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Kentucky Fruit Facts

July 2004 (7/04)

Fruit Facts can be found on the web at: http://www.ca.uky.edu/fruitfacts/

John Strang, Extension Fruit Specialist, Editor
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Fruit Crop News

John Strang, Extension Horticulturist

Most growers are still getting plenty of rain and should be spending extra time on their sprayer this season. Grape growers that have purchased air blast sprayers are in general very pleased with the performance and disease control that they are getting this season if they have tightened up their spray interval enough.

We are seeing lots of double blossom or rosette disease on blackberries and black rot on grapes. Japanese beetle populations vary considerably across the state. Strawberry growers should be aware that strawberry root weevils have shown up extremely early this year. These the adults feed at night making holes in the leaves. A flashlight inspection at night will help you determine if this is a problem in your field. If this insect is detected an insecticide spray can get this pest under control.

Growers should spray for the third generation of codling moth(present from now until the end of August), as well as the 5th, 6th and 7th generation of oriental fruit moth on apples.There are lots of mites in apples. Many growers are obtaining effective control by using ½ to 1 gal. of summer oil per 100 gal. of spray and avoiding using sevin and captan within 14 days both before and after this application. Continue trapping for peach tree borer and lesser peach tree borer. Sprays should be applied for these pests 7 days after peak flight. Bees and wasps are showing up on ripe fruit. If these insects were a problem last season a spray of sevin applied 7 days prior to harvest is effective. For growers that are already harvesting, Malathion has a shorter pre harvest interval and will provide some control.

Grape growers should be seeing grape root borer adults flying in their vineyards. A soil application of Lorsban may be used for control if examination after last years harvest showed pupal skins beneath 5% of the vines. Lorsban has a 35 day pre harvest interval. Insecticide applications are used for the second generation of grape berry moth at the time of grape coloring (veraison).

We are into July and sprays of glyphosate (Roundup and other brands) should be used with caution. Low branches and basal sprouts hit with this product will move the herbicide to the roots and injury will show up next season as injured leaves and shoots.

Inside This Issue:

Upcoming Meetings

Jul. 27 UK Horticultural Research Farm Twilight Tour, 6:00 p.m. until dark, Lexington, KY 40546. Questions?, Contact: Pam Compton phone: 859/257-2909, e-mail: pscomp1@uky.edu The tour itinerary may be found in the June Fruit Facts newsletter.

Sept. 11 The KSU/Pawpaw Foundation Pawpaw Workshop, Kentucky State University Research Farm, Frankfort, KY. Contact Kirk Pomper phone:502-597-5942 or e-mail: kpomper@dcr.net

Oct. 15-16 Kentucky Vineyard Society Fall Meeting and Amateur Wine Competition, Shepherdsville, KY. Contact Len Olson 502/ 540-5650.

Jan. 3-4, 2005 Kentucky Fruit and Vegetable Conference and Trade Show, Holiday Inn North, Lexington, KY.

ReTain is Now Labeled for Stone Fruit Except Cherries

by John Strang and Joe Masabni, Extension Fruit and Vegetable Specialists

ReTain is now labeled on stone fruit (except cherries) in addition to apples and pears. ReTain commonly known as aminoethoxyvinyl- glycine, aviglycine HCl or AVG is a growth regulator produced by fermentation. This product is marketed by Valent USA Corporation. On peaches it can slow the maturation process of the fruit, increase fruit size, maintain fruit firmness, reduce fruit drop, improve fruit quality and lengthen fruit storage potential. It does this by reducing ethylene production, which is a plant hormone that promotes fruit ripening.

On peaches, nectarines and plums one pouch of ReTain should be applied per acre 7-14 days prior to the anticipated beginning of the normal harvest period. ReTain may be used on stone fruit with or without an adjuvant.

ReTain should be applied under slow drying conditions in the morning or evening to promote absorption. Applications should not be made when the fruit is hot. Spray solution pH should be between 6 and 8 and this product should not be used on trees that are under stress. This material should not be applied if rain is expected within 8 hours of application. The pre- harvest interval for ReTain on stone fruit is 7 days.

Green June Beetle and Fruit Crops

by Ric Bessin

As fruit crops begin to ripen across the state, one insect pest is almost certain to causes problems, the green June beetle. Unlike the Japanese beetle that is primarily a leaf feeder, although it will attack damaged fruit and sound fruit on occasion, the green June beetle almost exclusively feeds on the fruit. It may be easier to list fruit that this pest does not attack as most of the fruit crops are vulnerable. Growers of peaches, apples, grapes, blueberries, and blackberries have regular battles with this pest.

Green June beetle is attracted to ripening fruit often in the last few days before maturity. This is when the sugar content of the fruit begins to peak. Damage by green June beetle often attracts other insect harvest pests including sap beetle, Japanese beetles, fruit flies, wasps and bees.

Control of green June beetle is not easy. Although we have very effective sprays that can eliminate the pest, the difficulty is timing. They typically arrive in the last few days before harvest begins. The required pre-harvest interval (PHI) of the more effective sprays is longer than period before harvest will begin, so they cannot be used when the beetles arrive. Growers often will substitute a less effective material with a short pre-harvest interval in order to comply with the required waiting period.

Sanitation is also very important, not only for green June beetle, but the other pests that are attracted to the damaged fruit and the scent of the fermenting plant juices. To the extent it is practical and possible, the damaged fruit needs to be removed from the orchard/ vineyard. Inintense situations or where organic-certification precludes the use of synthetic insecticides, netting can be used over small plants and vines as a barrier to the beetles.

Quintec, A New Powdery Mildew Fungicide for Grapes

by John Hartman

Quintec (quinoxyfen) fungicide is a new protectant fungicide labeled for control of powdery mildew in grapes. Quintec is normally applied on a 14-21 day schedule starting early in the season before powdery mildew infections begin. The fungicide is not to be used within 14 days of harvest and no more than 5 times per season. In Kentucky, Quintec would likely be used in combination with a black rot fungicide; it is compatible with other commonly used fungicides and insecticides. Based on information from the national Fungicide Resistance Action Committee, this fungicide has a chemistry and mode of action different from other fungicides such as strobilurins and sterol biosynthesis inhibitors. Thus, it can be alternated with these fungicides to help prevent fungicide resistance development by the powdery mildew fungus. Quintec is manufactured by Dow AgroSciences.

Eastern European Wine Evaluation, January 5, 2004

by Chris Smigell, Extension Associate, University of Kentucky Department of Horticulture

This is the third year that the University of Kentucky has held a tasting evaluation of the Eastern European wines, made from grapes grown at the Research and Education Center in Princeton,Ky. I will begin the report with a brief overview of the project.

On behalf of all of us in the UK department of Horticulture, I thank all the KVS members who have assisted in this project.

The Missouri Wine Grape Importation Program:

This project was conceived in 1991, and began in 1993, when the USDA gave Southwest Missouri State University (SMSU) a license to import grape vines for evaluations. The project was headed by the late Dr. Bob Goodman of SMSU. He visited viticultural institutes in Eastern European countries to find wine grape varieties that are suitable for the US and could:

1) yield a crop after a winter temperature of -13°F,
2) resist downy and powdery mildews and botrytis infections, and
3) produce high quality wines.

Some of the varieties were already commercially available in Europe. Others were under evaluation at the agricultural institutions and showed promise. After several years of quarantine (to screen out possible virus-infected plants) nine states were given vine cuttings to begin regional evaluations.

Vines Grown by the University of Kentucky:

In 1998, the University of Kentucky planted 18 of these varieties at Princeton (Table 1). There are 15 to 30 vines of each variety, trained on a two-wire, high-cordon trellis. All grew well and appeared to adapt to the western Kentucky climate. The exception was Burmunk; most of the vines were dead after two years, or growing poorly. This variety was removed from the vineyard and the evaluation.

In 2000 nine more varieties (eight red and one white) were planted at Princeton. Small crops were harvested from a few of these varieties last fall. For more information about the varieties' vigor, yield, and other characteristics, see the University of Kentucky 2003 Fruit and Vegetable Crops Research Report (available from your county extension office, or contact me at csmigell@uky.edu, or Shane Bogle at smbogl2@uky.edu).

Making the wines:

Wine has been made each year, beginning with the 2000 harvest of the 1998 planting. Grapes have been provided to professional winemakers (Kentucky wineries) or to amateur KVS winemakers. In most cases they've received 90-150 lbs of grapes, which usually renders enough juice to make a 5 gallon carboy of wine. They have been instructed not to blend any varieties, but have been otherwise free to follow their own procedures. We have collected three to five bottles of each variety for each vintage. The wines are stored at the University of Kentucky in a dark cooler at 45°F.

Table 1. The 1998 planting of Eastern European wine grapes, their countries of origin, and parentage.

Variety	Wine color	Originating Country	Parentage
Malverina	White	Czech. Republic	SV 12375 x Malvasia X Merlot x S 13666
Bianca	White	Hungary	Eger 2 X Bouvier
Burmunk	White	Hungary	Unknown
Liza	White	Hungary	Kunleany X Pinot gris
Petra	White	Hungary	Kunleany X Pinot noir
Rani Riesling	White	Hungary	Kunbarat X Italian Riesling
Toldi	White	Hungary	SV 12375 X Alfold 1000
XIV-186	White	Moldova	SV 12375 X Traminer
XX-15-51	White	Moldova	SV 12375 X Red Malvasia
34-4-49	White	Ukraine	Ovidioploski X Red Muskat
Iskorka	White	Ukraine	17-21-68 x Zalagyongyi X Muksat odessi
I 31/67	Red	Bulgaria	Unknown
Laurot	Red	Czech. Republic	Franconien x St. Laurent X Merlot x S 13666
Kozma 55	Red	Hungary	S 13666 X Pearl of Csaba
Kozma 525	Red	Hungary	S 13666 X Pearl of Csaba
M 39-9/74	Red	Hungary	Media X Saperavi
XIV-1157	Red	Moldova	S 13666 X Merlot
Rubin Tairovski	Red	Ukraine	Odessa Resistant X SV 23657 X Ovidioploski X Red Muskat

The evaluations:

Each white wine vintage is to be evaluated for two years, and the red vintages for five years. At the end of 2001 (listed as the '02 tasting in Table 3) we held the first evaluation, of the 2000 vintage (see University of Kentucky 2001 Fruit and Vegetable Crops Research Report). The 2001 and 2002 vintages have been evaluated as well (see University of Kentucky 2003 Fruit and Vegetable Crops Research Report). Tables 2 and 3 shows the details of the January 5, 2004 evaluation, as well as the average ratings from our previous evaluations. The 2000 whites' ratings are found in 2001 Fruit and Vegetable Crops Research Report.

We held this year's evaluation at the Holiday Inn North in Lexington, in conjunction with the annual Kentucky Fruit and Vegetable Conference. Wines were tasted in this sequence: 2001 whites, 2002 whites, 2000 reds, 2001 reds, 2002 reds. Reds were served at approximately 60° F and whites at about 40° F.

The tasters this year were:

Ben O'Daniel, professional wine maker/ consultant, SE Vintners
Butch Meyer, amateur wine maker, KVS member
Gari Thompson, amateur wine maker, KVS member
Dave & Frances Miller, amateur wine makers, KVS members
Jim Wight, amateur wine maker, KVS member
Jerry & Marilyn Kushner, owners of Broad Run Winery, Louisville

This was a blind taste evaluation. The American Wine Society evaluation forms were used to score wines. Wines could receive up to 20 points, with rating descriptions as follows :

0-5 -- poor and objectionable
6-8 -- acceptable
9-11 -- pleasant
12-14 -- good
15-17 -- excellent
18-20 -- exceptional

These wines would be more scientifically evaluated if all were made by the same, highly qualified vintner, using optimal equipment, and making the volumes of wine that small wineries produce. We expect to hire an enologist in the future to help with this project. He/she will be stationed at UK in Lexington.

Table 2. Summary of the 2004 evaluation of the Eastern European white wines, and previous average ratings for the same wines.

Vintage	Variety[1,2]	Wine Maker	Rating Range[3]	Avg. rating '04 tasting	Avg. rating '03 tasting[4]	Comments from this year's tasting[6]
2001	Rani Riesling	Meyer	3-18	12.5	10.5	Good aroma & acid; extremely poor
whites	Malverina	Thompson	6-17	12.4	10.9	None
	34-4-49	Thompson	6-18	12.2	14.1	None
	XIV-186	Meyer	3-17	11.8	15.6	Slightly musty; good acid; heavy sulfur, nitrogen deficient
	Bianca (sweet)	Georgiev	8-13	9.4	9.0	None
	Bianca (dry)	Georgiev	6-11	8.8	9.2	Nail polish aroma; slight oxidation
2002 whites	Vidal/Seyval (75/25 blend)	Meyer	3-17.5	10.7		Nice fruit, good balance, brilliantly clear; high total & volatile acidity
	Rani Riesling	Miller	5-13	9.7	na	Dark; long aftertaste
	Liza	Solomon	5-10	8.4	na	Sweet
	Toldi	Georgiev	5-12.5	7.6	na	None
	Traminette	Nelson	1-11	6.2	na	High volatile acidity; off aroma
	Bianca	Georgiev	2-10	4.3	na	Poorly made; off taste
	Toldi	Burton	1-7	4.0	na	None

[1] Vidal, and Traminette were included as standards for comparison.

[2] The 2001 Iskorka, Liza, Toldi, and XX 15-51 were not evaluated due to poor rankings in the 2003 tasting; the 2001Petra wine was not bottled. The 2002 Malverina, 34-4-49, and XIV-186 were not bottled; the 2002 Iskorka, Petra, and XX-15-51 did not yield enough grapes to make wine.

[3] The lowest and highest scores received in this year's evaluation.

[4] Tasters for the 2003 evaluation were Ben O'Daniel, Butch Meyer, Gari Thompson, Dave Miller, Jim Wight, Jerry & Marilyn Kushner, Tom Kohler (KVS treasurer), Elmer Kleber & Linda Hogan (owners of La Ferme du Cerf Winery, Dry Ridge KY).

[5] A semicolon separates comments made by individual tasters.

Table 3. Summary of the 2004 evaluation of the Eastern European red wines, and previous average ratings for the same wines.

Vintage	Variety[1,2]	Wine maker	Rating range[3]	Avg. rating '04 tasting	Avg. rating '03 tasting[4]	Avg. rating '02 tasting[5]	Comments from this year's tasting[6]
2000 reds	Kozma 55	Nelson	5-14	12.1	12.2	8.8	Very dark; almost too much aroma
	Kozma 525	Nelson	8-13	11.0	None	11.2	None
	Laurot	Durbin	8-14	10.7	12.2	12.8	Lacks fruit; dark; dark, nice tannins
	39-9-74	Durbin	2-13	9.5	11.9	11.5	Dark; cloudy & fully spoiled; bitter aftertaste; flat-no tannins
	R. Tairovski	E. O'Daniel	7-12	8.7	10.2	11.2	Brownish
2001 reds	Laurot	Thompson	10-17.5	13.1	12.3	na	Very dark
	39-9-74	Nelson	7-19	12.0	11.7	na	None
	Kozma 525	Durbin	7-13	11.3	13.0	na	None
	I-31-67	Nelson	6-14	10.4	9.3	na	None
	Kozma 55	Meyer	2-14	10.1	12.5	na	Maderized; off odors; barnyard aroma
	Blended R. Tairovski	Georgiev	6.5-13	8.8	9.8	na	None
	R. Tairovski	E. O'Daniel	3-12	7.7	9.5	na	Poor density
	XIV-1157	E. O'Daniel	4-11	7.7	11.5	na	Thin appearance; very light
2002 Reds	Cynthiana	B. O'Daniel	12-18	14.9	na	na	None
	Laurot	Thompson	10-16	13.4	na	na	Very dark; high total acidity
	Kozma 55 & Laurot (50/50 blend)	Meyer	6-18	12.7	na	na	High total acidity; good; very dark
	Chambourcin	Solomon	6.5-16	11.5	na	na	Perfume aroma; slight phenolic instability; good fruit; too sweet; slightly high TA
	XIV-1157	Thompson	5-13	10.2	na	na	Vegetative aroma (mentioned twice); needs aging
	Kozma 525	Willman	6-17	9.7	na	na	None
	39-9-74	Georgiev	4-11.5	8.2	na	na	High total & volatile acidity; vanilla aftertaste; slight off aroma
	R. Tairovski	Georgiev	1-7.5	4.6	na	na	Oxidized taste

[1]Chambourcin and Cynthiana were included as standards for comparison.

[2] The 2000 I-31/67 and XIV-1157 were not evaluated due to poor rankings in the 2003 tasting; the 2002 I-31-67 did not yield enough grapes to make wine.

[3,4] Footnotes 3 and 4 for this table are the same as in table 2.

[5] Tasters for the 2002 evaluation were Butch Meyer, Dave Miller, Gari Thompson, George Wessel (KVS member), Bud & Mickey Mirus (KVS members), Eddie O'Daniel, (owner of Springhill Winery, Bloomfield KY), Jay & Gina Pruce (owners of Century House Winery, Lewisburg KY) Chris Nelson (owner of Chrisman Mill Winery, Nicholasville KY).

[6] A semicolon separates comments made by individual tasters.

General Observations:

The research thus far gives us some idea of how these wines taste (or could taste, with vinting modifications), and which ones warrant more attention. We have not eliminated any varieties (apart from Burmunk) from future evaluations, but we have dropped some bottlings that have not rated well. (see footnotes in Tables 2 and 3).

The people that made these wines, and some other professional winemakers, feel that some of the varieties could make decent wines, or at least good blenders. We have not heard any wine makers suggest that these are mostly grapes with no potential to make acceptable wines. For several low-rated wines, tasters commented that the wine tasted either spoiled, or not properly vinified (e.g., too much acidity).

In this year's evaluation, the three highest rated white wines were of the 2001 vintage. The three highest rated reds were from 2002. Most red wines have gotten lower ratings as they've aged.

After 3 evaluations, the four highest-rated white wines are 34-4-49, XIV-186, Rani Riesling and Vidal Blanc (Table 4). The Vidal has been included for comparison, as it is one of the better white French-American hybrids grown in Kentucky. The four highest-rated red wines are Chambourcin, Laurot, Kozma 55, and Kozma 525 (Table 4). Kozma 525 rates just under Kozma 55, and both have the same parentage.

Chambourcin, another excellent, French-American hybrid grown in Kentucky, has been the best performing red variety so far. It has been used as a standard for comparison.

Table 4. Cumulative average ratings of the top four white and red varieties.

Variety	Wine color	Cumulative average rating[1]	Quality ranking
XIV-186	White	12.5	Good
34-4-49	White	12.1	Good
Vidal Blanc	White	12.0	Good
Rani Riesling	White	10.9	Pleasant
Chambourcin	Red	13.1	Good
Laurot	Red	12.4	Good
Kozma 55	Red	11.4	Pleasant
Kozma 525	Red	11.2	Pleasant

[1]Averages of all 3 years' evaluations. Cynthiana was used as a standard in only the 2004 tasting and received a 14.9 or Good rating.

State Parks Will Now Purchase Local Produce

by Janet Eaton, Farmers Market Specialist, Kentucky Department of Agriculture

Producers who want to sell produce to their local state park may begin registering with the finance office at each park on August 2. The price will be established by obtaining prices for product from major distributors and then averaging the prices. The price will change weekly, but the farmer will get the full amount that the Park has been paying to companies like Sysco. The check will sent to the farmer in four days. The produce purchasing lists from the parks are extensive!

It may be rocky at first as we work out the kinks, but this is something that we have wanted for quite a while. The Parks really want to buy from small farmers with quality product. Producers will need to build a relationship with their local chef and we hope to let them work out the details. The producer will not have to have any special permits or pay any membership fee to sell to the parks. The Parks are really excited about this and so is the KDA.

For more information call Janey Eaton at 502/564-4983 ext. 235 or e-mail: janet.eaton@ky.gov

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