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# **Fruit ICM News**

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# Calendar

**February 4-6, 2002: Michigan State Tree Fruit Integrated Production & Pest Management School;** Kellogg Biological Station, Hickory Corners, Michigan. Contact Gary Thornton at 231-946-1510 or e-mail <u>nwmihort@msue.msu.edu</u> for additional information.

**February 6-8, 2002: Ohio Fruit and Vegetable Growers Congress**, Toledo Seagate Convention Centre & Radisson Hotel. Plan to attend educational sessions on small fruit, tree fruit, cider, truck crops, potatoes, processing vegetable crops, greenhouse vegetables, and direct agricultural marketing. General sessions include OFB Workers' Comp group rating program safety session, crop protection adjuvants, stickers & technology, food safety, and changes to Ohio Uniform Food Safety Code. Visit the trade show featuring over 100 exhibitors serving fruit & vegetable growers & direct agricultural marketers. Details at <a href="http://www.ohiovegetables.org">http://www.ohiovegetables.org</a> and <a href="http://www.ohiofruit.org">http://www.ohiofruit.org</a>.

**February 15, 2002: Bramble Pruning & Care Workshop**, presented by Dick Funt at the residence of Bob Suter, 3708 Rd. Q, Pandora, OH, 10:00 a.m. to noon. Call Putnam County Extension Office 419-523-6294 for additional information.

**February 17-19, 2002: Ohio Grape - Wine Short Course**, Wyndham Dublin Hotel, Dublin, Ohio. Contact Dave Ferree (<u>ferree.1@osu.edu</u>), Todd Steiner (<u>steiner.4@osu.edu</u>) or Dave Scurlock (<u>scurlock.2@osu.edu</u>) for information. You can also log on at <u>http://www.ohiowines.org</u>.

**February 26, 2002: Mid American Ag and Hort Services (MAAHS) Labor Seminar**, Days Inn in Findlay, Ohio. See article in this newsletter for details.

March 27, 2002: Fruit Crops Breakfast, Vanson's Restaurant, Monroeville, OH, 8:00 a.m. Guest presenter will be Dick Funt.

March 27, 2002: North-Central Ohio Pruning Clinic, Norwalk, OH, 1:00 p.m. Presented by Dick Funt; more information to follow.

### New Fungicides are Labeled for Use on Strawberry

Source: Mike Ellis, OSU Extension Plant Pathologist

**Switch 62.5% WG fungicide** is a product of Syngenta Company and has full label registration for use on strawberry in Ohio. Switch is a package mix (combination) of two fungicides (Cyprodinil plus fludioxonil). It is registered for control of Botrytis fruit rot and has provided excellent disease control in Ohio fungicide evaluations. Research in Florida indicates that it provides some level of control for Anthracnose fruit rot. To use Switch most effectively for control of Botrytis, it should be applied at the rate of 11 to 14 oz per acre on a 7 to 10-day interval through bloom. It is important to maintain good coverage throughout bloom. Switch has a preharvest interval of 0 days. Do not apply more than 56 ounces of product per acre per year (4 applications at the maximum rate) and do not plant rotational crops other than onion or strawberry for 12 months following the last application of Switch.

**Quadris 2.08F fungicide** is a product of Zeneca Corporation and has received full label registration for use on strawberry in Ohio. The active ingredient in Quadris is azoxystrobin and is the same product as Abound fungicide, which has been registered for use on grapes for several years. Quadris is registered for control of Anthracnose and powdery mildew on strawberry. Although Botrytis fruit rot is not on the label, research in New York has shown that Abound (azoxystrobin) provides good to fair control of Botrytis. In addition, azoxystrobin has good activity against Phytophthora fungi on several other crops. Therefore, it may provide some level of leather rot (a fruit rot caused by *Phytophthora cactorum*) control when applied for control of Anthracnose fruit rot on strawberry. To repeat this point, although Quadris is only registered for control of Anthracnose and powdery mildew, it may provide some level of control against Botrytis fruit rot (gray mold) and leather rot as well.

Quadris is the first fungicide that I am aware of that is registered for control of Anthracnose. This is very important because the incidence of Anthracnose fruit rot appears to be increasing in several Ohio strawberry plantings, and it can be a devastating disease.

Quadris is registered for use at the rate of 6.2 to 15.4 fl. oz. per acre and may be applied the day of harvest (0-day PHI). For fungicide resistance management, do not apply more than two sequential sprays of Quadris before alternating with a fungicide that has a different mode of action. Do not make more than four (4) applications per acre per crop year. Do not apply more than 1.92 quarts per acre per season. This is four applications at the maximum rate.

**Special Note:** The active ingredient in Quadris (azoxystrobin) is very phytotoxic to McIntosh apples and other varieties related to McIntosh. We recommend that Quadris not be used in the same sprayer or equipment that will be used on apples. It is also important to prevent any drift from strawberry to

apple. Apple varieties related to McIntosh are: Bancroft, Bromley, Cortland, Cox, Discover, Empire, Gala, Janamac, Kent, McIntosh, Spartan and Summared.

# New Fungicide Labeled for Use on Blueberry

Source: Mike Ellis, OSU Extension Plant Pathologist

**Abound 2.08F fungicide** is now registered for use on blueberry, currant, elderberry, gooseberry, huckleberry, lingonberry and juneberry. Abound is the same fungicide as Quadris (azoxystrobin). At present, it is not registered for use on brambles (raspberry and blackberry). It is registered on the above mentioned crops for control of mummy berry, Alternaria fruit rot, Phomopsis stem canker, and Anthracnose fruit rot. It is registered at the rate of 6.2 to 15.4 fl oz per acre. Do not apply more than two sequential sprays of Abound before alternating with a fungicide that has a different mode of action. Do not make more than three (3) applications of Abound per acre per crop year. Do not apply more than 1.44 quarts per acre per season. This is three applications at the highest label rate. Abound may be applied the day of harvest (0 day PHI).

# Loss of Benlate 50WP Fungicide

Source: Mike Ellis, OSU Extension Plant Pathologist

Dupont has requested a voluntary registration cancellation for Benlate 50WP fungicide on all crops. The sale and distribution of Benlate will not be legal after December 31, 2002. Growers may use labeled product after this date; however, they will not be able to purchase additional material.

**Topsin-M WSB fungicide** is very similar in activity to Benlate and is an excellent alternative to Benlate on labeled crops. Topsin-M (Thiophomate-Methyl) is labeled on apples, pears, stone fruit, strawberries, and grapes. Therefore, the loss of Benlate on these crops is not serious. Topsin-M is not labeled for use on brambles (raspberry and blackberry) or blueberries.

Editor's note: Thanks to Cindy Folck for mentioning that Cerexagri added pears and grapes to their Topsin-M label.

Benlate was an important fungicide on brambles, and its loss is important. At present, Rovral is the only remaining fungicide on brambles that provides good control of Botrytis fruit rot (gray mold). We also have a 24-C registration for the use of Captan in Ohio. We are hopeful that Abound and Switch will be registered on brambles in the near future.

Benlate was also important for use on blueberry. We are attempting to obtain a section-18 registration for the use of Topsin-M on blueberry in Ohio for 2002.

If you have questions about any of the information presented here or other questions about the use of fungicides on fruit crops in Ohio, contact Mike Ellis at 1-330-263-3849 or by e-mail at <u>ellis.7@osu.edu</u>.

### Farm, Hort, and Small Business Employers Invited to Labor

#### Seminar

Source: John Wargowsky Executive Director, Mid American Ag and Hort Services, Inc.

Mid American Ag and Hort Services (MAAHS), a new organization for agricultural and other employers, will hold its first employer seminar and annual meeting on Tuesday, February 26th at the Days Inn in Findlay, Ohio. The day begins at 9:30 a.m. with registration and concludes at 4:00 p.m. MAAHS is a unique consortium of associations, organizations, and employers organized to meet the educational, compliance assistance, and labor recruiting needs of agricultural and other employers in Ohio and Indiana. It provides educational materials, seminars, telephone consultation, guest worker recruiting programs, and more to its members.

Libby Whitley, General Manager of Mid-Atlantic Resources Association, will cover how the H-2A and H-2B programs work and their potential benefits to employers. Francisco Espinoza of The Ohio State University Extension Farm Labor Relations Program will address "Cultural and Social Issues within Hispanic Labor."

John Wargowsky, Executive Director of MAAHS, and Tom Sachs, Executive Director of the Ohio Fruit and Vegetable Growers, will review a series of compliance issues on topics such as labor contractors, child labor, harassment, OSHA field sanitation, Immigration Reform and Control Act, and Social Security mismatch letter handling. The MAAHS annual meeting and a discussion of how MAAHS will work with its employer members will follow lunch.

Members of MAAHS and other employers are welcome to register for the event. More information and the registration form are available on Ohio Farm Bureau's web site <u>http://www.ofbf.org</u> under "Upcoming Events." Interested parties may also contact MAAHS by phone at 614-677-4530; by fax at 614-249-2200; by mail at P.O. Box 479, Columbus, OH 43216; or by e-mail at <u>labor@ofbf.org</u>. Registrations are requested by Feb. 20, 2002.

Current sponsor members of MAAHS include the Ohio Farm Bureau Federation, Indiana Farm Bureau, Ohio Nursery & Landscape Association, Ohio Florists' Association, Ohio Fruit Growers Society, Ohio Vegetable and Potato Growers Association, and Ohio Landscapers Association.

# **Plum Pox Virus Survey: Good News!**

Source: Curtis Young, OSU Extension IPM Agent

Leaf samples from ten stone fruit orchards (mainly peach) in seven Ohio Counties were gathered during September and October of 2001. Table 1 lists the counties visited, the number of orchards and areas sampled, and the numbers of lab samples tested. **All samples were negative (-) for plum pox virus (PPV).** 

#### Table 1. Ohio Plum Pox Virus Sampling for 2001

County	Orchards	Areas sampled	# Lab samples
Columbiana	1	2	110
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Erie	3	7	369
Fulton	1	1	50
Huron	1	1	34
Montgomery	1	1	22
Sandusky	2	3	135
Union	1	1	12
Totals	10	16	732

Thanks go to Curtis for the long hours and diligent effort in maintaining the identification of individual trees and the integrity of the leaf samples. Each tree sample involved multiple leaves resulting in thousands of specimens overall - quite a task!

For information about the progress made toward eradication of PPV in Pennsylvania and Ontario, check out <u>http://sharka.cas.psu.edu</u>

### **Chill Hours: Where Do We Stand?**

Sources: 1998 Handbook of Peach and Nectarine Varieties, and climatological records from Wooster OARDC and Erie County orchards.

Dave Ferree, OSU Horticulturist, posed the question about chill hours accumulated in Ohio in light of warmer than usual daily mean temperatures. At the OARDC Wooster Station, the mean temperature (F) was 47.7 vs. a normal of 40.5 for November. December's mean was 36.8 vs. a normal of 30.0, and January's mean will probably be 6above normal.

Ohio fruit crops including apple, apricot, blackberry, blueberry, currant, gooseberry, grape, Japanese plum, nectarine, peach, raspberry, sour cherry, strawberry, and most sweet cherry cultivars require chill hours. Chill hours are defined as accumulated cold-season hours between 7 degrees C and -18 C (approximately 45 degrees and 0 degrees F). Therefore, a chill hour is accumulated each hour that the air temperature is between -18 and 7 degrees C.

For Ohio apple cultivars and conditions, a minimum of about 1200 chill hours are necessary "for the buds to develop properly, so the tree will bloom and foliate normally." Stone fruit require somewhat less, with varietal differences shown in Table 2.

Variety	Туре	Chill hour requirement
Contender	peach	1050
Cresthaven	peach	950
Flavortop	nectarine	750
Garnet Beauty	peach	850

#### Table 2. Chill Hour Requirements for Stone Fruit Varieties

Glohaven	peach	850
Independence	nectarine	750
Madison	peach	850
Redgold	nectarine	850
Redhaven	peach	950
Redskin	peach	750
SunGlo	nectarine	850

As of January 29, approximately 1450 chill hours have been accumulated at the Wooster location since November, 2001.

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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