

Wine-Grower-News #42 *May 9, 2008*

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

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Flyer attached - 6-6-08 IWGA Strategic Planning Session at Two Saints Winery

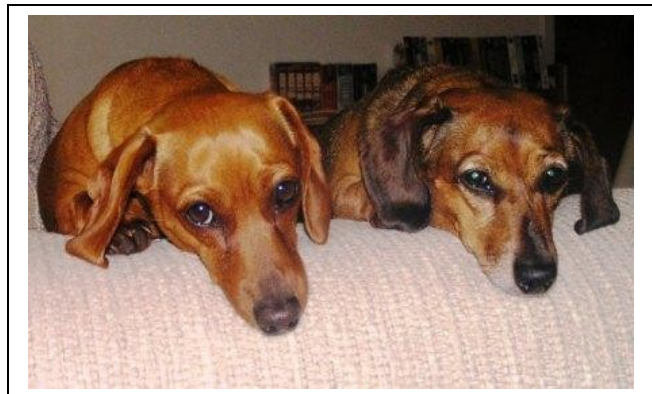
Post & View Classified Ads here: <http://iowawinegrowers.org>

Meet the Wine Grower News Editorial Board

Millie (L) and Isabelle (R)

Our editorial board believes in very close supervision. They watch my every move as I type up *Wine Grower News* while working in my home office. Not a word or movement ever gets by them.

Proofreading is their main task. Blame them when you find spelling, grammar or punctuation mistakes in this newsletter!



Saturday, 5-17-08 Vineyard Pest Mgt-Spray Workshop, Elkhorn, IA

When: 8:30 AM - Noon, Saturday, 5-17-08

Where: Danish Countryside Vines & Wines (owned by members: Allan & Carol Petersen), 2 ½ Miles East of Elkhorn, IA on F58; ph: 712-764-2991,
<http://www.danishcountrysidevinesandwines.com/>

Sponsor: Western Iowa Grape Growers Association: <http://www.westerniowagrapegrowers.org/>

Agenda: 8:30 AM Registration (coffee & donuts)

9:00 AM Intro, Welcome & Comments

9:30 Mike White, iSU Extension

- Developing a Weed Control Program
- Developing a Disease Control Program
- Record Keeping

10:45 AM Break

11:00 AM Wayne Peterson, Midwest Grower Supply: <http://midwestgrowersupply.com/>

- Air Blast Sprayer operation and selection (Wayne will bring up a sprayer)
- Sprayer calibration handouts
- Common Pesticides being used in vineyards

Noon - Adjourn

Cost: \$10 each for members, \$15 for non-members, pay at the door.

Pre-Registration and/or Questions: Please contact Charlie Caldwell prior to workshop at 712-566-2681 or Caldhome@aol.com

Note: Paul & Dave Klodd will have be attending with displays of their NetterGetter:

<http://www.nettergetter.com/> and Nuke-a-Weed : <http://www.nukeaweed.com/>

Pictures from the Week

Grape Flea Beetle

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 when 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 second generation is not considered an economic pest.



Grape Flea Beetle picture taken on wild grapes, *Vitis riparia* outside of my ISU Extension office in Indianola. 5-7-08

Additional Grape Flea Beetle info:

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>



Jason Smith of Hardi Sprayers located in Davenport talks about airblast sprayer maintenance while displaying a new 400 gallon airblast sprayer that was being delivered to vineyard near Carlisle, IA. The sprayer was being displayed at an ISU vineyard pest workshop held at Donnellson, Iowa Tuesday, May 6th. You can view Hardi's product line here: <http://www.hardi-us.com/>

4" shoot with 3 leaves of wild grape, *Vitis riparia* (R)
 Not many people realize that unlike most of our other grapes, *Vitis riparia* is dioecious, meaning its male and female reproductive organs are carried on separate individual plants of the same species. When a plant species is dioecious, at least one male plant must be present in a group for the fruit-bearing female plants to be pollinated. By contrast, "hermaphroditic" plants are plants having both reproductive organs present in their flowers. All of the other winegrapes we are planting in Iowa are hermaphroditic. St. Pepin is an exception being pistillate only, meaning it only has the female flower parts present. St. Pepin needs to be pollinated by other grapes.



4" shoot – 3 leaf wild grape
 5-7-08 Indianola, Iowa

Brown Stink Bug

The Brown Stink bug, *Euschistus servus* is one of three common stink bugs found in Iowa. The three are the Brown, Green and Spined Soldier Beetle. Stink bugs overwinter as adults and begin to feed on the foliage of many species of plants early in the season.

The brown stink bug (R) is an occasional economic pest of corn and soybeans but very seldom of grapes. The brown stink bug can stick its piercing mouthparts into a newly emerging grape leaf or bud to feed. Later in the season they can also pierce ripening berries and create a puncture hole where they suck out the juices. Very seldom if at all would stink bugs be an economic pest of grapes in Iowa. Adult stink bugs will overwinter on wild plants in field edges. Feeding in the early spring is followed by the female laying eggs on the backside of leaves. There are typically two generations per year.



Brown Stink Bug feeding on swelling grape buds. Courtesy of Diane Forristall, Silver Creek Farms, Macedonia, Iowa.

Additional Stink Bug Info:

1. Three Kinds of Stink Bugs, ISU ICM newsletter 9-17-2001
<http://www.ipm.iastate.edu/ipm/icm/2001/9-17-2001/stinkbugs.html>
2. Green Stink Bugs on Grapes, OK State Univ.:
<http://entopl.okstate.edu/ddd/insects/greenstinkbugs.htm>
3. Stinkbugs of Kentucky:
<http://www.uky.edu/Ag/CritterFiles/casefile/insects/bugs/stinkbugs/stinkbugs.htm#brown>



(L-R) Dr. Gerald Miller, Associate Dean of Ag and Dr. Murli Dharmadhikari, ISU Extension Enologist proudly show off the new HPLC machine to Dave W.Cushman, President of the Iowa Wine Growers Association/Park Farm Winery and John Guinan IWGA board member/Santa Maria Winery. High-performance liquid chromatography (HPLC) is a form of column chromatography used frequently in biochemistry and analytical chemistry to separate, identify, and quantify compounds. This equipment will be used to study the organic acids and sugar profile of Iowa grown grapes and wines. The HPLC machine is located within the wine lab of the Midwest Grape & Wine Industry Institute on campus.

Iowa Wine and Beer Promotion Board Now Accepting Grant Applications

The Iowa Wine and Beer Promotion Board is now accepting grant applications in support of events involving Iowa native wineries and breweries. Events involving wine and beer distributors will be disqualified. \$25,000 has been allocated for FY 2009 (7-1-08 to 6-30-09). There are two levels of grant funding: Level 1 provides up to \$1,500 for a group of 3-9 native Iowa wineries and/or breweries. Level 2 provides up to \$3,000 for a group of 10 or more native wineries and/or breweries. The grants will be paid out on a 50/50 matching basis and can be used to pay for media advertising,

promotion pieces or advertising specialty items. Grant applications must be turned in a minimum of 2 months prior to the event. Applicants will be notified if their grant was funded or denied within 30 days of submission. Grant applications will soon be posted online here:

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

For more information/questions contact: LuAnn Reinders at the Iowa Tourism Office, 515.242.4732 or luann.reinders@iowalifechanging.com

The Iowa Wine & Beer Promotion Board was established by the Iowa Legislature during the 1986 session. The Board consists of three members. One member represents the Iowa Department of Economic Development (IDED), one member represents the Iowa wine makers, and one member represents the Iowa beer makers. The Board shall advise the IDED on the best means to promote native wine and beer made in Iowa. The account is funded by a tax (\$5.89 per 31 gallons of beer and \$1.75 per gallon of wine) on native wholesale Iowa wine and beer.

The Nomenclature of Spray Adjuvants – Clear as Mud

There are all types of spray adjuvants that can be used in the application of pesticides. Sometimes the label will recommend exactly what to use. Often the label is less specific and will just indicate that a spray adjuvant, sticker-spreader, or a non-ionic surfactant be used. Here are some of the most common types of spray adjuvants used in here in the Midwest:

Spreader/Sticker - These are typically 80%+ paraffin based surfactants or organo-silicone based. They are used to break the surface tension of the water so that it does not bead up on the leaf. They also help to stick the pesticide to the leaf surface.

Spreader/Sticker/Penetrant - are sticker/spreaders that also help dissolve the waxy leaf cuticle for better pesticide penetrations. Crop Oil, Crop oil concentrate and methylated seed oils are common spreader/sticker/penetrants.

Non-ionic - is a term used to refer to spray adjuvants that have no cations (+ charge) or anions (- charge) in solution that could combine and deactivate some of the pesticide mix in solution..

Fertilizer Spray Enhancers – are typically made up of liquid 28% nitrogen, liquid ammonium sulfate or ammonium sulfate crystals. The ammonium ions formed in solution tends to soften the water and reduces any pesticide antagonism created from sodium, calcium or magnesium salts that would have been in solution.

Drift Inhibitors – are normally acrylic or silicone polymers that reduce spray drift by increasing the viscosity of the spray solution and increasing the droplet size.

Compatibility Agents are soap type products that help to dissolve products back into solution. “Unite” is one of many trade names. “Dawn” dishwashing detergent” is a common product used may commercial pesticide applicators to get pesticide mixes back into solution.

Anti-Foaming Agents are often liquid silicone concentrates that are used to eliminate foam buildup in the tank.

Acidifiers – consist of products that lower the pH of the solution to help stabilize the pesticide active ingredient.

Acre ≠ Acre

An acre (43,560 sq. ft.) does not always equal an acre when spraying a vineyard. It all depends on what you are spraying and/or canopy size of the vineyard. Let us start out with herbicides. Herbicides always have a application rate range per broadcast acre listed on the label. But we normally just apply herbicides in a 2-3 ft. wide band under the trellis wire and are trellis rows are often spaced 10 ft. apart. In this case a herbicide labeled for 1 quart per broadcast acre would cover $10 \text{ ft.} / 2 \text{ ft.} = 5 \text{ acres}$ or $10 \text{ ft.} / 3 \text{ ft.} = 3.3 \text{ acres}$ of an entire vineyard.

Fungicides and insecticides labeled rates are also labeled per broadcast acre, but once again the amount of product that should be applied will vary by the size and density of the canopy that needs to be covered within that broadcast acre. We use the concept of “Tree Row Volume” (TRV) when spraying vineyards and orchards. This concept is described below:

Tree Row Volume (TRV) Spraying: The principle target in spraying may be the foliage, canes, blossoms, fruit or wood surfaces. The TRV method of spraying was developed in the orchard industry. With the TRV method, the volume of dilute spray needed per acre can be easily calculated based on plant size and density. Between row spacing, maximum plant height and canopy width must be determined. Here is how you calculate TRV gallons per acre.

Step 1: $\frac{43,560 \text{ sq. ft./acre}}{\text{Row Width}} = \text{feet of row/acre}$

Step 2: $(\text{step 1}) \times \text{plant ht. in ft.} \times \text{canopy width in ft.} = \text{cubic feet of TRV/acre}$

Step 3: Select a density factor:

0.70 / 1000 cu. ft. = extremely open canopy

0.80 / 1000 cu. ft. = well pruned canopy, moderate vigor plant with light penetration

0.90 / 1000 cu. ft. = minimally pruned, vigorous plant growth with light penetration

1.00 / 1000 cu. ft. = unpruned plants with dense foliage.

Example of starting out with a labeled rate of 100 gallons/ broadcast acre:

$$100 \text{ gal/ac} \times \frac{43,560 \text{ sq. ft./ac}}{10 \text{ ft. row}} \times \frac{5' \text{ row ht.}}{1000 \text{ cu. ft.}} \times \frac{3' \text{ wide canopy}}{1000 \text{ cu. ft.}} \times \frac{0.80 \text{ factor}}{1 \text{X Rate}} = 52 \text{ gallons}$$

Further information about Tree Row Volume spraying can be found in the 2008 Midwest Commercial Small Fruit and Grape Spray Guide:

http://www.hort.purdue.edu/hort/ext/sfg/sfg_sprayguide.html

Lower Pesticide Application Rates via Low Volume Spray Solutions

Dilute Sprays: Typically, 100 gallons per acre early in the season prior to bloom and 200 gallons per acre after bloom are considered 1X rates. The intent is adequate coverage to the point of runoff.

Low Volume Sprays: refer to the use of less water per acre. As the water volume decreases, the concentration of pesticide increases. Example: a 50 gal./ac. prebloom spray would be considered a 2X concentration. A 50 gal./ac. post bloom spray would be considered a 4X concentration. Low volume sprays must be applied with air assisted sprayers which use a high velocity air stream. Most conventional air blast sprayers can be used to spray up to a 6X concentration. Sprayers specifically designed for **ultra low volume** can be used to spray up to 10X concentrations.

Low volume sprays require excellent calibration, calm conditions and good canopy management to ensure spray penetration. University studies and professional expertise has often shown that low volume sprays of 3x or greater concentrations enable pesticide use rates to be lowered by 20-25%. Note that the application of lowered than labeled rates is completely legal, but will be void of written or implied warranties of the pesticide formulator.

Further information about Low Volume sprays can be found in the 2008 Midwest Commercial Small Fruit and Grape Spray Guide: http://www.hort.purdue.edu/hort/ext/sfg/sfg_sprayguide.html

Quote of the Week

“When I go into a vineyard and find a Black Rot ‘hot spot’, the first thing I do is look for last year’s mummies still hanging in the trellis near the current zone of activity. I almost always find them.”

--- Dr. Wayne Wilcox Plant Pathologist, Cornell University, page 9, Grape Disease Control- 2008:
http://www.fruit.cornell.edu/pdfs/Wilcox_%202008_Grape%20Disease_Man.pdf

Neeto-Keeno WWW Stuff

1. Cannon River Winery, Cannon Falls, MN Video: <http://www.cannonriverwinery.com/index.php>
2. Free Wine Database software: <http://www.softspecialist.com/The-Winery-1148/The-Winery.htm>

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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IOWA WINE GROWERS ASSOCIATION

IWGA 2008 Strategic Planning Session

Two Saints Winery, 15010 20th Avenue, St Charles IA

Friday June 6, 2008

10:00 am - 5:00 pm

RSVP Required

2008 IWGA Strategic Planning Session RSVP

RSVP Deadline is Friday, May 30, 2008

Our check, made payable to the **IWGA**
in the amount of (\$25 per person) \$ _____ is enclosed.

Name(s)

Company

Address

City/State/Zip Code

Telephone Number

Please return this form and your check to: **Iowa Wine Growers Association**

900 Des Moines Street
Des Moines, Iowa 50309
Phone 515-262-8393 Fax 515-262-8960

In 2003 Iowa wine industry stakeholders held a strategic planning workshop and developed a strategic plan for the grape and wine industry in Iowa. Attached is a copy of the summary of the plan developed during this workshop. After five years, many of the goals set in this meeting have come to fruition, but we believe it is prudent to continually update our plan. Therefore, it is time to once again revisit the plan to revise, update and refocus our efforts for our statewide industry. Our 2008 strategic planning workshop will be held at Two Saints Winery on June 6th from 10:00 am thru 5:00 pm and will once again be mediated by David Roederer.

Lunch and refreshments will be included with the attendance fee of \$25 per person. This workshop is open to any **2008 IWGA** member and I strongly encourage anyone who wants to have input in the direction of the Iowa wine industry to attend.

Dave Cushman, IWGA President