

Vineyard IPM Scouting Report for week of June 22, 2009
UW-Extension Door County and Peninsular Agricultural Research Station
Sturgeon Bay, WI

Anthracnose

Grape anthracnose is a common disease of grapes that was introduced from Europe in the 1800's. Anthracnose is prevalent East of the Rocky Mountains where moisture and temperature provide an ideal environment for infection and disease. The disease is favored by prolonged periods of moisture (24 hours or greater) and temperature above 36 degrees F.

Anthracnose overwinters in survival structures (sclerotia) on infected grape shoots. In the spring when moisture and temperature favor germination, the sclerotia germinate and produce the primary spores (conidia). These spores are transferred by rain to grape shoots and will cause disease symptoms provided environmental conditions favor infection.



Anthracnose can be very destructive and infect leaves, tendrils, shoots, petioles, and immature berries. Often the first symptoms recognized in the vineyard are shoot or leaf spots. The disease symptoms start off as small circular, reddish spots that enlarge over time and the outside edges of the lesions become angular. On leaves the spots may coalesce and infect primary leaf veins causing the leaf to roll. (see photo bottom left.)

There are a number of tactics to manage Anthracnose. In the fall, clean up dropped leaves and berries and prune out infected canes. Removing diseased material from the vineyard reduces the source of primary Anthracnose inoculum. Also remove any wild grapes in or near the vineyard that can be a reservoir for disease. As with any good disease management program, provide good air circulation by proper shoot training, hedging and leaf removal. Since Anthracnose can produce primary spores at relatively cool temperatures (36 degrees F or above) reducing survival structures with liquid Lime Sulfur before bud break is critical, especially in vineyards with a history of Anthracnose.



Off Target Phenoxy Herbicide Movement

This week I visited a vineyard that had grape injury symptoms from drift of a phenoxy/growth regulator herbicide. If you are unfamiliar with injury symptoms caused by growth regulator herbicides on grapes, study the photographs below. The injury symptoms that include leaf cupping and fingering are consistent with 2,4-D drift. The drift was unrelated to production agriculture — it was due to the application of a herbicide to a lawn. As I mentioned in last weeks article, drift injury to grapes can take place almost any-time throughout the growing season.



What's lurking in or near the vineyards this week?

Scouting of vineyards and wild grapes throughout Door County revealed an assortment of pest activity this week. Weather conditions have been supportive of the development of powdery mildew, but at this point the disease is not apparent.



Galls on wild grape formed by larvae of cecidomyiid flies at PARS



Deer browse damage in a commercial vineyard



Growth Regulator herbicide damage. Note cupping and fingering on leaf margins



Anthracnose disease symptomology



Downy mildew on rachis and pedicels



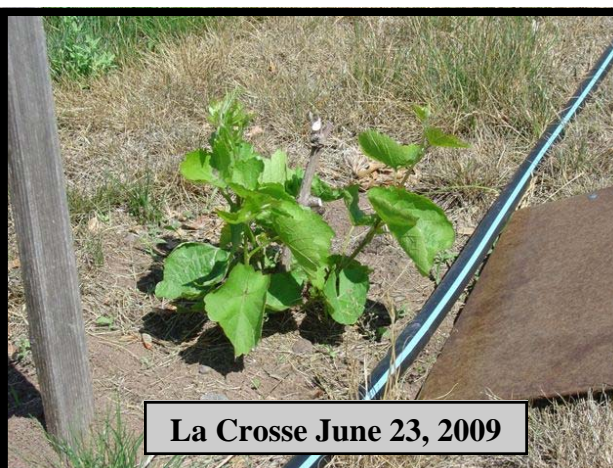
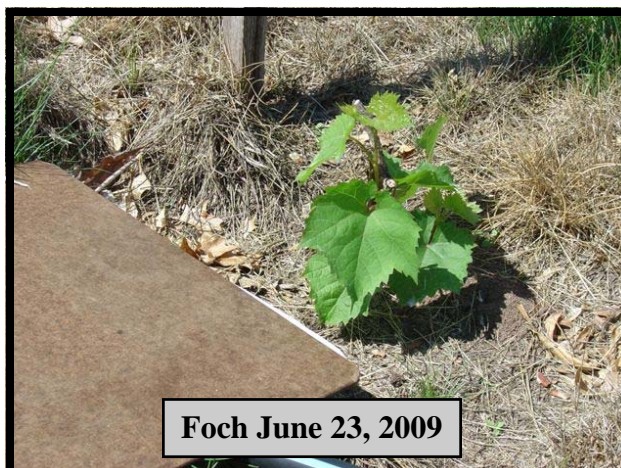
How are well established mature grapevines developing in Sturgeon, Bay Wisconsin?



How are well established mature grapevines developing in Vernon County Wisconsin?



Second year Foch and La Crosse grapevines at Spooner Agricultural Research Station.



What stage are the second year grapevines at West Madison Agricultural Research Station?



Foch West Madison ARS June 22, 2009
Flowering complete



La Crescent West Madison ARS June 22, 2009
Flowering complete

What stage are the second year grapevines at Peninsular Agricultural Research Station?



Foch Peninsular ARS June 22, 2009
Shoots 12 to 18 inches



La Crescent Peninsular ARS June 22, 2009
Shoots 12 to 22 inches

Growing Degree Days¹ from April 1 to June 21			
	2009	2008	5 Yr. average
Peninsular ARS	503	529	601
W. Madison ARS	723	719	837²

¹Modified method
²3 year average for West Madison ARS.

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