

Ohio Fruit ICM News

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

Volume 10 (25)

August 31, 2006

In This Issue

Calendar
Comments from the Editor
Early August Heat Affects Honeycrisp Fruit
Growing Degree Days Across Ohio
Coming Events
Fruit Observations and Trap Reports
Ohio Poison Control Phone Number

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

September 14-15, Ideas to Reality: Value Added Success - Product Diversification and Packaging (September 14 from 6 to 8 p.m. at Agricultural Incubator Foundation - NOCK, 13737 Middleton Pike, Bowling Green, OH) and Value-Added Agriculture & Cooperative Development (September 15 from 8:30 to 10:30 a.m. at EISC & CIFT Main Office, 5555 Airport Highway, Ste. 100, Toledo, OH). For more information, contact Paula Ray, 419-823-3099 or via e-mail: aif@agincubator.org.

Sept. 16, 2006, Home Grape Production and Home Winemaking, 9:00am to 12:00 Noon at Kingwood Center, Mansfield. This workshop will cover all aspects of growing grapes in the home garden and techniques for improving your home winemaking skills. For more information contact Maurus Brown at brown.989@osu.edu.

September 16-17, Ohio Pawpaw Festival, Lake Snowden near Albany, Ohio. For more information <http://www.pawpawfest.com>

September 19-21, Farm Science Review, Molly Caren Agricultural Center, London.
<http://fsr.osu.edu/>

September 21, Grape and Pawpaw Field Day KSU Research Farm, Mills Lane, Frankfort, KY. For more information contact Kirk Pomper at 502-597-5942

October 6-7, U.S. Highbush Blueberry Council Fall Meeting. Regency, Bar Harbor, Maine, Regency, Bar Harbor, Maine. For more information (207) 288-9723.

November 9-11, Southeast Strawberry Expo, Sunset Beach, NC (near Wilmington). For more information, contact the NC Strawberry Association, 919-542-3687 or ncstrawberry@mindspring.com

December 5-7, Great Lakes Fruit, Vegetable and Farm Market EXPO. DeVos Place, Grand Rapids, Mich., www.glexpo.com.

January 7-9, 2007, Wisconsin Fresh Fruit and Vegetable Conference, Olympia Resort and Conference Center, Oconomowoc, www.wisconsinfreshproduce.org

Jan. 8-9, 2007, Kentucky Fruit and Vegetable Conference and Trade Show, Holiday Inn North, Lexington, KY. Contact John Strang 859-257-5685; e-mail jstrang@uky.edu

January 15-17, Ohio Fruit and Vegetable Growers Congress, Ohio Direct Agricultural Marketing Conference, Mid American Human Resource Conference and National Bramble Conference, Greater Columbus Convention Center.

January 25-28, 2007, Southern Sustainable Agriculture Conference. The Galt House Hotel and Suites, Louisville, Ky. For more information (678) 494-0696

Jan. 29. Beginning Commercial Apple Production Workshop. Indianapolis. For more info contact Peter Hirst, 765-494-1323 or hirst@purdue.edu

Jan. 29-31. Indiana Horticultural Congress and Trade Show, Indianapolis.

January 30-February 1, 2007, Mid-Atlantic Fruit & Vegetable Convention. Hershey Lodge & Convention Center, Hershey PA

February 9-12, 2007, North American Strawberry Growers Association Strawberry Symposium. Ventura, California. For more information <http://www.nasga.org/>.

February 12-13, 2007 Ohio Grape-Wine Short Course, Shisler Conference Center at OARDC in Wooster, OH.

February 14-15, 2007, Empire State Fruit and Vegetable Expo Syracuse, N.Y. For more information <http://www.nysaes.cornell.edu/hort/expo/>

February 16-17, 2007, North American Farmers' Direct Marketing Conference and Trade Show. Hyatt Regency Hotel, Calgary, Alberta, Canada. For more information www.nafdma.com.

Comments from the Editor

Please note the report from Dr. Welty in the Waterman Trap report about continued codling moth activity and the need for control. Ron Becker's final trap report for the

season is in this issue and I want to thank him for sending us his reports and crop updates. This will be the final report of Growing Degree Days for this year as well.

Early August Heat Affects Honeycrisp Fruit by Dave Rosenberger, Plant Pathology, Highland (Source: SCAFFOLDS Fruit Journal Volume 15, No. 24)

In eastern New York and parts of New England, high temperatures (mid-90's F) and high humidity created uncomfortable conditions during the first few days of August. Within a week, some of the Honeycrisp apples in our planting at the Hudson Valley Lab began showing signs of severe sunburn and heat injury. Several growers in Massachusetts and southern Vermont brought Honeycrisp fruit with similar symptoms to the field day hosted by Northeast Fruit Consultants on August 17.

Most growers recognize sunburn when it shows up as browning or bleaching of the skin on the sunward faces of apple fruits growing in exposed positions within the tree canopy. However, internal fruit damage caused by high temperatures is less common. High ambient temperatures combined with solar heating of exposed fruit can cause breakdown of cells in the fruit flesh. The injury first appears as water-soaked areas on the fruit surface. Water-soaking is also evident in the fruit flesh if fruit are inspected soon after the injury has occurred. Because the damaged cells die and collapse, whereas non-killed cells in the fruit continue to grow, fruit soon become misshapen. Sections through the damaged fruit then reveal necrotic and collapsed tissues.

Honeycrisp fruit damaged by sunburn or heat injury are especially susceptible to invasion by the species of *Botryosphaeria* and *Colletotrichum* that cause black rot, white rot, and bitter rot. The heat-damaged skin can no longer maintain the natural defense mechanisms that normally help to protect apple fruit from infection by these pathogens, so summer fruit rots may appear even where reasonable fungicide protection has been maintained through summer. In some cases, pathogens initially cause lenticel spots on sunburned areas of the fruit, and those spots later enlarge into summer fruit rots. Damaged fruit may be more prone to premature fruit drop, although such natural "pre-sorting" is never perfect and the falling fruit may cause bruises on fruit lower in the trees.

Nothing can be done at this point to mitigate losses from sunburn and heat injury that occurred in early August. In regions like the Hudson Valley where high temperatures during August are not uncommon, Honeycrisp growers may need to experiment with overhead cooling to protect the crop during August heat waves. Otherwise, the apparent susceptibility of Honeycrisp to heat injury is just one more justification for maintaining a high sales price for this difficult-to-grow cultivar.

Growing Degree Days Across Ohio - Data through August 30 from OSU Phenology Garden Network (not all locations) [OSU Phenology Garden Network](#)

OSU So. Centers Piketon	2952
Wilmington	2919
Chillicothe	2878
Athens	2859
Marietta	2845
Washington Court House	2825

Xenia	2805
Mt. Sterling	2723
Columbus	2682
Newark	2659
Delaware	2638
Findlay	2572
Toledo	2547
Coshocton	2536
Mansfield	2509
Wooster	2507
Canton	2504
Norwalk	2488
Shinrock	2470
Stow	2451
Canfield	2444
Cortland	2350
Willoughby	2340
Kingsville	2240

Coming Events -Art Agnello SCAFFOLDS Fruit Journal, Volume 15, No. 24

COMING EVENTS Ranges (Normal +/- Std Dev):	50F
American plum borer 2nd flight subsides	2184-2544
Apple maggot flight subsides	1908-2368
Codling moth 2nd flight subsides	1944-2536
Lesser appleworm 2nd flight subsides	1973-2387
Lesser peachtree borer flight subsides	2017-2433
Obliquebanded leafroller 2nd flight peak	1784-2108
Obliquebanded leafroller 2nd flight subsides	2036-2458
Oriental fruit moth 3rd flight peak	1821-2257
Oriental fruit moth 3rd flight subsides	2000-2288
Redbanded leafroller 3rd flight peak	1881-2327
Redbanded leafroller 3rd flight subsides	2142-2422
San Jose scale 2nd flight subsides	1785-2371
Spotted tentiform leafminer 3rd flight subsides	2246-2432

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>

Site: Holmes, Medina, and Wayne Counties
 Ron Becker, IPM Program Assistant
 Date: August 25

Black rot, European red mites, two spotted spider mites and codling moth damage are increasing in apples. We also continue to see new scab lesions on both leaves and fruit. Grapes were sprayed this past week for grape berry moth and some new strawberry plantings had to be sprayed for two spotted spider mites. Several of the apple varieties

being harvested now include Summer Rambo and Molly's Delicious. Reliance grapes should be ready to harvest soon.

Wayne:

Codling Moth - 3.6 (down from 4.3)

Apple Maggot - (Sum of 3, with apple essence lure) - 0 (down from 0.3)

Holmes:

Codling Moth - 2.2 (up from 2.1)

Apple Maggot - (Sum of 3, no lure) - 0 (same as last week)

Medina:

Codling Moth - 0.58 (down from 1.8)

Apple Maggot - (Sum of 3, no lure) - 0 (same as last week)

Site: Waterman Lab Apple Orchards, Columbus

Dates: 8/24/06 to 8/30/06

Pests: Redbanded leafroller: 25 (down from 26 last week)
Spotted tentiform leafminer: 488 (up from 439 last week)
San José scale: 22 (up from 8 last week)
Codling moth (mean of 3): 14.3 (up from 9.3 last week)
Lesser appleworm: 7 (up from 5 last week)
Tufted apple budmoth: 11 (up from 8 last week)
Variegated leafroller: 5 (up from 0 last week)
Obliquebanded leafroller: 13 (up from 6 last week)
Apple maggot (mean of 3): 1.3 (up from 0.7 last week)

Site: Waterman Lab Apple Orchards, Columbus

Dates: 8/17/06 to 8/23/06

Pests: Redbanded leafroller: 26 (down from 54 last week)
Spotted tentiform leafminer: 439 (up from 253 last week)
San José scale: 8 (up from 7 last week)
Codling moth (mean of 3): 9.3 (up from 7.3 last week)
Lesser appleworm: 5 (down from 6 last week)
Tufted apple budmoth: 8 (down from 17 last week)
Variegated leafroller: 0 (down from 4 last week)
Obliquebanded leafroller: 6 (down from 12 last week)
Apple maggot (mean of 3): 0.7 (down from 1.3 last week)

Note on codling moth: The population of codling moth adults remains active at high levels (>5 moths per trap per week). Continued moth activity means there is a risk of larvae infesting fruit unless an insecticide program is maintained until moth activity declines. The prolonged flight of this generation is not surprising, after we saw an extremely prolonged first generation. At Columbus, our degree-day accumulation since the first emergence of codling moth on 4 May is now 2430 degree-days (as of 8/31/06). One full generation takes about 1000 degree-days, so now that we are above 2000 degree-days, there is a chance that we are seeing a partial third generation.

North Central Tree Fruit IPM Program Report Prepared By Zachary Rinkes - Erie County Extension Educator Trap Reports can be found at: <http://erie.osu.edu/north-central-fruit-integrated-pest-management-program>

Jim Mutchler - East District IPM Scout (Erie and Lorain Counties)

Dates - 8/21/06 and 8/22/06

Apples

Redbanded leafroller - 3.1 (down from 3.3)
Oriental Fruit Moth - 3.8 (up from 3.1)
San Jose Scale - 10 (down from 60)
Codling Moth (mean of 3) - 5.2 (up from 3.8)
Apple Maggot (sum of 3) - 3.1 (up from 1.5)

Peaches

Redbanded leafroller - 1.0 (down from 4.0)
Oriental Fruit Moth - 6.3 (down from 7.0)
Lesser peachtree borer - 17.0 (up from 14.0)
Peachtree borer - 0.7 (down from 4.7)

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

Date - 8/21/06

Apples

Spotted tentiform leafminer - 143 (down from 272)
Redbanded leafroller - 13.0 (down from 14.0)
Oriental Fruit Moth - 11.0 (same as last week)
San Jose Scale - 0 (same as last week)
Codling Moth (mean of 3) - 1.0 (down from 1.7)
Lesser appleworm - 7.1 (up from 4.9)
Apple maggot (sum of 3) - 0 (same as last week)

Peaches

Redbanded leafroller - 17.3 (down from 20.3)
Oriental Fruit Moth - 0.1 (same as last week)
Lesser peachtree borer - 12.1 (up from 11.3)
Peachtree borer - 0.3 (down from 0.8)

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