Vineyard IPM Scouting Report for week of 6 May 2013
UW-Extension Door County and Peninsular Agricultural Research Station

Generalized Fungicide Spray Program

Many times new grape growers have many questions about disease management. A common question is what and when should I be spraying. This past spring Patty McManus of the Department of Plant Pathology presented a generalized spray program at the Wisconsin Grape Growers Spring Vineyard School. Below is a synopsis of a generalized spray program.

Dormant vines consider applying liquid lime sulfur to reduce anthracnose, Phomopsis and powdery mildew inoculum. If in the previous season, you had problems with anthracnose or Phomopsis the use of lime sulfur will help get the disease under control. Remember that anthracnose and Phomopsis will need to be managed throughout the season with other fungicides regardless if liquid lime sulfur is applied.

1 to 5 inch growth
When shoot growth is at the stage of 1 to 5 inches then foliar fungicides are going to need to be applied to protect the foliage from fungal infections. Typically, many growers will apply mancozeb or captan at this stage of growth. Mancozeb and captan will provide protection from anthracnose and Phomopsis infections. If black rot is a major concern consider using mancozeb instead of captan. Also be aware if using captan, do not apply within 2 weeks if an oil has been applied. Many growers will apply mancozeb at this stage because of the 66 day preharvest interval (PHI).

Throughout the growing season be aware of how your vines are growing - quickly or slowly and keep up to date on upcoming weather patterns. If vines are growing quickly between spray intervals, new vine growth will be unprotected if using protectant type fungicides such as mancozeb and captan. The point is to keep aware of vine growth and scout your vineyard as you are nearing or at the end of a spray interval. You should be looking for potential problems.

6 to 10 inch growth

At 6 to 10 inch shoot growth disease concerns are anthracnose, Phomopsis, black rot, and downy mildew. Mancozeb will protect against these pathogens. If your grape cultivars are susceptible to powdery mildew then consider also applying sulfur or an SI fungicide (Rally/Nova, Elite, Procure, Bayleton, Inspire Super, Revus Top, Quadris Top, or Mettle).

Pre-bloom through 4 weeks post bloom

This is the most important time when fungicides need to be applied to protect the grape crop. If you miss these applications, reduce fungicide rates, or have poor spray coverage during these periods of development then your grape crop may be in jeopardy. If you are considering using mancozeb during this period consider predicting your harvest date. Remember, mancozeb has a 66 day PHI. Potentially consider using mancozeb at immediate pre-bloom and then switching to captan thereafter. It is suggested that you also apply a fungicide to control powdery mildew at this time. Consider using either SI's or strobilurins (Abound, Flint, Sovran, and Pristine). Both the SI's and strobilurins will target the control of powdery mildew and black rot. When you transition from mancozeb to captan, it is very important to include an SI or strobilurin in the tank mix to target black rot. Remember captan will not protect your crop as well as mancozeb against black rot infections. Another fungal pathogen that can be a problem at flowering is botrytis. Botrytis can infect during the end of flowering and then becomes latent in the developing berries until veraison. Botrytis can also infect berries later in the season, but infection late in the season often is dependent on berries that have been injured from hail, birds, or some type of other injury. If boytrytis has been a problem in your vineyard in the past, consider applying a boytrytis specific fungicide at or near bloom. See page 20 of the 2013 Midwest Small Fruit and Grape Spray Guide for recommendations.

Next week I will continue this column through harvest. Remember to read and follow the label.

Development of wine grapes in the grape variety trials at the Peninsular Agricultural Research Station (PARS) Sturgeon Bay, WI and West Madison Agricultural Research Station (WMARS), Madison, WI

Brianna at PARS 5.6.2013

Brianna at WMARS 5.7.2013

2013

Foch at PARS 5.6.2013

Foch at WMARS 5.7.2013

Frontenac at PARS 5.6.2013

Frontenac at WMARS 5.7.2013

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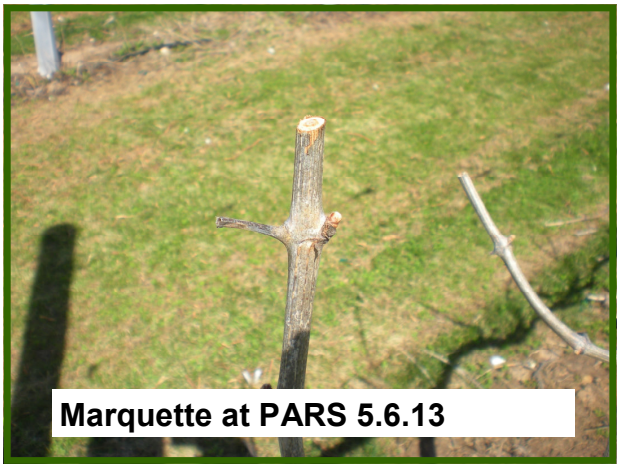
2013

La Crescent at PARS 5.6.13

La Crescent at WMARS 5.7.13

La Crosse at PARS 5.6.13

La Crosse at WMARS 5.7.13



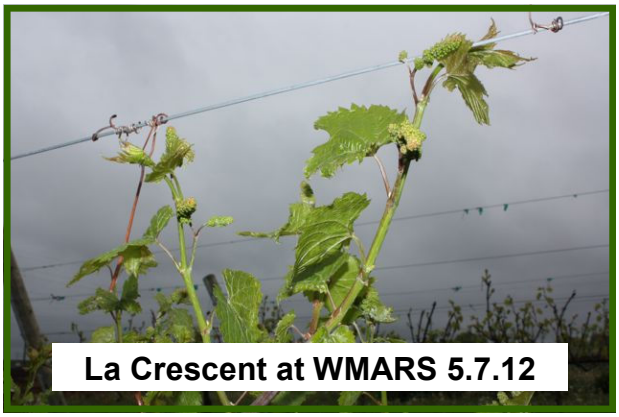
Marquette at PARS 5.6.13

Marquette at WMARS 5.7.13

Development of wine grapes in the grape variety trials at the Peninsular Agricultural Research Station (PARS) Sturgeon Bay, WI and West Madison Agricultural Research Station (WMARS), Madison, WI

2012

La Crescent at PARS 5.7.12



La Crescent at WMARS 5.7.12

La Crosse at PARS 5.7.2012

La Crosse at WMARS 5.7.2012

Marquette at PARS 5.7.2012

Marquette at WMARS 5.7.2012

Degree Day[1] (base 50) Accumulation from April 1 to May 5, 2013 at Peninsular Agricultural Research Station in Sturgeon Bay, WI

Date	2013	2012	5 Year Average[2]
4/1 to 5/5	50	87	97

[1]Modified method.
[2]Average from 2008 to 2012.

Degree Day[1] (base 50) Accumulation from April 1 to May 5, 2013 at West Madison

Date	2013	2012	5 Year Average[2]
4/1 to 5/5	130	190	180

[1]Modified method.
[2]Average from 2008 to 2012.

Accumulated degree days[1] (base 50) for the month of March in Sturgeon Bay and Madison, WI.

Year	Madison WI	Sturgeon Bay WI
	GDD (base 50, ceiling 86)	
2013	1[2]	0
2012	252	106
2011	13	3
2010	72	38
2009	51	12
2008	1	0
2007	90	41
2006	22	7
2005	40	9
2004	49	11

[1]Modified method.
[2]Data from http://www.doa.state.wi.us/degreedays/

Please scout your vineyards on a regularly scheduled basis in an effort to manage problem pests. This report contains information on scouting reports from specific locations and may not reflect pest problems in your vineyard. If you would like more information on IPM in grapes, please contact Dean Volenberg at (920)746-2260 or dean.volenberg@ces.uwex.edu