

# Ohio Fruit ICM News

Editor: Shawn R. Wright  
Ohio State University South Centers  
1864 Shyville Rd., Piketon, OH 45661  
Phone (740) 289-2071 extension 120  
E-mail: [wright.705@osu.edu](mailto:wright.705@osu.edu)

<http://southcenters.osu.edu/hort/icmnews/index.htm>

Volume 11 (27)

August 20, 2007

## In This Issue

Comments from the Editor  
Fruit Observations and Trap Reports  
Plant and Pest Development  
Summer Diseases  
Controlling Late Summer Apple Diseases Without Topsin M  
Currant Affair: Once-Banned Berry Makes Comeback in Wine  
Indiana Crop Conditions:  
Drought Statement  
Southern Ohio Vegetable and Small Fruit Update 8/13-8/19/07  
Calendar  
Ohio Poison Control Phone Number

## Comments from the Editor

Dr. Ellis has recommended a couple of good articles on diseases that are included.

For growers of matted row strawberry we are fast approaching the important Labor Day Sinbar application if appropriate for your situation. Two new herbicide registrations for strawberries have come through recently. Prowl H2O has a supplemental label from BASF, and UPI has a label for Ultra Blazer. We will keep you informed of appropriate use in Ohio as information becomes available.

Thought you might find the following website document useful. It details all of US EPA's major federal laws and programs that could affect an agricultural producer.

<http://www.epa.gov/oecaagct/agmatrix.pdf>

**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>

North Central Tree Fruit IPM Program  
Report Prepared by Zachary Rinkes (Erie County Extension Educator)  
Jim Mutchler East District IPM Scout (Erie and Lorain Counties) 8/13/07-8/14/07

Apples

Spotted tentiform leafminer 239 (down from 315)  
San Jose Scale 3.7 (down from 39.6)  
Redbanded leafroller 10.1 (up from 5.6)  
Codling Moth (average of 3) 6.9 (up from 5.0)  
Oriental Fruit Moth 13.8 (up from 8.2)  
Apple Maggot (sum of 3) 22.0 (up from 9.6)

#### Peaches

Redbanded leafroller- 7.3 (up from 3.5)  
Oriental Fruit Moth 19.0 (up from 2.5)  
Lesser peachtree borer 27.0 (up from 10.0)  
Peachtree borer 4.7 (up from 2.0)

Ted Gastier West District IPM Scout (Sandusky, Ottawa, Huron & Richland Co.) 8/13

#### Apples

Spotted tentiform leafminer 293.8 (down from 523)  
San Jose Scale 72.0 (up from 50.0)  
Redbanded leafroller 34.3 (up from 30.5)  
Codling Moth (average of 3) 3.4 (down from 4.0)  
Oriental Fruit Moth 8.6 (up from 4.7)  
Lesser appleworm 24.5 (up from 19.6)  
Apple Maggot (sum of 3) 0 (same as last week)

#### Peaches

Redbanded leafroller- 23.8 (up from 17.7)  
Oriental Fruit Moth 2.3 (down from 4.4)  
Lesser peachtree borer 14.1 (up from 7.1)  
Peachtree borer 4.1 (up from 3.4)

Waterman Lab Apple Orchards, Columbus, 8/9/07 to 8/15/07

Redbanded leafroller: 44 (down from 48 last week)  
Spotted tentiform leafminer: 163 (up from 113 last week)  
San José scale (mean of 2): 0.5 (up from 0 last week)  
Codling moth (mean of 3): 0.6 (down from 2.6 last week)  
Lesser appleworm (mean of 2): 5 (up from 3.5 last week)  
Tufted apple budmoth: 2 (down from 7 last week)  
Oblique-banded leafroller: 0 (down from 3 last week)  
Variegated leafroller: 5 (down from 10 last week)  
Apple maggot (mean of 3): 6.3 (down from 10 last week)

Ron Becker, Trap reports 8/13-8/17

Little insect activity was observed in most blocks, though a few did show fresh codling moth and apple maggot damage. Fruit cracking was also observed in apples due to weather conditions.

Wayne:

Codling Moth - 3.1 (down from 3.9)

Oriental Fruit Moth - 3 (down from 8)

Lesser peachtree borer -6 (up from 3)

Peachtree borer - 4 (same as last week 4)

Apple maggot (unbaited, sum of 3) - 0 (same as last week)

Holmes:

Codling Moth - 1.6 (down from 3.0)

Oriental Fruit Moth - 0 (down from 1.5)

Lesser peachtree borer - 8 (down from 12)

Peachtree borer - 1 (down from 3)

Apple maggot (unbaited, sum of 3) - 2.3 (up from 1.0)

Medina:

Codling Moth - 2.2 (up from .83)

Oriental Fruit Moth - 3 (up from 0)

Lesser peachtree borer - 0 (same as last week)

Peachtree borer - 0 (same as last week)

Apple maggot (unbaited, sum of 3) - 0 (same as last week)

**Plant and Pest Development** - (Based on Scaffolds Fruit Newsletter, Coming Events (D. Kain & A. Agnello), NYSAES, Geneva)

Obliquebanded leafroller 2nd flight peak	1784-2108
San Jose scale 2nd flight subsides	1785-2371
Oriental fruit moth 3rd flight peak	1821-2257
Redbanded leafroller 3rd flight peak	1881-2327
Apple maggot flight subsides	1908-2368
Codling moth 2nd flight subsides	1944-2536
Lesser appleworm 2nd flight subsides	1973-2387
Oriental fruit moth 3rd flight subsides	2000-2288
Lesser peachtree borer flight subsides	2017-2433
Obliquebanded leafroller 2nd flight subsides	2036-2458
Redbanded leafroller 3rd flight subsides	2142-2422
American plum borer 2nd flight subsides	2184-2544
Spotted tentiform leafminer 3rd flight subsides	2246-2432

**Summer Diseases** by Dan Cooley, University of Massachusetts [Reprinted from Healthy Fruit 15(13), 17 July 2007 with edits for NY conditions by Dave Rosenberger.] (Source SCAFFOLDS Fruit Journal Volume 16, No. 19)

For those of you too busy, too hot or just plain not interested in what goes into our advice on when to spray for summer diseases, just know that it's now time. Apply summer sprays, keep track of the time and rain, and reapply as necessary according to Table 1.

For the first summer spray, the most effective fungicide is a Topsin-M plus captan combination. If this can't be used, use either Flint, Sovran, or Pristine to get eradication of any infections that may have started. Thereafter, captan alone at appropriate intervals is sufficient [although the Flint, Sovran, Pristine, or Topsin plus Captan all provide better residual protection and are preferred where disease pressure is high. –DR]

Table 1. Fungicides for management of sooty blotch and flyspeck. Protection is gone when either the days of protection or amount of rain necessary for wash off, whichever comes first, have been met. (Based on tests by D. Rosenberger)

Treatment (rate/100 gal.)	Days of protection	Rain (inches) to wash off
Topsin M 70WP or WSP (3 to 5 oz) + Captan 50 WP (1 lb)	21	2
Flint 50 WDG (.67 to .8 oz)	21	2
Sovran 50 WG (1 to 1.6 oz)	21	2
Pristine (5 oz)	21	2
Captan 50 WP (2 lb)	14	2
Ziram 76 WP (1.5 lb)	14	2
Captan 50 WP (1 lb)	10	1.5
Ziram 76 WP (1 lb)	10	1.5

Through June, the risk of sooty blotch/flyspeck (SBFS) infection was low. It takes some time for the inoculum to develop in the trees and bushes around orchards. Then once it is released and lands on apples, it takes some time to develop into visible "specks".

I'm being deliberately vague about times because there's some disagreement on how much time it takes to develop inoculum and symptoms. Basically, plant pathologists agree that the flyspeck fungus grows only when plant surfaces are wet. However, we haven't settled on when to start counting the leaf wet hours, whether to count all leaf wet hours, and just how many leaf wet hours must be accumulated before fungicide treatments should start.

That's largely because sooty blotch and flyspeck are stealth pathogens. In flyspeck, the "specks" are actually the first stage of the fungus trying to form ascospores for the next year. Before the specks form, the fungus still grows, and produces lots of another kind of spore, conidia, but we can't see it doing that. It's only after a considerable amount of fungal growth and spore production, including movement from reservoir hosts

on orchard borders, that the fungus finally forms visible structures. The rest of the time, for practical purposes, it's invisible.

Researchers at North Carolina State University decided that the best way to start to get a handle on a better way to manage SBFS was to see if they could predict the first appearance of symptoms using weather information. From 1987 to 1994, they collected weather data and noted when the first SBFS symptoms appeared on apples. Based on this, they determined that it took 273 hrs of leaf wetness for the first SBFS symptoms to show on apples, counting only wetting that was 4 hours or longer, accumulated from the first rain to occur 10 days after petal fall (LWHA, 4 hr. min, 10 days). There wasn't a real biological explanation about why this worked. But they theorized that the fungi were probably growing invisibly on fruit up to the point that 273 LWHA accumulated, at which point they formed visible symptoms. Based on this, they recommended that growers put on Benlate or Topsin M at about 220 hours, a little before symptoms were predicted to appear. Benlate and Topsin M were the most effective materials available, and assumed to have eradicant activity against SBFS fungi, much as they did against scab. After this initial application, they recommended regular fungicide applications at roughly 2-week intervals through the rest of the season. This saved a spray or two from a little after petal fall until the 220 hours wetness had accumulated.

Later work in Kentucky simplified the model, and counted all wetting periods, not just the ones that were longer than four hours. This research used paper bags to protect fruit from SBFS, and compared the bags with fungicide. They concluded that it took from 185 to 251 hours of wetting, with no minimum on the wetting, before SBFS symptoms appeared. If fruit were bagged, or sprayed with Topsin M, at 175 wet hours starting at 10 days after petal fall, they stayed free of SBFS. There was no reason to think that bags would eradicate existing infections on the apples, so it appeared that the Topsin M was most likely working as a protectant fungicide, without eradicating invisible infections. Ultimately, this Hartman/Sutton model has become the most widely used forecast tool. It has worked throughout the upper Midwest and in the Mid-Atlantic, and it is used by Spectrum Technologies.

Cornell used a somewhat different approach for several years. As we did at UMass, they concluded that the last scab sprays should offer some protection against SBFS. Dave Rosenberger's trials indicated that the amount of protection that was provided by different fungicides ranged from 10 to 21 days, or from 1 to 2 inches of rain (see Table 1, above). So, the last fungicide application targeting scab would generally be applied during the first week to 10 days after petal fall, and would usually protect for up to 3 weeks. After that, 100 wet hours were allowed to elapse before a Topsin M application was applied. From then on, the table was used to tell when to apply the next spray. This approach has worked well.

While these programs have generally been effective, they are not based on a clear understanding of the pathogens and their biology, but on tests of varying spray intervals and the appearance of SBFS symptoms in response. The growth of the SBFS fungi is frustratingly mysterious. It isn't at all clear exactly when the flyspeck and sooty blotch

fungi land on apple fruit, or how long they grow before symptoms can be seen. Some tests indicate that they can grow, then stop growing, then start again, depending on whether the fruit are wet and whether a fungicide is present.

The Kentucky work is particularly interesting, because putting a bag around fruit at 175 hours of wetting stops SBFS. If all the bag is doing is keeping inoculum from getting to fruit, then this suggests that SBFS doesn't move into orchards until 175 wet hours measured from 10 days after petal fall. But how long after that does it take for the fungus to grow and produce symptoms? Ten wet hours? One hundred wet hours? We aren't all that sure. And while the fruit bags stop infections, a captan spray at the same time doesn't. But a Topsin M spray does.

Rosenberger's work in New York consistently points toward a period of 270 wet hours, a grace period, during which the fungus is probably on the fruit, but is not developing. Apparently, if an appropriate fungicide is applied before the end of this period, and coverage is maintained, the fungus is either killed or can't grow. In at least one test, however, it is clear that the fungus is not always killed, and a break in coverage will allow it to develop into symptoms. But because we can't watch the fungus develop, we really don't know what's happening during this time.

A few studies have indicated that benzimidazoles (Topsin M) do kill—that is, eradicate-SBFS fungi, while captan will not. For example, Rosenberger treated apples in the field with a benzimidazole plus Captan on several dates during summer. He harvested fruit from these trees several days after treatments were applied and incubated them, along with fruit from unsprayed control trees, in moist conditions to encourage SBFS development. Sixty-six percent of unsprayed fruit harvested on 23 July developed symptoms within two weeks, compared with only 20% of treated fruit that received the first spray on 19 July. Following a second benzimidazole-captan spray on 2 Aug, only 5% of fruit harvested on 6 Aug developed flyspeck after incubation. The presence of flyspeck on the control fruit indicated that the SBFS fungi were present on the fruit by 19 July and that the benzimidazole captan fungicide sprays had eradicated them.

It is not clear exactly what the strobilurines Flint and Sovran, or the strobie/boscalid combination Pristine do in terms of eradication vs. protection, though they have generally been very effective against SBFS.

North Carolina research did show that with the standard protectant fungicides, dilute applications are more effective than concentrate applications against SBFS. For example, with Captan 50W, 1X (dilute) applications, 53% of fruit had SB and 70% had FS. That compared with 5X applications where 97% of fruit had SB, and 90% had FS. This may be a simple coverage issue, but again, we don't know.

Add to all of this the discoveries out of North Carolina and Iowa that there aren't just two fungi causing SBFS, but many different species, and that several may occur on the same apple. It's unlikely that all of these fungi behave the same. We can only hope

that forecast models can accommodate whatever growth differences there may be between the several fungal species.

So far, they appear to do that. For the time being, without a clear understanding of the biology of the SBFS pathogens, we stick with what has worked in terms of management, and what allows us to save a spray or three in June and July. And the bottom line is that this year, there has now been enough wet weather to recommend that summer sprays begin.

### **Controlling Late Summer Apple Diseases Without Topsin M** by Dave Rosenberger, Plant Pathology, Highland (Source: SCAFFOLDS Fruit Journal Volume 16, No. 19)

A combination of Topsin M plus Captan is commonly used during June, July, and August to control sooty blotch and flyspeck (SBFS) and summer fruit decays on apples. However, some growers may need alternative controls during August for several reasons. First, the label for Topsin M limits applications to a total of 64 oz/A/year. In the Hudson Valley, where conditions are especially conducive to summer diseases, consultants often suggest that Topsin M is most effective if applied at 12–16 oz/A in combination with Captan. At those rates, only 5 or 4 sprays are allowed per year. Under lower disease pressure, Topsin M may provide adequate control of SBFS when applied at 9–10 oz/A, rates that would allow 7 or 6 applications per season. Where high rates of Topsin M are used during summer, the annual limit for Topsin M application may be reached before the spray season is completed. Topsin M may also be unsuitable for August applications if growers are selling fruit to buyers that will not accept fruit with detectable residues of Topsin M.

Flint, Sovran, and Pristine are effective alternatives for late-season control of summer diseases (Table 2). However, these products also have labels limiting the total number of applications for each season. Growers using Sovran or Flint for scab control may not be able to use these products in late-season sprays. Pristine is a good alternative for August sprays, but it may be more expensive than the Topsin-captan combination. Captan alone, if applied at maximum label rates on a 14-day interval, will provide adequate control of SBFS and summer fruit rots. However, Captan at those rates may leave considerable visible residue, and the shorter residual activity will result in increased costs for more applications during the late season.

In a 2006 field trial, we evaluated liquid lime-sulfur (LLS) as an option for summer disease control in organic orchards. As indicated in the table footnote, the last fungicide spray was applied 31 August, and protection from that spray was depleted by 14 September, due to accumulation of more than two inches of rainfall. From 14 September until harvest on 3 October, fruit were exposed to 181 hr of accumulated wetting, and that, combined with some spray gaps earlier during summer, brought the total flyspeck incubation period to 276 hr of accumulated wetting by 3 October. That total is slightly more than the 270 hr of wetting that usually allows appearance of the first flyspeck lesions on unprotected fruit.

Four applications of LLS at 2 qt and 4 qt, but not at 1 qt, per 100 gal controlled flyspeck just as well as four sprays of Topsin M plus Captan (the commercial standard). When LLS at 1 qt/100 gal was applied six times, or roughly every 10 days rather than every 21 days, it worked nearly as well as the higher rates of LLS. However, other trials have shown that LLS is not very effective for controlling summer fruit rots. In fact, high rates of LLS (e.g., 4 qt/100 gal) applied during summer may injure fruit skin, and that injury may exacerbate development of black rot and white rot.

We are still uncertain about the best approach for controlling summer diseases in organic orchards. Based on work completed to date, I suspect that LLS controls SBFS primarily via post-infection activity rather than via protectant activity. Thus, LLS applied at 2 qt/100 gal on a 15 to 20-day interval starting in early July might provide effective control of SBFS, so long as a final application is made close enough to harvest to prevent development of SBFS after the last spray.

Low rates of copper fungicides (e.g., 5 oz/100 gal of Cuprofix Ultra 40 Dispers) can also be used during late July and August to prevent summer fruit rots. However, even low rates of copper may discolor yellow-skinned apple cultivars. (Copper applications during June and early July will almost always cause lenticel injuries that appear as black spots on mature fruit.) We are currently evaluating the feasibility of using tank mixes of LLS and Cuprofix during August to determine if that combination will provide better control of both SBFS and summer fruit rots than either product used alone.

Phosphite fungicides may eventually provide another alternative for summer disease control. Aliette was the first fungicide in the phosphite fungicide group and it was used primarily to control *Phytophthora* diseases (i.e., root rots). However, the expiration of the Aliette patent allowed introduction of less expensive generic phosphites and stimulated exploration of other potential uses. In both 2005 and 2006, Dr. Turner Sutton in North Carolina conducted field tests that showed excellent control of sooty blotch and flyspeck where phosphite fungicides were combined with 6 lb/A of Captan 50W. The same rate of Captan 50W used alone was ineffective. Several phosphite fungicides were included in a 2006 trial conducted in the Hudson Valley. A phosphite-Captan combination provided residual protection during the preharvest interval (31 August to 3 October) equivalent to that of Pristine, Sovran, and the Topsin-Captan combination. Phosphite-plus-Captan combinations may prove useful for controlling SBFS during late summer after product labels are changed to include these diseases. So far as I have been able to determine, none of the phosphite fungicides currently have New York State labels that include SBFS or summer fruit rots on apples.

---

Final note: The very best fungicides will prove ineffective for controlling SBFS if they are not properly applied. Incomplete spray coverage and control failures can be expected when spraying in the wind, driving too fast, using low volumes of water per acre (e.g., < 80 gal/A with conventional nozzles), or attempting to penetrate dense foliage or clustered fruit. Where SBFS was a problem last year, growers should first evaluate their spray coverage to ensure that the fungicides are getting to the intended target. The



second most common problem is failure to respray trees during late August or early September if heavy rains wash off fungicides more than 25 days prior to harvest. Given the fungicides that are currently available, complete control of SBFS and summer fruit rots is feasible if fungicides are applied at the right time and under conditions that allow good spray coverage.

Table 2: Effects of various fungicide treatments on summer diseases in a trial conducted in 2006 at the Hudson Valley Lab in Highland, NY.

Material and rate of 3 Oct formulated product per 100 gal of spray <sup>a</sup> blotch	% of Golden Delicious fruit harvested				
	out of grade due to SBFS <sup>b</sup>		flyspeck		sooty
Control	99.5	f <sup>c</sup>	100.0	f	100.0
Captan 80W 10 oz (4 appl.)	29.5	e	44.0	e	13.5
Flint 50W 0.67 oz (4 appl.)	10.0	cd	19.4	cd	9.0
Sovran 50W 1.33 oz (4 appl.)	5.6	bcd	10.7	bc	5.6
Pristine 38 WDG 4.8 oz (4 appl.)	1.0	ab	5.0	ab	3.0
Captan 80W 10 oz + Topsin M 70 WDG 4 oz (4 appl.)	0.0	a	4.0	a	0.0
Liquid lime-sulfur 2 qt (4 appl.)	2.5	ab	6.5	ab	5.0
Liquid lime-sulfur 1 qt (6 appl.)	0.0	a	7.5	ab	0.5
Liquid lime-sulfur 1 qt (4 appl.)	14.8	d	31.5	de	22.5

<sup>a</sup> Sprays were applied 30 Jun, 19 July, 10 & 31 Aug except that treatments receiving 6 applications were also treated on 10 July and 28 July

<sup>b</sup> Fruit were down-graded from U.S. Extra Fancy due to sooty blotch and/or flyspeck.

<sup>c</sup> Numbers within columns followed by the same letter are not significantly different (Fisher's Protected LSD,  $P \leq 0.05$ ).

**Currant Affair: Once-Banned Berry Makes Comeback in Wine** by Mike Maslanik, Finger Lakes Times, Tuesday, August 7, 2007, mmaslanik@fltimes.com (Source NY Berry News Vol. 6, No. 8)

On a recent sunny afternoon, farm owner Curt Rhodes stepped off his specialty harvester to examine his haul. Two barrels brimming with black currants, which were illegal to grow just four years ago, stood nearby while Rhodes inspected the rows of bushes that produced his first-ever harvest. He estimated the crop will yield at least 1,000 pounds per acre this year, and after the plants have a while to grow, it should jump up to 2 1/2 tons per acre next year.

“It's going to work for us. I can tell you that much,” he said of growing the small, antioxidant-packed berries. “From beets to berries, it was a pretty good move.”

Two years after the family-owned R.H. Rhodes & Son Farm Inc. decided to exclusively grow black currants, its first harvest has hit the ground running. Montezuma Winery recently released Dragonfly, a currant wine made using berries grown at the farm, and a deal is being finalized with Forestville-based Walker's Fruit Basket, a nationwide supplier of grapes and wine juice. All in all, not bad for a group who had to learn the ways of the black currant on the fly.

But the triumphant return of the black currant is a bigger story than that of a family farm turning to a new cash crop. At its core, it proves that farms can remain economically viable with a little bit of creativity and a lot of hard work and determination. “You used to see hundreds of acres of green beans, red beets and all kinds of vegetables, but they aren't there anymore,” said Carolyn Sullivan, Curt Rhodes' sister and part-owner of the farm. “The nature of farming is changing, and we have to change with it.”

The federal government outlawed the cultivation of black currants in 1911 because the plant was an intermediate host for white pine blister rust, a disease that attacks pine trees. As science led to disease-resistant currants, the government left the ban up to the states in 1966. New York lifted the ban in 2003, thanks in large part to the lobbying efforts of Dutchess County resident and currant booster Greg Quinn. Quinn believes that the berry, which is packed with nutrients, has the potential to be New York's signature crop.

R.H. Rhodes & Son Farm began its currant experiment in 2004 with a one-acre test crop and then dove in last May, planting 17 acres of currants that were shipped from British Columbia. Previously, the more than 100-year-old farm specialized in row crops, such as beets and beans. Before that, apple orchards covered the property. Sullivan marveled at how easy the plants were to grow. “We just put them in the ground and away they went,” she said. So far, pests and disease haven't touched the crop, meaning they haven't needed any chemical treatments or sprays. The crop can't be certified organic, Sullivan said, because of the farm's long history of fertilizer use.

On their own, black currants aren't the most delicious berries, tending to be a little on the sour side. Sullivan describes them as “blueberries with attitude.” They do, however, make very good jams, jellies and salad dressings, she said. With the help of researcher Olga Padilla-Zakour, of the New York State Agricultural Experiment Station's Food Venture Center, Sullivan plans to start a new line of products under the label “Finger Lakes Black Currants.” So far, they're off to a good start. “The quality of the berries is excellent. They're very flavorful,” said Padilla-Zakour. “They can definitely reach a specialty food market that's been growing in recent years.” Sullivan will unveil the first Finger Lakes Black Currant products at the station's 125th anniversary celebration in September.

After picking the first test crop by hand, Rhodes is happy to have a new Littau-brand harvester - which arrived this spring from Oregon - to expedite the picking process. Somewhat resembling a toy from “How the Grinch Stole Christmas,” the harvester slowly drives alongside the bushes, shaking the berries off with thin metal rods and depositing them in the barrels by way of conveyor belt. “It beats hand-picking, and it works very nicely,” Rhodes said. “Plus, it doesn't hurt the bush any.”

When the farm planted its test crop, its owners sent interest surveys to around 70 area wineries to see if they'd want to buy some currants. One winery that took them up on the offer was Montezuma Winery, and they're glad they did, said Bill Martin, a family owner. “None of us had ever worked with currants before, so we were open to

experimentation,” Martin said. “They're pretty high in acidity, but packed with color and flavor.” The Dragonfly table wine emerged from the Montezuma wine lab in March and is selling well. Winemakers used apple wine to cut down on the acidity and create a balanced semi-sweet with a little kick at the end. Montezuma placed another order with the farm and looks forward to more experimentation in the future. “I think it will be really interesting to see how they do,” Martin said of the farm. “I think there is a market with people looking for something high in antioxidants, but the key is to keep it as a small, niche market.” Meanwhile two other area wineries expressed interest in buying currants, and Walker's Fruit Basket said it's willing to buy whatever is left, Sullivan said.

With the farm packing away currants by the barrel, the crop's future in New York is looking bright, said Farm Bureau Director Mark James, and so are the prospects of farmers looking to branch out into more unusual crops. “As with any small specialty crop, it's important for farms to diversify, branch out and try new things,” James said. “This is just one instance where farms can grow something different and be successful.”

### **Indiana Crop Conditions:** (Source: Purdue Facts for Fancy Fruit, 07-07)

Apple harvest has begun around the state with early varieties such as Lodi, Transparent and Pristine. Paula Red harvest is continuing in southern areas. Crops are patchy, due to varying severity of the spring frost. Grape harvest is beginning in the southern part of the state. The hot, dry conditions are slowing the accumulation of sugars, so while we were looking at an early harvest, it looks like things may be back to normal because of the heat wave.

### **Drought Statement**

Severe drought conditions have expanded further into portions of southern and western Ohio as well as further south in Indiana.

Much of the region under sever drought is at least 6 to as high as 12 inches below normal for the 90 day rainfall period. While recent rain has continued to reduce the rainfall deficits, regular rainfall of nearly an inch per week over the next month and near to below normal temperatures would be necessary to bring the far southern areas out of drought.

For Cincinnati, Dayton and Columbus, the rainfall is as follows.

STATION	SINCE MAY 1	INCHES BELOW NORMAL
CINCINNATI	4.94	9.72
DAYTON	7.84	6.06
COLUMBUS	7.89	6.60

Recent crop reports indicate roughly 25 percent of soybeans crops are in very poor or poor condition, with nearly 30 percent of the corn crop in poor or very poor condition.

**Southern Ohio Vegetable and Small Fruit Update 8/13-8/19/07** by Brad Bergefurd

Another very dry and hot week for the southern Ohio growing region with very little to no rainfall for the past 4 weeks. High temperature on Tuesday 8/14 was 88 making it the first day in the past 16 where the high temperature for the day was below 90.

Temperatures soared back into the low 100's in the Cincinnati area on Thursday 8/16. Some southern growing counties closer to the Ohio river as well as the Chillicothe area did receive 2/10 to 5/10 inch of rain with storms that came through southern most growing regions the evening of 8/16. Needless to say irrigation systems continue to run almost non stop around the clock with growers reporting very low water levels in ponds and some deep wells going dry.

Wholesale Sweet corn prices quickly climbed towards weeks end due to short supply from the drought with wholesale auction prices spiking to \$3.50 per dozen with some worm damage being reported. Sweet corn even under irrigation is wilting and leaves have been curled daily from the excessive heat.

Pumpkin and squash plants are aborting blossoms due to high temperatures. Downy Mildew and Powdery Mildew continue to spread rapidly across vine crops even under tight fungicide programs. There is some concern among vine crop growers of possibly some Downy Mildew disease resistance to some of the fungicides possibly showing up in fields even with fungicide rotations. This heavy disease pressure is resulting in vine crop shortages and very high wholesale market prices and demand for summer squash, cucumbers and fresh market pickles. Wholesale cantaloupe and watermelon prices remain strong considering high temperatures have sped up maturity, harvest and supply of these crops. The first Jack O lantern and pie pumpkins are being harvested and sold at wholesale produce auctions in southern Ohio with strong interest and demand in these crops. Where pumpkin vines are collapsing from the heat some reports of sunburn on the pumpkins are being reported. Harvest of hard winter squash, which began 3 weeks ago continues in transplanted fields. Harvest of Ornamental corn began this past week with very high quality and tip fill being reported. The ornamental corn crop is quickly drying down in the field with the high temperatures, with some husks being almost too dry to pull back and bundle.

Double cropped processing pickles in the Circleville area, replanted back into pickle fields harvested on the 4th of July, are at vine tip with a projected machine harvest around Labor day weekend.

Fresh market Tomato harvest continues with wholesale prices rebounding slightly this week with a strong, abundant and high quality supply available. Bacterial diseases of canker, spot and speck continue to be a problem for tomato growers even with tight fungicide programs. High tunnel tomatoes that have been harvested since June continue to be harvested. The high tunnel crops are showing much less disease pressure than crops planted in the open field, probably due to dryer foliage. July planted high tunnel tomatoes for a fall harvest are growing well and are beginning to show signs of bloom, with little disease pressure being reported on these late tunnel crops. Harvest of green beans, half runner beans, bell peppers, hot peppers, sweet and mild onions, red and green cabbage continues.

Plasticulture strawberry tips continue to be stuck for growing out as plug plants. Tips planted early August are growing well with mist irrigation intervals still narrowed due to the high temperatures. Overall plug plants are looking good and are right on schedule for field planting to begin around September 1st. Growers continue to prepare ground, spread fertilizer, form raised beds, fumigate and lay plastic and drip on plasticulture strawberry fields. Red raspberry harvest continues. Irrigation continues to run on blackberry, black raspberry and strawberries where field conditions are very dry. Harvest of blackberry crops continues with very high wholesale prices in the range of \$5 to \$8 per quart being reported.

### **Calendar** - Newly added in ***Bold***

**August 22, Honey Bee Meeting**, OSU Extension-Clark County, 4400 Gateway Blvd. Springfield, OH 6:30-9:00 p.m. Please call to reserve your seat. Payable at door. Cost: \$10.00 per person or apiary. Dr. Jim Tew, OSU Bee Specialist will speak on "Managing the Modern Bee Hive", John Grafton, Ohio Department of Agriculture will speak on "Coping with Honey Bee Problems". For additional information & reservations please contact: Jonah T. Johnson, OSUE Clark County, 937-328-4607.

August 23, Northwest Michigan Horticultural Research Station Open House and Equipment Show, Traverse City, Michigan. For more information phone (231) 946-1510 or [www.maes.msu.edu/nwmihort](http://www.maes.msu.edu/nwmihort).

**August 30, OFFER Field Day**, Wooster area. See what's new in certified organic grain, fruit and vegetable research. Tour experimental plots, sample organic products, and hear from and talk with OFFER scientists. For more information contact Kathy Bielek at 330-202-3528.

September 15 -16, Ninth Annual Ohio Pawpaw Festival, Lake Snowden. The Pawpaw will be celebrated with music, vendors, tastings, a cook-off, contests, kid's activities, and more for the whole family. To find out more visit [www.pawpawfest.com](http://www.pawpawfest.com) or email [info@pawpawfest.com](mailto:info@pawpawfest.com).

**September 18-20, Farm Science Review**. For more information <http://fsr.osu.edu/>

October 5-6, US Highbush Blueberry Council Fall Meeting, Crowne Plaza Northstar Hotel, Minneapolis, Minnesota. For more information: <http://www.blueberry.org/calendar.htm>.

Oct. 27, Kentucky Nut Growers Association Fall Meeting, UK Research and Education Center, Princeton. Contact Joe Masabni 270-365-7541 ext 247; e-mail [jmasabni@uky.edu](mailto:jmasabni@uky.edu).

November 11-13, 2007-- Southeast Strawberry Expo, at the Sheraton Imperial Hotel, Research Triangle Park (Durham), North Carolina. New Grower workshop

and farm tour on November 11; trade show and educational sessions on November 12-13. For more information, email [ncstrawberry@mindspring.com](mailto:ncstrawberry@mindspring.com), call 919-542-3687, or visit [www.ncstrawberry.com](http://www.ncstrawberry.com).

December 4-6, Great Lakes Fruit, Vegetable and Farm Market EXPO, DeVos Place, Grand Rapids, MI, for more information [www.glexpo.com](http://www.glexpo.com).

Jan. 7-8, 2008 -- Kentucky Fruit and Vegetable Conference, Embassy Suites, Lexington, KY. Contact John Strang 859-257-5685; e-mail: [jstrang@uky.edu](mailto:jstrang@uky.edu)

Jan 14-16, 2008. Ohio Produce Growers and Marketers Association Congress, Kalahari Resort & Conference Center, Sandusky Ohio

Jan. 28-30, 2008. Indiana Horticultural Congress, Adam's Mark Hotel, Indianapolis. For more information see [www.inhortcongress.org](http://www.inhortcongress.org)

Jan. 29-31 - Mid-Atlantic Fruit and Vegetable Convention, Hershey Lodge and Convention Center, Hershey, PA. For More information Contact William Troxell 717-694-3596.

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