In This Issue

Calendar
Comments from the Editor
After the Freeze - UPDATED
Fruit Observations and Trap Reports
Easter Freeze Update
Ohio Poison Control Phone Number

Calendar - Newly added in **Bold**

April 21, Home Winemaking and Grape Production Workshop, OSU Extension Montgomery County Office, 9:30-12:30. Cost is $30 per person and **Pre-registration is required by April 16th**. For more information or to register contact Tammy Dobbles, Extension Educator, at (937) 224-9654 or by email at dobbels.958@osu.edu.

**May 22, Viticulture Short Course "Recent Advances in Vineyard Site Selection", 1-5:30 pm at the Shisler Center-OARDC in Wooster.**

This short course is offered for potential grape growers, new grape growers, existing grape growers, and Extension Educators as an in-service training in collaboration with the University of Kentucky.

June 13, OPGMA Summer Tour. Bauman Orchards, Rittman, Ohio

July 19, Crop, Soil, and Water Field Night, OSU South Centers, Piketon. For more information contact Dr. Rafiq Islam, 740-289-2071.

July 26, Beekeeping Workshop, OSU South Centers, Piketon. 3:00-8:00. More information to follow.

August 9, OSU South Centers Horticulture Field Night.

August 16, Ohio Grape & Wine Day, Ashtabula Agricultural Research Station, Kingsville. For more information contact Greg Johns (440/224-0273).

Comments from the Editor

Hopefully the information we are sending out is useful to you as you review your crop management and farm business plans. Dr. Miller and growers from around the state will be having a conference call today and she will summarize this so we can update you on what growers around the state are seeing.

I jumped the gun a bit on the article from Drs. Beckerman and Ellis and they have updated their recommendations on disease management.

Lastly, Brian Frieden, Deputy Director USDA/RMA has been working with The Ohio State University team as we monitor the impact of the freeze. Remember to document as much as you can! Photographs are good as well as written records. The following is the summary of a response to Dr. Steve Baertsche from Brian….

“Crop insurance is available for apple producers in Fulton, Lucas, Ottawa, Sandusky, Erie, Lorain, Ashtabula, Mahoning, Stark, Columbiana, Licking, Fairfield, Ross, Jackson and Scioto counties in Ohio. Apple producers in Ohio have 21 crop insurance policies covering 1159 acres of apples. For producers growing apples in counties not listed above, insurance is available by a written agreement. Currently, no counties in Ohio have a peach program. Peaches are only insurable by written agreement in the state of Ohio. Unfortunately, the deadline (sales closing date) to purchase insurance for the 2007 crop year has passed for perennial crops such as apples, blueberries, grapes and peaches. The sales closing date for apples as outlined in the Apple Crop Insurance Provisions (FCIC05-054) and the sales closing date for peaches as outlined in the Peach Crop Provisions (FCIC 01-034) is November 20th. Regrettably, if a producer did not purchase a crop insurance policy for these crops before the sales closing date, crop loss or crop damage is not covered by the crop insurance program’s policy. “…"

“Counties with crops not covered by a crop insurance program may obtain catastrophic coverage through the Noninsured Crop Disaster Assistance Program (NAP) administered by FSA. … Typically, federal assistance is submitted by the Governor’s Office to the United States Department of Agriculture (USDA) where the Secretary of Agriculture has the approval authority to declare a Secretarial Disaster Designation. The process usually starts by the Governor’s Office requesting Flash Situation Reports from the Farm Service Agency (FSA) State Office. A declaration provides for low interest loans to affected producers. It may or may not determine what counties are eligible for assistance, if disaster legislation passes.”

“This information was put together with the Risk Management Specialists that
works predominately in Ohio, Dennis Janusick and Jennifer Dammerman. I hope this information is helpful. If we can be of further assistance, please do not hesitate to call. “

*After the Freeze - UPDATE* by Dr. Janna Beckerman, Purdue University and Dr. Mike Ellis, The Ohio State University

**Apples and Pears:**
Despite the potential loss of crops, disease management, particularly for fire blight, is of the utmost importance right now. Although results aren’t yet in on the state of this year’s crop, improper management of trees from this point on can profoundly affect future harvests. Freeze injury, much like hail injury, results in damage to young and succulent shoots and leaves, providing a means for the fire blight bacterium to cause shoot blight. Running both Cougar Blight and MaryBlite currently shows zero risk of infection, as temperatures remain below 60 degrees F. Despite the negligible risk of infection, you may wish to protect some of the most susceptible varieties, like Fuji, Gala, and Ida Red (For a list of susceptibility see the new Extension Brief Disease Susceptibility of Common Apple Cultivars, at [http://www.ces.purdue.edu/extmedia/BP/BP-132-W.pdf](http://www.ces.purdue.edu/extmedia/BP/BP-132-W.pdf) especially if these are grafted on M.26 and M.9 rootstocks. Streptomycin or a low rate of copper (0.2 -0.6 lb of metallic copper/acre depending on tree row volume) will provide protection against fire blight. Keep in mind that copper can cause injury on some varieties, and application should occur after the temperatures are above 50 degrees F to prevent phytotoxicity. Suggested coppers include Cuprofix, Kocide, or C-O-C-S. Turner Sutton, at North Carolina State University reports using the 0.2 and 0.4 lb rates on Golden Delicious during the summer without any problem. If you think you might have a crop on a copper sensitive variety, use streptomycin if you are concerned about possible injury. Should you still have a crop, based upon regional weather forecasts, you should plan on applying streptomycin prior to this weekend’s anticipated rain and warm weather.

According to the prevailing wisdom, dead flowers that don’t fall off are not good hosts for the fire blight bacterium. However, any escaped side blossoms, later developing blossoms, or “rat tail” blooms that are still alive can become infected. Continue monitoring until bloom is over, and apply streptomycin as needed, not to exceed four applications per season. Information and simple directions as to how to use Cougarblight to assess your risk of infection can be found at: [http://www.ncw.wsu.edu/treefruit/fireblight/2000f.htm](http://www.ncw.wsu.edu/treefruit/fireblight/2000f.htm)

If your orchard has a history of fire blight, I would strongly encourage you to consider applying Apogee (Prohexadione-Ca). Apogee is a growth regulator that does not directly kill the fire blight bacterium, but reduces shoot growth, thereby increasing plant resistance by reducing host vigor. Apogee suppresses apple shoot growth when applied near petal fall as a single spray, or as several applications over time. Apple response to Apogee depends upon the cultivar, timing, rate of application, crop load, and even geographical location. Regardless of this variability, Apogee remains the best management tool available for controlling the shoot blight phase of fire blight that growers may be faced with after a freeze.
Despite the potential, or real loss of crop, it is imperative to maintain at least a minimum spray program to protect future harvests. Failure to do so will result in defoliated trees that fail to produce next year, or may not survive the next winter. Normally, the greatest risk of scab would be right now, from pink to bloom. However, nothing is normal about this year. For these reasons, I am recommending:

- EDBC fungicide (3 lb/acre) program through bloom. Alternate with copper or sulfur from second cover on to remain under label limits. Remember to stay within the 21.0 lb/acre/season limit for your EBDCs. I like the EBDCs as they also protect against bitter rot, black rot and white rot. Use this schedule if cedar-apple rust is a particular problem.
- Alternatively, Captan can be used earlier in the season for better scab control instead of the EBDCs, but provides no control of rust or powdery mildew.
- **NOTE:** Do not use Captan 50 Wettable Powder in combination with or closely following or in alternation with wettable sulfur products, or oil. Sulfur sensitive varieties of apples such as Red Delicious, Staymen, and Baldwin, can suffer severe injury and defoliation. Captan 50 WP has a 64 lb limit per acre per year.

For those that have lost crops:

Copper (0.2 – 0.6 lb metallic copper per acre based on tree row volume) + sulfur (6-30 lb/acre depending on brand/formulation) every 10-14 days between now until the first week in June, depending upon weather conditions. Suggested sulfur formulations include Thiolux, Microthiol Disperss, or Microfine Wettable sulfur. This spray program protects against scab and mildew. Remember, copper can russet fruit, and should not be used if you want to use your crop for anything except cider. Do not use sulfur if temperatures are going to exceed 90 degrees F, or drying conditions are extremely poor. Do not use sulfur or copper within two weeks of an oil application. Neither of these programs is going to provide complete scab control but should reduce leaf infections. Organic trials in both Michigan and North Carolina regularly apply 6 lbs of sulfur per treatment without any reported phytotoxicity due to temperature.

If it turns considerably wetter, or if powdery mildew is particularly bad, you may wish to consider applying a sterol inhibitor like Nova, or Rubigan; or a strobilurin like Flint, Sovran, or Pristine prior to second cover. Due to cost, and the potential of no return on investment, I am recommending against using these fungicides for growers experiencing significant loss. It simply is not cost effective in the absence of a crop, nor worth risking the development of resistance.

Stone Fruit: With stone fruit crop loss approaching 100% throughout most of the state, management must focus on protecting foliage to ensure a good potential crop for next year, while reducing overwintering spore loads. Captan at the 1.3 lb/100 gallon rate should sufficiently rein in brown rot twig blight, scab on peaches, cherry leaf spot and powdery mildew on all stone fruit. Wettable sulfur at the 6 lb per 100 gallon rate provides excellent control of powdery mildew of stone fruit, brown rot twig blight, and
peach scab. Bacterial spot on peach, particularly if the weather is wet in late June and July, may warrant applications of Flame Out (Oxytetracycline) or Mycoshield.

**Fruit Observations and Trap Reports** Trap reports for Columbus are posted at least once per week on the internet at [http://bugs.osu.edu/welty/tree-traps.html](http://bugs.osu.edu/welty/tree-traps.html)

Ron Becker, IPM Program Assistant for Wayne, Holmes and Medina Counties sent me the following email this morning regarding his recent observations.

We went out and looked at apples and peaches again on Wednesday (4/18). What we were seeing was pretty much the same as last week. Both apples and peaches were a mix of dead and what looked like good blossoms. There did not seem to be any advance in the blossom stage from last week. With temperatures getting up a little higher this week, I am hoping next week will be the one where we can tell just where we are. I still think apples will be OK, but I am concerned that what I am calling a good peach blossom will go down hill with the warmer temperatures. Only time will tell.

North Central Tree Fruit IPM Program  
Report Prepared by Zachary Rinkes (Erie County Extension Educator)  
Ted Gastier – West District IPM Scout (Sandusky, Ottawa, Huron and Richland Counties)  
Date - 4/16/07

**Apples**
- Spotted tentiform leafminer 0 (down from 0.4)  
- Redbanded leaf roller 0 (down from 37.0)

**Peaches**
- Redbanded leaf roller- 0.4 (down from 39.0)  
- Oriental Fruit Moth 0 (same as last week)

Site: Waterman Lab Apple Orchards, Columbus  
Dates: 4/12/07 (early pink) to 4/18/07 (early pink)  
**Pests:**  
- Redbanded leaf roller: 2 (same as last week)  
- Spotted tentiform leaf miner: 16 (up from 3 last week)  
- San José scale(mean of 2): 0 (same as last week)

**Easter Freeze Update** By: Imed Dami, HCS-OARDC (Source: O-GEN 20, April, 2007)

Many of our grape growers in central and southern Ohio reported sub-freezing temperatures in the low 20s and sometimes high teens which lasted for almost a week (April 4-April 10) across the state. Early grape varieties have already broken buds by then due to unusual warm March which led to extensive damage. Native varieties (e.g. Concord) sustained the most damage, followed by hybrids (e.g. Foch, Dechaunac). Vinifera varieties were the latest to break and had the least bud damage. However, due to sap flow already in conductive tissues (xylem and phloem) damage in canes and trunks is expected in all species including vinifera. It is difficult to estimate the extent of damage and crop loss now. We know that hybrids usually have the highest crop potential due to fertile secondary and latent buds, but natives and vinifera will have the least crop
potential due to low or unfertile secondary buds. Statewide, the damage has occurred mostly in central and southern Ohio, but not in the north. Temperatures in the north were just as cold, but bud development was not as advanced.

Few practical suggestions:

- Pruning: With expected cane and trunk damage, practice minimum pruning by hedging or leaving 3 times the amount of buds. Vines heal better their permanent structure by increasing the amount of leaf area early in the spring. Even though vines will be a nightmare to manage with that many buds, but think of 2008 and how to get vines back to production as soon as possible.

- Suckering: plan for the worst and assume you have trunk damage and leave suckers at the base of vines for potential trunk renewal. The other reason for trunk renewal is possible increase in crown gall incidence.

- Disaster Assistance: Contact your local USDA-FSA (Farm Service Agency) and report to them your crop loss. It is important that you record the extent of damage you have, in case some assistance program becomes available. The FSA is already assembling crop loss information for the fruit industry in Ohio.

NOTE: Disclaimer - This publication may contain pesticide recommendations that are subject to change at any time. These recommendations are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. Due to constantly changing labels and product registrations, some of the recommendations given in this writing may no longer be legal by the time you read them. If any information in these recommendations disagrees with the label, the recommendation must be disregarded. No endorsement is intended for products mentioned, nor is criticism meant for products not mentioned. The author and Ohio State University Extension assume no liability resulting from the use of these recommendations.

Ohio Poison Control Number

(800) 222-1222
TDD # is (614) 228-2272