

# Newsletter Extension



# **Fruit ICM News**

Volume 7, No. 28 July 24, 2003

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#### Calendar

August 4-5: HACCP (Hazard Analysis Critical Control Point) Workshop for Apple Cider & **Juice:** will take place at the Berks County Ag Center in Leesport, PA. For more information please contact Dr. Luke LaBorde, Penn State University, at 814-863-2298 or e-mail at lf15@psu.edu.

August 19: Ohio Grape & Wine Field Day will be held at the Grape Research Branch, 2625 S. Ridge Rd. East, Kingsville, OH, from 2:00-5:00 PM Activities for the day will include tours of research vineyards and the opportunity to meet and talk to OARDC researchers. Free admission. Contact Greg Johns at 440-224-0273 or johns.1@osu.edu.

**August 19: Grape Twilight Tour** will immediately follow the Grape & Wine Field Day. The twilight tour will take place from 6:00-8:30 PM at Gene & Heather Sigel's South River Vineyard, 6062 South River Road, Geneva, OH. Advance registration is \$15.00 per person and includes dinner. Call Ashtabula County Extension for details at 440-576-9008 or send email to dmarrison.2@osu.edu.

## **Japanese Beetle Control**

Sources: Scaffolds Fruit Journal, July 21, 2003 and Rick Foster, Purdue Entomologist, Facts for Fancy Fruits, 2002-09, July 10, 2002. Chart based on the 2003 Commercial Spray Guides for Tree and Small Fruits.

This perennial pest overwinters as a partially grown grub in the soil below the frost line. In the spring, the grub resumes feeding, primarily on the roots of grasses, and then pupates near the soil surface. Adults begin to emerge during late June and early July. The adults fly to any of 300 species of trees and shrubs to feed. Early feeding after emergence is usually on the foliage and flowers of low-growing

plants such as roses, grapes, and shrubs. Later feeding is usually on tree foliage.

On tree leaves, beetle adults devour the tissue between the veins, leaving a lace-like skeleton. Severely injured leaves turn brown and often drop. Adults are the most active during the warmest parts of the day and prefer to feed on plants that are fully exposed to the sun.

Sevin is the most effective material labeled for use on most fruit crops. The preharvest interval (PHI) is 3 days for the tree fruits, which usually does not present a problem. However, the PHI for Sevin on the small fruits is 7 days, which can present a huge problem during harvest. Imidan is moderately effective and has a 3-day PHI, which may help somewhat. Malathion has a 1-day PHI on blueberries and brambles, although it is not the most effective insecticide.

Insecticides containing pyrethrum can be used up to the day of harvest, but provide only very short-term control. Be sure to adhere to the preharvest restriction and Restricted Entry Intervals for whatever pesticide you choose to use.

#### Harvest and Re-entry Restrictions for Japanese Beetle Insecticides

		Days 1	Restricted-Entry			
Material	Grape	Blueberry	Brambles	Apples	Peaches	Interval (REI)
Imidan	14	3*	-	7	14	24 hrs
Malathion	3**	1**	1	-	7	12-24 hrs**
Pyrellin	0	0	0	-	-	12 hrs
Rotenone	1	1	1	-	-	12 hrs
Sevin	7	7	7	3	3	12 hrs

<sup>\*</sup> Imidan has a 24(c) registration for blueberries in Indiana and Illinois that allows up to 5 applications per season. The product is restricted to no more than 2 applications per season in Ohio and northeastern states.

## A Non-Conventional Apple Invader

Source: Celeste Welty, OSU Entomologist and <a href="http://www.ipm.uiuc.edu/fieldcrops/insects/stalk\_borer/">http://www.ipm.uiuc.edu/fieldcrops/insects/stalk\_borer/</a>

A worm found recently in a Ginger Gold apple has been identified as a stalk borer *Papaipema nebris*. This pest seems to be more common than usual this year. We usually hear about it in pepper or tomato, but it can get into many weeds as well as potato, corn, soybean, and other crops. It goes through many larval instars and switches hosts as it grows, usually starting in a small stem and working its way up to the giant ragweed. A stalk borer inside an infested plant is protected from an insecticide treatment, but as the borer leaves one host in search of a newer, larger host plant, it can be killed by insecticides.

The stalk borer passes the winter in the egg stage. The eggs hatch in May and the larvae tunnel into nearby plants, becoming full grown in July. They then pupate, usually just below the soil surface, and

<sup>\*\*</sup>Malathion label should be consulted as harvest restrictions, use limitations, or restricted entry intervals vary by crop, crop use, rate, or formulation.

emerge as moths in August. The moths deposit eggs in weeds and grassy patches, particularly along fence rows, ditch banks, and grass waterways. There is one generation a year.

The larvae are brown with white longitudinal stripes and distinctive purple areas in the middle of the body. The larvae are active and move rapidly when disturbed. When full grown, they are 1½ to 2 inches long. The pupa is brown and spindle-shaped. The moth has a wing expanse of slightly over one inch, and the forewings are brown to gray with small white spots. The eggs are somewhat globular, ridged, and laid in the creases of rolled or folded leaves, weeds, grasses, and garden crops.

### William (Bill) Eyssen to be Honored

Source: Tom Sachs, Executive Director, Ohio Fruit Growers Society

William Eyssen, of Mapleside Farms in Brunswick, Ohio, will be inducted into Ohio Agricultural Hall of Fame on Friday, August 8, 2003, 8:00 a.m. at the Rhodes Youth Center on the grounds of the Ohio Expo Center and State Fair, Columbus, Ohio. If you are interested in attending, reservations are required for breakfast tickets at \$10 and pre-sale State Fair tickets at \$6. Please contact the Ohio Ag Council Executive Director Jane Scott at 614-228-2332. Former inductees include Louis Bromfield, Bob Evans, Dr. Freeman Howlett, Roy Kottman, Dr. James Utzinger, and Eugene Wittmeyer.

#### Degree Day Accumulations for Ohio Sites July 24, 2003

	Degree Day Accumulations					
Ohio Location	Base	45° F	Base 50° F			
	Actual	Normal	Actual	Normal		
Akron/Canton	1936	2003	1373	1481		
Cincinnati	2351	2596	1748	1985		
Cleveland	1973	1952	1430	1443		
Columbus	2289	2245	1694	1687		
Dayton	2175	2306	1590	1748		
Kingsville	1673	1803	1164	1325		
Mansfield	1831	1981	1275	1464		
Norwalk	1900	1950	1358	1447		
Piketon	2405	2549	1774	1935		
Toledo	1897	1945	1356	1445		
Wooster	2014	1885	1444	1375		
Youngstown	1735	1836	1190	1335		

## **Pest Phenology**

<b>Coming Event</b>	Degree Day

	Accum. Base 50° F
San Jose scale 2 <sup>nd</sup> flight peak	1271 - 1874
Redbanded leafroller 2 <sup>nd</sup> flight subsides	1291 - 2160
Apple maggot flight peak	1387 - 1953
Obliquebanded leafroller 2 <sup>nd</sup> flight begins	1412 - 2076
Oriental fruit moth 3 <sup>rd</sup> flight begins	1448 - 3013
Peachtree borer flight subsiding	1497 - 2309
Spotted tentiform leafminer 3 <sup>rd</sup> flight begins	1537 - 2123

Thanks to Art Agnello, Scaffolds Fruit Journal

## **Fruit Observations & Trap Reports**

#### Insect Key

AM: apple maggot CM: codling moth

ESBM: eye-spotted budmoth
LAW: lesser apple worm
LPTB: lesser peachtree borer
OBLR: obliquebanded leafroller
OFM: oriental fruit moth

PTB: peachtree borer
RBLR: redbanded leafroller
SJS: San Jose scale

STLM: spotted tentiform leafminer TABM: tufted apple budmoth VLR: variegated leafroller

#### Site: Waterman Lab, Columbus

Dr. Celeste Welty, OSU Extension Entomologist

**Apple:** 7/16 to 7/23/03

AM: 0.3 (up from 0.0) CM: 19.7 (up from 11.0) ESBM: 0 (same as last week) LAW: 4 (same as last week) OBLR: 0 (same as last week) RBLR: 2 (same as last week)

SJS: 40 (up from 14) STLM: 775 (up from 628) TABM: 0 (same as last week) VLR: 0 (same as last week)

**Peach:** 7/16 to 7/23/03

OFM: 0 (same as last week) LPTB: 0 (down from 1) PTB: 16 (up from 14)

#### Site: Medina, Wayne, & Holmes Counties

Ron Becker, IPM Program Assistant

Apple: 7/16 to 7/23/03

STLM: Holmes: 1213 (up from

233)

Medina: 175 (down from

300)

Wayne: 186 (up from 67)

RBLR: Holmes: 3.7 (up from 3.3)

Medina: 1.8 (down from

8.5)

Wayne: 1.3 (down from 4)

CM: Holmes: 0.9 (up from 0.8)

Medina: 0.6 (down from

1.9)

Wayne: 1.2 (down from

9.7)

**Peach:** 7/16 to 7/23/03

LPTB: Holmes: 0 (down from 1)

Medina: 0 (same as last

week)

Wayne: 1 (down from 6)

OFM: Holmes: 0 (same as last

week)

Medina: 0 (same as last

week)

Wayne: 1 (up from 0)

PTB: Holmes: 5 (up from 4)

Medina: 0 (same as last

week)

Wayne: 10 (up from 5)

<u>Beneficials</u>: Larvae of syrphid fly, lady bug, and lacewing are feeding heavily on aphid populations on the terminals.

**Site: East District: Erie & Lorain Counties** 

Jim Mutchler, IPM Scout

**Apple:** 7/16 to 7/23/03

CM: 1.5 (down from 2.3) LAW: 23.2 (up from 12.8) OFM: 3.4 (up from 2.8) RBLR: 8.2 (down from 29.7) SJS: 115 (up from 22.0) STLM: 1031 (up from 690)

Other apple pests: green apple aphid, Japanese beetle, wooly apple aphid, and white apple leafhopper.

Beneficials: green lacewing, orange maggot, native lady beetle, & multi-colored Asian lady beetle

**Peach:** 7/16 to 7/23/03

LPTB: 3.0 (down from 4.3) OFM: 2.7 (down from 3.7) PTB: 1.0 (down from 2.7) RBLR: 12.7 (down from 19.0)

Beneficials: green lacewing

Site: West District: Huron, Ottawa, Richland, & Sandusky Counties - Gene Horner, IPM Scout

**Apple:** 7/15 to 7/22/03

CM: 0.6 (down from 0.8) LAW: 3.5 (up from 1.5) OFM: 5.5 (up from 5.1) RBLR: 7.7 (down from 30.9) SJS: 8.6 (up from 0)

333. 8.0 (up 110111 0)

STLM: 102 (down from 270)

Other apple pests: green apple aphid, Japanese beetle, and potato leafhopper

**Peach:** 7/15 to 7/22/03

LPTB: 1.6 (down from 3.6) OFM: 1.9 (up from 0.8) PTB: 1.2 (down from 1.7) RBLR: 9.0 (down from 19.8)

Other peach pests: lilac borer and Oriental fruit moth flagging

Beneficials: lacewing

The Ohio Fruit ICM News is edited by:

Ted W. Gastier Extension Agent, Agriculture Tree Fruit Team Coordinator Ohio State University Extension Huron County 180 Milan Avenue Norwalk, OH 44857 Phone: (419)668-8210 FAX: (419)663-4233

E-mail: gastier.1@osu.edu

Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension.

TDD No. 800-589-8292 (Ohio only) or 614-292-1868

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