

USDA-NATURAL RESOURCES CONSERVATION SERVICE
NOTICE OF RELEASE
OF
NICHOLSON GERMPLASM ROUGHLEAF DOGWOOD
CORNUS DRUMMONDII

The United States Department of Agriculture (USDA)-Natural Resources Conservation Service (NCR), the Elsberry Plant Materials Center at Elsberry, Missouri announces the release of Nicholson Germplasm roughleaf dogwood, *Cornus drummondii*, Meyer, as "SELECT CLASS" for wildlife food and cover and windbreaks.

Nicholson Germplasm has been assigned the NRCS accession number 9055594.

Origin:

Geary County, Kansas

Ecotype Description:

Roughleaf dogwood is a small native tree (5-6 m tall) with a very general distribution throughout the states of Missouri, Illinois and southern Iowa. It is probably found in every county in Missouri. The leaves are opposite, borne simply; very rough above, woolly beneath. Flowers small and white in color; unlike the flowering dogwood, the flowers of this species have no large petal-like bracts. Fruits are white, berry-like drupe; globular 6-7 mm. diameter, with minute, tightly appressed hairs and milky flesh. Seeds greenish-white or tan, often red when young, 4-5 mm long, hairy; leaf scars narrow, crescent-shape with ends and center widened; pitch white and large. The bark is gray-brown, thin, scaly with short plates or long, flat strips, wood is hard and white. Trees rarely become large enough to attain a definite pattern. Roughleaf dogwood is predominantly cross-pollinated with some self-pollination. *Cornus* is from the Latin word cornu, "horn"; drummondii is in honor of Thomas Drummond, Scottish Botanist, 1780-1835.

Development:

Nicholson Germplasm was selected out of an assembly of 55 collections of roughleaf dogwood planted on the Plant Materials Center in April 1990. After seven years of comparative evaluations, this accession was selected based on the following characteristics: fruit production, insect and disease resistance, form and seedling vigor. This selection has been tested on various soil types throughout the states of Western Missouri and Southwest Iowa. Plant performance has ranged from good to excellent. This selection of dogwood is able to survive drier and more exposed soil conditions than any other species in Western Missouri and Southwestern Iowa and is often found around limestone glades and rocky exposed outcrop.

Seed Production:

Nicholson Germplasm was an excellent fruit producer and compared well with any accessions included in this assembly from the Plant Materials service area. Yield of fruit

per individual tree ranges from 5-8 bulk pounds. It takes four to five years for new transplants to produce significant quantities of fruits.

This selection has approximately 15,000 clean seeds per pound. Average seed weight is approximately 3.70 grams per 100 seeds.

Site Description:

This collection was made from a native stand located in Geary County, near Junction City, Kansas, on a prairie soil.

Climate:

The average annual temperature is 55.2 degrees Fahrenheit. July is the warmest month with an average high of 92.6 degrees and low of 67.1 degrees. January is the coldest month with an average high of 39.4 degrees and low of 17.3 degrees. The average annual precipitation for this region is 33.8 inches with much of this coming during the growing season. The average frost-free growing period runs from April 22 to October 17.

Availability of Plant Materials:

Breeders material is being produced by the Plant Materials Center, Elsberry, Missouri.

Release Approved By:

Roger A. Hansen, Missouri State Conservationist 10-2-97
Chairman, PM Advisory Committee, NRCS

William J. Gradle, Illinois State Conservationist 10-29-97

Leroy Brown, Iowa State Conservationist 10-21-97

References:

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A Field Guide to Trees and Shrubs; p. 77, 78; Peterson, R. T. and McKenny, M. Houghton Mifflin Company, Boston, Mass., 1968.

Trees of Missouri; p. 109; Settergren, C. and McDermott, R. E., University of Missouri Agricultural Experiment Station, Columbia, Missouri, 1968.

Gray's Manual of Botany; p. 1107; Fernald, M. L.; American Book Company; Eighth Edition; Harvard University, 1950.