



North Texas Vineyard News

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For further information or comments, please don't hesitate to contact me.

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What's Inside...

- Early Season Diseases
- Common Pesticide Options
- Davies Grape Day

Early Season Diseases.

Most varieties have budded by now, and are growing shoots. Early season diseases will become a bigger problem if they overwintered in last season's wood or leaf litter. Begin scouting now before rapidly growing canopy hides the symptomatic wood.

Below are some diseases to have on your radar at this time. Preventative sprays are the best way to assure diseases do not become a problem. A preventative spray program should begin at 1-4 inch shoot growth. There are several inexpensive protective fungicides that are labeled for grapes. Choices are discussed under Common Pesticide Options.

Anthracnose overwinters in black, gray sunken cankers. Vines with a history of Anthracnose should be treated during dormancy with Lime Sulfur. Lime sulfur can burn green tissue and is not typically used during the growing season.



Photo by Fran Pontasch

Phomopsis overwinters and spreads during cool wet spring weather. Infected dormant wood has a bleached appearance.



Black Rot overwinters on wood and mummies, where Primary infection typically begins.



Since Black Rot is so prevalent in North Texas, vineyards typically apply fungicides containing

mancozeb (Dithane, Manzeb) to prevent infection. These and other effective protectant fungicides must be applied before leaf symptoms are visible.

Powdery Mildew mostly overwinters in buds. PM infection often goes undetected until it is well established. PM the previous year will increase the importance of early season fungicide applications. Topical fungicides, such as oils and sulfur can be useful to control PM. Abound, Pristine, and Rally are effective if the fungicides have not been overused in previous years. Elite and Quintec are also effective. Sulfur can be tank mixed with Elite, Rally, or Pristine for cross protection of PM.

Powdery Mildew on Cane



Powdery Mildew on Leaves



Downy Mildew spores overwinter on leaf litter. Last fall gave us historical amounts of rainfall. The temperatures and humidity were optimum for DM and many areas were too wet to get sprayers into vineyards.

Downy Mildew on Leaves



A Note on Wood Fungal Pathogens. Penny Adams, Hill Country Viticulture Advisor, has teamed with researchers at UC Davis to investigate Bot canker and other wood damaging fungi in Texas vineyards. Symptoms of Eutypa are similar to Bot canker and other wood damaging fungi and in the end they all lead to lower yields and vine decline. UC Davis has diagnosed many pathogens, but has not found Eutypa in her collections. Symptoms of Eutypa appear in early spring where shoots are stunted with leaves that come out yellow and curl upwards.

Pesticide Spray Options.

Early and continual scouting and insect monitoring are parts of an integrated pest management program. They will help you avoid unnecessary and/or excessive pesticide applications.

From budbreak to pre-bloom, scouting and fungicide spray applications should focus on all green tissue. Applications for Phomopsis, Black Rot, Downy Mildew, & Powdery Mildew control are typically repeated 3-4 times during this phase, depending on the weather and disease pressure. Protective fungicides, such as mancozeb are appropriate and if necessary tank mixed for further protection. Check labels for compatibility before mixing.

The just before bloom application is very important. Systemic fungicides, such as Rally or Pristine can be incorporated immediately before bloom and up until fruit set for improved protection. The first half application of imidacloprid for leafhopper control should be applied near bloom (May 1) with the second half application applied 30 days later (May 31).

From fruitset to veraison, focus on maintaining a healthy rachis for optimum berry formation by targeting DM, PM, and Black Rot. It is also the time to control Grape Berry Moth.

From veraison to harvest, fungicides focus DM, PM and bunch rots, while insecticide should target green June beetles, if necessary.

After harvest, fungicide applications should focus on maintaining a healthy canopy for approaching dormancy, by targeting DM and PM

Common Fungicides NOT at risk of pathogen developing a resistance to it:

Mancozeb Broad spectrum protectant fungicide effective for Phomopsis, Black Rot, Downy Mildew control.

Captan Effective for Phomopsis and summer bunch rot control. Can slow fermentation of harvested grapes if sprayed within 30 days of harvest.

Phosphorus Acid Effective alternative for mid and late season Downy Mildew control. Can burn green tissue or flowers if applied close to bloom or at concentrations above 0.5% active ingredient.

Oils, Wettable Sulfur For Powdery Mildew, usually tank mixed with other fungicides for increased efficacy. Sulfur should not be sprayed when temperatures approach 85F. High temperatures can cause toxicity to green tissues.

Common Fungicides on the Fungicide Resistance Action Committee's (FRAC) List.

Because of their mode of action, they have the risk of the target pathogen developing a resistance to the active ingredient.

Abound (Group 11) Preventative systemic fungicide with curative properties. High probability of pathogen developing resistance – limit to 2 applications per season. Effective for Black Rot, Downy Mildew, and Powdery Mildew control.

Rally (Group 3) Protectant and curative fungicide. High probability of pathogen developing resistance – Limit to 2 applications per season. Effective for black rot and powdery mildew control.

Pristine (Group 7 & Group 11) Residual, rainfast fungicide that protects against infection and offers some backward protections that is not yet visible. Effective for Black Rot, Downy Mildew, Powdery Mildew control. Possibility of pathogen developing resistance – Limit to 2 applications per season.

Ridomil (Group 4) Systemic fungicide for downy mildew. Available with mancozeb (Ridomil Gold MZ) for wide range of diseases.

Common Insecticides.

Imidacloprid Neonicotinoid insecticide effective against leafhoppers/Sharpshooters (vectors of Pierce's Disease) and mealy bugs. Provado was recently labeled for control of green June beetle.

Intrepid 2F. Specific to lepidopterous larvae (caterpillars of moths & butterflies). Targets grape berry moth larvae without harming other insect orders. Some residual effect.

Sevin XLR (or Sevin) Effective contact broad spectrum insecticide, such as leafhoppers, green June beetle and grape berry moth. Sevin XLR some residual effect, Sevin has no residual effects.

Common Herbicides.

Glyphosate Post-emergence, systemic, broad spectrum herbicide. Apply to actively growing weeds in established plantings. Avoid spraying

on highest temperature days as it becomes very volatile and can damage canopy.

Glufosinate Post-emergent, broad spectrum contact herbicide. May be safer to use than glyphosate in young vineyards when green tissue is present.

There are always exceptions and additional pests to consider. This information does not represent all pest problems or suggested pesticides that are labeled for grapes in Texas.

Check your Fungicide Efficacy Table 2009 for effective fungicides and their rates. If you need a copy, let me know.

Pesticide training, training materials, exam dates & times are available through your Texas AgriLife Extension County office.

Notice: This publication may contain pesticide recommendations. Changes in pesticide regulation occur constantly and human errors are possible. Read the label before applying any pesticide. The Texas A&M Univ. System and its employees assume no responsibility for the effectiveness or results of any chemical pesticide usage. No endorsements of products are made or implied. Extension programs serve people of all ages regardless of socioeconomic level, race, color, sex religion, disability or national origin. The Texas A&M University System, U.S. Dept. of Agriculture, and the County Commissioners Courts of Texas Cooperating.



North Texas Field Day

Davies Grape Day

May 14

Oak Creek Vineyard

528 Wagner Road

Saint Jo, Montague County

<http://www.archewines.com>

Schedule begins at 8:30

Morning - Vineyard Field Talks

Lunch at Ancient Ovens

Afternoon – Winery Panel Discussion

Topics include:

Sprayer calibration - Howard's

2- volute Swihart

Pesticide basics

Berry sampling

Disease scouting for crop quality

Managing canopy for crop quality

Winery Panel – Grapes to wine

Q & A with NTX winemakers.