



CAPITAL REGION EXTENSION

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Web Site on Cherries

Visit <http://frec.cas.psu.edu/> for trap counts and degree days

SAVE THIS DATE

Young
Grower Tour
of Blueberry
Operation &
Virginia Farm
Market

July 2



VOLUME 27, NUMBER 6

JULY, 2008

There Interposed a Fly

Drs. Harvey Reissig and Art Agnello, Cornell U.

Pennsylvania growers are now advised to monitor for apple maggot and here are some suggestions from Cornell entomologists:

Reprinted from Scaffold Fruit Journal, June 23, 2008 (Vol 17, No 14)

It is once again time to anticipate the first appearance of apple maggot (AM) flies in wild apple trees and abandoned orchards. To allow growers to detect apple maggot as early as possible, researchers developed traps that have the form of a "super apple" — large, round, deep red, and often accompanied by the smell of a ripe apple — in an attempt to catch that first AM fly in the orchard. Because this kind of trap is so much more efficient at detecting AM flies when they are still at relatively low levels in the orchard, the traps can usually be checked twice a week to allow a 1–2-day response period (before spraying) after a catch is recorded, without incurring any risk to the fruit. In fact, research done in Geneva over a number of years indicates that some of these traps work so well, it is possible to use a higher threshold than the old "one fly and spray" guidelines recommended for the panel traps. Specifically, it has been found that sphere-type traps baited with a lure that emits apple volatiles attract AM flies so efficiently that an insecticide cover spray is not required until a threshold of 5 flies per trap is reached.

The recommended practice is to hang three volatile-baited sphere traps in a 10- to 15-acre orchard, on the outside row facing the most probable direction of AM migration (towards woods or abandoned apple trees, or else towards the south). Then, periodically check the traps to get a total number of flies caught; divide this by 3 to get the average catch per trap, and spray when the result is 5 or

more. Be sure you know how to distinguish AM flies from others that will be collected by the inviting-looking sphere. There are good photos for identifying the adults on the Apple Maggot IPM Fact Sheet (No. 102GFSTF-18); check the web version at: <http://www.nysipm.cornell.edu/factsheets/treefruit/pests/am/am.asp>. In home apple plantings, these traps can be used to "trap out" local populations of AM flies by attracting any adult female in the tree's vicinity to the sticky surface of the red sphere before it can lay eggs in the fruit. Research done in Massachusetts suggests that this strategy will protect the fruit if one trap is used for every 100–150 apples normally produced by the tree (i.e., a maximum of three to four traps per tree in most cases), a density that makes this strategy fairly impractical on the commercial level.

A variety of traps and lures are currently available from commercial suppliers; among them: permanent sphere traps made of wood or stiff plastic, disposable sphere traps made of flexible plastic, and sphere-plus-panel ("Ladd") traps. The disposable traps are cheaper than the others, of course, but only last one season. Ladd traps are very effective at catching flies, but are harder to keep clean, and performed no better than any other sphere trap in our field tests. Brush-on stickum is available to facilitate trap setup in the orchard. Apple volatile lures are available for use in combination with any of these traps. These tools are available from a number of orchard pest monitoring suppliers, among them:

- Gempler's Inc., 100 Countryside Dr., PO Box 328, Belleville, WI 53508; 1-800-382-8473, Fax, 1-800-551-1128 <http://www.gemplers.com/>

- Great Lakes IPM, 10220 Church Rd. NE, Vestaburg, MI 48891; 800-235-

0285, Fax 989-268-5311, e-mail: glipm@greatlakesipm.com web site: <http://www.greatlakesipm.com>

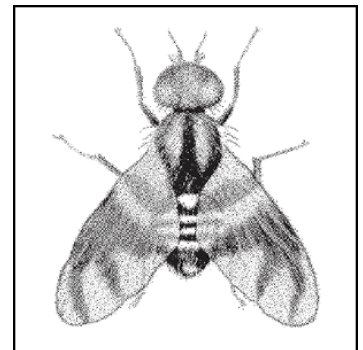
- Harmony Farm Supply, 3244 Hwy. 116 N, Sebastopol, CA 95472; 707-823-9125, Fax 707-823-1734 e-mail: info@harmonyfarm.com; web site: <http://www.harmonyfarm.com>

- Ladd Research Industries Inc., 83 Holly Court, Williston, VT 05495; 800-451-3406, Fax 802-660-8859 e-mail: sales@laddresearch.com; web site: <http://www.laddresearch.com>

- Olson Products Inc., PO Box 1043, Medina, OH 44258; 330-723-3210, Fax 330-723-9977 <<http://www.olsonproducts.com/>>

- Suterra-Scenturion, 213 SW Columbia, Bend, OR 97702-1013; 866-326-6737, Fax 541-388-3705 <http://www.suterra.com>

By preparing now for the apple maggot season, you can simplify the decisions required to get your apples



through the summer in good shape for harvest.

You may sign up the day of the event!



Orchard and Vineyard Spray Application Field Day **Improving Deposition while Reducing Drift**



*Featuring Dr. Andrew Landers
Cornell University Pesticide
Application Technology Specialist*

Wednesday, June 25, 2008

Penn State Fruit Research & Extension Center (FREC)

1:30—4:00 pm

Registration beginning at 1:00 pm



Low-Cost Fixes for Airblast Sprayers

Improved nozzle orientation, air induction nozzles, end plates, air deflectors, axial fan size and speed adjustments, PTO and hydraulic drive modifications, Cornell donuts, "Landers Louvers"

Sprayer Demonstrations

Foliage sensors, new sprayer technologies



\$20 per person registration fee

The Penn State Fruit Research and Extension Center is located at 290 University Drive 1/2 mile west of Biglerville (off Route 234), about 1 1/2 to 2 hrs from Washington and 45 minutes from Harrisburg
<http://frec.cas.psu.edu/>



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New Herbicides

Dr. Rob Crussweller, Department of Horticulture

Since the publication of the new Commercial Tree Fruit Production Guide a number of new herbicides have been registered for use in tree fruit. The following describes the materials and their use.

Matrix® FNV is a new herbicide from DuPont for use in all tree fruit and grapes. The active ingredient rimsulfuron is a sulfonylurea, which is a totally new chemistry from any other weed control product we have had for orchards. The active ingredient acts within the plant to inhibit amino acid synthesis. There are two products under the trade name of Matrix and only the FNV formulation is labeled for tree fruit. The material provides selective control of broadleaves and grasses and can be tank mixed with other pre-emergent materials to expand the control spectrum. While it is primarily a pre-emergent it does have some postemergent activity on small weed seedlings. Orchards and vineyards must be at least 1 year old. The material works best on weed free soil and when applied under cool moist conditions. The preharvest interval is 7 days for pome fruit and 14 days for stone fruit and grapes. Primary weeds controlled are dandelion (from seed), mallow, marestail, fleabane and grasses. Yellow nutsedge can be suppressed with 2 timed applications.

Aim® is a new burndown material from FMC Corporation. The active ingredient is carfentrazone-ethyl and is a triazoline that inhibits photosynthesis. It is labeled for all tree fruit and grapes. If the branches or vines extend down to the ground then the material must be applied with a hooded sprayer. If the branches or vines do not extend down to the ground then application can be done as a directed spray. The material can also be used to control root



suckers. Application for sucker control must be made while the suckers are still green and growing. Use a non-ionic surfactant or crop oil concentrate with Aim. Use extreme caution that spray mist does not contact green fruit or foliage as spotting can occur. Adjust your sprayer so that droplet size is large to reduce the possibility of drift onto green foliage. There is a preharvest interval of 3 days between last application and harvest.

Reglone® is burndown material from Syngenta with the active ingredient diquat bromide. It is labeled for all tree fruit, grapes and many small fruit. The pre-harvest interval limits its use to non-bearing plantings (365 days PHI). Do not allow the spray to contact any green tissue including the trunks.

Parazone™ 3SL is a burndown material from Makhteshim with the active ingredient paraquat dichloride. The product has 3 lb paraquat cation per gallon versus the other products that have 2 lb per gallon. Three to five applications can be made during the growing season depending upon the crop being treated. Preharvest interval is 14 to 28 days depending upon the crop. Do not allow spray to contact green foliage.



Venue™ is a non-selective burndown material produced by Nichino America for use in all non-bearing tree fruit and vine crops. The active ingredient is pyraflufen ethyl. It should be applied during the dormant to prebloom period as a burn down material. If applied later during the growing season it must only be to non-bearing trees. Venue can be tank mixed with 2,4-D or glyphosate for broader spectrum control.

Recoil® is a proprietary mix of glyphosate (1.58 lb acid) and 2,4-D (1.07 lb) that is labeled for pome and stone fruit orchards that are at least 1 year old. Avoid all contact with foliage and green stems. The material can be applied as a directed spray. With peaches be sure that it does not contact any of the leaves as peaches are very susceptible to glyphosate. The addition of ammonium sulfate is recommended to assist the glyphosate action. The preharvest interval for pome fruit is 14 days and for stone fruit 40 days.

Scythe® is from Dow AgroSciences which has as the active ingredient of pelargonic acid. It is a fatty acid based, non-selective contact herbicide. The disruption of the cell membrane results in cell leakage and death of all contacted tissues. Weed response is very rapid. Scythe applied alone should be as a 3 to 10% solution depending upon weeds present and level of burn down desired. Use a 3 to 5% solution for annual weeds and vegetation. Use a 5 to 7% solution for perennial herbaceous and late stage annuals. Use a 7 to 10% solution for maximum vegetation burn down. Scythe can be tank mixed with glyphosate for added effectiveness on perennials. Scythe can also be tank mixed with

pre-emergent materials. Scythe can also be used for burning down of green rootsuckers. Care must be exercised to avoid all contact with green tissue or bark of fruit trees. The REI is 12 hours and a PHI of 24 hours.

Showcase™ is an herbicide for non-bearing stone fruit trees. Dow AgroSciences has recently labeled Showcase for use in tree fruit orchards. The granular material is a proprietary mixture of trifluralin, isoxaben and oxyfluorfen. It is a pre-emergent material that should be applied when trees are dormant and only to non-bearing stone fruit. It is not labeled for pome fruit. Rates are 100 to 200 lb per treated acre.

XL 2G is an herbicide for non-bearing tree fruit. Helena has recently labeled a proprietary granular mixture of oryzalin plus benefin. Application rates are 200 to 300 lb per treated acre (4.6 to 6.9 lb per 1000 sq ft) It is a pre-emergent material and will not control established weeds. The REI is 24 hours and PHI is 365 days. It is labeled for all non-bearing tree fruit and vineyards.

Glyphosate for Control of Certain Perennial Weeds. Application of glyphosate products during certain growth stages can help control thistle, milkweed and bindweed. For thistle and milkweed, applying glyphosate just as the plants are about to bloom or in early flower bud can help reduce the population. Treatment of bindweed with glyphosate when it is in full flower is recommended. Refer to the table on glyphosate formulations on pages 163 – 164 in the new Tree Fruit Production Guide when choosing a product with the most glyphosate acid.



Visit <http://frec.cas.psu.edu/> for:
—Insect Bytes, Trap Counts and Emergence
—Apple Scab and Fire Blight Infection Periods
—Twilight Meeting Details

The Mid-Atlantic Young Grower Alliance has been invited to a double feature....

Wednesday, July 2nd 9:30 am – 5:30 pm

Butler Orchards in Germantown, MD & Wakefield Farmers Market in Annandale, VA

Susan Butler of [Butler Orchards](#) has invited the YGA to come see their blueberry patch in its prime. Butler Orchards also has pick-your-own strawberries, peas, thornless blackberries, tart cherries, apples, red raspberries, pumpkins, and Christmas trees, which accompany their farmer's market.

Then we'll head over to the [Wakefield Farmers Market](#) where Sidney Kuhn will talk about their experiences in the suburban markets of the Greater D.C./Northern Virginia area. We'll also get to see Ben Wenk at this market as well.

We will plan to leave the Ag Center at 9:30am and we hope to return by 5:30pm – depending what traffic is like. We will have to carpool because the 4-H van is reserved for another program. If you are able to join us, please call or email Katy Lesser (kml19@psu.edu/717-752-5211).

Butler Orchards, 22200 Davis Mill Road, Germantown, MD 20876, (301) 972-3299

Directions: From: Frederick Interstate 270 South Exit 16 - Father Hurley Boulevard. Left at exit ramp stop light onto Rt. 27 towards Damascus. Continue on Rt. 27 for approximately 1.5 miles. Right onto Brink Road. Approximately 1/2 mile to: Left onto Wildcat Road. Approximately 1 mile to: Left at stop sign onto Davis Mill Road. Orchard will be on your left.

Comprehensive Cherry Web Site

Michigan State Extension has recently updated their cherry web site. The site, www.cherries.msu.edu is a comprehensive site for information on the production of cherries. It has information from several different sites and experts including Oregon State's Lynn Long and Washington State's Matt Whiting. The site was designed to be a "one-stop shopping" location for information on cherries. Information on pruning and training and new sweet cherry varieties maybe especially useful.

(Submitted by Dr. Rob Crassweller, PSU, Dept. of Horticulture)

A more detailed *Fruit Times*

can be found at:

<http://frec.cas.psu.edu/>



Penn State **EXTENSION**
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Capital Region *Fruit Times* edited by Tara Baugher, Regional Tree Fruit Educator



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Where trade names appear, no discrimination is intended and no endorsement by Penn State Cooperative Extension is implied.

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For more information, contact any member of the Capital Region Tree Fruit Team—Tara Baugher, Horticulture; Tim Elkner, Horticulture; Matt Harsh, Economic Development/Marketing; Katy Lesser, Ag Innovations. Penn State Cooperative Extension, Adams Co., 717-334-6271 (AdamsExt@psu.edu); Lancaster Co., 717-394-6851 Agricultural and Natural Resources Center, 670 Old Harrisburg Road, Suite 204, Gettysburg, PA 17325