

Newsletter Extension



Fruit ICM News

Volume 7, No. 31 August 14, 2003

In This Issue:

Calendar Codling Moth Emergence Heads UP Rain & Fungicide Wash-Off Pre-harvest Intervals for Common Insecticides Degree Day Accumulations Pest Phenology Fruit Observations & Trap Reports

Calendar

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. 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

September 16-18: Farm Science Review, Molly Caren Agricultural Center, London, Ohio. See 2,100 acres showcasing a dynamic Ohio agricultural industry. For information contact Craig Fendrick, 614-292-4278 or email at fendrick.1@osu.edu. Web site: http://fsr.osu.edu

Don't Walk on By

Source: Ted W. Gastier, OSU Extension Agent, ANR

This note is directed to those of you who are deeply involved in harvesting a bountiful crop of Ohio peaches. Second generation codling moth trap catches since August 1 in apples have set Biofixes between August 2 and August 10. Therefore, we can expect egg hatch this weekend or next week, based on degree day accumulations base 50. Research shows control methods timed at 13 percent egg hatch are the most effective means of reducing second generation codling moth pressures.

Not only do we need to be concerned about potential damage to this year's apple crop, we need to

remember that these emerging larvae will pupate and become next year's emerging adults. Don't overlook this opportunity to keep your apples clean and reduce codling moth populations for 2004.

Effect of Rain on Fungicide Wash-Off

Source: J. W. Travis, Plant Pathologist, PennState, Fruit Times Newsletter Vol. 21, No.7

If you are using protectant fungicides you need to consider the effect of rain on wash-off of the materials. The Strobilurin (Sovran, Flint) and sterol inhibitor (Nova, Procure, Rubigan) fungicides are absorbed into the leaf and fruit tissue after application (once the residue has dried) and are not affected by rain wash-off. The protectant (Dithane, Manzate, Penncozeb, Captan, Ziram, Thiram, Polyram) fungicide residues can be affected by rain.

A general rule-of-thumb for the effect of rain on washing-off protectant fungicides follows:

- Less than one inch of rain since the last spray will not significantly affect residues.
- One to two inches of rain will reduce the residue by one half. Reduce the number of days until the next spray by one half.
- Over two inches of rain since the last spray will remove most of the spray residue. Renew the fungicide deposit as soon as possible.

This rule has been used for many years to provide growers with general guidance. Newer protectant fungicide materials may be less subject to wash-off, but information is limited.

Pre-harvest Intervals (PHI) for Common Insecticides

Source: Drs. Greg Krawczyk and Larry A. Hull, Penn State Fruit Research & Extension Center, reprint from July 29, 2003 issue of Fruit Times News

With peach harvest already underway and apple harvest fast approaching, it is very important to always check the legal pre-harvest intervals (PHI) before deciding which pesticide will be used for late season insect control. As a reminder for the more commonly used insecticides, the PHIs are as follows:

Acetamiprid (Assail) - 7 day PHI on pome fruit, do not exceed 13.5 oz of formulated product per acre/season; not registered on stone fruit.

Azinphos-methyl (Guthion) - 14 day PHI on apples if applied less than 1 pound of active ingredient (AI) per acre; 21 days on apples if more than 1 pounds AI per acre; 14 days on pears; 21 days on peaches. On apples no more than 4.5 pounds/acre of AI may be applied during a season.

Carbaryl (Sevin) - 3 day PHI on apples; 3 days on pears; 3 days on peaches and nectarines. On apples no more than 15 pounds of AI is allowed per acre/season; on peaches and nectarines no more than 9 pounds per acre per growing season is allowed.

Esfenvalerate (Asana) - 21 day PHI on apples; 28 days on pears; 14 days on stone fruit. On apples no more than 0.525 lb of AI per acre per season is allowed.

Fenpropathrin (Danitol) - 14 day PHI on apples; 14 days on pears. On both crops no more than 0.8 pound of AI is allowed per acre/season.

Indoxacarb (Avaunt) - 28 day PHI on apples; 28 days on pears. On both crops no more than 0.44 pound of AI is allowed per acre/season; not registered for use on stone fruit.

Lambda-cyhalothrin (Warrior)- 21 day PHI on pome fruit, 14 day PHI on stone fruit

Ethomyl (Lannate 90SP)- 14 day PHI on apples; 7 days on pears; 4 days on peaches; 1 day on nectarines (PA only). On apples no more than 4.5 pounds of AI/acre is allowed, on peaches no more than 5.4 pounds of AI per acre/season; on pears no more than 1.8 pounds of AI per acre/season.

Methoxyfenozide (Intrepid) - 14 day PHI on apples, 7 days on peaches, plums, prunes, nectarines. No more than 1.0 pound of AI allowed per acre/season.

Phosmet (Imidan) - 7 day PHI on apples; 14 days on peaches; 14 days on nectarines. On apples no more than 21 pounds of AI per acre/season is allowed, on peaches no more than 11.9 pound of AI per acre/season.

Spinosad (SpinTor) - 7 day PHI on apples; 14 days on peaches; 3 days on nectarines (PA only). No more than 0.45 pound of AI is allowed per acre/season on registered fruit crops.

Tebufenozide (Confirm) - 14 day PHI on apples and pears. No more than 1.86 pounds of AI per acre per season.

Please be sure to always check the PHI intervals with the actual label on the pesticide container.

Degree Day Accumulations for Ohio Sites August 13, 2003

	Degree Day Accumulations			
Ohio Location	Base 45° F		Base 50° F	
	Actual	Normal	Actual	Normal
Akron/Canton	2485	2525	1817	1901
Cincinnati	2937	3278	2229	2554
Cleveland	2551	2533	1903	1912
Columbus	2864	2868	2164	2198
Dayton	2733	2941	2044	2270
Kingsville	2203	2321	1590	1740
Mansfield	2351	2562	1690	1932
Norwalk	2473	2526	1821	1911
Piketon	3000	3204	2259	2481
Toledo	2445	2522	1799	1910
Wooster	2601	2436	1920	1815
Youngstown	2255	2383	1605	1769

Pest Phenology

Coming Event	Degree Day Accum. Base 50° F	
Oriental fruit moth 3 rd flight peak	1660 - 2402	
San Jose scale 2 nd flight subsides	1662 - 2477	
Codling moth 2 nd flight subsides	1705 - 2635	
Spotted tentiform leafminer 3 rd flight peak	1728 - 2231	
Lesser peachtree borer 2 nd flight subsiding	1796 - 2513	
Lesser appleworm 2 nd flight peak	1844 - 2359	
Redbanded leafroller 3 rd flight peak	1818 - 2625	
Apple maggot flight subsides	1904 - 2573	

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: 8/6 to 8/13/03

AM: 1.3 (up from 1.0) CM: 27.3 (down from 35.0) ESBM: 0 (same as last week) LAW: 5 (down from 8)

OBLR: 0 (down from 3) RBLR: 29 (up from 19) SJS: 43 (up from 36)

STLM: 318 (down from 415) TABM: 0 (same as last week)

VLR: 0 (down from 2)

Peach: 8/6 to 8/13/03

OFM: 0 (same as last week)

LPTB: 3 (up from 0) PTB: 13 (up from 11)

Site: Medina, Wayne, & Holmes Counties

Ron Becker, IPM Program Assistant

Apple: 8/6 to 8/13/03

STLM: Holmes: No current

reports

Medina: No current

reports

Wayne: No current

reports

RBLR: Holmes: 2.3 (up from 0.7)

Medina: 2.8 (up from 0.8)

Wayne: 1 (up from 0)

CM: Holmes: 9.2 (same as last

week)

Medina: 3.0 (down from

3.8)

Wayne: 13.6 (up from

10.4)

AM: (average of the sum of 3 traps per Holmes: 2.0 (down from

block)

Medina: 5.3 (down from

6.5)

Wayne: 6.3 (up from 8.3)

Comments: Few apples are showing internal damage from codling moth; most stings, skin deep damage.

Peach: 8/6 to 8/13/03

LPTB: Holmes: 1 (same as last week)

Medina: 0 (same as last week)

Wayne: 6 (up from 3)

OFM: Holmes: 0 (same as last week) Medina: 0 (same as last week) Wayne: 0 (same as last week)

PTB: Holmes: 3 (down from 6)

Medina: 0 (same as last week) Wayne: 5 (down from 12)

Comments: A few peaches previously infested with powdery mildew now showing a leathery spot where mildew had been.

Site: East District: Erie & Lorain Counties

Jim Mutchler, IPM Scout

Apple: 8/05 to 8/12/03

AM: 1.1 (down from 1.8) CM: 6.4 (down from 6.8) LAW: 22.3 (up from 22.8) OFM: 3.3 (down from 4.1) RBLR: 1.8 (up from 0.6) SJS: 140 (down from 312) STLM: 708 (up from 702)

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

<u>Beneficials</u>: green lacewing, orange maggot, native lady beetle, Stethorus lady beetle, & brown lacewing.

Peach: 8/05 to 8/12/03

LPTB: 7.7 (up from 4.3) OFM: 4.7 (same as last week) PTB: 5.3 (same as last week) RBLR: 2.0 (up from 0.3)

Other pests: OFM strikes and bacterial spot

Beneficials: green lacewing

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

Apple: 8/05 to 8/12/03

AM: 7.9 (up from 1.9) CM: 4.9 (up from 1.9) LAW: 1.9 (down from 3.5) OFM: 0.4 (down from 0.9) RBLR: 6.9 (up from 1.8) SJS: 145 (up from 4.6) STLM: 354 (up from 354)

Other apple pests: green apple aphid, potato leafhopper, European red mite bronzing, Japanese beetle

Beneficials: green lacewing, phytoseiid mite

Peach: 8/05 to 8/12/03

LPTB: 3.3 (up from 2.7) OFM: 1.5 (down from 3.2) PTB: 3.6 (up from 3.2) RBLR: 4.4 (up from 1.1)

Other peach pests: potato leafhopper, European red mite

Beneficials: green 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.

Copyright © The Ohio State University 2003

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

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

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

| Back |