

The Kentucky Grapevine: Information Sources for Kentucky Grape Growers

Table of Contents

Introduction	2
Basic Texts and Manuals for the Grape Grower	3
Grape Grower Newsletters	5
Grape and Wine Industry Journals	6
University of Kentucky Cooperative Extension Service Productions	7
Grapevine Nurseries	8
Vineyard Supply Sources	13
Vineyard and Orchard Agricultural Chemical Suppliers	18
University-Based Viticulture Programs	23
Various Viticulture and Winegrower Information Internet Web Sites of Interest	24
Organizations and Societies Important to Grape Growers	25
Viticultural and Enological Characteristics of Kentucky's Interspecific Wine Grape Varieties	26

Introduction

What began several years ago as my quest for knowledge on the subject of growing grapes in Kentucky has slowly grown and evolved into this second, revised edition of *The Kentucky Grapevine: Information Sources for Kentucky Grape Growers*. As books, pamphlets, videocassettes, phone numbers, email addresses and internet site listings slowly accumulated, it became increasingly apparent that the information vital to Kentucky grape growers was not to be found in a single, convenient source. Therefore, I undertook the task of compiling and organizing all of these resources in order to help those of you seeking the best and most practical grape growing information.

This edition of *The Kentucky Grapevine* has been divided into several sections, containing critical information and vineyard supply sources for both the weekend vineyardist and the commercial grower. The first section contains a selection of core textbooks, pamphlets, and extension service publications pertinent to growing grapes in Kentucky. This is followed by several sections containing regularly published newsletters and industry journals, and a special listing of extension service publications available from the University of Kentucky College of Agriculture Cooperative Extension Service. The subsequent three sections include listings of grapevine nurseries, vineyard supply sources, and vineyard agricultural chemical suppliers. The last section of this guide has been revised to include "Viticultural and Enological Characteristics of Kentucky's Interspecific Wine Grape Varieties", which details the parents of the interspecific grape varieties grown in Kentucky in addition to pertinent information about each variety. This succinct guide is provided as a supplement to published information on these grape varieties in order to provide Kentucky-specific information important to the grower who is deciding which wine grape variety to plant.

Whether you intend to grow grapes for wine, table, or jelly, and regardless if you are practicing viticulture on a commercial scale, or just have a few vines in the backyard, growing grapes in Kentucky's climate requires at least a basic understanding of site selection, pruning and trellising, and disease surveillance and control in order to be successful. Rest assured, however, that once you are armed with the right knowledge, equipment, advice, and resources, grape growing in Kentucky can be an extremely enjoyable and even profitable venture. It is my sincere hope that this manual serves you well in achieving success in your grape growing endeavors.

Best Wishes,

Chris Nelson
President, Kentucky Vineyard Society
October 23, 1999

This text was updated in 2007 by Chris Smigell, John Strang, and Kaan Kurtural of the University of Kentucky.

Basic Texts and Manuals for the Grape Grower

Many excellent extension publications and textbooks are available on growing grapes of all varieties. Start out with some of the basic, economical sources listed toward the beginning of each of the sections here, then if desired, you can progress into the more detailed (and often more expensive) publications appearing toward the end of each section.

Many of the books listed are available new or used at www.amazon.com.

This web site has an extensive list of wine and grape related titles as well:

<http://winegrapes.tamu.edu/resources/books.shtml>

The University of California bookstore also stocks many of those below:

<http://bookstore.ucdavis.edu/Display.cfm?CatID=43&StartRow=21>

Viticulture:

- Growing Grapes in Kentucky¹ (University of Kentucky Cooperative Extension Service Publication No. ID-126). G.R. Brown, D.E. Wolfe, J. Strang, T. Jones, R. Bessin, J. Hartman. 1997 (www.ca.uky.edu/agc/pubs/id/id126/id126.htm)
- Cultural Practices for Commercial Vineyards³. T.D. Jordan, R.M. Pool, T.J. Zabadal, J.P. Tomkins. 1980 (\$2.00)
- Grapes: Production, Management and Marketing (Ohio State University Cooperative Extension Service Bulletin No. 815). Garth Cahoon, Michael Ellis, Roger Williams, Larry Lockshin. 1991 (\$7.75 + \$2.50 S&H)
- Growing Grapes in Minnesota. The Minnesota Grape Growers Association. 1991(\$10.00)
- A Wine-Grower's Guide. Philip M. Wagner. 1996. ISBN: 093266492X (\$19.95)
- From Vines to Wines: The Complete Guide to Growing Grapes and Making Your Own Wine, 3rd edition. Jeff Cox, 1985. Storey Books, ISBN: 1580171052 (\$14.95)
- Growing Wine Grapes. John R. McGrew, Juergen Loenholdt, Thomas J. Zabadal, Arthur C. Hunt, Herman O. Amberg. 1994. G. W. Kent, Inc.; ISBN: 0961907207 (\$10.50)
- The Mid-Atlantic Winegrape Grower's Guide². Tony K. Wolf, E. Barclay Poling. 1995 (in process of being revised, 2003) (\$20.00)
The Profitability of Investing in a Small Vineyard and Winery. Paul Dakis,
- Peter Hayes, Drew Noon, John Whiting. CSIRO, Australia (\$20.00)
- Sunlight into Wine: A Handbook for Winegrape Canopy Management. Richard Smart, Mike Robinson. 1991. Winetitles, ISBN: 1875130101 (\$40.00)
<http://www.smartvit.com.au> (also sold at Liquor Barn)
- The Production of Grapes and Wine in Cool Climates. David Jackson, Danny Schuster. 1984. Butterworth-Heinemann; ISBN: 0864760647 (\$28.95)
- Oregon Viticulture. Edward W. Hellman. 2003. Oregon St. Univ. Press; ISBN: 0870715542 (\$44.95)

The book serves as a successor to the popular “Oregon Winegrape Growers’ Guide,” offering broader, more in-depth coverage.

- Small Fruit Crop Management. Gene J. Galletta, David G. Himelrick. 1990. Prentice Hall; ISBN: 0131854550
- General Viticulture. A.J. Winkler, James A. Cook, W. M. Kliewer, Lloyd A. Lider. 1974 Univ. of Calif. Press; ISBN: 0520025911 (\$55.00)
- Grape Growing⁵. Robert J. Weaver. 1976. Wiley & Sons, IS BN: 0-471-923249 (\$75.00)

Grape Varietal and General Information:

- Wine and Juice Grape Varieties for Cool Climates³ (Cornell University Cooperative Extension Information Bulletin 233). Bruce I. Reisch, Robert M. Pool, David V. Peterson, Mary-Howell Martens, Thomas Henick-Kling. 1993 (\$5.00) or at www.nysaes.cornell.edu/hort/faculty/reisch/bulletin/wine/index2.html) Grapes into Wine: The Art of Winemaking in America. Philip M. Wagner. 1994. Alfred A. Knopf, pub. ISBN: 0394731727 (\$18.95)
- Winegrowing in Eastern America: An Illustrated Guide to Viticulture East of the Rockies. Lucie T. Morton. 1985. Cornell Univ. Press; ASIN: 0801412900
- Vines, Grapes and Wines: the Wine Drinker’s Guide to Grape Varieties. Jancis Robinson. 1986. Mitchell Beazley; ISBN: 1857329996 (\$27.95)
- Jancis Robinson’s Guide to Wine Grapes. 1996. Oxford Univ Pr; ASIN: 0198600984 (\$13.95)
- The Wines of the East: Native American Grapes⁶. Hudson Cattell, Lee Stauffer Miller. 1980 (\$2.75)
- The Wines of the East: The Hybrids⁶. Hudson Cattell, Lee Stauffer Miller. 1978 (\$2.75)
- The Wines of the East: The Vinifera⁶. Hudson Cattell, Lee Stauffer Miller. 1979 (\$2.75)
- Grape Varieties and Rootstock Varieties. Pierre Galet. Oenoplurimedia. Chaintre, France; 1998 (\$135.00)
- Grape Varieties. Pierre Galet. 2002. Cassell Pub; ISBN: 0304364096

Grape Disease and Pest Management:

- Kentucky Commercial Small Fruit and Grape Spray Guide¹ (University of Kentucky College of Agriculture Cooperative Extension Service Publication No. ID-94). Published Yearly (Free) www.hort.purdue.edu/hort/ext/sfg/)
- Midwest Small Fruit Pest Management Handbook⁴ (soft cover \$10.60, includes S & H)
- Compendium of Grape Diseases (American Phytopathological Society). Roger C. Pearson, Austin C. Goheen. 1994 (\$40.00) www.apsnet.org)

- Grape Pest Management, 2nd ed.⁵ (University of California at Davis). 1992(\$68.00)
- A Pocket Guide for Grape IPM Scouting in the North Central and Eastern U.S. Rufus Isaacs, Annemiek Schilder, Tom Zabadal, Tim Weigle, Joy Landis, 2003 (\$13.00) www.ipm.msu.edu/GrapePocket.htm

¹ Available through your County Cooperative Extension Service Office

² Available through: Publications Office, Department of Agricultural Communications, North Carolina State University, Campus Box 7603, Raleigh, NC 27695-7603

³ Available through: Media Services Resource Center, Cornell University, 7 Business and Technology Park, Ithaca, NY 14850; (607) 255-2080

⁴ Available through: UK College of Agriculture, Ag Distribution Center, Coal Pile Rd, Lexington 40546-0229)

⁵ Available through: ANR Communication Services at 1-800-994-8849 or (510)

642-2431, or order on line at <http://www.ipm.ucdavis.edu/GENERAL/orderpubs.html>

⁶ Available through: L&H Photojournalism, 620 North Pine Street, Lancaster, PA; (717) 393-0943

Grape Grower Newsletters:

Newsletters provide an up-to-date, regional, and economical (many are free) source of information. Many include a bulletin board listing wine and grape schools and conferences, in addition to classified ads offering vineyard equipment and grapevines for sale.

- Kentucky Fruit Facts (University of Kentucky College of Agriculture Cooperative Extension Service, Dr. John Strang, Ed). Published Monthly (Free). Write to: Kentucky Fruit Facts, Research & Education Center, P.O. Box 469, Princeton, KY 42445 (www.ca.uky.edu/fruitfacts/index.htm)
- Facts for Fancy Fruit (Purdue University Dept. of Horticulture, Bruce Bordelon, Ed.). Published Monthly (Free) Write to: Bruce Bordelon, Department of Horticulture, Purdue University, 1165 Horticulture Bldg., West Lafayette, IN 47907-1165; (765) 494-1301 (www.hort.purdue.edu/fff/fff.html)
- Finger Lakes Vineyard Notes (Cornell University Cooperative Extension, Tim Martinson, Ed). (\$20.00/yr.) Write to: Tim Martinson, Finger Lakes Grape Program, 110 Court Street, Penn Yan, NY 14527-1130; (315) 536-5134 <http://flg.cce.cornell.edu/2007%20Vin%20Notes%20Subscription%20out%20of%20area.pdf>
- The Maryland Grapevine (Maryland grape Growers Association) \$15.00/yr., 1116 E. Deep Run Road, Westminster, MD, 21158, (410) 848-7577 (<http://marylandwine.com/mgga/general/grapevine.html>)
- Vineyard and Vintage View (Free) Department of Fruit Science, Southwest Missouri State University, Research Campus, Mountain Grove, MO 65711-9252 (<http://mtngrv.missouristate.edu/grapenews.htm>)

- Vineyard and Winery Information Series (Viticulture Notes by Tony Wolf and Vintner's Corner by Bruce Zoecklein) (\$10.00/yr) Winchester Agricultural Research and extension Center, 595 Laurel Grove Road, Winchester, VA 22606
(www.ext.vt.edu/news/periodicals/viticulture/04januaryfebruary/04januaryfebruary.html)
- Grape Notes from the University of California Cooperative Extension, Tulare County
<http://cetulare.ucdavis.edu/pub/grapelst.htm>
- Illinois Fruit and Vegetable News, from the University of Illinois at Urbana-Champaign
<http://ipm.uiuc.edu/ifvn/>
The Tender Fruit Grapevine, from the Ontario Ministry of Agriculture
- www.omafra.gov.on.ca/english/crops/hort/tender_fruit.html

Grape and Wine Industry Journals:

These colorful, information-packed publications are aimed primarily at the commercial grape grower and winery owner, but also provide information of interest to the hobbyist. Some also list a yearly guide to nurseries, equipment suppliers and other important industry sources. Others are circulated only to members of their respective societies.

- Practical Winery and Vineyard. Published bi-monthly. (\$31.00/yr.) 15 Grande Paseo, San Rafael, CA 94903-1534; (415) 479-5819
(www.practicalvineyard.com/)
- Vineyard and Winery Management. Published bi-monthly. (\$27.00/yr.) 103 Third St., P.O. Box 231, Watkins Glen, NY 14891-9989; (607) 535-7133 or (800) 535-5670
(www.vwm-online.com)
- Wines and Vines. Published monthly (\$32.50/yr. Industry news, editorial columns on politics, legal and regulatory opinions, the world wine market, vineyard management. Also the Yearly Grape and Wine Industry Buyer's Guide \$65.00. The Haring Company, 1800 Lincoln Ave., San Rafael, CA 94901-1298; (415) 453-9700
(www.winesandvines.com/)
- Wine East. Published bi-monthly (\$20.00/ 1yr., \$36.00/ 2yr.) Subscription includes annual Wine East Buyers' Guide. L&H Photojournalism, 620 North Pine Street, Lancaster, PA 17603; (717) 393-0943
(www.wineeast.com/)
- Grape Grower Magazine. Published monthly (\$19.95/yr., but free for 1st 3 years to commercial growers) 4969 E. Clinton Way, Suite 119, Fresno, CA 93727-1549; (209) 252-7000
(www.business-magazines.com/)
- American Journal of Enology and Viticulture. Published quarterly by the American Society for Enology and Viticulture. \$130.00/yr., includes

membership to ASEV. Contact: Secretary-Treasurer, P.O. Box 1855, Davis, CA 95617; (530) 753-3142.

[\(www.asev.org/\)](http://www.asev.org/)

- American Wine Society Journal. Published quarterly by the American Wine Society, \$36.00/yr., includes membership to AWS. Contact: Angel Nardone, 3006 Latta Road, Rochester, NY 14612-3298(www.americanwinesociety.com/)
- Australian Journal of Grape and Wine Research. Published three times per year; an international journal that publishes peer-reviewed research results. www.asvo.com.au/ajgwr/
- Australian & New Zealand Wine Industry Journal. A bimonthly journal of oenology and viticulture. www.winetitles.com.au
- Good Fruit Grower. Published Monthly June-December, and Semi-Monthly January-May, \$30.00/yr., \$75.00/3 yrs. Washington State Fruit Commission, 105 South 18th Street, Suite 205, Yakima, WA 98901-2149, (509) 575-2315 or (800) 487-9946. www.goodfruit.com
- Small Fruits Review. Published quarterly, \$48.00/year. Peer-reviewed research results, applicable to the grower, extension agent, and educator. www.haworthpressinc.com/web/SFR/
- Wine Business Monthly. Published monthly, Free to qualified requestors (commercial growers and wineries), otherwise \$69.00/yr. Wine Business Monthly, 867 West Napa Street, Sonoma, CA 95476, (707) 939-0822, Fax (707) 939-0833 [\(www.winebusiness.com/\)](http://www.winebusiness.com/)

University of Kentucky Cooperative Extension Service Productions:

(Available free through your county extension agent)

Some of the most specific, well-written and practical guides for grape growing are available through state and county agricultural extension agencies. As you can see from the following list, Kentucky is no exception.

The following articles may be found at the Department of Plant Pathology website: www.ca.uky.edu/agcollege/plantpathology/PPAExten/pppublin.htm#Small%20fruit

- Black Rot of Grapes (PPA-27)
- Cane and Leaf Spot “Dead Arm” of Grapes (PPFS-FRS-1)
- Crown Gall (Pub. PPFS Gen 1)
- Powdery Mildew (Pub. PPFS Gen-2)

All of the following articles may be found at the Department of Horticulture website:

www.uky.edu/Agriculture/HLA/welcome.htm

- Fruit Facts

- 2005 Grape Cost and Return Estimates: Summary and Assumptions
- 2005 Grape Production Budgets - American Hybrid Wine Varieties
- 2005 Grape Production Budgets – European/ Hybrid Wine Varieties
- 2005 Grape Production Budgets - Table Grape Varieties
- Growing Grapes in Kentucky (ID-126, HTML or PDF)
- Kentucky Winegrape Growers Survey - December, 200
- Site Selection for European (Vinifera) Grapes Based on Kentucky Low Temperature Weather Data
- Grape Insects (ENTFACT-208)
- Black Rot of Grapes (PPA-27)
- Disease and Insect Control Programs for Home Grown Fruit in Kentucky Including Organic Alternatives (ID-21)
- Video: Pruning Grapes (VHO-0126)
- Video: Planning for a Commercial Table Grape Operation (VHO-0568)
- **Kentucky Grape Alert** – is an e-mail message that provides timely Kentucky disease and insect information during the season. Contact U.K. Horticulture personnel Joe Masabni, John Strang, or Chris Smigell to be set up to receive the alerts.

Grower's Guide to Grapevine Nurseries

One of the single most important decisions facing the new grower is what grape varieties to plant. This is a highly personal decision, but buying quality vines from a reputable nursery can make the choice much easier. The following is a comprehensive listing of North American nurseries, including the types of vines which they sell, and how to contact them for more information.

KEY:

A=Native American Varieties

H=Interspecific Hybrid Varieties

V=Vitis vinifera Varieties

S=Seedless Varieties

N=New York (Including Numbered, Experimental) Varieties

New York State

Grafted Grapevine Nursery (A, H, V, N)

2399 Wheat Road

Clifton Springs, NY 14432-9312

(315) 462-3288 or (716) 526-6742

Fax: (315) 462-5234

No web site

Double A Vineyards, Inc. (A, H, V, S, N)

10275 Christy Road

Fredonia, NY 14063

(716) 672-8493

Fax: (716) 679-3442

email: vine@rakgrape.com

www.Rakgrape.com

Foster/Concord Nurseries, Inc. (A, H, V, S)

10175 Mile Block Road
North Collins, NY 14111-9770
(716) 337-2485 or (800) 223-2211
Fax: (800) 448-1267

www.concordnurseries.com/

Herman J. Weimer Vineyard, Inc. (V, H)
P.O. Box 38, Route 14
Dundee, NY 14837
(607) 243-7971 or (800) 371-7971
Fax: (607) 243-7983

www.wiemer.com/#nursery

Dr. Konstantin D. Frank & Sons (V)
Vinifera Wine Cellars, Ltd.
9749 Middle Road
Hammondsport, NY 14840
(607) 868-4884 or (800) 320-0735

www.drfrankwines.com

Walter & Hilda Volz Vinifera Vineyard & Nursery (V)
109 Gibson Street
Bath, NY 14810
(607) 776-2270

No web site

Turnbull Nursery, Inc. (A, H, S)
10036 Versailles Plank Road
North Collins, NY 14111
(716) 337-3812
Fax: (716) 337-0318
email: TURNBULL@PRODIGY.NET

<http://www.turnbullgardencenter.com/>

Miller Nurseries (A, H)
5060 West Lake Road
Canandaigua, NY 14424
(800) 836-9630

www.millernurseries.com

Congdon and Weller Wholesale Nursery (A,S)
10308 Mile Block Road
North Collins, NY 14111
716-337-0171 800-345-8305

no web site

Canada

Mori Nurseries (H,V)
RR #2
Niagara-On-The-Lake
Ontario LOS 1JO Canada
(905) 468-3217, 468-0822
Fax: (905) 468-0344

www.morinurseries.net

Euro Nursery & Vineyard, Inc. (H,V)
3197 Culp Road

Jordan, Ontario LOR 1SO Canada
(905) 562-3312
Fax: (905) 562-5610

www.euro-nursery.com

Virginia

American Nursery (V, and selected Geisenheim hybrids)
Route 1, Box 87B1
Madison, VA 22727
(703) 948-5064
Fax: (703) 948-5150

no web site

Omega Virginia Nursery (V)
Rt. 4, Box 77
Leon, VA 22725
(703) 547-3703

no web site

Schloss Tucker Certified Grapevine Nursery (H, V)
38638 Old Wheatland Road
Waterford, VA 20197
(540) 882-3929

no web site

Missouri

Chaumette Vineyard (A, N)
1838 Kenneth Place
St. Louis, MO 63104
(314) 444-1927 or (573) 756-6522
Fax: (314) 444-1775 or (573) 756-6522
email: Johnsonh@daniel-henry.com

www.chaumette.com

Stark Brother's Nursery and Orchard Co. (A, H)
P.O. Box 1800
Louisiana, MO 63353
(800) 325-4180
Fax: (324) 754-5290

www.starkbros.com

Evergreen Nursery (H, V, N)
17 Southwinds Circle
Suite No. 7
Washington, MO 63090
(314) 390-2301
Fax: (314) 390-2332

no web site

Arkansas

Blossomberry Nursery (A, S)
Rt. 2 Box 28F
Clarksville, AR 72830
(501) 754-6489

no web site

Pense Nursery (A, H, S)
16518 Marie Lane

Mountainburg, AR 72946
Phone/Fax: (501) 369-2494
email: ppense@cei.net

www.alcasoft.com/pense

Post Vineyard and Winery (A, H)
1700 St. Mary's Mtn Rd
Altus, AR 72821
800-275-8423 (479) 468-2741

www.postfamilie.com

Boston Mountain Nurseries (A, H, S)
10340 Turner Bend Dr.
Mulberry AR 72947
479-997-1480
email: ArBerryFarm@prodigy.net

www.alcasoft.com/arkansas

California

Foundation Plant Material Service (A, V, H, S)
University of California, Davis
Davis, CA 95616
(916) 752-3590

<http://fpms.ucdavis.edu/>

Sonoma Grapevines, Inc. (V)
1919 Dennis Lake
Santa Rosa, CA 95403
(707) 542-5510
Fax: (707) 542-4801

www.sonomagrape.com

Duarte Nursery, Inc. (V)
1555 Baldwin Road
Hughson, CA 95326
(209) 531-0351

www.duartenursery.com

California Grapevine Nursery, Inc.
1085 Galleron Road
St. Helena, CA 94574-9790
(707) 963-5688 or (800) 344-5688

www.californiagrapevine.com

Geno's Nursery (V)
18225-A Road 25
Madera, CA 93637
(559) 674-4752

<http://www.genosnursery.com/>

Sunridge Nursery (V)
441 Vineland Road
Bakersfield, CA 93307
(661) 363-8463

www.sunridgenurseries.com

Vinifera, Inc. Grapevine Nursery (V)
4288 Bodega Avenue
Petaluma, CA 94952

no web site

(707) 773-4557

Cal Western Nurseries (V)
16384 Avenue 264
Visalia, CA 93292
559-733-3130

no web site

Caldwell Nursery (V)
169 Kreuzer Lane
Napa, CA 94559
(707) 255-1294
Fax: (707) 255-5162

www.caldwellvineyard.com

Novavine Grapevine Nursery
6735 Sonoma Highway
Santa Rosa, CA 95409
(707) 539-5678
Fax: (707) 539-2819
email: info@novavine.com

www.novavine.com

Ponderosa Nurseries, Inc. (V)
464 S. Mooney Blvd.
Tulare, CA 93274-6101
(559) 688-6626 or (888) 810-4250
Fax: (559) 688-3542

www.ponderosanutrery.com

Madera Nursery (S)
Kendall-Jackson Winery, Ltd.
421 Aviation Blvd.
Santa Rosa, CA 95403
(707) 544-4000 (800) 884-4441
Fax: (707) 544-4013

Oregon

King Estate Lorane Grapevines (V, H)
80854 Territorial Road
Eugene, OR 97405
(541) 942-9874 or (800) 884-4441

www.kingestate.com

Vinifera, Inc. (V)
8505 S.W. Creekside Place
Beaverton, OR 97008-7108
(503) 520-6250
Fax: (503) 643-2781

no web site

Lon J. Rombough (A, H, V)
P.O. Box 365
Aurora, OR 97002
(503) 678-1410
email: lonrom@hevanet.com/lonrom

www.bunchgrapes.com

Minnesota

Lake Sylvia Vineland Nursery (A, H, Including Elmer Swenson Hybrids)
Rt. 1, Box 149
South Haven, MN 55382
(612) 236-7685

no web site

Jewell Nurseries (H)
P.O. Box 457
Lake City, MN 55041
(800) 848-0933 (651) 345-3356

no web site

Ohio

Carl Remkus Nursery (A, H)
858 Bank Street
Painesville, OH 44077
(216) 354-8817

no web site

Texas

Grayson County College (Munson Hybrids)
Viticulture and Enology Program
Thomas Volney Munson Memorial Vineyard
6101 Grayson Drive
Denison, TX 75020
(903) 786-4382

no web site

Womack's Nursery
Rt. 1, Box 80
De Leon, TX 76444-9660
(817) 893-6497

no web site

Vineyard Supply Sources

As with all jobs, owning the right equipment is one of the keys to success, especially in commercial ventures. Many supplies may be purchased locally, while specialized equipment may best found by contacting a vineyard and orchard supply specialist. Most of the supplies you will need can be purchased from one of the following sources.

General Supplies (pruning equipment, training supplies, backpack and commercial sprayers, trellising supplies, grow tubes, bird control items, harvest lugs, bamboo stakes, safety equipment, nursery and vineyard tools, clothing, vineyard thermometers etc.)

Orchard Valley Supply
1521 Mountainview Dr.
Quakertown PA 18951
888-755-0098

www.orchardvalleysupply.com

A.M. Leonard, Inc.

241 Fox Drive
PO Box 816
Piqua, OH 45356
(800) 543-8955

www.amleo.com

Jim Gonyer Supply (irrigation/plumbing supply)
522 E. Washington
Winchester, Ky
859-744-2043

Griffin Greenhouse & Nursery Supplies

1619 Main Street
Tewksbury, MA 01876

www.griffins.com/

Tel: (978) 851-4346
Fax: (978) 851-0012

Forestry Suppliers, Inc.
PO Box 8397
Jackson, MS 39284-8397
(800) 647-5368
Fax: (800) 543-4203

www.Forestry-Suppliers.com

Gentrees Grower Supplies
395 Pisgah Highway
Candler, NC 28715
(704) 665-1514

no web site

Trellis Supply Specialty Companies

Jim's Supply Company, Inc.
(Specialized Trellis Supplies)
3530 Buck Owens Blvd.
PO Box 668

Bakersfield, CA 93302-0668
(661) 324-6514 or (800) 423-8016

www.jimssupply.com

A&P Ag Structures (Rail Steel T-Posts, J-R Clips)
11266 Avenue 264
Visalia, CA 93277
(559) 685-8700
Fax: (559) 685-8622

www.aandpag.com/

Bluegrass Treated Wood
3015 Catnip Hill Rd
Nicholasville Ky
606-887-2474

no web site

Burke, Parsons & Bowlby (wood posts)
Stanton, Ky
800-272-2365

<http://www.bpbcorp.com/>

Cameron and Cameron, Inc.
(Vineyard Supplies)
Fulton, Ca
(800) 546-7706 (707) 546-7706

<http://www.ccvineyard.com/>

Interstate Fencing Supply
2098 Indian Mound Rd
Mt. Sterling, 40353
859-498-3757

no web site

Kiwi Fence Systems, Inc.
(Trellising and Electric Fencing Supplies)
121 Kiwi Road
Waynesburg, PA 15370-8070
(724) 627-8158
Fax: (724) 627-9791

www.kiwifence.com

McArthur Lumber & Post
539 Sour Springs Rd
Olympia Ky 40358
606-674-6296

<http://www.mcarthurlumberandpost.com/>

Vineyard Systems Manufacturing
8422 Standustrial St
Stanton, CA 90680
(714) 821-7440 or (800) 858-6898

no web site

American Trellising, Inc.
PO Box 5846
Napa, CA 94558
(707) 259-5222
Fax: (707) 259-5220

no web site

Valley Vineyard & Orchard Supply
PO Box 1042 420 N. Sacramento St.
Woodbridge CA 95258-1042
(209) 368-8595 or (800) 600-8944

no web site

Vineyard Sprayers

Jerry Holder
Lovers' Leap Vineyard and Winery
104 Lovers' Leap Ln
Lawrenceburg, Ky
502-839-1229

<http://www.loversleapvineyardky.com/>

UAP-Richter/ John Phillips
1061 Henderson-Ford
Mooresville, IN 46158

phone & fax (317) 831-2559
voice pager (888) 474-6470

no web site

Swihart Sales Co. (Mist Sprayers)
Rt. 3, Box 73
Quinter, KS 67752
(785) 754-3513 or (800) 864-4595)

www.Swihart-Sales.com

AgTec Crop Sprayers
5720 Smetana Drive
Minnetonka, MN 55343
(800) 704-4292

www.agtecsprayers.com

Flory Industries
P.O. Box 908
4937 Toomes Rd.
Salida, CA 95368
800-662-6677
Fax: (209) 545-4924

<http://floryindustries.com>

PBM Supply & MFG., Inc.
324 Meyer St.
Chico, CA 95927
(916) 345-1334 or (800) 688-1334

www.pbmsprayers.com

John Bean Sprayers
P.O. Box 1404
LaGrange, GA 30241
(800) 241-2308 or (706) 882-8161

www.johnbeansprayers.com

Spray-Air USA, Inc.
P.O. Box 37
Grangeville, Idaho 83530
(208) 983-2002 or (888) 286-6493
Fax: (208) 983-1103
email: sprayair@camasnet.com

www.sprayair.com

Grow Tubes

Pacific Western Container
(Vine Shelters and Vine Protectors)
1535 E. Edinger
Santa Ana, CA
(714) 547-9266 or (800) 241-3513
Fax: (714) 953-9270

www.pacificwestern.com

Treesentials Company, Inc.
(Supertube® Clipper, Snap N' Grow, and Trilobite Grow Tubes)

60 E Plato Boulevard
Suite 130

www.snapngrow.com

Saint Paul, MN 55107
(800) 634-2843 (651) 681-0011

Animal Pest Control (scare devices, netting, traps, deer fencing)

Abco Bird Control
(Super Bird Guard and other items)
Kelseyville, CA
(707) 479-3966

www.birdcontrol.com

BirdGard Bird Scare Devices
P.O. Box 1690
601 North Larch Street,
Sisters, Oregon 97759
1-888-332-2328 (541) 549-0205
Fax (541) 549-5286

www.birdgard.com

Fickle Hill Fence & Supply
(Polypropylene Deer Control Fence)
Arcata, CA 95521
(888) 633-3623
Fax: (707) 822-0403

www.northcoastweb.com/deerfence

JWB Marketing (Weitech Bird Alarm)
Westwood NJ 07675
800-555-9634, 201-666-8334

<http://www.birdcontrolsupplies.com/>

Jerry Holder
Lovers' Leap Vineyard and Winery
104 Lovers' Leap Ln
Lawrenceburg, Ky
502-839-1229

<http://www.loversleapvineyardky.com/>

Maplehurst Deer, Inc. (Deer Fencing)
P.O. Box 697
Bellville, TX 77418
(979) 865-0111

www.texaswildlifeservices.com/staytite.htm

Applica, Inc, (bought Weitech)
5980 Miami Lakes Drive
Miami Lakes
FL 33014
305-362-2611

<http://www.applicainc.com/>

Harvesting and Storage Bins

Carson-Brooks Plastics, Inc.
2120 Auto Centre Drive

no web site

Glenora, CA 91740
(909) 592-6272

Korvan Industries (Grape Harvesters)
Lynden WA 98264
360-354-1500

<http://www.korvan.com/>

Macro Plastics, Inc.
2250 Huntington Dr.
Fairfield Ca 94533-9732
(707) 437-1200

www.macroplastics.com

Western Square Industries
1621 N. Broadway
Stockton, CA 95205
(800) 367-7810

www.westernsquare.com

Michigan Orchard Supply
07078 73 ½ Street
South Haven MI 49090
(800) 637-6426
(269) 637-1111
Fax: (269) 637-7419

<http://www.michiganorchard.com/>

For trellis supplies and some vineyard supplies available locally, also try Lowe's, Home Depot, Tractor Supply Company, Southern States, Ace Hardware, Local Lumber Suppliers and other hardware dealers)

Vineyard and Orchard Agricultural Chemical Suppliers

With Kentucky's diversity of insect and fungus pests, you won't be the only one anticipating a bountiful harvest from your vineyard. Protect the fruits of your labors with insecticides and fungicides from one of the suppliers listed here.

Many of these chemical suppliers will ship pesticides if they are not restricted use materials.

For easy-to-read information about how toxic these chemicals are, go to:

<http://pmep.cce.cornell.edu/profiles/extoxnet/>

The Extension Services of Cornell University and Michigan State University have put together information sheets for many common pesticides. They provide information on what testing has been done to determine the chemicals' effects on humans and wildlife, and the fate of these chemicals in the environment.

You can also find complete pesticide labels, and Material Safety Data Sheets at:

<http://www.cdms.net/pfa/LUpdateMsg.asp>

Go to this web site for a table showing the properties (potential for resistance development, systemic/contact activity, et c.) of grape fungicides:

<http://axp.ipm.ucdavis.edu/PMG/selectnewpest.grapes.html>

<u>Supplier</u>	<u>Deliver Less Than Case Qty?</u>	<u>Sales Made To</u>
Agriliance LLC (Spencer Searcy) P.O. Box 119 5018 Hwy 41N Springfield, TN 37172 615-384-2573	Sells less than case	Growers
Agri-Chem, Inc. 1301 US Hwy 62 West Princeton, KY 42445 (502) 365-7232	Yes-must be container sized qtys	Growers
Agri-Chem, Inc. 1106 West 15 th Street Hopkinsville, KY 42240 (270) 886-0141	?	Growers
Agri-Chem, Inc. Highway 848 West Trenton, KY 42286 (270) 885-6280	?	Growers
Akridge Farm Supply 724 Fairview Ave Eddyville, KY (502) 388-2910	no	Growers
Akridge Farm Supply P.O. Box 175 Fredonia, KY 42411 (502) 545-3332	Some	Retailers, Growers
Big Rivers Agri-Supply (Miles Farm Supply) 2760 Keller Rd Owensboro, KY 42301 (502) 926-8737	No	Retailers Growers
Clements Ag Supply 1223 Lebanon Rd Springfield, Ky (859) 336-3112	Yes	Growers

<u>Supplier</u>	<u>Deliver Less Than Case Qty?</u>	<u>Sales Made To</u>
Fruit Belt Service Formerly TERRA 200 Jamestown Rd Cobden, IL 62920 (618) 893-4852	No	Retailers, Growers
Otis Bryant & Son Inc 512 E Maple St Caneyville, Ky (270) 879-3221	Yes	Growers
Pro Source Formerly CORY/TERRA 8104 Woodland Dr Indianapolis, IN 46278 (800) 672-4273	Yes	Wholesale, Retailers, Growers
UAP Mid-South 574 Horton Court Lexington, KY 40511 (606) 254-3811	Yes	Wholesale, Growers
UAP-Richter/ John Phillips 1061 Henderson-Ford Mooresville, IN 46158 phone & fax (317) 831-2559 voice pager (888) 474-6470	Will deliver if possible (ship UPS)	Wholesale, Retailers, Growers
Ryan's Agri & Pest Supplies 1130 West High Street Lexington, KY 40508 (859) 233-0057	Yes	Wholesale, Retailers, Growers
Robinson Milling Co P.O. Box 357 Somerset, KY 42502 (606) 678-4106, or 4107	No	Growers
Royster Clark Highway 431 South Utica, KY 42376 (270) 733-4028	?	Retailers, Growers
Royster Clark Retail 315 W Martin Luther King Dr Union City, TN 38281 800-238-7244	No	Wholesale
Salem Fruit Growers Coop Assoc 12093 Lisbon Rd P.O. Box 3 Greenford, OH 44422 (800) 423-3609	Not to Ky	Retailers, Growers

<u>Supplier</u>	<u>Deliver Less Than</u>	<u>Sales Made To</u>
-----------------	--------------------------	----------------------

	<u>Case Qty?</u>	
Southern States Cooperatives (Locations statewide-check local listings)	?	Growers
Warner Fertilizer and Chemical Box 188 East Bernstadt, KY 40729 (606) 843-6163	No	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 796 Somerset, KY 42502 (606) 679-8484	Yes	Retailers, Growers
Warner Fertilizer and Chemical Rte. 5, P.O. Box 5074 Albany, KY 42602 (606) 387-6415	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 30 Russell Springs, KY 42642 (502) 866-5319	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 274 Columbia, KY 42728 (502) 384-5042	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 108 Nancy, KY 42544 (606) 636-6241	Yes	Retailers, Growers

<u>Supplier</u>	<u>Deliver Less Than Case Qty?</u>	<u>Sales Made To</u>
Warner Fertilizer and Chemical P.O. Box 1100 Liberty, KY 42539 (606) 787-2215	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 441 Stanford, KY 40484 606-365-9917	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 215 Thomkinsville, KY 42167 (502) 487-5161	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 87 Campbellsville, KY 42718 (502) 465-6387	Yes	Retailers, Growers
Warner Fertilizer and Chemical P.O. Box 117 Monticello, KY 42633 (606) 348-8447	Yes	Retailers, Growers
Valley Fertilizer P.O. Box 180 Edmonton, KY 42129 (502) 432-2727	Yes	Retailers, Growers

University-Based Viticulture Programs

University of Kentucky

College of Agriculture Home Site

<http://www.uky.edu/Ag/Horticulture/comfruit.html#grapes>

Kentucky Cooperative Extension County Offices/ Agents Listing

www.ca.uky.edu/county/

Kentucky State University

http://www.kysu.edu/land_grant

Cornell University

Cornell Fruit Resources-grapes

<http://www.fruit.cornell.edu/grapes.html>

The Grape Pages, by Dr. Robert Pool

www.nysaes.cornell.edu/hort/faculty/pool/GrapePagesIndex.html

University of California, Davis

Department of Viticulture and Enology Cooperative Extension

<http://wineserver.ucdavis.edu/>

California State University, Fresno - Viticulture and Enology Research Center

www.atinet.org/cati/verc/

University of California Cooperative Extension, Tulare County

Grape Extension Publications

<http://cetulare.ucdavis.edu/pubgrape/pubgrape.htm>

Purdue University Agricultural Extension Fruit and Vegetable Connection

www.hort.purdue.edu/fruitveg/fruit/grapes.shtml

Southwest Missouri State University Fruit Experiment Station at Mountain Grove

<http://mtngrv.missouristate.edu/dept.htm>

University of Illinois at Urbana-Champaign

<http://w3.aces.uiuc.edu/NRES/faculty/Skirvin/cfar/index.htm>

Washington State University Wine and Grape Program

<http://winegrapes.wsu.edu/>

University of Minnesota

<http://fruit.coafes.umn.edu/grape/index.htm>

Various Viticulture and Winegrower Information Internet Web Sites of Interest

Winesearch-online.com – a good source for a wide range of information about wine and wine making

<http://www.winesearch-online.com/categories/Categories.cgi/regions/usa>

The Super Gigantic WWW Winegrape Glossary, by Anthony Hawkins

<http://www.wineloverspage.com/hawkins/>

Northwest Berry and Grape Information Net

<http://www.osu.orst.edu/dept/infonet/>

Grape Growing in North Carolina

<http://www.agr.state.nc.us/markets/commodit/horticul/index.htm>

<http://www.ncwine.org>

The Maryland Grape Growers Home Site

<http://www.marylandwine.com/mgga/growing/cvem/03.html>

Washington Association of Winegrape Growers

<http://www.wawgg.org/>

Smart Viticulture, Home site of Dr. Richard Smart

<http://www.smartvit.com.au/>

The USDA National Plant Germplasm System web site has a good introduction to origins and taxonomy of grapevines

http://www.ars-grin.gov/npgs/cgc_reports/grapecgc2001.htm

Climatologic Information Sites

The Weather Channel Home site

<http://www.weather.com/>

National Oceanic and Atmospheric Administration Online Climatic Data

<http://www.ncdc.noaa.gov/ol/climate/climatedata.html>

University of Kentucky Agricultural Weather Information
<http://www.agwx.ca.uky.edu>

USDA Agricultural Hardiness Zones
<http://www.usna.usda.gov/Hardzone/ushzmap.html>

Grape Disease Information Sites

University of Kentucky Plant Pathology Department-Extension
www.ca.uky.edu/agcollege/plantpathology/PPAExten/ppaext.html

Kentucky Pest News - a newsletter providing timely information on anticipated and occurring diseases, insects, and pesticide information in Kentucky.

www.ca.uky.edu/agcollege/plantpathology/PPAExten/kpnindex.htm

University of California Grape Pest Management Guidelines
<http://axp.ipm.ucdavis.edu/PMG/selectnewpest.grapes.html>

Michigan State University Fruit Crop Advisory Team Alert Newsletters
<http://www.msue.msu.edu/ipm/fruitCAT.htm>

Penn State Department of Plant Pathology – Compost in Vineyards
<http://fpath.cas.psu.edu/>

Washington State University Tree Fruit Research and Extension Center Fruit Pathology Site
<http://fruit.wsu.edu/Diseases/grapealert.html>

American Phytopathological Society Plant Pathology Site
<http://www.apsnet.org>

Organizations and Societies Important to Grape Growers

Kentucky Vineyard Society Home Page
<http://www.kyvineyardsociety.org>

The Indiana Winegrape Council Home Page
<http://www.indianawines.org/iwgc/>

Lodi-Woodbridge Winegrape Commission
www.lodiwine.com/

California Family Wineries

<http://familywinemakers.org/>

Washington Wine Commission

www.washingtonwine.org

Association of Maryland Wineries

<http://marylandwine.com>

Missouri Wineries Homepage

<http://www.missouriwine.org/>

Wine On The Net Guide to New York Wineries

<http://www.travelenvoy.com/wine/newyork.htm>

Pennsylvania Wineries

<http://www.pennsylvaniawine.com/>

Virginia Wine Country

<http://www.virginiawines.org/>

American Wine Society

<http://www.americanwinesociety.com/>

Viticultural and Enological Characteristics of Kentucky's Interspecific Winegrape Varieties

Due to the lack of Kentucky field data for some new wine grapes, approach planting them with caution. The major challenge in growing grapes is winter injury, and it is likely to occur during a vine's lifetime. The nature and extent of injury is not entirely predictable, due to the complex interaction between variety, site, and climate.

Other considerations when choosing varieties are the market, disease susceptibility, ripening date, yield potential, growth habit, and cultural requirements.

White Winegrape Varieties

Seyval blanc: Seyve-Villard 5276, S.5656 X S.4986 (Rayon D'Or)

Positive Characteristics

Moderate to good vigor; foliage relatively disease resistant; good cold hardiness (although dependent on crop loading), reliable, heavy producer; excellent crop

after spring frost; excellent quality, versatile, white wine grape with vinous character; good winery demand

Negative Characteristics

Early bud break; requires shoot and cluster thinning; tends to over-crop, tight clusters susceptible to Botrytis bunch rot; susceptible to powdery mildew fertilization and/or grafting important to maintain vigor

Vidal blanc: Vidal 256, S.4986 (Rayon D'Or) X Ugni blanc (Trebbiano)

Positive Characteristics

Good vigor; attractive and healthy foliage; moderate cold hardiness; reliable moderately heavy producer; very late bud break so almost never affected by late spring frosts; excellent quality, versatile, white wine grape producing wines with floral and fruity characteristics; good winery demand

Negative Characteristics

Foliage susceptible to phomopsis, downy and powdery mildews; also susceptible to soil-borne tobacco and tomato ring spot viruses so should be grafted for best vigor and health; requires cluster thinning

Vignoles: Ravat 51, S.6905 X Pinot de Corton (Pinot Noir)

Positive Characteristics

Excellent cold hardiness; late bud break; excellent quality white wine grape, especially well-suited to wine production, yielding wines with tropical fruit and floral tones; high winery demand

Negative Characteristics

Vines generally of low vigor; foliage susceptible to phomopsis, black rot, downy and powdery mildews; clusters small, tight and sparse so yield/acre is low and clusters are very susceptible to Botrytis; not as versatile in the winery due to very high titratable acids at desirable harvest Brix levels; needs to hang on the vine and clusters need sunlight exposure for good fruit composition

Traminette: NY 65.533.13, J.S. 23416 X Gewurtztraminer

Positive Characteristics

Excellent vigor and overall disease resistance; good cold hardiness; late bud break; good producer not requiring cluster thinning; excellent quality white wine indistinguishable from the unique, spicy wines made from Gewürztraminer; very high winery demand; wineries paying an average of \$1,000 per ton for this variety.

Negative Characteristics

Unproven in Kentucky; uncertain market niche; good reception in Chicago area and metro-east in St. Louis; high vigor may be a problem on fertile soils; susceptibility to Phylloxera like Chardonel (may need to be grafted to resistant rootstocks)

Chardonel: NY 33403/G.W. 9, S.V. 5276 (Seyval blanc) X Chardonnay

Positive Characteristics

Good vigor; very vigorous on fertile soils; vigor depends on previous year's crop load and nutrition management; good cold hardiness; cluster thinning not necessary in most years; clusters less susceptible to Botrytis than Seyval parent; good balance of TA, pH, and Brix for making premium dry white wines; name similarity to Chardonnay helpful in marketing variety to public; very high winery demand

Negative Characteristics

Early bud break; foliage may be susceptible to powdery and downy mildews; moderate yields compared to Seyval parent; recent reports of severe root borer damage in Virginia and Phylloxera damage to own-rooted vines in Virginia and Indiana, so grafting is now recommended; even with grafting, leaf form of Phylloxera occurs

Cayuga White: NY 33403/G.W. 3, S.V. 5276 (Seyval blanc) X Schuyler

Positive Characteristics

Vigorous; disease-resistant; highly productive of fruit which hangs well and resists rot; good cold hardiness; versatile wine grape suited to several different wine styles; variable winery demand

Negative Characteristics

Early bud break; definite window of desirable harvest time for still wine production; overripe fruit develops strong "hybrid" and native American grape aromas and flavors; excessive vigor in warm and fertile sites;

Villard blanc: Seyve-Villard 12375, S.6468 X S.6905

Positive Characteristics

Vigorous, productive; fruit clusters large, loose, very attractive and flavorful

Negative Characteristics

Foliage susceptible to powdery and downy mildews; only fair winter hardiness; requires long growing season to fully ripen fruit; wines high in iron content and thus may be difficult to clarify; wine quality average; limited winery demand

Others: Melody, Horizon, Rayon D'Or, Aurore, Ravat 6, Ravat 34, Verdelet

Red Winegrape Varieties

Chambourcin: Johannes Seyve 26205, ? S.7053 (Chancellor) X S.V.12417

Positive Characteristics

Moderate to good vigor; own-rooted; foliage relatively disease resistant; moderate cold hardiness; reliable, heavy producer; good quality, dry wines with excellent color; more tannin and body than other red interspecific winegrape varieties (if crop load managed properly); very high winery demand' wineries paying an average of \$1,000 per ton for this variety.

Negative Characteristics

Requires cluster thinning after fruit set; if pruned too heavy requires non-count shoot thinning; tends to over-crop; ripens very late in season with red vinifera varieties

Chancellor: Seibel 7053, S.880 X S.5163

Positive Characteristics

Good vigor; own-rooted; highly productive; excellent cold hardiness; good quality, versatile, red wine grape; mid-season ripening; good winery demand

Negative Characteristics

Early bud break (with Seyval); requires aggressive shoot and cluster thinning; foliage highly susceptible to powdery and downy mildews, and fruit susceptible to downy mildew

Norton/Cynthiana: Norton's Virginia, Norton's Seedling *Vitis aestivalis*

Positive Characteristics

Vigorous, healthy, and disease-resistant foliage and fruit so easy to grow with few sprays; excellent cold hardiness; reliable producer; produces dry, red wines with full body and varietal character which have been shown to age well; very high winery demand; wineries paying an average of \$1,000 per ton for this variety.

Negative Characteristics

Expansive foliage must be adequately trellised (Geneva Double Curtain system recommended) and shoot-positioned; clusters relatively small so yields low; soil potassium and pH must be managed for good fruit composition; must have unusual combination of high pH and high TA, so requires creative and careful cellar practices; late maturing

Marechal Foch: Kuhlmann 188.2, M. 101-14 X Goldriesling

Positive Characteristics

Good vigor and general disease resistance so easy to grow; excellent cold hardiness; early season ripening lending itself to production of good Nouveau-type red wines; variable winery demand

Negative Characteristics

Very early bud break; small clusters so low yields unless multiple canes retained at pruning; early ripening and small black berries make Foch especially attractive to birds; total acidity and pH are problems in warmer climates

Leon Millot: Kuhlmann 194.2, M. 101-14 X Goldriesling

Positive Characteristics

Similar to Foch; where the two are grown side-by-side, Leon Millot tends to be slightly more vigorous, productive, and later ripening than Marechal Foch

Negative Characteristics

Same as those of Marechal Foch

De Chaunac: Seibel 9549, ? S.793 X S.5163

Positive Characteristics

Vigorous vine; no serious foliar disease susceptibility; heavy producer with numerous large clusters; good cold hardiness

Negative Characteristics

Requires aggressive shoot and cluster thinning; susceptible to soil-borne tobacco and tomato ring spot viruses, so should be grafted; a red wine that tends to lack color, body and tannin; limited winery demand

Baco noir: Baco 1, Vitis riparia X Folle Blanche

Positive Characteristics

Extremely vigorous and spreading variety with large attractive leaves; foliage generally disease-resistant

Negative Characteristics

Very early bud break; small clusters of small black berries ripen early; yields are low and fruit is appealing to birds; strong vigor difficult to adequately control, which may lead to fruit shading and susceptibility to winter injury; vines susceptible to soil-borne tobacco and tomato ring spot viruses; wines deeply colored but generally very highly acidic and low in tannins and body; limited winery demand

Villard noir: Seyve-Villard 18315, S.6905 X S.7053 (Chancellor)

Positive Characteristics

Foliage relatively disease-resistant except for susceptibility to powdery mildew; produces fair to good dry, red wine when grown on sites with long growing season

Negative Characteristics

Highly productive so requires cluster thinning (berry compensation with cluster thinning); requires long growing season to adequately ripen fruit; only moderate winter hardiness; often requires grafting to induce adequate vigor; limited winery demand

Frontenac: a lot of demand in Illinois and is used to make port style wines

Others: Chelois, Cascade, Rougeon, Colobel, Vincent, Rosette