

COTONEASTER *Cotoneaster integerrimus* **Medik.** Plant Symbol = COIN16

Contributed by: USDA NRCS National Plant Data Center



D.E. Herman. 1996. North Dakota tree handbook.

Alternate Names

Cotoneaster cotoneaster, Cotoneaster vulgaris, European cotoneaster, great orme berry, *Mespilus cotoneaster*, *Ostinia cotoneaster*, quan yuan xun zi (Chinese), skalnik obecny (Czech), wild cotoneaster, zwergmispel (German).

Uses

Conservation: The USDA NRCS recommends cotoneaster for use in windbreak plantings on farmsteads and along transportation, transmission, and recreation corridors.

Wildlife: Many bird species consume cotoneaster fruit in autumn. The plant also offers protection and habitat to small wildlife species.

Description

General: Rose Family (Rosaceae). Cotoneaster is a multi-branched shrub with a broad crown. It is 2 m tall at maturity. The branchlets are grayish brown, covered with dense hairs, becoming more glabrous at maturity. Leaves are simple, alternate, broadly ovate to almost circular, 2 to 4 cm long and 1 to 3 cm wide. They are gray-green above, gray pubescent below, and are untoothed. Buds are brown to pale gray and less than 1 cm long. Two to five flowers are borne

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on inflorescences that are 1.5 to 2.5 cm long. The flowers are pinkish-white and approximately 8 mm in diameter. The fruit is a dark red berry, 6 to 8 mm in diameter. Cotoneaster blooms in May and June and sets fruit in August and September.

Distribution: Cotoneaster is native to Europe and temperate regions of Asia. Its native status in China is debated and has been documented as unknown by some sources.

Habitat: The natural habitats of cotoneaster are rocky slopes and forests at elevations below 2500 meters.

Adaptation

The recommended USDA hardiness zones for cotoneaster are 3 through 5. Cotoneaster prefers soils that are moist and have a pH range of 5.0 to 7.5. The "North Dakota Tree Handbook" states that cotoneaster is not adapted to alkaline soils (as well as saline soils), but other sources suggest that alkaline soils are preferred. It is adapted to a variety of soil textures. Growth is slow on very dry and poorly drained soils. Cotoneaster does well in full and partial sun.

Pests and Potential Problems

Fireblight is a common problem among cotoneaster plants. It is caused by the bacterium, *Erwinia amylovora*. New plant growth is black and curved. Smooth bark will crack while older growth will develop cankers. The cankers may cause death. The disease is prompted by heavy rainfall followed by warm, hazy weather. Nitrogen fertilization, late season fertilization, poor soil drainage, and overwatering promote susceptibility to fire blight.

Pear slugs are common insect pests that chew cotoneaster leaves, giving plants a skeletonized appearance. Damaged leaves fall prematurely. Pear slug infestations leave cotoneaster unattractive, but do not affect plant health.

Management

To reduce the risk of fireblight infection, do not plant cotoneaster near ornamental or orchard apple trees. Although there is no chemical treatment available, sanitary culture conditions can manage fireblight spread. Prune diseased twigs and remove plants with large cankers. Disinfect pruning tools. Apply sprays that contain fixed copper during bloom-time to

Plant Materials http://plant-materials.nrcs.usda.gov/ Plant Fact Sheet/Guide Coordination Page http://plant-materials.nrcs.usda.gov/ National Plant Data Center http://plant-materials.nrcs.usda.gov prevent infection. Remove suckers from the base of the plant.

Pear slug infestation is controlled with insecticides labeled for caterpillars or leaf beetles, or by using a jet of water to remove the slugs. Wood ashes kill pear slugs.

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

The USDA NRCS Plant Materials Center released the cultivar 'Centennial' cotoneaster in 1987 for conservation use in the Great Plains.

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

Agricultural Research Center. 2004. *GRIN taxonomy* (http://www.ars-grin.gov/cgi-bin/npgs/html/index, 19 June 2004). USDA, Beltsville.

Cranshaw, W.S. and D.A. Leatherman. 1986. *Pear slugs* (http://www.colostate.edu/Depts/IPM/ento/ j560.html, 23 June 2004). Colorado State University Cooperative Extension, Fort Collins.

Devonian Botanic Garden. 2004. *Woody perennials* (http://www.discoveredmonton.com/devonian/seedw ood.html, 19 June 2004). University of Alberta, Alberta, Canada.

Landscape Alberta Nursery Trades Association, Alberta Agriculture, Food, and Rural Development. 1997. *ArborCare Library*

(http://www.arborcare.com/library/fireblight.html, 23 June 2004). Arbor CARE Tree Service Ltd., Calgary, Alberta, Canada.

Tree Information Center. 1996. *North Dakota tree handbook* (http://www.ag.ndsu.nodak.edu/ aginfo/trees/handbook/ndhand-1.htm, 19 June 2004). North Dakota State University, Fargo.

USDA NRCS. 2002. *NC-7 woody ornamental evaluation trials: 1989 accessions* (http://www.arsgrin.gov/ars/MidWest/Ames/Ornamental_Trials/inde x.html, 19 June 2004). North Central Regional Plant Introduction Station, Ames. USDA-NRCS PLANTS Database / Herman, D.E. et al. 1996. North Dakota tree handbook. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Admin., Bismarck.

Zhengyi, W. and P. Raven. 1994. *Flora of China*. Science Press, Bejing, China, and Missouri Botanical Garden, St. Louis.

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