservation Service Plant Materials Center, P.O. Box 1458, Bismarck, ND 58502. Certified seed is available from growers approved by the State Certified Seed Department. Standards for all classes of seed are published in the North Dakota Tree and Shrub Certification Standards.

For more information on the availability and use of Centennial cotoneaster, contact your local SCS or conservation district office. All programs and services of the Soil Conservation Service are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

United States Department of Agriculture
Agricultural Research Service
National Cotton Council

Centennial

Centennial cotton is a medium-staple cotton with a long history of production in the central United States. It is well adapted to the soil conditions and rainfall of the central United States. It is a good choice for the grower who wants a cotton that is well adapted to the soil conditions and rainfall of the central United States. It is a good choice for the grower who wants a cotton that is well adapted to the soil conditions and rainfall of the central United States.



**Area of adaptation of
'Centennial' cotoneaster**

