MS-21

# Fruit Cultivars Released by the State Fruit Experiment Station CENTENNIAL EDITION

March, 1988 – Revised May, 1999



State Fruit Experiment Station
College of Natural and Applied Sciences
Missouri State University
Mountain Grove, Missouri
http://mtngrv.missouristate.edu

### Foreword

There is nothing that provides fruit growers with greater hope of better fruit and larger yields than new cultivars. Few other research endeavors are as long-term and expensive as the traditional plant breeding programs where progress is measured in decades. In this centennial year of the founding of the Missouri State Fruit Experiment Station, we proudly recount the achievements of the breeding program and look into the future of cultivar development.

Over the past 100 years, 43 new cultivars have been developed and released to the public by the Station. These include 10 apple, 8 peach, 11 plum, 13 grape and 1 raspberry. Of these, only Ozark Gold apple; Loring and Topaz peaches; Blufre, Ozark Premier, and Earliblue plums; and Blue Eye grape have been grown commercially to any great extent. The economic value generated by these seven cultivars has repaid the long-term investment for development many times over.

Today, the public willingness to support long-term research has diminished to the point where many traditional fruit breeding programs at public institutions have been eliminated. The breeding program at the Station was no exception.

The challenge for the State Fruit Experiment Station is now to provide new cultivars of fruit to Missouri growers using methods that reduce development time and increase the probability of introducing commercially acceptable cultivars. Alternatives to the traditional breeding programs are the importation of fruit selections from breeding programs in other areas of the world and the use of biotechnology to produce new cultivars. In fact, both approaches are now pursued with the goal of providing cultivars which are well adapted to the Missouri climate, are resistant to major diseases, and are of high quality.

As we approach the new Millennium and the beginning of the second century of service by the State Fruit Experiment Station, the following quote from Thomas Jefferson remains true. "The greatest service which can be rendered to any country is, to add a useful plant to its culture. .." We rededicate our efforts to this goal with the vision of better quality and more productive fruit cultivars for Missouri growers.

James F. Moore Jr., Director

# Fruit Cultivars Released by the Missouri State Fruit Experiment Station

MS-21

March, 1988 – Revised May, 1999

Foreword by Dr. James F. Moore, Jr. Introduction by John D. Avery, Jr.

Edited and Compiled by Marilyn Odneal Based on release information published by the former directors of the State Fruit Experiment Station.

### Table of Contents

Foreword	i
Introduction	iii
Apples	1
Peaches	4
Plums	6
Grapes	9
Black Raspberry	12
Literature Cited	12

State Fruit Experiment Station Missouri State University Mountain Grove, Missouri 65711

# Introduction By John D. Avery Jr.

The mission of the State Fruit Experiment Station of Southwest Missouri State University is the scientific study of fruit crops and the dissemination of results to the growers of Missouri. This research included breeding programs in the following genera, Vitis (grape), Prunus (peach and plum), and Malus (apple) until 1984. These traditional programs have been discontinued; however the cultivars that were released and a number of advanced selections are still under evaluation in repositories.

The station maintains the cultivars and selections it has released in repositories for the study of horticultural characteristics and to supply scions to interested persons or institutions. Presently cultivars released by the station include ten apple, thirteen grape, eight peach, eleven plum and one black raspberry. Many of the cultivars were released in the mid-1940's and some have been lost from the station. Efforts are now being made to locate the following cultivars: Osage and Missouri peach; Brilliant, Marvel, Radiance and Redbud plum; and Kent crabapple. Since the last publication of this booklet we have located Poppy peach and Somo black raspberry. If any one knows of a person with any of these missing cultivars, please contact John Avery at the station.

Repositories of station cultivars have been reestablished at new locations on the station. The grape repository was replanted in 1990, the peach and plum repositories in 1991, and the apple repository in 1992.

A few of the various fruits have become personal favorites since I have managed the repositories. My favorite plum release is Ozark Premier. It is a red plum, which can be large when the trees do not set heavily. It is frosted out most years. Two other plums, which are smaller but very good, are Twilite and Bonnie. My favorite peaches are definitely Loring and Topaz. There are several apples, which I like in the repositories. Ozark Gold is one of my all time favorite apples. It is a golden apple with a slight pink blush on one shoulder. It has the right amount of sweetness with a hint of tartness. Other apples in the repository that I like are Whetstone, Wright, and Fyan. They are large tart eating and cooking apples. In the grape repository are two cultivars that I like. The first is a seedless table grape, Challenger. It is a red grape with nice, large clusters and medium size berries but it is susceptible to the mildews. The other cultivar is a juice/jelly grape similar to Concord, the large blue grape named Beaver.

# Apples

Walter Williams wrote in the 1904 "State of Missouri – an autobiography" (Missouri) now has 25,000,000 apple trees, a third more than any other state in the union". This early industry was based primarily on the indestructible 'BenDavis' apple which could be successfully shipped in barrels. The majorfocus of the State Fruit Experiment Station breeding program was to combine the indestructible characteristics of 'BenDavis' with the higher quality and choice flavors of Delicious' and 'Jonathan'. Ozark Gold, a much later release from this program, is the most important commercial apple released from the State Fruit Experiment Station.

### **Conard**

(A-756)

### (Ben Davis X Jonathan)

The Conard is a vigorous tree resembling Jonathan and bearing regular, large crops, equal to Ben Davis. The fruit is almost entirely red, large, round or conic, tart and fine grained. In appearance, it resembles Jonathan and is often confused with it. The quality is fair to good, not as good as Jonathan but much better than Ben Davis. The flesh is white, crisp, moderately juicy and firm; a good storage apple which ripens one week after Jonathan. The variety does not ripen prematurely as Jonathan often does in southern Missouri during hot, late summers. The foliage is less susceptible to scab than Jonathan. Introduced 1935.



# **Faurot** (A-986)

### (Ben Davis X Jonathan)

The Faurot is less susceptible to blight than Jonathan and not subject to canker like Ben Davis. The fruit resembles Jonathan in size and color. One distinguishing characteristic is a considerable number of large, conspicuous dots. It has good quality, not quite equaling Jonathan but approaching it closely. As it ripens with Winesap, it is much less likely to drop prematurely in southern Missouri. The tree is a strong grower of normal shape and produces excellent foliage and large crops of late-keeping apples. Introduced 1935.

# Fyan (A-422)

### (Ben Davis X Jonathan)

The fruit is large to very large, nearly round, and attractive in appearance. Its color is about two thirds red and one third greenish yellow; has a tough, coarse skin fully covered with a light blue bloom. The fruit ripens about two weeks after Jonathan; is an excellent keeper and less subject to diseases than its parents. It is firm, juicy, fine grained, tart, and with good flavor. The tree is of the spreading type, a very vigorous grower and a regular bearer of large crops. Introduced 1935.

### Grove

(A-1150)

### (Ingram X Delicious)

This cross was made in 1915. The fruit is attractive, medium to large size, good quality, and has the ability to color well at least two weeks before ripening. In form and color it somewhat resembles a solid red Winesap. It is distinctly conical, slightly pinched on one side. Ripening season is a little later than Winesap. The fruit is uniform in shape, size and ripening; hangs well on the tree and is an excellent shipper and keeper. It is not as subject to scab as Delicious or to blight as Ingram. The set of fruit is improved with cross pollination. The fruit buds retain the late blooming habit of Ingram, blooming fully ten days after Delicious. Introduced 1935.

### Whetstone

(A-1289)

### (Conard X Delicious)

This cross was made in 1912, and the original tree has borne heavy annual crops since 1920. The second generation is carrying the same heavy production. The fruit is large to extra large, well colored, long, conic in shape, slightly knobbed and uniform in size. The fruit ripens about ten days after Winesap and keeps well in storage until May. It hangs tightly to the tree. The leaves, spurs, limbs and apple stems are large and thick. Bearing surface is all along the main limbs on spurs, similar to the McIntosh habit of fruiting. Tree is vigorous, spreading and needs little corrective pruning. Because of its color and size, the fruit sells well. It is less susceptible to diseases and insects than most well known varieties. The flavor is good, but not as good as Jonathan. As a baking apple it is one of the best. Introduced 1935.

### Wright

(A-827)

### (Ben Davis X Jonathan)

The Wright produces larger crops than Jonathan in southern Missouri, with fruit of better quality than Ben Davis. The fruit is large and attractive; has good flavor somewhat earlier. The fruit is round. dark red with yellow background and obscure stripes of darker color. The tree is a thrifty grower on very mediocre soil and is not subject to blight. The foliage is good, not as susceptible to scab as Jonathan. Introduced 1942.

### **Delcon**

(A-1286)

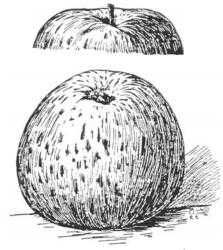
### (Conard X Delicious)

The Delcon was obtained from a cross made in 1916. The tree is dwarf to semidwarf and has drooping branches. The fruit has high quality; is fine grained, juicy and possesses some of the flavor of both Delicious and Jonathan. Many like it better than either when eaten raw. The tree produces heavy crops at an early age and often needs thinning. The bloom is particularly fertile, appearing o make fruit wherever a blossom appears. It bears both on spurs and terminally. The fruit ripens about ten days before Delicious; keeps well in storage. It is light to dark red with a yellow under color, medium sized when unthinned, shaped somewhat like the sheep-nosed Chenango. It is elongated, conical, much like Delicious without the knobs. A high quality apple recommended for close planting and home orchards. Introduced 1948.

# Jonagram (A-1907)

### (Ingram X Jonathan)

Fruit is medium to large; larger than Jonathan; round; skin is thin, tough, smooth, pale bright yellow overlaid with red, faint stripe on some fruits which have less color, dots small; flesh whiter than Jonathan but not as white as Ingram, firm, fine-grained, juicy, crisp, tender, subacid; keeps well in storage; matures about September 5 in southern Missouri (at Jonathan time). Tree is late blooming, about 12 days after Jonathan and Delicious and 6 days after Golden Delicious and Rome Beauty. Introduced 1956.



**244.** Ben Davis. (X 3/8)

### Kent (crabapple)

(U.S.1)

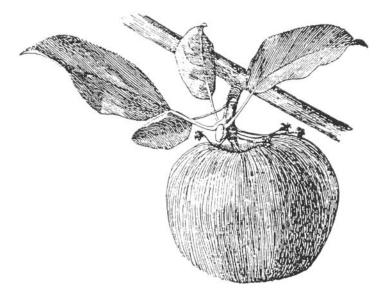
### (parentage unknown)

Kent crabapple fruit is about 2 inches in diameter; round to conic; stem length medium, calyx small, closed; skin thin, tough, vermillion overcast with yellowish-white; flesh juicy, crisp, sprightly subacid, fine-grained, faintly yellow, flavor good; may be eaten fresh, matures about September 5 in southern Missouri. Tree is vigorous, upright, spreading; hardy. Introduced 1956.

### Ozark Gold

(A-3071) (Golden Delicious X (Conard X Delicious))

Ozark Gold is an early Golden Delicious type. The quality is good. It has a Golden Delicious shape but is blemish free and develops a more golden skin color. It matures two weeks earlier than Golden Delicious. The tree type is good with wide branch angles and moderate vigor. It tends toward alternate bearing. Introduced 1970.



### Peaches

Peaches have always been an important crop in Missouri. Now grown primarily in the bootheel region of Missouri, the industry continues to successfully grow and market Loring and Topaz peaches, both released from the State Fruit Experiment Station Breeding Program.

# Loring (PH-811)

### (Frank X Hale Haven)

This variety resembles Golden Jubilee in color and shape; however, that is about as far as the resemblance occurs, as it is firmer and does not soften at the suture or tip. It is a large, firm, yellow-fleshed freestone with an attractive bright color of red and yellow over a yellow under color. The ripening period is about two weeks before Elberta.

Introduced 1946.

### Missouri (PH-127) (Open pollinated seedling of Sunbeam)

Like its seed parent, this peach has fine texture, a high percentage of sugar and good freezing qualities; however, it is larger, more highly colored and it ripens earlier. It has short fuzz, a full red outside color and an orange-yellow under color, which develops early. It somewhat resembles Tuskena and Ambergen clings, but is itself a freestone when ripe. The flesh is yellow without any red mixture; has good flavor and sufficient firmness to stand shipping. The ripening date is four weeks before Elberta. Introduced 1946.



# Osage (PH-631)

### (An open pollinated seedling of Alton)

The Osage is a true cling ripening two weeks before Elberta. It is a large, round peach with red outside and a greenishvellow under color. The flesh is creamy white streaked with red, fine grained, tender, sweet, firm and with a good peachy flavor. It is a high quality canning peach, resembling to some extent the Indian peach in color and flavor. The juice is an attractive pink. The tree is vigorous in growth and has buds which are resistant to low temperatures. Because of its firmness and ability to hang on the tree, it can be handled leisurely at harvest time. Introduced 1946.

### Ozark (PH-820)

### (Frank X Hale Haven)

This is a large, full red peach ripening about ten days ahead of Elberta. It is a yellow-fleshed freestone, with sufficient firmness to make it a good shipper. In 1944 when a spring freeze destroyed the Elberta crop, the Ozark had a 100 percent crop, indicating bud and bloom hardiness. The flesh is fine grained with an excellent flavor. The original tree has borne full crops the last four years. It colors well before harvest time. Introduced 1946.

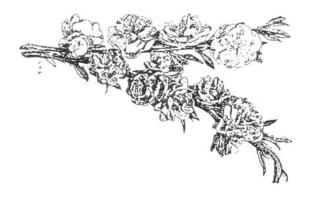
# **Poppy** (PH-812)

### (Frank X Hale Haven)

Three full crops, 1945-46-47. of large sized fruit with no thinning, indicates good size. The color and shape resemble Elberta in general; however, the red on Poppy is more pronounced. Its ripening season is eight days before Elberta. It appears to be ripe a week or ten days before Elberta. It appears to be ripe a week or ten days before it actually reaches the hard ripe stage. The peach is a freestone with yellow flesh of fine texture and flavor. It is a good shipper. Introduced 1947.

### Romance (PH-1132) (Wilma X Hale Haven)

A large, yellow-fleshed, freestone peach somewhat resembling J. H. Hale. Outside color is red with yellow under color, which appears early. The flesh is pure yellow with no red, and is fine grained and firm with excellent flavor. Its time of ripening is about 16 days before Elberta. Buds and bloom are more resistant to cold than Elberta, and the fruit takes on full color while still firm. It is a good shipping peach. Introduced 1947.



# **Tulip** (PH-128)

# (An open pollinated seedling of Sunbeam)

Much of the description of the Missouri will apply to this variety. The greatest difference lies in the ripening date. Tulip ripens six to seven weeks before Elberta, ahead of Marigold and Mikado. It is the best extra-early, yellow fleshed peach grown at the station. The fruit is medium to large in size. nearly round, and possesses good color before picking time. It has short fuzz, fine texture and excellent flavor; has firm flesh and will stand shipping. A semi-freestone. Introduced 1947.

# **Topaz** (PH-3002)

### (Loring X Loring)

Topaz peach was selected to fill the slack season prior to Loring. Fruit is large, round to nearly round; tip is slight; cavity is deep, medium wide and flaring; suture is distinct; halves are equal; appearance is light pubescence, medium dark red over a bright clear yellow ground, very attractive. Skin is thick, tough, and adherent. Flesh is yelloworange tinged slightly with red mostly at suture, good texture; very firm, juicy, very good flavor. High quality. Stone is freestone, medium to large, medium plump, pitted and corrugated, medium tip, oval shaped. Flower is large, showy, pink, self-fertile. Tree is vigorous, upright and strong. Glands are round. Topaz ripens about July 20 in southern Missouri, 10 days ahead of Loring. Introduced 1976.

# Plums

All the plum varieties listed are more or less resistant to bacterial spot, a disease which is prevalent in this part of the country. Some varieties of Japanese and Japanese-American hybrids in this area can be killed by this disease which may appear on leaves, fruit and wood.

The blooming dates of our "new" varieties are about the same as those of their parents. In 1947, our new hybrid varieties bloomed between April 12 and 15, Burbank bloomed on April 13, and Maynard, Bruce and Gold, April 14. Our new European crosses bloomed last year between April 25 and 30, about the same blooming days as President and Stanley.

### **Ozark Premier**

(PL-167)

(Burbank X Methley)

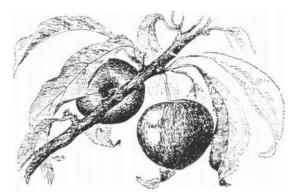
One of the largest plums grown at the Station, larger than either of its parents. It ripens about August 1, has an attractive appearance, being nearly round and wholly colored outside with a bright red, tough skin. Its flesh is yellow, firm and fine grained. It is juicy, tart, flavorful and clings to the seed which is small. The tree is productive and vigorous. Introduced 1946.

### **Bluebell**

(PL-218)

### (Stanley X President)

Bluebell is a large, blue, freestone, prune-type plum ripening about September 14. or just a little after Stanley. The fruit resembles Stanley in appearance, although it is somewhat larger. The flesh is firm, yellow, sweet, juicy, and possesses an excellent flavor. The tree is vigorous, upright and holds its fruit through a long harvesting period. Introduced 1947.



3073.The Japanese type (Prunus salicina).-Maru;

once grown.

### Bluefre

(PL-228)

### (Stanley X President)

The tree shape is like President; vigorous, upright and carries heavy crop. Fruit is freestone, large, shaped like President. The skin color is blue like Stanely. It has thick greenish-yellow, firm flesh with good flavor, and ripens just before Stanley, which is about September 1, here. The fruit will hang on the tree in good condition for about 30 days after normal harvest time. Introduced 1947.

### **Bonnie**

(PL-129)

# (From an open pollinated seed of America)

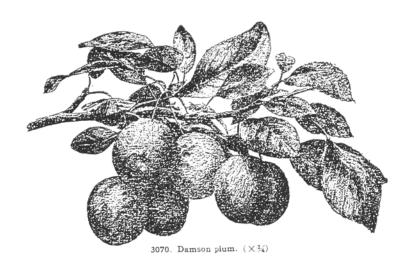
Compared to its parent, America, the fruit is similar except that Bonnie is larger with more red color and ripens earlier. The flesh is yellow, juicy and much like the America in flavor. It ripens about July 1, which is very early for a firm, shipping plum. The tree is a vigorous grower and produces bud and bloom which are hardier than most varieties of plums.

Introduced 1947.

# Marvel (PL-198)

### (Burbank X Methley)

A large cling ripening about July 5. This round, conical plum has a medium dark red skin and solid red flesh is firm, sweet, and flavorful. It has better outside color than either Burbank or Methley, having less gray scarf than those varieties. The tree is highly productive, carrying a crop which is uniform in size and color, and which does not drop readily. Introduced 1947.



### **Brilliant**

(PL-174)

### (Burbank X Methley)

This is a cling plum ripening about July 17. It is red with light blue bloom, large, round, smooth, making an attractive outside appearance. The fruit is firm, yellow fleshed, sweet, and has a flavor like Abundance. The tree is vigorous, resembles Methley in appearance and produces large crops, which hang well on the tree.

Introduced 1947.

### Ox-Heart

(PL-179)

### (Burbank X Methley)

An extremely large plum, shaped like Elephant Heart, but different in size and color. It is larger and the skin is redder. It is a cling plum with firm, red flesh, which is sweet and of good flavor; is conical in shape with distinct tip or nipple. A vigorous-growing, moderately-productive tree, which ripens its crop about July 10. Introduced 1947.

### Radiance

(PL-219)

### (Stanley X President)

A large, freestone plum resembling Yellow Egg in size and shape, ripening about September 10. Its color is light yellow with a pink blush, which gives it an attractive appearance. The flesh is yellow, sweet, firm and of good flavor. The tree is upright, vigorous and productive.

Introduced 1947.

### Redbud

(PL-149)

### (Burbank X Methley)

This variety can be planted for both ornamental and fruiting purposes. The Prunus myrobolan in the parent Methley probably accounts for some of the beauty of this variety. The foliage is purple. The blossoms are red, and the fruit has a dark red skin and flesh. When the small fruit first appears, it is red inside and out. The new wood which is long and slender is dark and streaked with red. The tree growth is extremely vigorous and fruit production is high. The fruit is a cling of medium size, tart and fit mostly for culinary purposes. Ripening date is about July 25. Introduced 1947.

### **Twilite**

(PL-97)

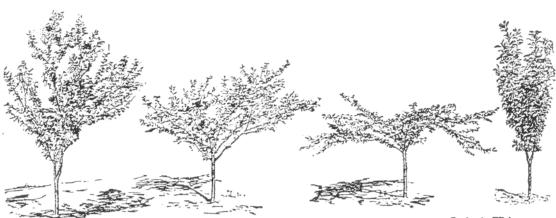
# (From an open pollinated seed of Black Beauty)

It is probably a Japanese-American hybrid, very late to ripen for a plum from those species. Normal harvesting time is about September 10; however, it will remain firm and in good shape on the tree for three or four weeks after that time, which indicates a good shipper. The plum is a cling, medium to large, and red with a light blue bloom. The flesh is vellow tinged with red, fine grained, juicy, sweet and of good flavor. Tree growth is fairly vigorous, resembling the Japanese species; the variety produces large crops. Flesh characteristics (and the fact that some Santa Rosa trees were grown next to the seed parent Black Beauty) indicate the probability that Santa Rosa was the pollen parent. Introduced 1947.

111110000000

### **Earliblue**

Fruit is medium size, round ovate, with puplish-blue skin. Flesh is yellow, freestone, soft and juicy. Matures 4 weeks before Stanley. Tree is hardy, vigorous and moderately productive. Self-fruitful. Introduced 1973.



3074. Forms of tree of Japanese plums, at early bearing age.—Left to right: Abundance, G corgeson, Burbank, Wickson.

The Wickson is probably a hybrid with P. Simonii.

# Grapes

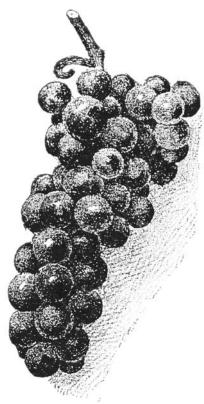
Grapes are grown extensively in Missouri and have always been an important part of the State Fruit Experiment Station breeding program. The grapes released from this program are named after the rivers and streams in the beautiful Ozarks area.

### **Beaver**

(G-388)

# (From an open pollinated seed of Triumph)

A high quality black grape ripening a week before Moore's Early; however it hangs well without cracking or shattering. The berry and cluster is medium sized; the pulp is firm, tender, juicy, easily separating from the seed and highly flavored. Production and vine vigor are good; blossoms are fertile. Introduced 1947.



1707. Hybrid of Vitis Lincecurnii and a foxgrape derivative — Husmann. ( X 5.6)

### **Blue Eye**

(G-794)

### (Ellen Scott X America)

This is a black grape with a high percentage of native *Vitis Zincecumii* and *V. rupestris* in its ancestry. The berry and cluster are both larger than Concord, and it ripens about 10 days later. The cluster is compact, and the berry is sweet, firm, round, and has a tough skin. It handles and keeps well; when pressed it produces and attractive red juice. Vine growth is vigorous and flowers are fertile.

Introduced 1947.

# **Bokay** (G-994)

### (Captain X Terret Monstre)

This grape ripens at Concord time and keeps well on the vine or in storage for two months without breakdown. This large, yellow grape is produced on extra large, compact clusters, and somewhat resembles the *Vitis vinifera* 'Malaga'. The berry is large, firm, meaty, tender, persistent and has a pleasing flavor. The vine is vigorous, productive, and needs no winter protection in southern Missouri. It has self fertile flowers. Introduced 1947.

### **Bryant**

(G-2589)

### (Muench X Terret Monstre)

The Bryant is a late black grape ripening four weeks after Concord. Extremely vigorous vines produce large, loose clusters of black berries that are covered with a blue bloom. The berry size is the same as that of Concord. The vine is productive and the flower is fertile. Introduced 1947.

### **Eleven Point**

(G-1320)

### (Captain X Terret Monstre)

The black grape resembles its seed parent Captain in cluster shape; however, it is much better in quality and larger in size. The compact cluster is definitely cylindrical all the way to the tip; has no shoulder and often measures over a foot long. The berry is large and firm. The flesh is tender, sprightly, sweet and readily separates from the seeds. It is suitable for table or red wine purposes. The flower is fertile, the vine vigorous and the grape production heavy.

Introduced 1947.

### Gasconade

(G-1013)

### (Captain X Terret Monstre)

A medium sized, black grape on large, compact clusters, ripening two weeks after Concord. The pulp is tender, sweet and of excellent flavor. It is suitable for fresh juice, red wine or table use. The vine is vigorous, producing perfect flowers and large crops.

Introduced 1947.

### **North Fork**

(G-2861)

### (Agawam X Early Daisy)

This variety is a vigorous-growing vine, producing perfect flowers and heavy crops. The large, compact clusters of large, black berries ripen about ten days ahead of Concord. The skin is tough and does not crack with added moisture at harvest time. The black berry has a blue bloom over the skin; the pulp is firm, crisp and sweet; the berry is persistent. Introduced 1947.

### **Ozark Prize**

(G-1925)

### (Dr. Collier X Sheridan)

The vine growth and production is good and the flowers are fertile. The cluster is much like the Sheridan, medium to large and very compact; however, it ripens earlier, almost with Concord. The berry is large, black, round, firm, sweet, persistent and a good keeper. The flavor is excellent.

Introduced 1947.

### **Piney**

(G-135)

# (From an open pollinated seed of Merrimac)

A black grape covered with blue bloom, ripening about Concord time. The berry and cluster are both larger than Concord, the skin is thin and tough, and the flesh (adhering somewhat to the seed) has good flavor. The flowers are fertile and the vine is vigorous and productive. Introduced 1947.



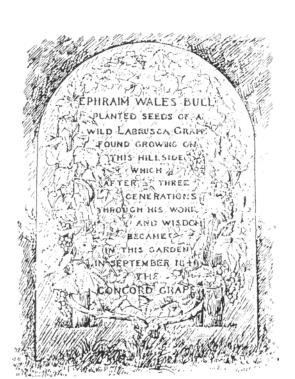
1714. Fruit-bearing of the grape.

### Roubidoux

(G-194)

### (From an open pollinated seed of Prune de Cazouls)

The canes, vine and leaves indicate the Vinifera parent was crossed with an American species, probably Labrusca. The vine is hardy, extremely vigorous and productive; has perfect flowers. The fruit is slightly oval resembling Vinifera; it is blue, large, firm, and ripens late, with Catawba. The cluster is medium and loose. Introduced 1947.



1709. Monument to the Concord grape and Ephraim W. Bull. Erected by the town of Concord.

### St. Francis

(G-2496)

### (Muench X Gros Guillaume)

A large, black, firm grape, ripening two weeks after Concord. The cluster is large and compact. The berry is slightly ovoid in shape, persistent, and develops from a perfect flower. The pulp is tender, sweet, sprightly flavored and separates from the seed easily. The vine is vigorous and productive. Introduced 1947.

### **Tetra**

(G-2918)

### (Herbert X Worden)

This is a black grape of extreme size, equaling Columbian and Golden Giant in that respect. It is probably a tetraploid. The clusters are medium to large, loose, and ripen at the same time as Concord. The large, round, black berry is sweet, juicy and with a much better flavor than most other very large grapes. The flowers have recurved stamens; vine growth is fair and production is good. Introduced 1947.

### Challenger

(G-2963)

### (Parentage Unknown)

Challenger is a seedless table grape. Vine is moderately vigorous; clusters are medium sized, loose with almost no shoulders; berries are medium sized, tear shaped, orange-red to deep red in color, very meaty and firm with one to two soft, small seeds; skin is thick, tough, adherent in pulp; flavor is sweet, with delicate vinifera character and excellent quality. Hardiness is moderate. Susceptible to black rot, downy mildew and powdery mildew.

Introduced 1983.

# Black

# Raspberry

Although red raspberries are only native to one county in northwestern Missouri, wild black raspberries are found throughout the state. The State Fruit Experiment Station released one black raspberry from its breeding program.

# **Somo** (R-101)

The name Somo (abbreviation for southern Missouri) was given because its point of origin is here. The berry is an attractive black, average in size, firmness and appearance. Its quality is very good when eaten fresh or after freezing. It is nearly round, clings well to a small torus, but releases readily when ripe. The drupelets are nearly round and medium large. They do not crumble in handling. The fruit is early to ripen, ahead of Cumberland and Kansas. The berries reduce in size somewhat as the season advances, due partly to the high production and a long harvest season.

Somo's claim to distinction is its vigorous habit of growth. No other black at the Station has equaled its growth, hardiness, production, and resistance to disease. Although a small amount of anthracnose has been found, it has been no problem for twelve years The plants grow tall, stand up well, but root readily at the tips. Introduced 1956.

# Literature

## Cited

Brooks, R. M. and H. P. Olmo. 1972. Register of new fruit and nut varieties 2nd ed. Univ. of Calif. Press. 708 p.

Hanson, K. W. 1976. A new peach variety: Topaz. State Fruit Exp. Sta. of SW. Missouri State Univ. Circular 39. 2. p.

Hanson, K. W. and M. A. Haag. 1983. A new grape variety: Challenger. State Fruit Exp. Sta. of SW. Missouri State Univ. Circular 41. 2 p.

Shepard, P. H. 1956. A new black raspberry variety: Somo. State Fruit Exp. Sta. of SW. Missouri State Univ. Circular 35. 2 p.

Shepard, P. H. 1948. New fruit varieties originated and introduced by the Missouri State Fruit Experiment Station, Mtn. Grove, Missouri. State Fruit Exp. Sta. of SW. Missouri State Univ. Bulletin 33. 14p.



# DIRECTORS OF THE STATE FRUIT EXPERIMENT STATION

JOHN T. STINSON (1899 - 1902)
PAUL EVANS (1903 - 1918)
FREDERICK W. FAUROT (1918 - 1933)
PAUL SHEPARD (1934 - 1961)
KENNETH HANSON (1963 - 1984)
JAMES F. MOORE, JR. (1984 - PRESENT)



This special edition of Fruit Cultivars Released by the State Fruit Experiment Station is dedicated to the Directors of the Missouri State Fruit Experiment Station, past, present and future.