



# Ohio Fruit ICM News

## Learn How Drip Irrigation Can Boost On-Farm Profits

Brad Bergefurd, OSU Extension Horticulturalist  
OSU South Centers at Piketon. OARDC and The Ohio State University

Specialty fruit and vegetable crop producers looking to gain a better understanding of how drip irrigation can boost on-farm profits have the opportunity to attend an Ohio State University Extension drip irrigation workshop on July 15.

**The workshop will be held from 6 p.m. until 8 p.m. at OSU South Centers in Piketon, 1864 Shyville Road, Piketon, Ohio. Registration is \$5 per person.**

Brad Bergefurd, an OSU Extension horticulturist, will discuss drip irrigation techniques, implementation and management. Topics include: why you should drip irrigate, the benefits of drip irrigation, what parts are needed for a system, what water sources work, how to install a system, how to fertilize with drip irrigation, and drip irrigation scheduling. "Drip irrigation is an insurance against periods of dry weather or drought. Specialty crops are such short-lived crops that they cannot go without the necessary 1 inch of water per week or else quality and yield will be lost," said Bergefurd. "Growers who grow specialty crops can have over \$10,000 per acre invested in a crop before their first harvest. Irrigation is insurance that the crop will be successful."

The workshop will showcase an irrigation demonstration unit, complete with 15 different system components. In 2008, researchers at OSU South Centers at Piketon established the drip irrigation research and education unit, in partnership with the Ohio-Israel Agricultural Initiative of The Negev Foundation, to evaluate new irrigation technology. Bergefurd said that the drip irrigation technology uses drip sticks, drip tape, multiple outlet drippers and streamline drip tubing that not only waters plant foliage, but also targets plant roots. The system, unlike traditional overhead irrigation, is suited for small parcels of land and high tunnel systems, as well as nursery/greenhouses, hydroponics and fruit production, such as plasticulture strawberries. "The drip irrigation technology has the ability to reduce water consumption up to 50 percent compared to overhead irrigation systems. Some of the technology uses a very small flow rate -- .16 to .24 gallons per hour," said Bergefurd. "The technology uses water more efficiently and spreads water more uniformly so there is no waste. It puts the water right where the crop needs it most."

Israel is a world leader in agricultural technology with special expertise in irrigation. As the country presents unique climate and soil challenges, Israel's agriculture specialists have developed advanced processes and technology for farming. Drip irrigation allows farmers to efficiently irrigate crops by optimizing water flow rates and targeting plant roots that result in enhanced production, water conservation, reduction of fertilizer usage, and elimination of water runoff and ground water contamination with an economic advantage to the farmer. Bergefurd believes such technology could be useful to Ohio growers. In addition to the irrigation demonstration unit, Bergefurd will demonstrate basic trickle irrigation set-up and operations management.

The drip irrigation workshop is part of the OSU South Centers Third Thursday Horticulture Business Training series. For more information or to register, contact Julie Strawser-Moose at (740) 289-2071, ext. 223 or e-mail [strawser.35@cfaes.osu.edu](mailto:strawser.35@cfaes.osu.edu)

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If you have articles for the newsletter that you would like to have considered to be included in upcoming issues, please submit to either Howard Siegrist at [siegrist.1@cfaes.osu.edu](mailto:siegrist.1@cfaes.osu.edu) or Melissa Swearingen at [swearingen.34@cfaes.osu.edu](mailto:swearingen.34@cfaes.osu.edu)



**EMPOWERMENT THROUGH EDUCATION**

**North Central Ohio Tree Fruit IPM Program**  
**Report Prepared by**  
**Cindy Crawford (Erie County Adm. Assoc.)**

**Mike Abfall** – East District IPM Scout  
(Erie and Lorain Counties)

**Date – 6/1/10**

**Apples**

Spotted Tentiform Leafminer – 3.43 (down from 6.85)  
Codling Moth – 6.7 (up from 6.2)  
San Jose Scale – 0 (same)  
Oriental Fruit Moth – 11.26 (up from 7)  
Lesser Appleworm – 0.5 (down from 0.8)  
Dogwood Borer – 6 (up from 0)

**Peaches**

Oriental Fruit Moth – 0.1 (up from 0)  
Lesser Peach Tree Borer – 3.7 (up from 1.3)  
Peach Tree Borer – 0.6 (down from 6.7)

**Date – 6/7/10**

**Apples**

Spotted Tentiform Leafminer – 214.8 (up from 3.43)  
Codling Moth – 6.7 (same)  
San Jose Scale – 0 (same)  
Oriental Fruit Moth – 2.6 (down from 11.2)  
Lesser Appleworm – 0.5 (same)  
Dogwood Borer – 16.1 (up from 6)

**Peaches**

Oriental Fruit Moth – 0 (down from 0.1)  
Lesser Peach Tree Borer – 3.7 (same)  
Peach Tree Borer – 3.3 (up from 0.6)

**Ted Gastier** – West District IPM Scout  
(Sandusky, Ottawa, Huron and Richland Counties)

**Date – 5/31/10**

**Apples**

Spotted Tentiform Leafminer – 18 (up from 1)  
Codling Moth – 5.6 (up from 3.1)  
San Jose Scale – 0 (same)  
Oriental Fruit Moth – 15.6 (up from 1)  
Lesser Appleworm – 0 (same)  
Dogwood Borer – 1.6 (down from 2)

**Peaches**

Oriental Fruit Moth – 0.3 (down from 0.3)  
Lesser Peach Tree Borer – 6 (up from 2.7)  
Peach Tree Borer – 0.3 (up from 0)

**Date – 6/7/10**

**Apples**

Spotted Tentiform Leafminer – 145 (up from 18)  
Codling Moth – 7.4 (up from 5.6)  
San Jose Scale – 0 (same)  
Oriental Fruit Moth – 5.9 (down from 15.6)  
Lesser Appleworm – 0 (same)  
Dogwood Borer – 0.1 (down from 1.6)

**Peaches**

Oriental Fruit Moth – 1.0 (down from 0.3)  
Lesser Peach Tree Borer – 2.0 (down from 6)  
Peach Tree Borer – 0 (down from 0.3)

**Wayne County**  
**Insect Trap Reports**

**Ron Becker** - Program Coordinator

**Week of 6/2**

**Codling Moth - Average /trap , 3 traps per block**

Wayne-4.67  
Medina-2.17  
Holmes-.78

**Week of 6/2**

**Oriental Fruit Moth**

Medina - 5.0

We are finding powdery mildew, bacterial spot and plum curculio and Oriental Fruit Machine damage in peaches. Light leafminer, and aphids (including wooly apple aphids) in apples. Botrytis and plum curculio in blueberries and raspberry sawfly leaf feeding in raspberries.

**week of 6/7**

**Codling Moth - Average /trap , 3 traps per block**

Wayne14.22  
Medina-.17  
Holmes-.33

**Week of 6/7**

**Oriental Fruit Moth-**

Medina - 2.0  
Wayne-0

**Produce Safety News: Open Docket for FDA Produce Safety Rule Extended**  
Betsy Bihn, GAPs Program Coordinator, Cornell University, Department of Food Science

The Food and Drug Administration (FDA) is extending to **July 23, 2010**, the comment period for a notice that appeared in the Federal Register of February 23, 2010. In that notice, FDA established a docket (FDA-2010-N-0085) to receive comments and information about current practices and conditions for the production and packing of fresh produce. The Agency is extending this comment period to give all interested parties additional time to provide the information requested by FDA in that notice. Comments will inform the development of safety standards for fresh produce at the farm and packing house and strategies and cooperative efforts to ensure compliance. The Agency will use all comments and perspectives to develop a proposed rule on safety standards for fresh produce.



Many comments have already come in -- but there's still time to make your voice heard and to share with FDA your views and specific recommendations in categories such as:

--The role of the Good Agricultural Practice (GAP) guidelines, "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables"

--How to coordinate produce food safety practices with:

- sustainable and/or organic production methods
- environmental and/or conservation goals or practices
- existing Federal, state, local and tribal government statutes and regulations

At the website below you can submit comments and view comments submitted by others. I have been told you can submit comments anonymously if you have concerns about your privacy. Please do comment. Now is the time to participate and have a voice in the development of this rule.

"Preventive Controls for Fresh Produce: Request for Comments"

- Proposed rule, reflecting all comments, expected before the end of 2010.
- Go to [www.regulations.gov](http://www.regulations.gov)
- Enter the docket number in the "Keyword" field: FDA-2010-N-0085
- This takes you to the docket, *Preventive Controls for Fresh Produce: Request for Comments*
- You can type comments directly in the field and/or attach documents in support of your comments.
- Press submit.

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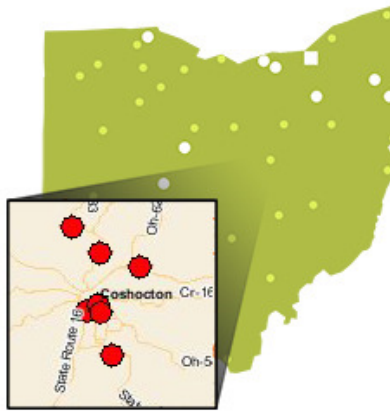
**Brown Rot**

Article from: Facts for Fancy Fruit Newsletter  
Purdue University Extension

We are entering that period where peaches are relatively resistant to brown rot infections right now. When looking at peaches, be on the lookout to see if there is any twig blight— evidence of blossom blight from earlier in the season where the infection has spread into the twig. Look for this as you are thinning, and remove the infected shoot promptly. As we currently have no reports of fungicide resistance, use Topsin-M plus captan or sulfur, and allow you to save your strobilurins (Pristine, Adament) until the fruit get closer to harvest.







# OHIO MARKETMAKER™

Linking Agricultural Markets

An interactive mapping system that locates businesses and markets of agricultural products in Ohio, providing an important link between producers and consumers is available on-line at: <http://oh.marketmaker.uiuc.edu/>

Also available on the website is a link to their April 2010 **MarketMaker** eNewsletter. Find out what's new in **MarketMaker**, learn **MarketMaker** tips & pointers, and view the latest businesses & MarketPlace advertisements.

## ABOUT US:

The Ohio MarketMaker project is made possible by a unique partnership among the following entities that have joined forces to promote and enhance Ohio's food, agricultural and natural resources economy by linking farmers and processors with food retailers, caterers, chefs, and other food supply chain contacts.

### National MarketMaker Sponsors



### Ohio MarketMaker Sponsors



## 2010 Upcoming Events:

**Wednesday, June 30 - OPGMA Summer Tour & Field Day** – <http://www.opgma.org/>

**Wednesday, July 7 - Twilight In-Orchard Fruit Tour and Meeting** - Heartland Orchard, Thornville.  
For a detailed flyer click on the following link: [Twilight Fruit In-Orchard Tour and Meeting Flyer](#)

**August 18-21 - North American Fruit Explorers (NAFEX) Annual Meeting and Midwest Fruit Showcase.**  
Lafayette, IN. See <http://www.nafex.org> for details.

**August 19-20 - Apple Crop Outlook Conference, US Apple Association, Ritz-Carlton Hotel, Chicago.**  
See [www.usapple.com](http://www.usapple.com) for details.

**December 7-9, 2010. Great Lakes Fruit Vegetable and Farm Market EXPO, DeVos Place Convention Center, Grand Rapids, Michigan.** For more information: <http://www.glexpo.com>.

Editor: Howard J. Siegrist, Extension Educator, Ohio State University – Licking County  
771 E. Main Street, Suite 103, Newark, OH 43055. Phone: 740-670-5315  
Email address: [siegrist.1@cfaes.osu.edu](mailto:siegrist.1@cfaes.osu.edu)

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Keith L. Smith, Ph.D., Associate Vice President for Agricultural Administration and Director, Ohio State University Extension  
TDD No: 800-589-8292 (Ohio only) or 614-292-1868



## Central Ohio Poison Control Number

**(800) 222-1222**  
**TTY # is (614) 228-2272**

## Anthracnose: A Potential Concern For Strawberries And Blueberries This Season

Kerik Cox, Assistant Professor, Department of Plant Pathology and Plant Microbe Biology  
Cornell University NY State Agricultural Experiment Station



With all of the early season heat and heavy rains last weekend, growers approaching harvest in the southern part of the state could be at risk for anthracnose infections in both strawberries and blueberries. Even if your operation isn't at harvest, anthracnose can still infect green fruit in both blueberries and strawberries resulting in unforeseen losses at harvest. Being proactive about anthracnose infections pre-harvest could help you avoid additional losses associated with anthracnose at harvest.

**Strawberries:** Anthracnose can manifest itself on strawberries in several forms including crown rots, fruit rots, and leaf spots. Of the species of *Colletotrichum* that attack strawberry, only *C. acutatum* is known to be prevalent in the Northeast, and it is not one of the species that causes crown rots. *C. acutatum* blights leaves, petioles, runners, flowers, and most importantly, rots the fruit. Lesions on petioles, stems, and runners start as small dark spots that elongate, coalesce, become sunken, and finally girdle the tissue. If runners become girdled, daughter plants may also wilt and die. Leaf infection for *C. acutatum* typically begins at margins, and then develops into large sunken brownish black spots. On fruit, green or red (**A, B**), lesions will start as slightly depressed water-soaked spots that become sunken, larger (>3mm), brown, and finally black. Interestingly, *C. acutatum* needs copious amounts of free moisture and can drain water right out of the fruit, which causes them to become hard and shriveled. The primary sign of this pathogen is the salmon to orange colored ooze (spore masses) (**B**) that typically form in fruit lesions, but can potentially appear in any plant lesion.



**Blueberries:** Anthracnose on blueberries is also caused by *C. acutatum*. On blueberries, *C. acutatum* may infect flowers, fruit, bud scales, and even blight young shoot tissue if conditions are favorable. Although shoot and bud blights can be quite devastating to blueberry operations, anthracnose fruit rot is the most commonly encountered form of the disease in NY production operations.

Infection occurs when spores, produced on infected fruit spurs and buds, are dispersed by rain to flowers and developing green fruit. Infection is highly dependent on the availability of free water and may occur at sub optimal temperatures (< 75 °F) if the period of surface wetting is long enough (> 8 hours). Infected flowers can be blighted when inoculum levels are high and the wetting period is long enough. However, blossom and green fruit infections often remain latent until fruit ripening when sugar content is highest. Flowers and fruit with latent infections will appear symptomless, but will begin to rot and become shriveled as the pathogen resumes colonization during ripening (**C**). If there is enough free moisture or high relative humidity, orange to salmon-colored spore masses will be produced over the surface of the fruit (**D**). The spore masses are composed of countless numbers of spores, which are capable of infecting neighboring berries during rains at harvest and during the sorting and packing process postharvest.



**Managing Anthracnose:** The battle against anthracnose in both strawberries and blueberries is best won by attacking on several fronts. Consider each of the following topics before planning your strategy for anthracnose management.

Continued on Page 6



## Continued from Page 5: Anthracnose: A Potential Concern

1. *Resistance*: Resistance to *C. acutatum* does exist in strawberries and blueberries and some cultivars are reported to differ in susceptibility to anthracnose (**Table 1.**). Unfortunately, some of the most widely planted blueberry and strawberry cultivars are susceptible to anthracnose fruit rot.

2. *Slowing the spread of secondary infections*:

The spores of the pathogen are water-dispersed, which allows the disease to spread easily with any form of moving water. Avoid overhead irrigation (which mimics rain infection events) and use drip irrigation instead. To further reduce the spread of the disease, decrease planting and canopy density to minimize contact between susceptible and infected tissues. Also, it's important to remove infected and dead plant material, as they are the sources of disease inoculum.

3. *What to spray*: Once the disease is established in a planting, even the most effective fungicide program won't completely eliminate the problem. Also, many of the recommended fungicides such as Captan 80 WDG and CaptEstate WDG are either protectants or only have moderate post-infection activity (e.g. Cabrio EG). To be on the safe side, apply all fungicides before rain events. Give fungicides at least 3-6 hours to dry on the fruit and foliage before a rain event. Table 2 below provides several fungicide program recommendations listed in order from highest potential level of control and application cost to the lowest potential level of control and cost. Begin all programs at 10% bloom and repeat on a 14-21 day interval depending on the amount of rain occurring between applications. If you are implementing a fungicide program for mummyberry disease of blueberry there is no need to make additional applications for anthracnose fruit rot at similar application timings.

**Table 1. Varietal Susceptibility to anthracnose in strawberries and blueberries**

<b>Strawberry</b>		
<b>Cultivar</b>	<b>Susceptibility</b>	<b>Season</b>
Honeoye	Extremely Susceptible	Early Season
Earliglow	Moderately Susceptible	Early Season
Kent	Extremely Susceptible	Middle Season
Allstar	Extremely Susceptible	Late Season
Tribute	Extremely Susceptible	Day Neutral
Seascape	Resistant	Day Neutral

<b>Blueberry</b>		
<b>Cultivar</b>	<b>Susceptibility</b>	
Bluecrop	Susceptible	N/A
Blueray	Susceptible	N/A
Earliblue	Susceptible	N/A
Patriot	Susceptible	N/A
Toro	Susceptible	N/A
Bluetta	Susceptible	N/A
Duke	Resistant	N/A
Elliot	Resistant	N/A

**Table 2. Recommended anthracnose management programs, relative efficacy and application costs**

<b>Cost/Efficacy<sup>a</sup></b>	<b>Program<sup>b</sup></b>
1	Pristine <sup>c</sup> WG (23oz./A) alternated with Switch 62.5WG (11oz/A)
2	Pristine <sup>c</sup> WG (23oz./A) alternated with CaptEstate WDG (11oz/A)
3	Pristine <sup>c</sup> WG (23oz./A) alternated with Captan 80 WDG (3.75lbs/A)
4	Captan 80 WDG (3.75lbs/A) alternated with CaptEstate WDG (11oz/A)
5	Captan 80 WDG (3.75lbs/A) alternated with Switch 62.5WG (11oz/A)
6	Captan 80 WDG (3.75lbs/A) full season

<sup>a</sup> Level of potential efficacy and cost in order from most potentially effective and most expensive (1) to the least (6)

<sup>b</sup> Begin the programs at 10% bloom and repeat on a 14-21 day interval.

<sup>c</sup> Abound 2.08F (6.2fl. oz./A) or Cabrio EG (14oz./A) may be substituted for Pristine WG, an identical level of efficacy may not be achieved.

## Strawberry Renovation

Bruce Bordelon, Department of Horticulture & Landscape Architecture  
Purdue University Extension

Matted row strawberry plantings must be renovated after harvest to establish new crowns for next year's crop. For best results, renovation should be started immediately after the harvest is completed to promote early runner formation. The earlier a runner gets set, the higher its yield potential. Harvest is early this year so plantings may be ready for renovation soon in the southern part of the state. Growers should begin renovation as soon as the last marketable berries are harvested. Renovation should be completed by the end of July in normal years. The following steps describe renovation of commercial strawberry fields.

1. **Weed control:** Post emergent application: Annual broadleaf weeds can be controlled with 2,4-D amine formulations. Check the label as only a few products are labeled for use on strawberries. (e.g. Amine 4 [Dimethylamine salt of 2,4-D (3.74 lb./gal.)] at 2 to 3 pts./acre in 25-50 gallons of water applied immediately after final harvest. Be extremely careful to avoid drift when applying 2,4-D. Even though the amine formulation is not highly volatile, it can volatilize under hot, humid conditions and can cause damage to sensitive plants a considerable distance from the site of application. Some damage to strawberries is also possible. Read and understand the label completely before applying 2,4-D amine. If grasses are a problem, sethoxydim (Poast 1.5 EC) or clethodim (Select 2 EC) will control annual and some perennial grasses. However, do not tank mix these materials and 2,4-D. See the Midwest Small Fruit and Grape Spray Guide and the product label for rates and especially for precautions.
2. Mow the old leaves off just above the crowns 3-5 days after herbicide application. Do not mow so low as to damage the crowns.
3. Fertilize the planting. A soil test will help determine phosphorus and potassium needs, but foliar analysis is a more reliable measure of plant nutrition. For foliar analysis, sample the first fully expanded leaves following renovation. Generally, nitrogen should be applied at 25-60 lbs/acre, depending on vigor. It is more efficient to split nitrogen applications into two or three applications at regular intervals, rather than apply it all at once. A good plan is to apply about half at renovation and half again in late August when flower bud development is occurring.
4. Subsoil: Where picker traffic has been heavy on wet soils, compaction may be severe. Subsoiling between rows will help break up compacted layers and provide better infiltration of water. Subsoiling may be done later in the sequence if crop residue is a problem or if soils are too wet at this time.
5. Narrow rows: Reduce the width of rows to a manageable width based on your row spacing, the aisle width desired, and the earliness of renovation. A desirable final row width to attain at the end of the season is 12-18 inches. Wider rows lead to low productivity and increased disease pressure. This means that rows can be narrowed to as little as 6 inches during renovation. Use a tiller or cultivator to achieve the reduction. Since more berries are produced at row edges than in the middle, narrow rows are superior to wide rows. Narrow rows will give better sunlight penetration, better disease control, and better fruit quality.
6. Cultivate: Incorporate the straw and other plant material between rows and throw a small amount of soil over the row by cultivation. Strawberry crowns continue development at the top, and new roots are initiated above old roots on the crown, so 1/2 - 1 inch of soil on the crowns will facilitate rooting. This also helps cover straw in the row and provides a good rooting medium for the new runner plants.
7. Weed control: Pre-emergence weed control should begin immediately. There are more options today than in past years. Chateau, Dacthal, Devrinol, Prowl H2O, and Sinbar are labeled materials. See the Midwest Small Fruit and Grape Spray Guide and check the product labels carefully. Devrinol must be incorporated by irrigation, rainfall, or cultivation to be effective. Rate and timing of Sinbar or Prowl application is critical. If regrowth has started at all, significant damage may result. Some varieties are more sensitive to Sinbar than others. See the Midwest Small Fruit Pest Management Handbook for a table showing variety sensitivity to Sinbar.
8. Irrigate: Water is needed for both activation of herbicides and for plant growth. Don't let the plants go into stress. Ideally the planting should receive 1 to 1-1/2 inches of water per week from either rain or irrigation.
9. Cultivate to sweep runners into the row until plant stand is sufficient. Thereafter, or in any case after early September, any runner plant not yet rooted is not likely to produce fruit next year and can be removed. Coulter wheels and/or cultivators will help remove these excess plants in the aisles.
10. Adequate moisture and fertility during August and September will increase fruit bud formation and improve fruit yield for the coming year. Continue irrigation through this time period and fertilize if necessary. An additional 20-30 pounds of N per acre is suggested, depending on the vigor.



## Fire Blight

Article from Facts for Fancy Fruits Newsletter  
Purdue University Extension

After what can only be described as a very strange spring, we seem to have skipped May and June entirely, and have now entered the warm and humid days of summer--And the type of weather that grows the fire blight bacterium (Fig. 2).

It is important to note that the fire blight pathogen, *Erwinia amylovora*, is always present at some level on the surface of most apple trees, and on other rosaceous plants. Fortunately for us, most cultivars are well past petal fall, meaning we have escaped the highest period of risk. Although late, or 'rat-tail' blooms may still appear, remove these late blooms during fruit thinning or whenever possible. Never forget that fire blight appears suddenly and spreads quickly—causing significant damage in a matter of days, but taking weeks, months or even years to get under control.



Fire blight infections start primarily at the flowers, although bacteria can enter and establish through wounds caused by hail or high winds associated with summer storms (referred to as shoot blight or trauma blight. Note: shoot blight is often the result of carryover flower infections from the previous year). How much the bacteria spread has a lot to do with type of cultivar infected: Red Delicious, Honeycrisp, McIntosh, and Empire are more resistant to fire blight, compared to cultivars like Mutsu, Fuji, Gala, Ginger Gold, Gravenstein, Jonathan, Ida Red, and Lodi that are much more susceptible. These susceptible cultivars serve as reservoirs for the bacteria. At our research plot at Meigs, we have witnessed a severe outbreak of fire blight in the Fuji/ Gala/Ruby Jon planting—a ground zero of sorts. This block of super susceptible cultivars acted as a source of inoculum for other cultivars, quickly spreading throughout the block, and then radiating out to those trees adjacent to or downwind from this planting.

Dealing with shoot blight is stressful, because there are no truly effective treatments; adding to the stress and frustration is the fact that new strikes may keep appearing all summer. This leaves the grower with the question: To cut or not to cut? In Michigan, in 2000, during the big fire blight epidemic, some apple growers pruned out fire blight infections and strikes as they appeared. Other growers left the fire blight strikes until winter before pruning. Regardless of when they pruned, both found some fire blight in their orchards the following season. I think this is an important point to make—that there is no silver bullet.

Dave Rosenberger of Cornell has suggested a type of fire blight triage when it comes to making a pruning decision once blight has struck, going from highest to lowest priority. This is a great approach, so I've expanded upon this:

Young orchards (less than 8 years old) with few strikes should be pruned out as soon as they appear. Failure to do so increases the likelihood that blight will continue to spread both to adjacent trees and possibly into the rootstocks of affected trees. Young orchards (3-8 years old) with severe strikes. Take out trees, if necessary.

Older orchards with a few strikes. Pruning out infections in mature trees may not be practical, but mature trees with a full crop will set terminal shoot buds earlier than young trees. When trees set terminal buds, blight stops spreading both between trees and within the affected trees. Under dry conditions when only a few strikes occur, pruning to the previous year's growth (the non-infected 2-year-old wood) should limit spread and reduce inoculum. This strategy also works when infections are few or is limited in location (one block or area of the orchard).

DNR- Definitely Need to Remove! Okay, a bad triage pun, but this is group you prune at ground level-- - trees with so many strikes that most of the tree would need to be removed. In this instance, severe pruning can stimulate new growth that can become re-infected, thereby increasing and not removing inoculum!

Trees should be examined two or three times weekly until either the epidemic slows or tree growth slows (which will slow the epidemic). One final note: Streptomycin or other antibiotic sprays should NOT be applied during summer because summer applications can result in rapid development streptomycin resistant strains of the blight pathogen.

