



# Ohio Fruit ICM News



Editor: Ted W. Gastier, Extension Educator, Agriculture  
Ohio State University Extension, Huron County  
180 Milan Avenue, Norwalk, OH 44857 419-668-8219  
FAX: (419) 663-4233 E-mail: gastier.1@osu.edu

Volume 9, No. 10

March 24, 2005

## IN THIS ISSUE

Calendar  
Jump-Starting Apple Scab Control Programs  
In High-Inoculum Orchards  
Reputation As Your Brand  
EPA Promotes Poison Prevention  
New Labor Poster Available for Employees  
Serving in the Military

## Calendar

**March 30: New Fruit and Vegetable Grower and Marketer Workshop**, Rural Services Building, 225 Underwood Street, Zanesville, OH. For information call OSU Extension, Muskingum County at 740-454-0144 or e-mail mechling.1@osu.edu. The session will discuss some of the regulatory and human resource components of speciality crops.

**March 29: Deer Control Strategies**, Rural Services Building, 225 Underwood Street, Zanesville, OH. For information call OSU Extension, Muskingum County at 740-454-0144 or e-mail mechling.1@osu.edu. Topics to be discussed include exclusion, repelling, hunting, and fencing for deer management.

**March 30: North Central Fruit Crops Breakfast**, MAW's Restaurant at Avery, US Rte 250, Milan, OH. Breakfast is at 8:00 a.m., discussion begins at 9:00. Private applicator's credit Shredding leaf litter with a flail mower causes leaves to decay more quickly and also reorients much of the leaf litter so that ascospores released from those reoriented leaf pieces will discharge into the ground rather than into the air. In a recent study in New

has been approved for CORE and Category 4.

## Jump-Starting Apple Scab Control Programs In High-Inoculum Orchards

*Source: Dave Rosenberger, Plant Pathology, Highland, Scaffolds Fruit Journal Volume 14, No. 1, March 21, 2005*

Scattered orchards throughout the eastern US developed severe scab problems during the 2004 growing season. Some problems were attributable to wet spring weather in 2004 that interfered with fungicide applications and favored scab development. In other cases, control failures occurred when growers continued to depend on the SI fungicides (Rubigan, Nova, Procure) in orchards where apple scab has developed resistance to this class of fungicides. In either case, regaining control of apple scab this year may be easier if sanitation measures are applied to reduce inoculum levels before apple trees begin to grow this spring.

The amount of overwintering scab inoculum in orchards can be significantly reduced either by applying a urea spray sometime before green tip or by shredding leaf litter with a flail mower. Urea works by stimulating microbial breakdown of overwintering leaves and by softening leaves so that they can be removed more quickly by earthworms that feed on the leaf litter. Urea may also directly suppress ascospore formation in the surviving leaf litter.

Hampshire, Sutton et al. (2000) found that either of these sanitation measures (spring urea sprays or flail chopping leaves in spring) could reduce ascospore production by 70-80%.

In using urea for inoculum reduction, the standard recommendation is to treat each acre of orchard with 40 lb of urea fertilizer dissolved in 100 gallons of water. Applications can be made either with air blast sprayers that have the upper nozzles turned off or with boom sprayers rigged to spray both the sodded row middles and the areas beneath the trees. The portion of the urea spray that falls within the herbicide strip beneath the tree canopy (or inside the drip-line) will ultimately contribute to nitrogen fertilization of the trees, whereas the portion of the spray that is applied to the sodded row middles will be utilized primarily by the ground cover. Nitrogen fertilizer rates should be adjusted accordingly for orchards where urea applications are used for scab control.

Effective leaf shredding can be accomplished only with a flail mower that is set low enough to contact leaf litter on the orchard floor. If the flail mower cannot be offset to reach most of area beneath trees, then leaf litter beneath trees should be blown or raked into the sodded row middles where it can be accessed with the flail mower. Mechanical brush rakes can remove leaf litter from beneath the tree if the orchard has a relatively clean herbicide strip. Flail mowers used to chop prunings should shred leaf litter at the same time if the flails are adjusted to cut low enough. However, low mowing in early spring can remove most of the overwintering sod cover, thereby increasing potential problems with mud and equipment traction at the time when early sprays will need to be applied.

Why are we promoting urea sprays or leaf shredding for high-inoculum orchards this spring? The primary reason is that we believe the SI fungicides are no longer effective in many of these high-inoculum orchards (more on that next week). Even conservative programs with protectant fungicides may provide less than 100% control of scab in high-inoculum orchards. In orchards where we no longer have any dependable method for arresting scab development after infections occur, just a few prebloom scab infections have the potential to cause season-long problems if the summer turns out to be cool and wet. Sovran and Flint may still be useful for stopping scab after infections appear in trees, but they are far less effective than the SI fungicides and using them to “burn out” scab will only contribute to further selection for resistance to the strobilurin fungicide group.

Sanitation measures applied to high-inoculum orchards will provide the following benefits:

- Reducing inoculum reduces risks of getting green tip infections. These early infections begin sporulating as trees approach bloom, just at the time that terminal leaves and fruitlets are approaching peak susceptibility to scab. Only a small proportion of ascospores are usually mature enough for release at green tip, but that small proportion can still be a huge number in high-inoculum orchards. High-inoculum orchards subjected to urea sprays or leaf shredding will behave more like “normal” orchards vis-a-vis risks of green tip scab infections.
- Protectant fungicides such as mancozeb and captan work better in low-inoculum than in high-inoculum orchards, especially if foul weather prevents perfect spray timing. Whereas the SI fungicides provided a “safety net” that eliminated infections that escaped prebloom sprays, the only option in orchards with SI-resistant scab will be to purchase that insurance up front by reducing inoculum levels before the season begins.
- Reducing inoculum reduces selection pressure for resistance to the strobilurin fungicides (Sovran, Flint) and the anilinopyrimidine fungicides (Vanguard, Scala) if those fungicides are used during the prebloom period.

Using a urea spray or leaf shredding prior to bud break will not eliminate the need for protectant sprays beginning at green tip. Where SI resistance is suspected, extra care will still be required to ensure that trees are protected with mancozeb, Polyram, and/or captan ahead of rains. Sanitation measures that reduce overwintering inoculum levels are therefore a supplement to, not a replacement for, effective spray programs during the prebloom period.

Literature cited: Sutton, D.K., Mac Hardy, W.E., and Lord, W.G. 2000. Effects of shredding or treating apple leaf litter with urea on ascospore dose of *Venturia inaequalis* and disease buildup. *Plant Dis.* 84:1319-1326.

## Reputation As Your Brand

*Source: Brian M. Henehan, Senior Extension Associate, Department of Applied Economics and Management, Cornell University, New York Berry News, Vol. 4, No. 11 Tree Fruit & Berry Pathology, NYSAES (Reprinted from Smart Marketing, February 2005)*

Many marketers of agricultural products are small businesses owned by individual producers or entrepreneurs. Customers typically associate the products marketed or services delivered with an individual or small group of people. Their individual or group reputation can become a key reason for doing business with them. And so their own names become, in many ways, the Brand for their products.

Most small businesses have limited resources to promote and build a brand name. But given that your reputation can be a key element of your brand identity, it is worth giving some thought to how your customers view your reputation. This becomes more important for food marketers operating in small or local markets resulting in a small world of contacts and relationships.

Word can travel fast about transactions that didn't turn out well for buyers. Reputations can be quickly enhanced or tarnished in markets with a small number of players. This market reality creates both challenges and opportunities. Your positive reputation can give you a competitive advantage over those seen in a less positive light.

In fact, more publicly-traded firms are reviewing strategies to build their reputational capital. With the recent flurry of ethical breakdowns of firms like Enron, Tyco, or World Com, companies are realizing that building reputational capital can result in improved investor or lender relations as well as creating a more positive work environment for managers and employees.

Small businesses with limited resources for conventional approaches to building a brand name like promotion and advertising might give some thought to relatively low-cost approaches to building your reputation.

A starting point can be gaining a better understanding of how your customers view your reputation. Do your customers view you and your employees as conducting business in an honest and ethical way? Are you reliable and consistent in delivering the services or products that you market? How do you address complaints from customers about not being treated fairly? When customers think about your business, would the words dependable, sincere, or trustworthy come to mind?

Some strategies to consider when building or maintaining a positive reputation:

- When conducting customer surveys, incorporate a question or two about how they perceive your reputation.
- Develop a values statement for your business that all staff understands. Set and practice high standards for ethical behavior.
- Establish fair terms of trade that are transparent and understood by your customers to minimize misunderstanding.
- Gain a better understanding of business practices that might have a negative impact on your reputation.

Your reputation is an integral part of the story that you tell to customers or consumers. Some segments of consumers are very interested in how you produce a product or the values you adhere to in conducting business. Some examples include: the ethical treatment of animals, utilizing environmentally sound practices, or how employees are treated. Highlighting your reputation or the standards you set for conducting business can be a productive marketing strategy.

In many situations, there are relatively low-cost, effective ways to build your reputation that can add value to your brand. Being perceived as a reliable, trustworthy business that treats customers fairly can yield increased sales and provide a more fulfilling work environment for you or your employees. Nice guys may indeed finish first as smart marketers!

## **EPA Promotes Poison Prevention**

*Source: William G. Smith, Senior Extension Associate, Pesticide Management Education Program (PMEP), Pesticide Sales and Use Reporting Database (PSUR) Group, Cornell University*

EPA is doing major outreach to the Hispanic community in preparation for observance of National Poison Prevention Week, March 20-26.

The agency is attempting to increase awareness of the danger to children of accidental poisonings from pesticides and household products. The goal is to encourage parents and caregivers to lock up products that could potentially harm children.

The media outreach campaign includes a featured segment on the Spanish morning show, *Despierta America*, (Wake Up America), which will be aired by Univision nationally; a segment on *Enfoque Comunitaria* (Community Focus), which will be aired by Telemundo for the Miami, Fla., market; and radio and magazine interviews in Miami, Palm Beach, Orlando, and Tampa.

Every 15 seconds, U.S. poison centers receive a call about someone being exposed to a poison, and 40 percent of those cases involve a child under three years old. In 2003, poison centers reported an estimated 70,000 children under the age of six were involved in common household pesticide-related poisonings or exposures in the United States.

According to the National Safety Council, more than 50 percent of over two million poisoning incidents each year involve children under six. Such figures show the need for everyone to lock up household pesticides and chemicals in a high cabinet out of the reach of children.

In most poisonings, children swallow common substances found around almost every home. In addition to pesticide products, these include: prescription drugs, nonprescription pain killers, vitamins, cosmetics, and personal care and cleaning products. Poisonings also involve house plants, tobacco products, and alcohol.

EPA has educational materials available to help prevent accidental poisonings. The materials can be obtained by calling EPA's Environmental Publications line at 1-800-490-9198.

Tips on how to protect children from pesticide and lead poisonings are available at: <[http://www.epa.gov/oppfead1/cb/10\\_tips/](http://www.epa.gov/oppfead1/cb/10_tips/)>

Additional information on Poison Prevention Week is available at: <[http://www.epa.gov/oppfod01/cb/csb\\_page/updates/ppweek-lockit.htm](http://www.epa.gov/oppfod01/cb/csb_page/updates/ppweek-lockit.htm)>.

## **New Labor Poster Available for Employees Serving in the Military**

*Source:* <<http://www.dol.gov/vets/programs/userra/poster.pdf>> (Thanks to Charles Behnke, Lorain County Extension Educator.)

The rights of individuals who voluntarily leave employment positions to undertake military service are protected by the Uniformed Services Employment and Reemployment Rights Act (USERRA). USERRA also prohibits employers from discriminating against past and present members of the uniformed services, and applicants to the uniformed services. Click on the web site above to view and print a copy of the poster.