

CHARACTERISTICS OF GRAPE VARIETIES UNDER TEST AT THE ILLINOIS AGRICUL- TURAL EXPERIMENT STATION

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During the last few years, with the increasing interest in small fruit culture in Illinois, there has come about a considerable demand on the part of both the amateur and the commercial grower for more detailed information from the Agricultural Experiment Station as to the varietal characteristics of the small fruits which can be grown successfully in the state.

In response to this demand a beginning has been made with the grape. The information in the accompanying table has been compiled from varietal studies carried on in the Station vineyard and cold storage plant at the Horticultural Field Laboratory, University of Illinois, Urbana, from 1921 to 1929.

Since local conditions influence the blooming and ripening dates, as well as other characteristics of the varieties, it should be stated that the latitude of Urbana is $40^{\circ} 7'$. The altitude is approximately 755 feet above sea level. The average rainfall is 36.89 inches. The average annual maximum temperature is 98.1 degrees F., while the average minimum is -11.1 degrees. There is an average growing season of 173 days.

The vineyard is situated on the eastern slope of a recessional moraine, characteristic of the early Wisconsin glaciation. The soil is brown silt loam of morainal type, merging into a black clay spot at the base of the slope.

The data as given in the table are based upon a nine-year average for most varieties. The letters *R*, *G*, and *B*, under color, signify red, green, and black, respectively, occasionally being further defined by *P* for purple and *Y* for yellow. The letters *H* and *M* refer to home and market. The numerals one to five designate varietal characteristics on a sliding scale of excellence. For example, the figure one signifies that the variety so characterized bears a very small cluster and berry, is lacking in hardiness and vigor, is a very poor yielder, is very early in blossoming and ripening, very poor in eating quality, and keeps only a few days in storage. The figure five denotes the other extreme.

Variety.	Color.	Size of clusters.	Size of berry.	Hardeness.	Vigor.	Productivity.	Cross pollination needed.	Beariness in blooming.	Beariness in ripening.	Eating quality.	Keepinge quality.	Recommenda ^{tion} or market.	Uses.	Remarks.	
Agawam.	P-R	3	4	5	3	3	3	x	3	5	5	5	H-M	Dessert.	Aromatic flavor. Subject to mildew.
August Giant.	B	3	5	4	5	5	5	x	1	5	5	5	H	Juice.	Subject to leaf hopper and phylloxera.
Bacchus.	B	1	2	5	5	5	3	x	3	4	5	4	H	Dessert.	A variety for the amateur.
Barry.	B	4	5	5	5	5	4	x	2	4	3	4	H	Culinary.	Resembles Delaware.
Berkman's.	R	2	2	5	5	5	4	x	2	1	2	1	H	Dessert.	Subject to root worm and phylloxera.
Beta.	B	1	2	5	5	5	4	x	4	2	3	3	H	Dessert.	Needs winter protection and special sprays.
Black Malvoise.	B	5	5	0	4	4	5	x	2	3	3	3	H	Dessert.	Subject to leaf hopper.
Brighton.	R	4	4	5	4	5	4	x	3	3	5	5	H	Dessert.	A Concord-Catawba cross.
Caco.	R	2	4	5	5	5	2	x	2	4	5	4	H	Dessert.	Subject to leaf hopper.
Campbell.	B	5	5	4	4	4	2	x	3	4	2	3	H	Culinary.	Of no particular value.
Carmian.	B	3	5	5	4	4	2	x	5	4	2	3	H	Dessert.	Subject to mildew and leaf hopper.
Catawba.	P-R	4	4	4	3	3	4	x	4	4	5	5	H	Culinary.	An inferior variety.
Chambord.	B	4	4	5	5	5	4	x	5	2	1	2	H	Dessert.	Needs winter protection and special sprays.
Chaseless Rose.	R	3	2	0	3	3	2	x	6	5	3	3	H	Culinary.	Subject to leaf hopper and mildew.
Clinton.	B	2	2	5	5	5	3	x	1	5	5	2	H	Dessert.	Subject to root worm.
Colerain.	G	3	3	4	2	2	1	x	1	3	3	3	H	Dessert.	A Concord seedling. Subject to root worm.
Concord.	B	4	4	5	5	5	5	x	3	3	3	3	H	Dessert.	Standard mid-season variety. Subject to root worm.
Delaware.	R	2	2	5	3	4	4	x	4	3	5	5	H	Juice.	Standard by which grape quality is gauged. Subject to mildew.
Diamond.	G	3	3	5	3	4	4	x	4	2	5	5	H	Dessert.	Subject to leaf hopper and black rot. For northern sections.
Dracut Amber.	R	3	4	5	5	5	3	x	2	2	1	2	H	Culinary.	Fruit has no merit. Thick skin and foxy flavor.
Dutchess.	Y-G	3	2	4	3	3	2	x	5	5	5	4	H	Dessert.	Not adapted to all soils.
Early Victor.	P-B	2	3	4	4	4	3	x	3	3	3	3	H	Dessert.	Subject to leaf hopper and black rot.
Elation.	B	4	5	4	3	3	2	x	3	3	2	2	H	Dessert.	Inferior to Concord, its parent.
Eclipse.	B	3	3	3	3	3	2	x	3	1	3	2	H	Dessert.	Injured by root worm and phylloxera.
Elvira.	G-Y	2	2	3	3	3	5	x	2	4	1	3	H	Dessert.	Subject to leaf worm and mildew.
Empire State.	Y-G	3	3	4	5	5	3	x	5	4	5	4	H	Juice.	A seedling of Elvira which it resembles.
Etta.	G	2	2	3	3	4	4	x	3	4	4	2	H	Dessert.	Subject to mildew.
Eunulan.	B	2	3	4	4	4	2	x	3	4	4	5	H	Dessert.	Not adapted to all soils. Subject to leaf hopper and mildew.
Gaertner.	R	4	4	4	3	3	4	x	3	3	3	3	H	Dessert.	Needs further test.
Geyer.	G	3	3	5	4	4	3	x	3	4	3	3	H	Dessert.	Subject to leaf hopper.
Goethe.	R	4	4	5	4	4	3	x	4	3	5	3	H	Dessert.	Fruit superior, subject to leaf worm and phylloxera.
Green Early.	G	3	2	4	2	2	1	x	4	2	3	2	H	Dessert.	Injured by root worm and phylloxera.

Variety.	Color.	Size of cluster.	Size of berry.	Productivity.	Cross-pollination needed.	Beariness in bloomtime.	Bearing fruitiness in ripening.	Batting quality.	Keeping quality.	Needs home or market.	Remarks.
Grein Golden.....	Y-G	2	4	4	4	3	2	2	2	2	Skin cracks easily. Fruit character is poor. Needs winter protection. Killed 1919-20.
Hartford.....	B	3	3	5	5	4	5	5	3	3	Culinary--
Herbemont.....	B	2	3	5	5	4	5	5	3	4	Dessert--
Herbert.....	B	4	5	5	5	4	5	5	5	4	H-M Dessert--
Hubbard.....	B	4	4	5	4	4	5	5	4	3	Fruit superior. Vine not adapted to all soils. Needs further test.
Iona.....	R	3	3	4	4	4	5	5	4	3	H Dessert--
Isabella.....	B	3	3	3	4	3	2	2	4	4	Culinary--
Ives.....	B	3	3	3	3	2	3	3	2	1	3
Janesville.....	B	3	4	5	3	4	2	2	1	1	4
King.....	B	5	5	5	5	4	4	3	3	3	Culinary--
Lady Washington.....	Y-G	4	3	4	3	2	4	4	4	4	2
Lindley.....	R	2	4	4	3	5	4	3	5	5	Dessert--
Lucile.....	R	4	4	5	4	4	5	5	3	2	An exhibition variety. Subject to mildew. Aromatic flavor. Subject to leaf hopper and mildew.
Little.....	R	3	4	5	5	4	4	4	3	2	Vine better than fruit.
Marion.....	B	2	2	2	3	2	2	2	2	2	Develops foxy flavor in storage.
Martha.....	G	2	3	4	4	4	3	3	2	2	Subject to leaf hopper.
Moore.....	B	4	4	4	3	3	3	3	2	2	A Concord seedling, now little grown.
Moyer.....	R	2	3	4	4	3	3	3	1	1	Subject to mildew and leaf hopper. An early Delaware for northern regions. Subject to leaf and black rot, and winter injury.
Niagara.....	Y-G	5	4	3	5	4	3	3	2	2	Subject to leaf hopper, black rot, and winter injury.
Noah.....	Y-G	3	3	3	4	4	5	5	4	2	Fruit cracks and shatters. Subject to mildew. Subject to leaf hopper, mildew, and black rot. Injured by root worm.
Norton.....	B	2	2	2	3	5	5	5	4	2	Subject to leaf hopper, mildew, and black rot. Injured by root worm.
Ontario.....	G	2	3	5	4	4	3	4	1	4	Promising new variety.
Pocklington.....	Y-G	4	4	4	4	3	3	3	4	4	Subject to leaf hopper.
Regal.....	R	2	3	4	5	4	4	3	4	4	Subject to leaf hopper.
Salem.....	R	3	4	4	4	3	3	3	5	4	Subject to mildew, injured by root worm.
Ulster.....	R	3	4	4	3	4	2	2	4	4	Subject to leaf hopper. Injured by root worm and phylloxera.
Urbana.....	R	4	4	4	3	4	4	4	5	5	H Dessert--
Vergennes.....	B	3	4	4	3	4	3	3	4	4	Subject to leaf hopper.
Wilder.....	B	4	5	5	4	4	4	3	5	4	Subject to leaf hopper.
Winchell.....	G	3	3	4	5	3	4	3	2	4	Subject to leaf hopper.
Woodruff.....	R	3	4	5	5	3	4	3	4	2	Fruit shatters. Subject to leaf hopper.
Worden.....	B	4	5	5	5	3	5	5	2	2	Skin cracks easily. Subject to leaf hopper.
Wyoming.....	R	2	3	5	5	4	4	3	2	2	Subject to leaf hopper.