

United States Department of Agriculture  
Soil Conservation Service  
Ecological Sciences and Technology Division  
Washington, D. C.

Notice of the Naming and Release of 'Redstone' Cornelian cherry dogwood.

The United States Department of Agriculture, Soil Conservation Service (SCS) announce the release of 'Redstone' Cornelian cherry dogwood, (Cornus mas L.) for conservation and amenity planting in the central cornbelt region.

Redstone was received in 1934, from the David E. Parks, Bureau of Parks, Rochester, New York, by B. H. Slavin. It was evaluated, selected and increased at the USDA, SCS, Plant Materials Center (PMC), Elsberry, Missouri. There are no commercially released cultivars of Cornelian cherry dogwood.

Cornelian cherry dogwood is an introduced woody species native to central and southern Europe and western Asia. The Elsberry PMC has evaluated Redstone as accession numbers M1-420 and 905585.

It was selected on the basis of superior seedling vigor, dense growth form and glossy foliage. It has demonstrated excellent survival and longevity with no apparent disease or insect problems in the 44 years of evaluation on the PMC. Other desirable characteristics include attractive yellow flowers and abundant, edible scarlet fruit.

Redstone is a shrub or small tree reaching a height of 20 feet (6.2 m); bark scaly, dark brown; young bracts minutely appressed-pilose, greenish yellow, later brown. Leaves dark green, glossy ovate to elliptic, 4-20 cm. long, acute to acuminate, with 3-5 pairs of veins. Flowers are yellow on short stalked umbels; bracts yellowish; pedicels are about as long as bracts; sepals shorter. Fruits are ellipsoid, 1-2 to 1.5 cm. long, scarlet; 2,000 seeds (clean) per pound. Flowering occurs March - April; fruit ripens August - September.

Redstone is a seed propagated cultivar recommended for use in multi-row farmstead windbreaks, wildlife habitat, and plantings associated in revegetation of transportation corridors and recreation development areas.

Redstone Cornelian cherry dogwood has performed well on deep, fine to moderately fine textured well-drained soils and climatic conditions typical of the central cornbelt region.

Field plantings are currently under way to further define its area of adaptation and performance. Evaluations of Redstone at the Elsberry PMC and in selected Midwest states indicate it is adapted in plant hardiness zones 5a - 7a. It has no apparent disease and insect problems.

Propagation by commercial nurseries will be from open pollinated seed. Breeder's seed and plants to establish seed orchards of Redstone will be available to commercial growers in limited quantities from the USDA, Soil Conservation Service, Plant Materials Center, Elsberry, Missouri 63343.

Release date for publicity purposes shall be effective on the date of final signature of the release notice.

Approved By: David L. Schatz, Acting  
Director, Ecological Science and Technology Division  
Soil Conservation Service - Washington, D. C.  
Date: 6-21-91

Russell Enfield  
State Conservationist  
Soil Conservation Service - Columbia, Missouri  
Date: 5/17/91

Mark W. England  
State Conservationist, Acting  
Soil Conservation Service - Champaign, Illinois  
Date: 5/13/91

Jeffrey Z. Vink  
State Conservationist  
Soil Conservation Service - Des Moines, Iowa  
Date: 5/15/91

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
Elsberry Plant Materials Center  
Elsberry, Missouri

Documentation of a Plant Accession Selected for Advanced Testing

Species:	<u>Cornus mas</u> L.
Common Name:	Cornelian cherry dogwood
Plant Symbol:	COMA
Accession Number(s):	9055585, M1-420
Origin/Source:	Introduced - Central Europe and Western Asia; Origin - Unknown. Received from David E. Parks, Bureau of Parks, Rochester, New York; Collector B. H. Slavin in 1934.
Method of Selection:	Twenty (20) plants selected from a high density population planting in the woody production area. Selected on the basis of superior seedling vigor, dense growth form and glossy foliage. It has demonstrated excellent survival and longevity with no apparent disease or insect problems in the 44 years of evaluation on the Elsberry PMC. Other desirable characteristics include attractive yellow flowers and abundant (scarlet) edible fruit.
Description:	Shrub or small tree, to eight meters; bark, scaly, dark brown; leaves ovate to elliptic, four to ten cm long, acute to acuminate, broad-cuneate at base. Flowers are yellow, in short stalked umbels before the leaves. Flowers March to April while fruits ripen August to September. Fruits are scarlet in color having 2,000 seeds (clean) per pound.
Conservation Use:	To be used for multi-row farmstead windbreaks, wildlife food and habitat, and plantings associated with revegetation of transportation corridors and recreational development areas.
Potential Area of Adaptation:	Iowa, Illinois, Missouri, east-central Kansas, and southeastern Nebraska.

Potential Soil Adaptation: Deep, fine to moderately fine textured well-drained soils.

Where Seed Will be Maintained: Elsberry Plant Materials Center, Elsberry, Missouri.

Prepared By: Jimmy Henry, Manager  
USDA, SCS  
Plant Materials Center  
Elsberry, Missouri

Table : Data to Support Release of 'Redstone' cornelian cherry dogwood

USDA, Soil Conservation Service

Genus: Cornus

Species: Mas L.

Acc. No: 9055585 (M1-420)

State: Missouri (29)

Purpose: Documentation for Release

MLRA	SOIL	TEX	COUNTY	COOPERATOR	PLOT LOC	DATE PLT	YR REC	AGE	NO PLTS	NO PLTS SRV	HT (FT)	CRN SPD (FT)	CO	UI	FLR PER	LBS FRU ABD	RESISTANCE DI IN
115	Menfro	Silt	Lincoln	USDA-SCS-PMC Elsberry, Missouri	F-9	4-39	1934	1	20	20	1.7	.5	1	1			
							1980	41	20	6	19.0	24	1	1	4-10-18	3.1	1 1
							1981	42	20	6	19.0	24	1	1	4-15-22	3.4	1 1
							1982	43	20	6	19.5	25	1	1	4-12-20	3.3	1 1
							1983	44	20	6	19.5	25	1	1	4-15-22	3.5	1 1
							1984	45	20	6	20.0	26	1	1	4-23-30	3.6	1 1
							1985	46	20	6	20.0	26	1	1	4-15-23	4.3	1 1
							1986	47	20	6	20.0	26	1	1	4-10-21	3.9	1 1
							1987	48	20	6	20.0	26	1	1	4-13-20	7.4	1 1
							1988	49	20	6	20.0	26	1	1	4-11-21	8.2	1 1
							1989	50	20	6	20.0	26	1	1	4-18-25	13.3	1 1
							1990	51	20	6	20.0	26	1	1	4-12-20	15.8	1 1

#### Evaluation Rating System

Vigor (VI) Fruit Abundance (FRU ABD)

1 = Excellent

3 = Good

5 = Fair

7 = Poor

9 = Very Poor

Cold (CO)

1 = None

3 = Slight

5 = Moderate

7 = Severe

9 = Very Severe

Resist. To Disease (DI) and Insect (IN)

1 = Excellent

3 = Good

5 = Fair

7 = Poor

9 = Very Poor

Table : Data to Support Release of 'Redstone' cornelian cherry dogwood  
 USDA, Soil Conservation Service  
 Genus: Cornus  
 Species: Mas L.  
 Acc. No: 9055585 (Mich-870, (M1-420)  
 State: Michigan (26)  
 Purpose: Area of Adaptation

MLRA	SOIL	TEX	COUNTY	COOPERATOR	PLOT LOC	DATE PLT	YR REC	AGE	NO PLTS	NO PLTS SRV	HT (FT)	CRN SPD (FT)	CO	VI	FLR PER	LBS FRU ABD	RESISTAN DI	IN
98	Baxter	Sandy Loam	Clinton	USDA-SCS-PMC Rose Lake, Michigan		5-72	1972	26	26	2.0		1.0	1	5			1	1
							1973	26	*8	3.0		1.5	1	5			1	1
							1974	26	8	3.5		2.0	1	5			1	1
							1975	26	8	4.0		2.0	1	3			1	1
							1976	26	8	4.5		2.5	1	3			1	1
							1977	26	8	5.5		2.5	1	3			1	1
							1978	26	8	6.0		3.0	1	3	5-10-18	5	1	1
							1979	26	8	7.0		3.5	1	3	5-9-18	5	1	1
							1980	26	8	7.0		4.0	1	3	5-12-19	3	1	1

#### Evaluation Rating System

Vigor (VI) Fruit Abundance (FRU ABD)

1 = Excellent  
 3 = Good  
 5 = Fair  
 7 = Poor  
 9 = Very Poor

Cold (CO)

1 = None  
 3 = Slight  
 5 = Moderate  
 7 = Severe  
 9 = Very Severe

Resist. To Disease (DI) and Insect (IN)

1 = Excellent  
 3 = Good  
 5 = Fair  
 7 = Poor  
 9 = Very Poor

\*Site selected for this planting was very droughty which contributed to poor survival,  
 and vigor was rated as fair in some instances.

Table : Data to Support Release of 'Redstone' cornelian cherry dogwood

USDA, Soil Conservation Service

Genus: Cornus

Species: Mas L.

Acc. No: 9055585

State: Kansas (20)

Purpose: Area of Adaptation

MLRA	SOIL	TEX	COUNTY	COOPERATOR	PLOT LOC	DATE PLT	YR REC	AGE	NO PLTS	NO PLTS SRV	HT (FT)	CRN SPD (FT)	CO	VI	FLR PER	LBS FRU ABD	RESISTAI DI	IN
76	Haynie	Sandy Loam	Ripley	USDA-SCS-PMC Manhattan, Kansas	17	4-23-84	1984	1	20	20	2.5	.5	1	1			1	1
							1985	2	20	20	3.5	1.0	1	1			1	1
							1986	3	20	20	4.0	1.5	1	1			1	1
							1987	4	20	20	4.5	2.0	1	1	4-16-22	5	1	1
							1988	5	20	20	5.0	2.5	1	1	4-15-21	5	1	1
							1989	6	20	20	5.5	3.0	1	1	4-22-27	3	1	1
							1990	7	20	20	6.5	4.5	1	1	4-18-24	3	1	1

#### Evaluation Rating System

Vigor (VI) Fruit Abundance (FRU ABD)

1 = Excellent

3 = Good

5 = Fair

7 = Poor

9 = Very Poor

Cold (CO)

1 = None

3 = Slight

5 = Moderate

7 = Severe

9 = Very Severe

Resist. To Disease (DI) and Insect (IN)

1 = Excellent

3 = Good

5 = Fair

7 = Poor

9 = Very Poor

Table : Data to Support Release of 'Redstone' cornelian cherry dogwood  
 USDA, Soil Conservation Service  
 Genus: Cornus  
 Species: Mas L.  
 Acc. No: 9055585  
 State: Arkansas (05)  
 Purpose: Area of Adaptation

MLRA	SOIL	TEX	COUNTY	COOPERATOR	PLOT LOC	DATE PLT	YR REC	AGE	NO PLTS	NO PLTS SRV	HT (FT)	CRN SPD (FT)	CO	VI	FLR PER	LBS FRU ABD	RESISTAI DI	IN
	Leadville	Silt	Logan	USDA-SCS-PMC Booneville Arkansas														

#### Evaluation Rating System

Vigor (VI) Fruit Abundance (FRU ABD)

- 1 = Excellent
- 3 = Good
- 5 = Fair
- 7 = Poor
- 9 = Very Poor

Cold (CO)

- 1 = None
- 3 = Slight
- 5 = Moderate
- 7 = Severe
- 9 = Very Severe

Resist. To Disease (DI) and Insect (IN)

- 1 = Excellent
- 3 = Good
- 5 = Fair
- 7 = Poor
- 9 = Very Poor