



The Grape Communicator

A Newsletter for the Illinois Grape & Wine Industry

Volume 2, Number 1

January/February 2006

Table of Contents



- Link to: Buying and Selling Grapes Doesn't Have To Be Antagonistic in Welcome (p.2)
- 2005 Vineyard and Winery Survey Publication (p.2)
- Preventing Frost Damage in Grapes (p.3)
- Winter Annual Weeds In Vineyards (p.4)
- Wine Analysis: When & Why (p.5)
- Midwest Grape Production Guide (p.6) & Publication Review (p.7)
- Will Drought Follow Drought in Illinois Vineyards (p.8)
- Upcoming Conferences & Workshops (p.10)

Welcome to 2006

As we look back at 2005, we gain perspective on the things that could have been. As we look forward to the New Year, we can use this gained perspective from our past endeavors to plan for the coming year. Such is true in our personal lives as well as in our vineyards and wineries. To begin this task, we must have a plan. A plan that encompasses not only the seasonal chores of spray

(Continued on page 2)

ILLINOIS GRAPE GROWERS & VINTNERS ASSOCIATION

**ANNUAL CONFERENCE
FEBRUARY 24 – 26, 2006
HILTON HOTEL, SPRINGFIELD,
ILLINOIS**

**See Upcoming Conferences &
Workshops (p 10)**

Welcome to 2006

(continued from page 1)

schedules and canopy management, but growers should also have a clear picture of what will become of the grapes after harvest. Planning months in advance is critical for the grower who has a perishable product to sell and also to the winemaker, who may be looking for grapes to purchase.

An article entitled, "*Buying and Selling Grapes Doesn't Have to be Antagonistic*" written by the Joseph W. Ciatti Company, LLC. discusses the "big picture" of a balanced marketplace and it defines some of the characteristics that are necessary for a good working relationship between grower and winery. The article mentioned above can be viewed at the following website:

<http://winebusiness.com/grapegrowing/webarticle.cfm?dataId=38030>

Definitely a worthwhile article to read and something worth considering.

Denise Cimmarrusti, Editor

**REPORT ON GRAPE AND WINE INDUSTRY SURVEY RELEASED**

William H. Shoemaker, University of Illinois

At the end of December 2005 a new publication, "The Illinois Grape and Wine Industry; Its Current Size, 2004 Production, and Growth", was released by the University of Illinois Department of Natural Resources and Environmental Sciences (NRES). The Principle Investigators, Gene Campbell and Bill Shoemaker, produced two formats, a full 8 ½ x 11, 15 page document and a quad-fold color brochure.

The survey of Illinois vineyards and wineries was initiated in Spring of 2005. Supported by the Illinois Department of Agriculture and the Illinois Grape Growers and Vintners Association (IGGVA), the survey was conducted to determine the status and nature of the industry at that time. Similar surveys had been conducted in the past, the most recent in 2002. But because of the dynamic growth of the industry there was a need to document the changes experienced by the industry.

The survey report presents data representing 4 primary areas; an overview of the industry, the nature of Illinois vineyards, the nature of Illinois wineries and the state of labor in the industry. Growth in the industry is illustrated by the fact that

SURVEY REPORT

(continued from page 2)

between 2002 and 2004 the number of licensed Illinois wineries doubled from 31 to 63. Likewise, Illinois vineyard acreage also grew, from 326 acres in 1999 to a total of 906 in 2004. Indicators in the survey suggest that the rapid growth documented in this survey should be expected to continue.

Vineyard and winery owners or operators who participated in the survey were sent copies of the report and brochure in early January. Copies are available to others by contacting the IGGVA. The report will also be posted on the IGGVA website: www.illinoiswine.com



PREVENTING FROST DAMAGE IN GRAPES

William H Shoemaker, University of Illinois

Across much of Illinois, vineyard operators experienced damaging

frost or freeze in their vineyards in at least one of the last 4 seasons. In a few cases, each of the last 4 seasons led to a damaging frost.

This is one of the risks of growing grapes in Illinois, where we experience a continental climate with the potential for wide fluctuation in temperatures, especially in Spring. Many of the hardy varieties we grow also have a tendency to break bud relatively early, increasing the risk of frost damage.

In the Grape Communicator Volume 1, Issue 2, Denise Cimmarrusti, Vineyard Technician at the St Charles Horticulture Research Center, shared results from a simple study to evaluate the merit of long-spur pruning. The method involves leaving a much longer spur when pruning. This involves the principle that at bud break the bud furthest removed from the cordon is the first to break on the spur. Buds continue breaking over time in succession toward the cordon, leaving the buds near the base to break last.

If you've been looking for a technique to help manage the issue of late Spring frost damage to young shoots and buds, you may want to refer to the article and consider whether this technique holds merit for your vineyard. That issue of the Grape Communicator can still be viewed at the IGGVA website, www.illinoiswine.com

Winter Annual Weeds in Vineyards

*John Masiunas, Department of NRES
University of Illinois*

Winter annual weeds emerge in the late summer through mid-fall. You might not even notice winter annuals during the fall because they will emerge and form a low-growing rosette of leaves that overwinter. After exposure to cold temperatures the winter annual will produce a flowerstalk, flower, produce seed and die. Examples of winter annual weeds include wild mustard, field pennycress, yellow rocket and shepherd's purse (all mustards), along with common and mouseear chickweed, henbit, and volunteer wheat and rye.

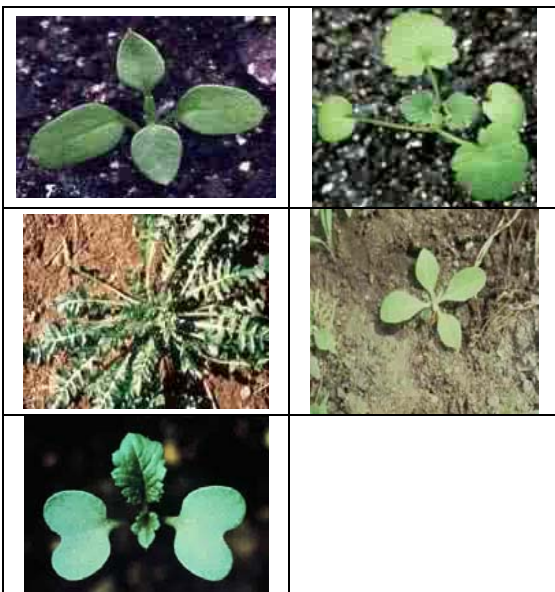


Figure 1. Examples of winter annuals include (left to right, top to bottom) common chickweed, henbit, shepherd's purse, field pennycress, and wild mustard.

Newly emerged winter annuals are not competitive with grape vines but it is easiest to control winter annual weeds when small. In the spring, winter annual weeds will grow rapidly at temperatures cooler than those required for grape growth. Thus, winter annual weeds can be very competitive during grape flowering and early vegetative growth, critical stages in determining the productivity of your orchard.

What can be done to control winter annual weeds? Target your control efforts in the fall when these weeds are small. Scout during the winter to determine how many winter annual weeds escaped control. If necessary, in early spring after winter annual weeds start growing but before grapes grow, kill large patches of winter annuals (use spot treatments only in the spring).

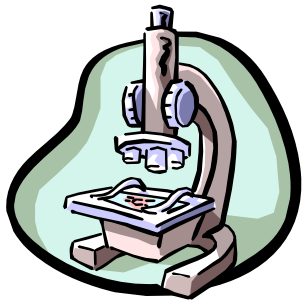
The best winter annual control is vigorously growing turf between your rows of grapes. The turf grass will prevent germination and emergence of winter annuals. Within the rows of grape vines there are three basic approaches to control winter annual weeds. These are: 1) apply a herbicide with soil-residual activity (check herbicide labels or the Midwest Small Fruit Spray Guide for the appropriate preemergence herbicide); 2) apply a contact or systemic herbicide/ flaming to kill emerged weeds; or 3) use a combination of the first two approaches. You can use flaming to kill small winter annual weeds if you

WINTER ANNUAL WEEDS

(continued from page 4)

avoid injuring vines. Flaming works best on very small broadleaf weeds if they are actively growing.

If you want to make a herbicide application to emerged weeds use a glyphosate containing product. These products are now relatively cheap, and will translocate killing roots of any winter annuals and perennial weeds. The winter annual weeds must be actively growing and cooler temperatures will slow glyphosate activity. Never contact grape plants with glyphosate.



Juice & Wine Analysis- When and Why?

*Dr. Barry Gump
California State University, Fresno
Department of Chemistry*

There is a very simple rationale for why we conduct lab analysis in the production of grapes and wines, your customers now expect to have available to them a variety of inexpensive, but high quality wines. And what is quality? Quality is a subjective judgment, which

- depends on the degree to which the wine is satisfying and balanced
- depends on how the wine reflects the character of the grape
- depends on how the wine reflects some acceptable value of color, aroma intensity, complexity, subtlety, palate strength, length, balance, and longevity.

The process of winemaking involves a number of concerns for both the wine grower and winemaker. The winegrower is focused on delivering optimum fruit to the winery. He might use a number of Fruit Maturity Gauges in order to do so:

- General fruit condition
- Taste assessment of grape aroma, flavor, and tannin maturity (reds)
- Assessment of varietal aroma and aroma intensity
- Lab Analyses -- soluble solids, sugar per berry, titratable acidity, tartaric/malic ratio, and pH
- Berry softness
- Ability to ripen further

The winemaker is going to wish to assess the quality of fruit – pre-harvest, as well as pre-fermentation, and then conduct additional assessments during fermentation,

Juice & Wine Analysis- When and Why?

(continued from page 5)

storage, pre-bottling, and post-bottling. For the winemaker, quality primarily depends on grape characteristics, but the winemaker can also put his or her mark on basic grape quality and produce a well-balanced, integrated product. Traditionally the winemaker depended primarily on his/her palate and ran relatively few laboratory analyses. Today there are a number of simple analysis procedures that might provide the winemaker with some component values that assist him/her in making better wine.

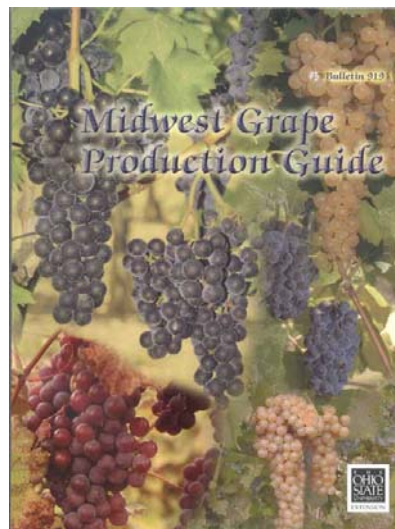
Some of the basic analyses that might be conducted at various stages of production are:

- Pre-fermentation
 - Soluble solids
 - pH and Titratable acidity
 - Nitrogen
- During fermentation/and at end of primary fermentation
 - Brix
 - Volatile acidity
 - Malolactic fermentation
 - Ethanol
- Post-fermentation/storage
 - Ethanol
 - Residual Sugar
 - Sulfur dioxide
 - Volatile acidity
 - Heat stability
 - Cold Stability

There are many different methods for accomplishing the above analyses and others that some in the industry like to do (phenolics and phenolics profiles, color and spectral analysis, sorbic acid, etc.). Should there be any follow-up articles I would be pleased to respond to specific questions regarding a method or methods. Let the newsletter know your question or e-mail me at baryg@csufresno.edu (good idea to request confirmation of receipt – otherwise might get deleted as Spam!).

Resources & New Publications

Elizabeth Wahle, University of Illinois



The Midwest Grape Production Guide is now available, and for many grape growers, this guide will be an invaluable addition to their reference

Resources & New Publications

(Continued from page 6)

library. Put together primarily by specialists from Ohio Sate University and Purdue University, this full-color guide covers several subjects, including site selection, cultivar selection, grapevine propagation, vineyard establishment, crop control and canopy management, multiple pests and their control, soil management, fertility, and harvesting and marketing. Included in this guide is a fold-out section containing diagrams depicting the growth and development of grapevines under various pruning and training systems from years one through five.

The costs of the guide is \$15.00, and will be available for sale at the 2006 Illinois Grape Growers & Vintners Conference, held February 24 - 26th at the Hilton Hotel in Springfield, Illinois. For those wishing a copy prior to the conference, send a check (payable to University of Illinois) for \$15.00 to:

Elizabeth Wahle
Edwardsville Extension Center
200 University Park Drive, Suite 280
Edwardsville, IL 62025-3649

Please include the name and mailing address to which the guide should be sent.



Publication Review

Dr. Brad Taylor, SIU

This newly released bulletin, *Midwest Grape Production Guide*, is a "must have" for all Midwestern Grape Growers! It covers topics ranging from the grapevine itself to all aspects of vineyard management. Its 155 pages are logically arranged in order of time and importance in 18 sections. The authors have produced a very practical guide to the management of the critical issues of viticulture with a very clear and simple presentation of the issues, for example "... a bright , uniformly yellowish-brown subsoil indicates good internal drainage. Poorly drained soils are characterized by greater mottling or ...uniform dark gray color. ...internal water drainage is extremely important, especially for the more cold-tender French hybrid or vinifera grapes."

All the steps of getting a vineyard started; site selection and preparation; variety selection, planting, trellis construction, vine training pruning, are comprehensively and efficiently covered with necessary detail greatly aided with up-to-date charts and fantastic photographs. The more than 100 color photos are one of the greatest strengths of this book. They clearly depict critical diseases, insect pests as well as abiotic injuries such as herbicides and winter injury and even key mineral nutrient deficiencies. But this bulletin goes beyond helping diagnose the

PUBLICATION REVIEW

(continued from page 7)

problems by providing clear, practical prescriptions for how to manage it. The pruning and training diagrams of earlier editions have been expanded to show proper development of the five most useful training systems in the first five years.

The bulletin even touches on marketing, although its coverage is way too brief for me, but adequate coverage of managing harvest is done. Another plus is the list of additional sources of information presented in honed-down lists of critical publications and extension service publications offices.

In conclusion: A must have publication for reading on frosty nights!

WILL DROUGHT FOLLOW DROUGHT IN ILLINOIS VINEYARDS?

William H. Shoemaker, University of Illinois

Grape growers over a large portion of Illinois faced a serious challenge producing their crop in 2005 as a very hot and dry season developed. Many vineyards through central and northern Illinois experienced low rainfall through the Spring, then saw very little rain through the rest of the growing season. While the crop coming from some of those vineyards may have been low, it was not a disastrous season. In fact,

fruit from some of these vineyards was concentrated, leading to excellent wine potential from some of those grapes.

But as we face a new season, what is the likelihood of experiencing a similar drought? No one can adequately predict weather conditions 3-6 months from now for planning vineyard management. But there are tools for evaluating the current situation and preparing based on the implications of those evaluations. One such tool that can help growers evaluate the potential for drought in their vineyards is the soil moisture measurement program conducted by the Illinois State Water Survey (ISWS). The ISWS has electronic weather stations in place across the state, which are used to take frequent readings of numerous environmental conditions. The resulting measurements can be used then to inform the citizens of the state about climatological issues. They use newsletters, press releases and other publications to inform the public. They also have an extensive website at www.sws.uiuc.edu which presents many of their programs online.

One publication they provide which addresses soil moisture is their biweekly Soil Moisture Survey report. Moisture measurements at various soil levels are taken from 17 locations around the state at several depths for each site. The report provides the results of these measurements in table form and with graphics depicting the state and the range of soil moisture geographically. Measurements are taken for the 0-6"

WILL DROUGHT FOLLOW...

(Continued from page 8)

level, 6-20" level, 20-40" level and 40-72" level. These reports can't be directly translated to a specific vineyard site but can keep growers abreast of soil moisture developments regionally.

As the grape growing season finished last Fall, a concern expressed by many growers was the lack of moisture going into winter and the Soil Moisture Survey gave growers good reason for concern from Mt Vernon north. Soil moisture through the soil profile was below normal. This was of immediate concern for overwintering plants, which continue to use moisture through dormancy but at a much reduced level. But with modest precipitation through Winter, the plants could survive and enter Spring in good condition.

Of greater concern was the need for recharging soil moisture prior to the next growing season. Rainfall through the end of 2005 was generally average, but in some cases soil freezing may have led to runoff rather than recharging subsoil moisture. Unfortunately, the ISWS Soil Moisture Survey for January 5, 2006 shows most reporting stations in Illinois having a declining soil moisture status from the December 1 report. Few exceptions can be found.

Where does that leave us? The graphics in the report indicate that

the southern grape growing region generally has good to high moisture throughout the soil profile. In fact a small area around Benton seems to have excessive soil moisture, particularly in the lower soil profile. Much of the rest of the state is below normal for soil moisture throughout the soil profile. Fair rainfall through the Winter and minimal usage by vegetation means the upper soil profile, 0-20", is approaching normal in some places. But the 20-72" deep soil moisture profile is of particular concern. A line from Mt. Vernon to Rockford is the center for dry subsoil with some relief as you go east or west from there. In that zone the 20-72" soil profile is between 10-50% of normal soil moisture.

While this report leaves unanswered the question of how much recharge to expect between now and the beginning of the growing season, it alerts growers to the potential for entering the growing season with a soil moisture deficit. It may give growers reason to consider close observation of the situation in their own vineyard and evaluating the potential for soil moisture problems in the coming season. Growers may find help in their local USDA Natural Resources Conservation Service office for making these evaluations. The soil type, lay of the property and local rainfall events could impact the vineyard soil moisture situation. We still have 2 months before active growth begins in the vineyards. Rainfall within the last two weeks

WILL DROUGHT FOLLOW...*(continued from page 9)*

and lack of soil frost mean some recharging could have already taken place. But the coming weeks will have a significant impact on the potential for drought to follow drought in Illinois' vineyards in 2006.



Photo from: IGGVA Conference 2005

UPCOMING CONFERENCES & WORKSHOPS

FEBRUARY 24 – 26, 2006

ILLINOIS GRAPE GROWERS & VINTNERS ASSOCIATION ANNUAL CONFERENCE

HILTON HOTEL, SPRINGFIELD, ILLINOIS

You are cordially invited to attend the 2006 Annual IGGVA Conference. This year's conference will feature an impressive array of speakers on enology, viticulture and marketing. Additionally we will have an expanded vendor presence, a wine reception, and a five-course banquet dinner paired with wine, our annual auction, regional and state IGGVA membership meetings. Following is this years conference agenda.

For additional information, please visit the IGGVA website at:

www.illinoiswine.com

FRIDAY FEBRUARY 24, 2006 –

AMBASSADOR ROOM

2:00 PM Illinois Department of Agriculture Director Chuck Hartke Tourism Director Jan Kostner will open the Conference in the Ambassador Room, which is located in the lower level of the Hilton.

2:00 – 4:30 PM – Direct Shipping – Bill Nelson - Wine America

4:30 – 6:30 PM – Enology Session - Chardone! Wine Production

6:30 PM – A Broadway Deli will be available in the Illinois Room, located on the Mezzanine.

7:30 – 9:30 PM – Viticulture Session - The session will cover Innovations in the Vineyard and Problems Faced in 2005.

SATURDAY FEBRUARY 25, 2006

7:00 AM - Continental Breakfast with Vendors – Prairie Room – Located on the Mezzanine.

VITICULTURE SESSION – PLAZA III

8:00 AM – Welcome – President Jim Nickell

IGGVA CONFERENCE

(continued from page 10)

8:05 – 8:20 AM - Demonstration/Research Program – SIUC Dr. Brad Taylor

8:20 – 8:40 AM– Use of Cover Crops for Improved Vineyard Management – B.G. Young

8:40 – 9:00 AM– Impact of Viruses and Plant Pathogenic Nematodes on Illinois Grape Production – S.A. Walters

9:00 – 9:15 AM - Training System Effect on Yield and Fruit Composition of Traminette – Dr. Brad Taylor

9:15 – 9:27 AM– Consumer Acceptance of Locally Grown Table Grapes – Sean Lynch

SATURDAY FEBRUARY 25, 2006 (cont)

VITICULTURE SESSION – CONFERENCE CENTER II (This session will run concurrently with the Enology Session)

1:00 – 4:00 PM – Session for New and Prospective Grape Growers. This session would cover the economics of establishing a vineyard and be presented by Alan Dillard and the Extension Specialists Elizabeth Wahle and Bill Shoemaker.

ENOLOGY SESSION – PLAZA III

1:00 – 2:00 – How the Use of Oak Effects Wine Body, Flavor and Aromas –Jeff McCord, Sta Vin

2:00 – 3:00 – Nutrients, Enzymes and Fermentation Tannins - Marco Bertaccini, American Tartaric

BREAK WITH THE VENDORS

3:30 – 4:45 Filtration Media and the Why's & How's of Bubble Point Testing– Doug Popp, Owner Media Separations

9:27 – 9:47 AM– Report on Research at St. Charles Research Vineyard – Bill Shoemaker.

BREAK WITH VENDORS

10:15 – 11:05 AM – Crown Gall – Laszlo Kovacs – Associate Research Professor, Missouri State University, Mountain Grove Missouri.

11:05 – 12:00 – Phylloxera – Jeff Grannett, Professor of Entomology, University of California, Davis.

12:00 – 12:15 – Jeff Wheeler – Summary & Tasting of Three New White Wine Varieties – NY 76, NY 62 and Viognier

LUNCH – ILLINOIS ROOM

NOTE: The Marketing Session and the Viticulture & Enology Sessions will run concurrently.

SATURDAY FEBRUARY 25, 2006 MARKETING SESSION – AMBASSADOR ROOM

8:00 – 10:00 AM – Tax & Trade Bureau – Rhonda Merrill will discuss Forms, AVA's, Advertising, Labels and Formulas.

BREAK WITH VENDORS

10:30 – 11:15 AM – Illinois Liquor Control Commission – Bill Donaghue – Chief Legal Counsel; Ted Penesis - Industry Education Manager; Dusanka Marijan – Licensing Administrator.

11:15 – 12:00 – Illinois Department of Revenue

LUNCH – ILLINOIS ROOM

IGGVA CONFERENCE

(continued from page 11)

1:00 – 2:00 PM – Ross Ament – Agri-Tourism

2:00 – 2:30 PM – Bob McElwee – Marketing
Rockome Garden.

BREAK WITH VENDORS

3:00 – 3:30 PM - Richard Naylor – Simple
Marketing Tools.

3:30 – 4:00 PM – Patti Held – Wine Trails

4:00 – 4:30 PM – Cindi Fleischli – Signage
Program

4:30 – 5:00 PM – Cindi Fleischli – The
Moment of Truth Hospitality.

WINE RECEPTION, BANQUET, AUCTION



Photo from 2005 Banquet/Auction

6:00 – 7:00 PM - Wine Reception.

7:00 – 10:00 PM – The five-course banquet
(with paired wine) will be held in the Ballroom.
The awards for 2005 will be presented followed
by the auction



Photo from 2005 Banquet/Auction

SUNDAY FEBRUARY 26, 2006

ILLINOIS ROOM

9:00 – 10:00 AM: Regional Meetings –
Election of Region Chairs & Director to the
IGGVA Board of Directors.

10:00 AM - Noon - IGGVA Annual
Membership Meeting

President's Message; Business, Election of
Officers & Directors



FROM THE EDITOR:



If there is a topic, which you feel is
important and would like to see
covered, please send your ideas to
cimmarru@uiuc.edu

Your ideas are appreciated and
always valued.

This newsletter welcomes new contributors. If you would like to make a newsletter contribution, please contact Denise Cimmarrusti at cimmarru@uiuc.edu or Bill Shoemaker at wshoemak@inil.com .

If you are a vineyard or winery and would like to be included in the business profile, please contact Denise Cimmarrusti before submitting material.



The Grape Communicator is an electronic newsletter, free of charge, for those interested in the Illinois Grape and Wine Industry.

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*We hope you have enjoyed reading this edition
As always, we welcome your feedback*