# **Ohio Fruit ICM News**

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

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### **Comments from the Editor**

Still dry across Ohio and we are continuing to irrigate. Plasticulture strawberry harvest will be ending in southern Ohio soon, but matted row berries are growing well with irrigation. With the hot, dry weather we need to be on the lookout for mite damage.

The Indiana Hort. Society Summer Meeting will be held close enough to Ohio (even in Ohio) that growers may wish to take this opportunity to interact with growers from Indiana. The summer meeting has been scheduled for July 2-3. We will visit two outstanding orchards, with well developed direct retail marketing outlets. On July 2, we will visit Beiersdorfer Orchard in Guilford IN (just to the west of Cincinnati) and on July 3 we are being hosted by Wesler Orchards in New Paris, Ohio (less than a mile east of the state line near Richmond IN). For more details of the meeting contact Peter Hist <a href="mailto:hirst@purdue.edu">hirst@purdue.edu</a> and check out the orchard websites: <a href="http://www.beiersdorferorchard.com">http://www.beiersdorferorchard.com</a> and <a href="http://www.weslerorchards.com/">http://www.weslerorchards.com/</a>

**Fruit Observations and Trap Reports** Trap reports for Columbus are posted at least once per week on the internet at <a href="http://bugs.osu.edu/welty/tree-traps.html">http://bugs.osu.edu/welty/tree-traps.html</a>

Waterman Lab Apple Orchards, Columbus - 5/17/07 to 5/23/07

Redbanded leafroller: 0 (same as last week)
Spotted tentiform leafminer: 0 (same as last week)
San José scale (mean of 2): 0 (same as last week)

Codling moth (mean of 3):

Lesser appleworm (mean of 2):

72 (down from 113 last week)

Tufted apple budmoth:

Oblique-banded leafroller:

Variegated leafroller:

18.3 (down from 25 last week)

3 (down from 5 last week)

2 (up from 0 last week)

0 (down from 2 last week)

Waterman Lab Apple Orchards, Columbus - 5/10/07 to 5/16/07

Redbanded leafroller: 0 (same as last week)

Spotted tentiform leafminer: 0 (down from 1 last week)
San José scale (mean of 2): 0 (same as last week)
Codling moth (mean of 3): 25 (up from 13 last week)
Lesser appleworm (mean of 2): 113 (up from 62.5 last week)

Tufted apple budmoth: 5 (up from 3 last week)
Oblique-banded leafroller: 0 (set last week)

Variegated leafroller: 2 (set last week)

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) - Date 5/21-5/22/07 Apples

Spotted tentiform leafminer 81.0 (down from 569)

San Jose Scale 12.3 (down from 20.9)

Redbanded leafroller 1.0 (down from 4.5)

Codling Moth (average of 3) 5.1 (up from 3.1)

Oriental Fruit Moth 13.7 (down from 25.3)

Peaches

Redbanded leafroller- 0.3 (down from 6.0)

Oriental Fruit Moth 8.7 (down from 25.7)

Lesser peachtree borer set

Peachtree borer - set

Jim Mutchler East District IPM Scout (Erie and Lorain Counties) Date 5/14/07-5/15/07 Apples

Spotted tentiform leafminer 569 (up from 533.6)

San Jose Scale 20.9 (up from 0)

Redbanded leafroller 4.5 (down from 4.6)

Codling Moth (average of 3) 3.1 (up from 0.2)

Oriental Fruit Moth 25.3 (down from 30.3)

Peaches

Redbanded leafroller- 6.0 (down from 23.0)

Oriental Fruit Moth 25.7 (down from 85.7)

Ted Gastier West District IPM Scout (Sandusky, Ottawa, Huron and Richland Counties)
Date 5/21/07

**Apples** 

Spotted tentiform leafminer 62.5 (down from 482.2)

San Jose Scale 0 (same as last week)
Redbanded leafroller 0.25 (down from 5.2)
Codling Moth (average of 3) 2.8 (up from 1.1)
Oriental Fruit Moth 40.3 (down from 76.6)
Lesser appleworm 38.5 (first report)

#### Peaches

Redbanded leafroller- 0.3 (down from 49.3) Oriental Fruit Moth 7.0 (up from 2.2) Lesser peachtree borer - set Peachtree borer - set

## Ron Becker (Wayne, Holmes, Medina County) 5/25/07

Apple scab has started to show up on fruit in orchards that had problems controlling scab on the leaves, though the leaves look no worse this week than last. We are also finding fruit with plum curculio and tarnished plant bug damage (less than 10%). Fruit drop is just starting to occur. Peaches are showing good growth with less than 5% insect damage to the fruit. Plasticulture strawberries are being picked while most other strawberries are at least a week to two weeks away from first harvest. Trap catches are as follows:

### Wayne:

Codling Moth - (Average of 3 traps) - 18.6 Oriental Fruit Moth - 10 Lesser peachtree borer - 7 Peachtree borer - 0

### Holmes:

Codling Moth - (Average of 3 traps) - 2.5 Oriental Fruit Moth - 5 Lesser peachtree borer - 30 Peachtree borer - 0

### Medina:

Codling Moth - (Average of 3 traps) - 1.3 Oriental Fruit Moth - 0 Lesser peachtree borer - 2.0 Peachtree borer - 0

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

### Growing Degree Day Ranges Base Temp.50F (Normal +/- Std Dev)

| Mirid bugs hatch complete       | 252-350 |
|---------------------------------|---------|
| Plum curculio oviposition scars | 256-310 |
| present                         |         |
| Pear psylla hardshells present  | 271-361 |

| American plum borer peak catch      | 279-495  |
|-------------------------------------|----------|
| San Jose scale 1st flight peak      | 319-413  |
| Redbanded leafroller 1st flight     | 321-561  |
| subsides                            |          |
| Codling moth 1st flight peak        | 325-581  |
| Obliquebanded leafroller pupae      | 328-482  |
| present                             |          |
| Spotted tentiform leafminer 1st     | 353-565  |
| flight subsides                     |          |
| Rose leafhopper adults on           | 366-498  |
| multiflora rose                     |          |
| Lesser peach tree borer adult       | 372      |
| emergence                           |          |
| Black cherry fruit fly 1st catch    | 380-576  |
| Pandemis leafroller first catch     | 420-508  |
| European red mite summer egg hatch  | 424-572  |
| Peachtree borer 1st catch           | 439-841  |
| Obliquebanded leafroller 1st catch  | 479-605  |
| Multiflora rose first bloom         | 548      |
| Spotted tentiform leafminer 2nd     | 560-740  |
| flight begins                       |          |
| Obliquebanded leafroller 1st flight | 565-827  |
| peak                                |          |
| Lesser appleworm 1st flight         | 570-920  |
| subsides                            |          |
| Pear psylla 2nd brood nymphs hatch  | 584-750  |
| San Jose scale 1st generation       | 619-757  |
| crawlers present                    |          |
| Arrowwood viburnum full bloom       | 621      |
| Obliquebanded leafroller summer     | 625-957  |
| larvae hatch                        |          |
| American plum borer 1st flight      | 698-1032 |
| subsides                            |          |

# **Vegetative Growth Control on Crop Loss Apple Trees** (Source: Purdue Facts for Fancy Fruit 07-03)

In those years when the crop is lost due to freeze or frost, Apogee and Ethrel can be used to reduce growth. Apogee is an effective vegetative growth control material. It must be applied in water with a buffering agent and a surfactant. It is not compatible with some materials such as calcium fertilizer. The full seasonal rate is 12 oz/100 (48 oz/acre on full size trees). It is mostly used on full bearing cropping trees at 2/3 the full rate and adjusted for TRV (Tree Row Volume) size trees. Ethrel can reduce vegetative growth and will increase return bloom. It is applied at 5, 7, and 9 weeks after full bloom at 1 pt/acre. Unfortunately, bearing apple trees that have lost their crop will generally come back with an abundant bloom and don't need the Ethrel enhancing bloom effect.

applied starting at petal fall with the first spray and applied every two weeks. Growers have found that lower seasonal rates will work fine at 24 to 30 oz/acre (example: 8 + 6 + 6 + 6). Ethrel can be added to the lower rates at 1 pt/acre with the third and forth spray. This will provide additional vegetative control. On 75% TRV trees, the following program will provide good vegetative control, but also increase return bloom. The first spray should be applied at KBPF of 8 to 12 oz/acre of Apogee, second spray two weeks later of 6 to 8 oz/acre Apogee, third spray two weeks later of 6 to 8 oz/acre Apogee + 1 pt/acre Ethrel, and the fourth spray two weeks later the same as the third.

If temperatures are above 85F, do not apply the Ethrel – wait for cooler conditions. Apples on lightly cropped trees will be advanced in maturity. Ethrel will also hasten apple maturity of any fruit on the trees. It is often the early season varieties that are most affected (varieties that ripen before Empire). If that is not desired, do not treat with Ethrel. (Phil Schwallier, Michigan State University)

Applying Apogee: There are four points that I would like to make about applying Apogee in apples. First is timing, second is rate per acre, third is thinning relationships and fourth compatibility.

Timing. Apply Apogee when vegetative shoot growth is less than 3 inches. This is about a 7 to 10 day window commencing at the king bloom petal fall stage. Most years all varieties can be treated at this time. The second application should be applied two weeks later and the third application two weeks after the second. Sometimes a fourth application is needed, but that is optional based on crop load and tree vigor. Excessive rainfall and light crops will promote vegetative growth; therefore an additional fourth application may be needed.

Rate. Rate per acre is usually calculated on a tree row volume basis and adjusted to 2/3 of the label full rate. This 2/3 rate/acre is a season long rate per acre. For example, if your trees are 75% tree row volume then 24 ounces per acre is the seasonal rate (48 \* .75 \* 2/3). Best results occur when seasonal rate is split into three or four sprays. For example, 8 + 8 + 8. When fire blight is a severe risk, the first application at king bloom petal fall timing should be increased, perhaps as much as 150% of a split rate. For example, increased from 8 ounces per acre to 12 ounces per acre. Subsequent sprays, the second and third sprays could be reduced, so the seasonal application would be 12 + 6 + 6 = 24 ounces per season.

Thinning. Apogee tends to increase fruit set, therefore more aggressive thinning is needed. Increase your thinning by 10 or 15%.

Compatibility. Apogee is not compatible with calcium or boron in the tank. Also, we suggest that Apogee be applied after a thinner. If the two-week timing interval is also the ideal time to thin, make your thinning application first and then a couple days later follow with Apogee. Remember to include the label recommendations for AMS and surfactants.

In a summary; Apogee is an excellent tool to help control vegetative growth and

especially suppress fire blight spread among shoots and within shoots. Follow these tips to get the most out of Apogee. (Phil Schwallier, Michigan State University)

# Fresh Produce Food Safety Comments to FDA

The Food and Drug Administration (FDA) is accepting comments regarding, data, and other scientific information about current agricultural and manufacturing practices used to produce, harvest, pack, cool, process, and transport fresh produce; risk factors for contamination of fresh produce associated with these practices; and possible measures by FDA to enhance the safety of fresh produce. There is pressure for FDA to develop federal regulations. Ohio Farm Bureau is concerned that these regulations could 1) be geared toward large western produce growers, 2) negatively affect Midwest production, 3) negatively affect small retail growers and 4) negatively impact international trade.

Ohio Farm Bureau is asking fresh fruit and vegetable producers to submit comments by June 13, 2007. Read the Farm Bureau Action Alert. Contact John Wargowsky, Ohio Farm Bureau, PH: 614-246-8291, FX: 614-246-8686 <a href="mailto:jwargows@ofbf.org">jwargows@ofbf.org</a>, PO Box 182383, Columbus, OH 43218 for more information.

NASGA Summer Tour: Ontario and New York by <u>Kevin Schooley</u>, Exec. Director, North American Strawberry Growers Association (Source: NY Berry News, Vol. 6, #5)

Before the summer comes to an end, treat yourself to a mini-break and the annual NASGA Summer Tour, August 14-15, 2007. NASGA's summer tours provide a unique chance to see other farm businesses in full swing. The 2007 summer tour will be based in Niagara Falls, Ontario.

We will visit many interesting farms and markets. We will begin in Ontario on day one with some historic sites along the breathtaking Niagara Parkway. Stops include a beautiful farm market, and a neighboring strawberry farm with plasticulture and day neutral production. The Niagara area has a large greenhouse industry and we hope to visit a 25 acre operation that produces all its energy needs on site using wind and biofuel ingestors. Our last stop will be at Strawberry Tyme Farms where we will see a variety of activities including nursery production, plasticulture and matted row strawberries and approximately 30 acres of tunnel production.

On our second day we will cross the border to New York to tour fruit farms near the beautiful shores of Lake Ontario. We will visit berry farms, a first rate market and value-added enterprises where products such as fruit butters and fruit wines are made. At one stop, Andrew Landers, from Cornell University will host a sprayer demonstration. Our final stop will be along the south shore of Lake Ontario where we will enjoy the scenery and reflect on the last two days of tours.

A block of rooms is reserved at the beautiful Sheraton Fallsview. This is a busy time of the year in Niagara Falls so if you are considering participating in the tour, book a room now. The Sheraton has created a personalized website for us to reserve rooms for our event at

http://www.starwoodmeeting.com/StarGroupsWeb/res?id=0703190882&key=69157. If you prefer to call in your reservation (1-877-353-2557) please quote group code NAH14A.

For more information and updates see: www.nasga.org

# IR-4 Launches Searchable Database for Biopesticide & Organic Pest Management Solutions by Sherrilynn Novack, PR & Communications, IR-4 Project Headquarters, Rutgers, The State University of NJ, Princeton, NJ 08540 (Source: NY Berry Times, Vol. 6, #5)

May 17, 2007, Princeton, NJ - The Interregional Research Project No. 4 (IR-4), headquartered at New Jersey's Agricultural Experiment Station at Rutgers University, announced today the launch of its Biopesticide / Organic database on the IR-4 website. The database, which is searchable by crop, pest, and state, will assist commercial and home growers of specialty crops. Specialty crops include fruits, vegetables, ornamentals and turf, but IR-4 also includes minor pests that are found on major row crops in this database. IR-4 Biopesticide Manager, Dr. Michael Braverman explained, "This project was conceived out of the observation that most growers or homeowners were unaware of the variety of today's biopesticides. There are a few Biopesticides that show up on conventional product websites, but there isn't a database for just biopesticides and organics. Creating this database is a tool for helping growers find answers to their pest problems."

### How it Works

Locate the database at: <a href="www.ir4.rutgers.edu/Biopesticides/LabelDatabase/index.cfm">www.ir4.rutgers.edu/Biopesticides/LabelDatabase/index.cfm</a> and click on the "Find Answers" prompt. Once opened, the database enables growers to input their crop, pest and state and it responds by providing a list of EPA registered product labels that fit their criteria. It also supplies the manufacturer contact information and other pertinent data. "Of course it is ultimately the responsibility of the end user to follow label directions," Braverman continued. "Organic growers will find this particularly useful too, as the database can limit the search to organically approved pest management products."

### Why Biopesticides?

Biopesticides are primarily natural products or organisms that are compatible with integrated pest management. They have broad modes of action which avoids resistance problems that may exist with some conventional products. Biopesticides often work best in rotation with conventional products so that optimal pest management can be obtained.

Most biopesticides have no restricted entry interval requirements. Whereas conventional products often limit the time growers can return to the fields following a treatment. This can hamper pruning, weeding, irrigation or other cultural practices. Homeowners as well may have difficulty keeping children and pets off treated areas, using biopesticides can

alleviate these concerns. Another advantage of biopesticides is reduce time to harvest. If a late season pest is discovered close to harvest or if a field contains a crop with multiple harvests, there may not be a conventional product option - biopesticides can fill in that gap.

Buyers and consumers are becoming increasingly selective in their purchasing habits. Illegal residues can result in loss of markets, fines, and consumer avoidance. Biopesticides often contain natural food products that are normally consumed and do not have residue concerns.

There are still many pest problems that conventional products do not address. Since biopesticides are, in general, broadly labeled, growers of minor crops with obscure pest problems may find a biopesticide can provide a solution to their needs.

### Funding for Database

Part of the funding for this database was made possible through a grant from EPA Region 2. Technical assistance was provided by those at EPA headquarters and many Biopesticide Industry Alliance manufacturers. Additionally, many individual companies contributed their information to help create the database. "We will be updating the data continually and welcome user comments. We hope this resource will be a valuable tool for our stakeholders," concluded Braverman.

#### About IR-4

For over forty years, the IR-4 Project has been the major resource for supplying pest management tools for specialty crops by developing research data to support registration clearances. To date, IR-4 has facilitated over 10,000 food use registrations and 10,000 registration expansions on nursery/ornamental crops.

IR-4 operates as a unique partnership between the State Agricultural Experiment Stations, the USDA (ARS and CSREES), specialty crop growers and the crop protection industry to accomplish its goal. It uses an extensive stakeholder driven process to prioritize research ensuring the most critical pest management needs are being addressed.

Over 80% of IR-4's research effort has involved new pest management technologies with biopesticides and lower risk chemistries.

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

June 3-5: National Value-Added Agriculture Conference, Lexington, Ky.

June 13, OPGMA Summer Tour. Bauman Orchards, Rittman, Ohio. Complimentary registration will be offered to OSU Extension Educators. The separate lunch fee is \$9 by June 6 and \$12 on-site. Pre-registration is strongly encouraged. To register go online at www.opgma.org or call 614-487-1117

- June 13-15, IFTA Summer Tour, Part 1, High Denisity Sweet Cherries, Yakima, Washington. For more information see the International Tree Fruit Association website <a href="mailto:ifruittree.org">ifruittree.org</a>, or email pheasant@ifruittree.org,
- June 17-19, IFTA Summer Tour, Part 2, Apples, Rootstocks, Intensive Systems, Yakima, Washington. For more information see the International Tree Fruit Association website <a href="mailto:ifruittree.org">ifruittree.org</a>, or email pheasant@ifruittree.org,
- June 21, Indiana Farm Sustainability Tours- Urban Fringe Marketing, Hancock County, Ind. (317) 462-1113
- June 28, OSU Extension Honey Bee Field Day, OARDC Wooster. 3:00-8:00, Fisher Auditorium. For more information please contact: Sherry Ferrell 330-263-3684 or by email at ferrell.6@osu.edu
- *July 7, Viticultural Field Day*, University of Kentucky Horticultural Research Farm, Lexington. 10:00 a.m. 5:00 p.m. Registration \$25 for KVS members; \$50 non KVS members, includes lunch and KVS wine glass. Contact Kate Edwards 859-527-6635.
- July 10, Western Research Station Agronomy Field Day, South Charleston, Ohio. (937) 484-1526
- July 14 -- Kentucky Nut Growers Association Summer Grafting Meeting, Don Compton's Farm, 387 W. Short St, Marengo, IN 47140; 812-365- 2278.
- July 19, Crop, Soil, and Water Field Night, OSU South Centers, Piketon. For more information contact Dr. Rafiq Islam, 740-289-2071.
- July 24, Farm Focus Field Day 2007, 8 a.m to 3 p.m Van Wert, Ohio. Rain date if needed- Thursday, July 26, 2007. Topics include GPS guidance and autosteering demonstrations, One pass fall tillage equipment demonstrations, OSU Entomology specialists covering corn rootworm scouting and root rating, plus other pests! There will be no charge for admission. For more information phone (419) 238-1214.
- July 26, Beekeeping Workshop, OSU South Centers, Piketon. 3:00-8:00. More information to follow.
- August 9, OSU South Centers Horticulture Field Night.
- August 14-15, 2007. NASGA Summer Tour, Niagara Falls Canada and Niagara region of New York.
- August 16, Ohio Grape & Wine Day, Ashtabula Agricultural Research Station, Kingsville. For more information contact Greg Johns (440/224-0273).

August 23, Northwest Michigan Horticultural Research Station Open House and Equipment Show, Traverse City, Michigan. For more information phone (231) 946-1510 or <a href="https://www.maes.msu.edu/nwmihort">www.maes.msu.edu/nwmihort</a>.

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

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.

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

Jan 14-16, 2008. Ohio Produce Growers and Marketers Association Congress

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