IOWA STATE UNIVERSITY University Extension

Wine-Grower-News #4

June 2, 2007

Information included in this issue includes:

Canopy Management
Grape Flea Beetle
Winemaking Misc. from Purdue University
Illinois Wineries vs. Beer & Wine Distributors
Should we be diversifying our wine trails?
Wine.com #1 U.S. Online Wine Seller
Neeto-Keeno WWW Stuff

Canopy Management

Canopy Management is a critical and complex component of growing winegrapes. We manage the grape canopy to:

- manage vegetative vigor
- improve sunlight exposure to fruit, foliage and renewal buds
- increase airflow to reduce disease pressure
- improve the coverage and infectiveness of pesticide applications
- facilitate pruning and harvest
- promote ripening and increase fruit quality

The primary methods used to accomplish this include:

- 1. Sucker Removal -of unwanted shoots from the base of trunks. (Make sure to leave 1 or more suckers if winter injury has occurred to the trunk)
- 2. Water Sprout Removal on the trunk up to head region of the vine.
- **3. Shoot Removal** involves removing undesirable shoots at the base of spur or "non-count" shoots along the cordon followed by unfruitful shoots along count nodes on each spur. Excess fruitful shoots can also be removed. This is best done early in the season prior to berry set. The shoots are much easier to remove when young.
- **4. Cluster Thinning** Removal of all clusters during the first two non-fruiting years and removal of excess clusters during fruiting years to keep from over-cropping. For wine grapes this is typically done the first 2 weeks after berry set to increase cluster weights. A late cluster removal can also be done around veraison for a final crop load adjustment and promote ripening. Leaving a heavy crop load on very vigorous plants and then adjusting the crop load at veraison can be used to slow the growth of very vigorous plants. Removing all or most of the clusters on low vigor vines before berry set will help to increase vine vigor for future crops.
- **5. Shoot Positioning** Untangling and combing the shoots for maximum airflow and sunlight interception. Shoot positioning can also be used to reduce vegetative growth by positioning the growing

points downward. Upward growing canopies should be evenly distributed and tucked into catch wires as they grow. Highwire downward oriented canopies should be untangled and combed downward. Getting 75-80% of the canopy oriented downward below the cordon in a highwire system is a good rule of thumb. This allows sunlight to hit the renewal buds forming along the top cordon. Whether canopies are oriented upward or downward, positioning the canopies should be done early in the season prior to the tendrils becoming attached.

- **6. Lateral Removal** involves removing lateral shoots that are shading the fruiting or renewal zone. This is commonly in the middle of the season.
- **7. Topping** is often done just prior to veraison in upright training systems to increase sunlight into the fruiting zone and renewal bud zone. Shoots are typically trimmed at a height of 12" above the top wire. Waiting until just before or after veraison will help minimize the amount of lateral growth that can result.
- **8. Skirting**-downward positioned systems is also done later in the season. Downward oriented vines should be trimmed up about 1' above the ground. Depending on variety, the plant will need anywhere from 10 to 15 leaves per fruiting shoot to properly produce and ripen the fruit.
- **9. Hedging** is also done later in the season to reduce shading within the canopy and increase airflow by trimming each side of canopy withing1- 1.5' feet of the trellis center.

Summary: Advice form experts often vary as to exactly how, when or if you should do the many canopy management procedures listed above. Climate, variety, site, trellis system and input management will greatly affect your canopy management techniques. Learning the concepts about canopy management will bring about a greater understanding of why they are being done.

Further Canopy Management Resources:

- a. Canopy Mgt, Chap 7, pp 17-26, Mid-Atlantic Grape Growers Guide http://www.ces.ncsu.edu/resources/winegrape/ag535-2.pdf
- b. page 40, MO Grape Growers Guide: http://mtngrv.missouristate.edu/Publications/grapeguide.pdf c.pp 39-41, Colorado Grape Growers Guide:
 - http://www.colostate.edu/programs/wcrc/Viticulture/GrapeGrowersGuide1998.pdf
- d. pp 55-61, Midwest Grape Growers Guide: http://ohioline.osu.edu/b919/index.html
- e. Pruning, Training & Grape Canopy Mgt. ppt presentation by Dr. Gail Nonnecker, ISU: http://viticulture.hort.iastate.edu/info/pdf/prunecanopy.pdf
- f. "Canopy Mgt" by Dr. Ed Hellman, Texas Coop Extension: http://winegrapes.tamu.edu/grow/canopy.shtml
- g. Grape Growers Notebook: http://www.grapeguru.grapegrowersolutions.com/fruitripening.htm
- h. Annual Care of Bearing Vineyards" ppt by Eli Bergmeier at 2006 IWGA annual conference: http://viticulture.hort.iastate.edu/info/pdf/anncarebearingvineyards.pdf

Grape Flea Beetle

The larva of grape flea beetles are now chewing on grape leaves. This common pest of grapes overwinters as a small approx. 3/16" long black shiny beetle. During cool springs an insecticide treatment may be needed if the beetles begin chewing on grape buds before they open and greater than 4% of the buds are being damaged. The adults soon lay eggs that hatch out to small brown colored larva with dark spots. The larva will normally grow to about 3/8 in length. The larva will then spend most of their time feeding on the leaves and occasionally the clusters. Very seldom will the larval damage warrant an insecticide treatment. After feeding, the larva will fall to ground in June and pupate into a

second generation of adults that will feed on the leaves in the last half of the season. This 2nd generation is not considered an economic pest.

Further information:

- 1. Grape Flea Beetle, Virginia Tech: http://www.ento.vt.edu/Fruitfiles/GFB.html
- 2. Grape Flea Beetle, Michigan State Univ: http://www.grapes.msu.edu/fleabeetle.htm
- 3. Grape Flea Beetle, Univ. of KY: http://www.ca.uky.edu/entomology/entfacts/ef224.asp

Winemaking Misc. from Purdue University

- 1. Wine Making Lab Starter Kit Supplies and equipment needed for successful small scale winemaking, Purdue: http://www.foodsci.purdue.edu/research/labs/enology/WineryLabStarterKit.pdf
- 2. Free SO2 vs. pH chart for your wine lab: http://www.foodsci.purdue.edu/research/labs/enology/ FreeSO2(pH)Pro.pdf
- 3. Residual Sugar Chart: http://www.foodsci.purdue.edu/research/labs/enology/ResidualSugarPurdue.pdf

Illinois Wineries vs. Beer & Wine Distributors

(Summary of 6-1-07 Illinois Grape Growers & Vintners Assn. Press Release)

After a 2 year tussle, it looks like a compromise is about to be struck between the Associated Beer Distributors of Illinois (ABDI), the Illinois Grape Growers and Vintners Association (IGGVA), the Wine Institute, the Wine and Spirit Distributors of Illinois (WSDI), the Beverage Retailers Alliance of Illinois (BRAI) and the Illinois Retailers Merchants Association (IRMA) regarding in-state and out-of-state wine shipping. They tried to put through compromise legislation in 2006 with the Senate Bill 2180 but the legislature recessed without voting on the bill.

Whether or not the Illinois 95th general assembly votes on the 2007 compromise House Bill 429 is yet to be seen. The legislature failed to reach adjournment for the season Friday, May 31st. The above compromise group hopes that the 95th assembly will vote on and pass HB-429 in their overtime session.

Under HB 429, wineries are permitted to ship up to 12 cases of wine per person per year after obtaining a winery shipper's license. It also requires winery shippers to agree to Illinois regulatory jurisdiction and pay Illinois' excise and sales taxes. The legislation also includes safeguards to prevent shipments to underage individuals and gives the Liquor Control Commission the power to conduct Internet stings and revoke the license of violators. In addition, it allows small wineries both in-state and out-of-state that produces less than 25,000 gallons of wine per year to sell up to 5,000 gallons of their wines per year directly to retailers as a means to develop a market presence.

If passed out of the House and approved by the Senate, HB 429 will bring Illinois into compliance with the 2005 U.S. Supreme Court decision in Graholm v. Heald -- that ruled states may not discriminate by banning or severely limiting the shipment of wine by out-of-state wineries while allowing shipments of wine by in-state producers.

Press Release: http://www.earthtimes.org/articles/show/news_press_release,115025.shtml

Should we be diversifying our wine trails?

(The following paragraph was taken from The New York WinePress 5-26-07 newsletter at: http://www.newyorkwines.org/)

WINE TRAILS throughout New York have been tremendously successful in generating tourism, regional identity, and brand loyalty-and similar ventures like beer trails. This week, Ag & Markets Commissioner Patrick Hooker unveiled the latest: a Farm, Apple & Cuisine Trail program launched with the Cooperstown Beverage Trail. The Farm, Apple and Cuisine Trail Designation Program promotes area agricultural opportunities and allows for 10 farm trails, 7 apple trails and 5 cuisine trails to be designated in the State. The Cooperstown Beverage Trail, near the Baseball Hall of Fame that attracts 400,000 visitors annually, connects the great Fly Creek Cider Mill with Ommegang Brewery, Cooperstown Brewing Company, and Bear Pond Winery. Among the offerings: sweet cider, hard cider, apple wines, Belgian-style ales, micro-brewed English-style ales, and grape and fruit wines. The new program capitalizes on two of the hottest tourism trends-agri-tourism and culinary tourism-as Americans discover the many benefits of fresh, local, safe foods and beverages right from their own backyards. More information about the new program is available at www.agmkt.state.ny.us.

Wine.com #1 U.S. Online Wine Seller

(San Francisco Business Times – 5-21-07)

Wine.com topped a list of U.S. online wine sellers put together by Internet Retailer Magazine. This is the third consecutive year San Francisco-based Wine.com has topped the list. It was No. 13 on the food and drug list and was No. 199 among all Internet retailers based on revenue in 2006. Iowa is one of 50 states they list that they cannot ship to: Check out them out here: http://www.wine.com/

Neeto-Keeno WWW Stuff

- 1. Iowa State University Viticulture Home Page: http://viticulture.hort.iastate.edu/
- 2. Free 1 yr. \$129 subscription to "Internet Retailer Magazine: here: http://www.internetretailer.com/
- 3. Extensive List of IPM Grape Disease/Weed/Insect Resources: http://ipmnet.org/cicp/fruit/grape.html
- 4. Grape Growers Notebook: http://www.grapeguru.grapegrowersolutions.com/index.htm

Past issues archived here: http://www.extension.iastate.edu/ag/newsletters/winegrowers.html

Please reply with the word "unsubscribe" in the Subject Line if you wish to no longer receive this newsletter.

Michael L. White ISU Extension Viticulture Specialist 909 East 2nd St. Suite E, Indianola, IA 50125-2892 ph: 515-961-6237, fax: 6017 or e-mail: mlwhite@iastate.edu

Wine Growers News
Iowa State University and the United States Department of Agriculture Cooperating Extension Programs are available without regards to race, color, national origin, religion, sex or disability