Missouri / Arkansas Vineyard and Pest Management News

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Vineyard Management:
We are in the shoot thinning period. Shoots originating from noncount positions such as basal or latent buds, unless needed for spur renewal should be removed by the time they reach 4-6 inches in length. At this stage of development they can easily be removed by rubbing off by hand. Where more than one shoot develops from a count node position, retain the primary shoot and remove the others. This is an important method of canopy density management and in hybrids with fruitful secondary shoots is an important method of crop load management.
Nitrogen fertilization should not be done until at least 4 weeks after budburst. Grapevine roots do not begin active nutrient uptake from the soil until that time period. Grapevine root activity increases from shortly before bloom until after fruit set and two-thirds of nitrogen uptake takes place between just before bloom and veraison.

Anthracnose (left), **Black rot** (center) and **Downy mildew** (Photos: A. Allen)

Alerts:

Spray Guide: Many of you have a copy of the "***2010 Midwest Small Fruit and Grape Spray Guide***". If not contact Andy Allen at ICCVE or go online at: http://www.ag.purdue.edu/hla/Hort/Documents/ID-169-2010.pdf

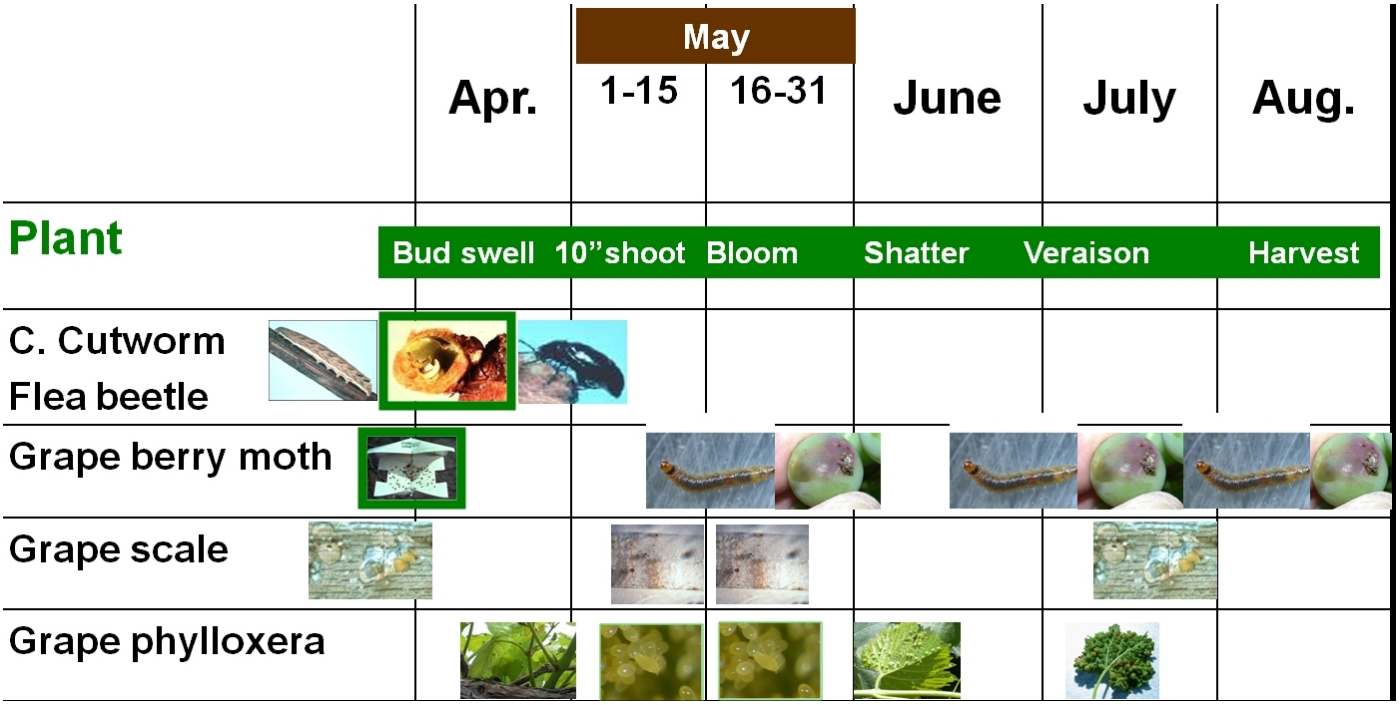
Diseases:

Grape Phomopsis: Potential for phomopsis (Ph) infection starts by 1 or 2 inches of shoot growth in April**.** Begin applying protective fungicides at 1 inch shoot growth.

Grape black rot: Black rot (BR) affects leaves, shoots, and fruit beginning shortly after budburst. Symptoms in early spring may not appear until two weeks after infection has taken place. Begin protecting vines when shoot growth is 3-5 inches long if weather is warm (>50° F) and wet.

Powdery mildew: Growers of *Vitis vinifera* and other powdery mildew (PM)-susceptible cultivars should begin protecting against PM when shoots are 3-5 inches long if it was a problem last season. Protection on less susceptible cultivars can be delayed, **BUT** continue to scout for signs of PM infection if conditions are wet or humid and warm.

Downy mildew: Symptoms of early infections of downy mildew (DM) have already been seen in Ste. Genevieve and in New Franklin areas of Missouri.



Grape insect phenology (Donn Johnson; U. of Arkansas)

<u>Insects</u>:

Grape berry moth: This is called an "edge effect" pest. **Monitor:** After the biofix date (first pheromone trap catch in early April), begin accumulating DD at base of 47.1° F. In perimeter vines by adjacent woodlot, check 300 clusters for berry damage (hole in berry with purple discoloration (see insect phenology above) from 400 to 700 DD. **<u>Control</u>:** Larvae are predicted to hatch from 400 to 700 DD after biofix date. During the hatch period, spray insecticide to perimeter vines for this first generation.

GBM	Purdy, MO		Hindsville, AR	
Date	GBM	DD	GBM	DD
26 Mar.	Set	out		
12-13 Apr.	1	0	1	0
20 Apr.		89		119

Grape phylloxera (see insect phenology above)**:** One to many stem mother galls (first generation from overwintered eggs) have been observed on the first to third expanded leaves of Chardonel in the Rocheport area. The growth is only about 4-6" and some of the leaves have only one gall while others are loaded with galls. **<u>Monitor:</u>** by 1 May make weekly inspections of inside of leaf galls for presence of yellow crawlers. **<u>Control</u>**: Wait until crawlers emerge in May and apply spray to infested vines.

Grape Scale (see insect phenology above)**: <u>Monitor:</u>** In early May, begin weekly inspections of scale-infested canes for yellows crawlers under the grape scale cover. **<u>Control</u>**: Wait until crawlers emerge in May and apply insecticide to infested vines.

Upcoming Events Calendar

May 12 – Exploring Winegrape Production Workshop. Velma Houts Fair Building, 201 E. Hwy 136, Rock Port, MO. 6:00-9:00 P.M. For more information or to register, call 660-744-6231.

June 8 - Missouri Grape Growers Association Viticulture Field Day. Location: Hermannhof Winery and vineyards, Hermann, MO. Invited speaker: Dr. Terry Bates of Cornell University on "Site Specific Viticulture". For program information and registration form, see our website at http://iccve.missouri.edu/.

June 14-18 – MO/AR Vineyard Tailgate Meetings. Schedule forthcoming. Invited speaker: Dr. Turner Sutton, Dept. of Plant Pathology, North Carolina State University. Meetings are free to all.

List of pest management suppliers online:
Click Suppliers; or **type in** http://comp.uark.edu/~dtjohnso/PM Suppliers.html

Arkansas Guides giving recommended fruit insect and plant disease control products (available online):
1) "Arkansas Plant Disease Control Products Guide – 2010"
   (**click** MP154; or **type in** http://www.uaex.edu/Other_Areas/publications/PDF/MP154/MP-154.asp)
2) "2010 Arkansas Small Fruit Management Schedule"
   (**click** MP467; or **type in** http://www.uaex.edu/Other_Areas/publications/PDF/MP467.pdf)
3) "Insecticide Recommendations for Arkansas – 2010"
   (**click** MP144; or **type in** http://www.uaex.edu/Other_Areas/publications/PDF/MP144/MP-144.asp)