

Wine-Grower-News #32 *February 29, 2008*

Midwest Grape & Wine Industry Institute: <http://www.extension.iastate.edu/Wine>

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Presentations Given at IWGA Annual Conference Now Posted Online

The Iowa Wine Growers 2008 Annual Conference was held February 8 & 9, at the Des Moines Area Community College Campus (DMACC). The following presentations given at this conference have been posted on the ISU Viticulture WWW site. <http://viticulture.hort.iastate.edu/info/info.html>

“Mid-American Wine Competition” by Paul Gospodarczyk, DMACC Enology Instructor
“Vineyard Management for Improved Fruit and Wine Quality” by Dr. Bruce Bordelon, Purdue Univ.
“Defining Quality, Creating a Flavor Profile” by Dr. Charlie Edson, Bel Lago Vineyards & Winery
“Effect of Living Mulch or Straw on Weed Management and Soil Quality on Grape Vineyards” by Dr. Craig Dilley, Iowa State University (now teaching at DMACC)
“Five Steps Towards a Profitable Vineyard & Satisfied Customers” Dr. Tim Martinson, Cornell Univ.
“Iowa Wine Quality Program” Dr. Murli Dharmadhikari, ISU Extension Enologist

Winter Injury to Grape Vines & Methods of Protection –Book Review

I just finished reading the new 106 page book *Winter Injury to Grape Vines and Methods of Protection* by Dr. Tom Zabadal, et al, and published by Michigan State University Extension. I strongly recommend anyone with a commercial vineyard adding this book to their library. It is easy to read and is full of detailed color diagrams and photos. The book starts out by defining cold

hardiness, identifying winter injury symptoms and the genetics of cold tolerance. It walks the reader through a list of holistic management practices that can be used to deter cold damage to a vineyard and how to manage cold damaged vines. Several pages are devoted to proper pruning techniques. There are several good charts one can use to keep crop records during the season. It's a good read with a large amount of information. You can order Online here for \$15:

<http://www.emdc.msue.msu.edu/viewitem.cfm?INVKEY=E2930>

ISU Looking for Full Time Viticulture Research Assistant

What: Ag Specialist III Specialist

Start Date: 3-24-08 **Deadline for Application:** 3-7-08

Salary Minimum: \$36,686; commensurate with qualifications

Job Description: Assist in planning and managing viticulture field research at the Horticulture Research Station, Ames, IA; coordinate viticulture field research at the Armstrong Research Farm, Lewis, IA, Northeast Research Farm, Nashua, IA, and the Southeast Research Farm, Crawfordsville, IA, and viticulture field research plots established with grower cooperators located in areas with unique conditions not found in the ISU Research and Demonstration Farms system.

Required Qualifications: Bachelor's degree in horticulture or related field and 2 years of horticultural crop experience including viticulture experience.

Further information: <http://www.iastatejobs.com/applicants/Central?quickFind=75319>

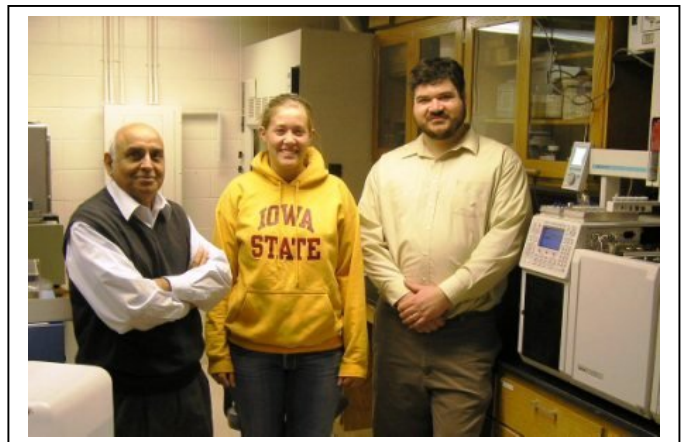
Update from the ISU Wine Quality Lab

I had the opportunity to visit the ISU Wine Quality Lab on campus this week. The Wine Quality Lab is part of the Midwest Grape and Wine Industry Institute (MGWII). Dr. Murli Dharmadhikari is the director of the Institute. The Institute is designed to serve Iowa and surrounding states..

Helping commercial wineries eliminate wine flaws and produce quality wine is what the wine lab is all about. Available services include:

- Wine & Grape Analysis
- Discounted Analysis Packages
- Diagnostic Evaluation
- Sensory evaluation
- Individual Training
- Demonstration of wine components & faults

L-R, Dr. Murli Dharmadhikari (Director), Jennie Hansen (Lab Technician) and Sebastian Donner (Lab Manager)



The following individual analysis tests are available through the Wine Quality Lab:

pH	Hydrogen Ion Concentration	VA	Volatile Acidity
TA	Titatable Acidity	OH	Alcohol

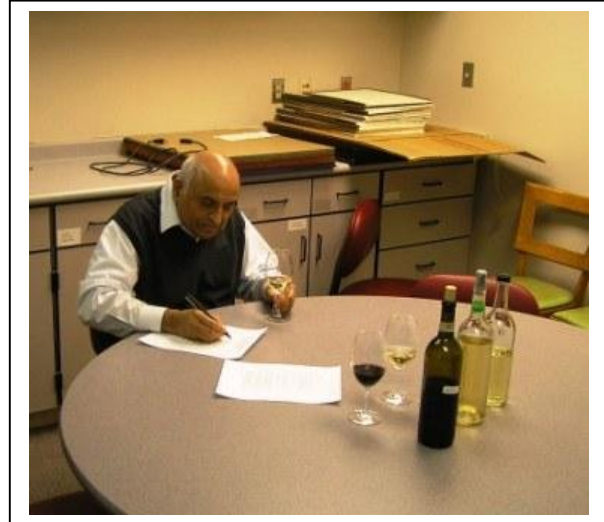
RS Reducing Sugar
FSO2 Free Sulfur Dioxide
FZ Cold Stability (freeze test)
HT Protein Stability

TSS Total Soluble Solids (°Brix)
MLF Malolactic Fermentation
CT Cold Stability (Conductivity at 0°C)
SEN Sensory Analysis by Panel



Sebastian Donner standing next to GC-MS (Gas Chromatograph-Mass Spectrometer (\$123,000)
A HPLC - High Performance Liquid Chromatography testing machine is on order (\$72,000).

This shipping kit can be requested free of charge. It includes ice packs and a number of sample bottles (dependent on how many samples are to be submitted, holds up to eight). For wine samples, we prefer a full wine bottle, especially if sensory analysis is requested.



Dr. Murli performing a sensory evaluation of several wine samples.



Jo Gregg is the first person you will talk to when calling the Midwest Grape & Wine Institute at 515-294-3308.



Midwest Grape & Wine Industry Institute: <http://www.extension.iastate.edu/Wine>

Cheap Vine Ties You Can Use in Your Vineyard

There are all kinds of tying gizmo's one can buy to tie up vines, cordons and trunks. Trellis Lok, Ag Lok, Branch Lok, Hand Tying Tape, Ag-Tye and T-Bands all work very well and many people swear by them. Personally, I am a cheapskate (frugal). I like to use natural sisal baler twine. You can pre-cut it to size prior to taking it to the vineyard. Natural sisal twine comes in different strengths and different package sizes. The lighter strength twine will work just fine for vineyard work. Price will normally range between \$3-\$4/1,000 feet. I do not recommend plastic twine. Plastic twine will be in your vineyard forever. It does not decompose. There is nothing more aggravating than to have to clean plastic twine out of a mower deck.



Driving nails into a board at pre-determined lengths can be used to wrap twine around, tie into bundles and then cut at both ends to get bundles of individual length twine ties. The twine shown in these pictures is natural green dyed sisal twine cut at 12" and 16" lengths.

Pruning Time is Here?

Many people are gearing up to start pruning or have started. Personally, I like to wait until late March or early April when temperatures are higher. Yes, I am a lightweight and proud of it! The later you wait the easier it is to determine the amount of cold injury to vines and buds. Waiting until bud swell does allow one to quickly visualize the amount of bud mortality on each vine. Contrary to popular opinion, the sap flow that occurs after pruning a growing plant in April or early May does not harm the plant. For those of you who need to start early due to time constraints, I understand. One consideration might be to "long prune" your first time through the vineyard. This involves leaving 2-3x more buds than you normally retain. The additional buds will help delay bud break and also provide insurance from cold injury that may have occurred earlier. You can then quickly run through the vineyard in April or early May and fine prune back to the correct number of buds.

The first pruning normally occurs after planting. Opinions vary, but I like to see people prune their newly planted vines back to 4-6 buds. This procedure will increase the growth of the remaining shoots and ensure that one or two canes will make the top wire the first year. These one or two canes will become the second year trunk(s). Adapted cold hardy vines should be trained to one trunk. Somewhat cold sensitive varieties should be trained to 2 trunks.

Pruning second year vines is fairly simple. Select the strongest one or two canes that made it to the top wire and cut the cane above the wire and prune off all other canes. The two buds just below the wire will grow out as canes that are tied to the wire to become next year's fruiting cordons. If none of the canes make it to the top wire, I would suggest cutting the plant back to 2-4 buds and starting

over from the base again. This will invigorate the plant and ensure that the canes make it to top wire this season. Some advocate cutting canes that did not make the top wire back to where they are at least pencil width (3/8") thick and restart them there. This leaves a small kink in the trunk where regrowth will begin. I don't recommend this. It is a matter of personal preference.

Pruning third year vines consists of preparing the vines for their first fruiting year. Hopefully the canes you tied to the wire have survived the winter and can be retained as cordons. Cut the cordons to the halfway point on the wire between the two adjacent plants. Cordons that did not make this distance should be cut back to where they are at least pencil thickness. All spouts on the trunk and persistent laterals on the newly formed cordon should be removed. The remaining buds on the cordon will form the fruiting canes for this year's crop.

Pruning 4+ year old vines with established cordons becomes more complicated. Pruning weights need to be taken on sample vines to help determine the number of buds to retain per variety and vine. This is where balanced pruning formulas start to be important and records need to be taken.

I would suggest spending some time reviewing some of the pruning resources shown below. Review is good. It helps to remind you of what you are doing and why you are doing it. This is important! Check them out:

1. EXCELLENT set of 3 Cold Climate Pruning "Macro Media Breeze" presentations by Fritz Westover, former Viticulture Research Associate at Virginia Tech University:
 - a. Grape Vine Anatomy & Vine Balance: <http://breeze.ag.vt.edu/westover1/>
 - b. Selecting Fruitful Wood & Balanced Pruning: <http://breeze.ag.vt.edu/westover2/>
 - c. Cold Climate Pruning Strategies: <http://breeze.ag.vt.edu/westover3/>
2. Pruning Grapevines in Michigan: <http://web1.msue.msu.edu/vanburen/e-1935.htm>
3. Pruning & Canopy Mgt, Dr. Gail Nonnecke, ISU: <http://viticulture.hort.iastate.edu/info/pdf/prunecanopy.pdf>
4. Wine Training Techniques, Wine Doctor.com: <http://www.thewinedoctor.com/advisory/technicaltraining.shtml>
5. Pruning Grapevines in the Home Garden, Washington State University <http://mountvernon.wsu.edu/FruitHorticulture/GrapePruningBasics.html>
6. Pruning Grapes to The 4-Arm Kniffen System, New Mexico State Univ: http://www.cahe.nmsu.edu/pubs/_h/h-303.pdf
7. Pruning Grapevines, Reiman Gardens, ISU: <http://www.extension.iastate.edu/Publications/RG502.pdf>
8. Pruning Grapevines, Ed Hellman, Texas Cooperative Extension: <http://winegrapes.tamu.edu/grow/pruning.shtml>
9. Pruning & Training, Chapter 6, Mid-Atlantic Grape Growers Guide: <http://www.ces.ncsu.edu/resources/winegrape/ag535-2.pdf>
10. Pruning & Training, Chapter of the Midwest Grape Production Guide: <http://ohioline.osu.edu/b919/0008.html>
11. Grape Pruning Terms, Univ. Illinois: <http://w3.aces.uiuc.edu/NRES/faculty/Skirvin/cfar/glossary.htm>
12. Training & Trellising Grapes for Production, Washington State University: <http://cru.cahe.wsu.edu/CEPublications/eb0637/eb0637.pdf>
13. Pictorial Guide of Pruning Dechaunac, Delaware and Cayuga & Years Growth: <http://www.honeyflowfarm.com/grapeproject/grapeproject.htm>
14. Pruning, Training & Canopy Management of Grapevines in the Midwest, Kentucky State Univ. ppt, Excellent: http://www.uky.edu/Ag/NewCrops/vinemanagement_files/frame.htm

Make Sure Your Winery is on the DNR WWW Interactive Recreation Map

The Department of Natural Resources (DNR) and the Iowa Natural Heritage Foundation (INHF) are partnering to develop an interactive trail map on the DNR web site. The website is under development. You can review it here: <http://programs.iowadnr.gov/ims/website/recreation/viewer.htm> Links to this directory will end up being located on many other recreation/tourism sites in the state. If you would like your winery included on this map, return the following information directly to Andrea Chase at achase@inhf.org ASAP (If you have not already done so!)

- Establishment's name
- Location Address
- Telephone Number
- Email Address
- Website
- Longitude and Latitude of site's location

Please contact her directly with any questions at:

Andrea Chase, Trails Coordinator

Ph: 515-288-1846, Fax: 515-288-0137, Email: achase@inhf.org

Great River Vineyard Pruning Clinics, Sat. March 22 & 29, Lake City, MN

What: Vineyard Pruning Clinics

When: 10AM to 1 PM, Saturday March 22 and 29, 2008

Cost: \$30 for first person and \$15 for each additional person in your party

Where: Great River Vineyard & Nursery, about 50 miles SE of St. Paul. 3 miles north of Lake City, MN and 12 miles south of Red Wing on Hwy. 61. Look for our sign out by the highway.

- Agenda:**
1. 45 minutes of classroom instruction
 2. A short tour of GRV's Vineyards
 3. Personal demonstrations of actually Pruning a vine.
 4. Opportunity to prune some vines yourself. (hands-on)

Please print and fill out the form below and return to us with your check made out to GRV. Seating is limited.

NAME _____
ADDRESS _____ STATE _____ ZIP _____
PHONE _____ EMAIL _____

MARCH 22nd _____ MARCH 29th _____

Send completed form and check made out to GRV to:

Great River Vineyard/Nursery 35680 Hwy. 61 Blvd. Lake City, MN 55041

Toll free: (877)345-3531, grv@mchsi.com, <http://www.greatrivervineyard.com>

DMACC offering Three Pruning Workshops

What: Vineyard Pruning Workshop

When: Saturday, March 1: @ 1:30 PM

Where: Villa Santa Maria Winery, 218 W 6th St Carroll, IA 51401

Located off Hwy 30 in Carroll about 1 block west of Main St.

Registration: There is no cost for the workshop, but please RSVP by the Friday noon prior to the workshop at 515-965-7310 or email at rjvos@dmacc.edu

What: Vineyard Pruning Workshop

When: Saturday, March 8: @ 10:00 AM

Where: Interpower/Meadow Creek Vineyards, 100 Interpower Ave, Oskaloosa, IA 52577

From Oskaloosa go north on Hwy 63 (N Market St), as you begin to leave town you will see Interpower and the vineyards on the west (left) side of the road.

Registration: There is no cost for the workshop, but please RSVP by the Friday noon prior to the workshop at 515-965-7310 or email at rjvos@dmacc.edu

What: Vineyard Pruning Workshop

When: Saturday, March 8 @ 3 PM

Where: Eagle City Winery, 28534 160th St., Iowa Falls, IA 50126

<http://www.eaglecitywinery.com>

Registration: There is no cost for the workshop, but please RSVP by the Friday noon prior to the workshop by contacting Ken Groninga: winemaker@eaglecitywinery.com or 641-648-3669

Take a Masters Level Viticulture Course Online for Free!

Dr. Kaan Kurtural is the Viticulture Specialist for Kentucky State University. He has posted a series of 15 pdf documents Online covering his entire graduate level class in Commercial Grape Production (PLS 597) held in the spring of 2007. Yes, there are some pretty big words and yes the common grape grower will not understand all of it, but ...there is a lot of pretty good stuff.

This is the official course description: *An analysis of the underlying history, anatomy, physiology and cultural practices that affect the commercial production of grapes in the Commonwealth. Topics include the vegetative and reproductive anatomy, developmental physiology, climatic influences on planting considerations, culture, and nutrition of the grapevines.*

Check it out here: <http://www.uky.edu/Ag/HLA/kurtural.html>

How Much Time Will You be in Your Vineyard This Year?

There is no average vineyard, they are all different and managed in many ways. But there are some trend lines one can come up with to estimate labor requirements for an average vineyard. I often tell people that a fully producing vineyard will require approximately 150-200 hrs of labor per acre per year. Where do I get these numbers? Good question. Some of this information can be pulled from vineyard plan worksheets similar to the ones we have at the ISU Ag Marketing Resource Center here: <http://www.agmrc.org/agmrc/commodity/fruits/wine/wineryfeasibility.htm> Some of the numbers come from experience and some come from logical guesstimates. Consider this my guesstimate of how many hours of labor are required in a mature 4 ton/acre yield vineyard placed on a single high wire trellis system using manual labor for all pruning, canopy management and harvesting operations.

My Estimate	Hours/Acre	Your Estimate
Pruning	40	_____
Cordon tying & training	5	_____
Shred and/or remove brush	1	_____
Fertilize	1	_____
Spraying - insect & disease control 8X	8	_____
Weed control 2x/yr	2	_____
Mow row middles 8x/yr	4	_____
Canopy Management	9	_____
Shoot positioning	14	_____
Brix & pH testing	1	_____
Yield Estimate	1	_____
Bird Netting on & off	8	_____
Harvest & Hauling out of field	45	_____
Deliver to winery	4	_____
Clean up harvest equipment	2	_____
Trellis Maintenance	3	_____
Management & Record Keeping	10	_____
_____	—	_____
_____	—	_____
Total	158 hours (OUCH!)	_____

ISU Extension Acreage Living Newsletter is Back!

AMES, Iowa -- Iowa State University Extension is bringing back its *Acreage Living* newsletter. The online newsletter provides timely research-based information for the new rural Iowa. One third of Iowa's residents are considered rural non-farm and live in either the country or in communities of less than 2,500. The March issue of *Acreage Living* features articles on Iowa's changing rural population, pasture management and how to use downed tree branches to your benefit.

Winter storms have left downed branches and trees as well as those old Christmas trees. An article on discarded trees and branches explains they can be beneficial rather than a burden. Learn about alternatives to burn piles. Create a habitat for birds, reptiles or small mammals. Improve your pond structure with discarded evergreen trees.

Spring is coming so it's time to think about increasing the productivity of pastures with proper fertilization management. Learn more about what fertilizer works best for grass-dominant pastures and how to encourage the growth of legumes in *Pasture Management and Forage Production*, the first article in a three-part series.

Iowa State sociologists provide information on how Iowa's rural non-farm population is increasing. Find out how that growth impacts local economic and social dynamics.

Each month the *Acreage Living* newsletter will provide timely research-based information. Topics will include neighbor relations, pet and horse care, small farm enterprises, rural residence maintenance, water quality and management, wildlife management, recreation and safety, landscape plantings and ponds. Read the March newsletter today at www.extension.iastate.edu/acreage/.

Fun Wine Facts For 2007.....

In 2007 the number of U.S. core wine drinkers surpassed the number of marginal wine drinkers for the first time, 55% to 45%. Core wine drinkers are identified as people who consume wine at least once per week, while marginal drinkers are described as those who drink wine less than once a week. In 2007, 57% of the population of the US reported drinking wine. In 2007, the median age of wine drinkers dropped. In 2007 there were approximately 1400 acres of grape bearing vineyards in the state of Missouri Taken from Feb. 08 Missouri Wines consumer newsletter. You can view the entire newsletter here: <http://www.missouriwine.org/press/newsletter.htm>

TTB Holding First Ever Expo In Kentucky “FREE-FREE-FREE”!

What: Tax and Trade Bureau EXPO

When: June 17 & 18, 2008

Where: Northern Kentucky Convention Center, Covington, KY
Des Moines to Covington, KY = 589 miles

Cost: FREE!

Wine-specific topics include:

Keeping it All in Your Head May Not Be Enough Wine Premises Recordkeeping Reporting; Label Perfection! How Can I Say That on My Wine Label?
Heightened Awareness: It Pays to Know...Before You Advertise
Do I Have to Fill Out ALL of these Forms?
TTB Qualification as a Winery or Bonded Wine Cellar
The Good, the Bad and the Ugly-How to Correctly Pay Wine Excise Tax
Uh-Oh! Did I tell TTB About That? Changes to Report to TTB Regarding Your Wine Operations
Pay.gov-Electronic Return and Report Filing for Wineries Made Simple!

Complete info and registration Online: <http://www.ttb.gov/conference/index.html>

Results of Illinois 2006 Vine/Wine Market Survey

In May of 2007 the results of the 2006 Illinois vineyard and winery market survey was completed by the University of Illinois at Urbana-Champaign. Dr. Bill Shoemaker was the principle investigator. The survey consisted of 488 mailings with a response rate of 66.4%. Earlier surveys were used to fill in data gaps. Here is a summary of the 2006 survey:

235 active vineyards and 77 wineries
1083 acres of vineyards of which 659 acres were harvested in 2006
844,372 gallons of total winery capacity
726,166 gallons in tanks (86%)
118,266 gallons in wood barrels (14%)
564,270 gallons of wine produced in 2006
Wine Sales = 46% sold through tasting room
47% white, 34% red, 16% non-grape wine
80% of wine made from Illinois fruit
43% of wine came from estate grown fruit
1,121 people employed in the vineyards

12% full time, 18% part-time, 70% seasonal
363 people employed in the wineries
34% full time, 41% part-time, 25% seasonal
1,666 tons of grapes harvested and marketed
85% of the harvested acres and 80% of the total acres consisted of the following cultivars in order of
acres: Chardonnay, Chambourcin, Vignoles, Traminette, Norton, Frontenac, Foch, Seyval,
Vidal, Blanc, Corcord, St. Croix, Cayuga White, and Niagara
Birds, Japanese Beetles, and Deer were top three pests in vineyards
\$360 to \$1,500/ton was the price range of winegrapes marketed in 2006
33% of the vineyards had access to cold storage
Delivery to the winery = 81% were delivered by vineyard
16% picked up by winery
3% were delivered by hired delivery

View the entire 21 page survey report here: <http://www.illinoiswine.org/pdf/industry-report07.pdf>

Quote of the Week

“Whenever a vine is out of balance -- by producing excessive vegetative growth or an excessive crop load – the vine will be more vulnerable to winter injury. That translates to reduced profitability.”
Page 35, Winter Injury to Grapevines and Methods of Protection, MSU Extension

Neeto-Keeno WWW Stuff

1. The Lexicon on Wine: <http://www.wineloverspage.com/lexicon/>
2. Ablegrape – New Search Engine Developed for Wine Geeks: <http://www.ablegrape.com/en/>
3. WINE NATION TV, First TV Station about Wine with Live Chat, on Wi-Fi TV:
<http://www.winenationtv.com/>

Past issues archived as html: <http://www.extension.iastate.edu/Wine/Resources/winegrowernews.htm>
Past issues archived as pdf: <http://www.extension.iastate.edu/ag/newsletters/winegrowers.html>

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