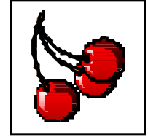


Berrien County Fruit Happenings



Volume 1, Issue 2, May, 1999

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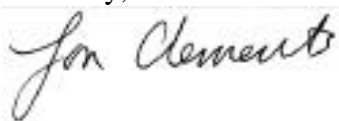
Dear Fruit Grower,

Petal fall has occurred on most tree fruit, and we are well into another growing season. So far, the crop potential looks real good:

- Apples are a little variable, with earlier blooming cultivars having a tendency to be light. Pre-bloom freezes may have taken their toll, and pollination weather was not always the best. Thinning needs have been adjusted on a block-by-block basis. Light to moderate chemical thinning sprays have been the rule. At this early point, things are looking pretty good for a nice apple crop. Keep in mind the importance of fruit quality. You need to do everything in your power – including adequate pruning, fertilization, pest control, and harvest handling – to produce high quality fresh-market fruit that is going to give you the greatest return for your investment. There is no room in today's competitive marketplace for sub-optimal fruit quality!
- Stone fruit - with the exception of peaches - looks very nice. The tart and sweet cherry crops have set-up nicely. Unfortunately, diversion of a significant portion of the tart cherry crop is a real likelihood. I am looking forward to my first sample of Michigan sweet cherries! There is growing interest in growing dwarf sweet cherries for local fresh-market sales. You might consider planting some of these on a small scale to see if you have a market (primarily PYO) for this high value tree fruit.
- Small fruit crops are generally looking good. Grapes are rumored to be a little light following last years' exceptional crop, and the mid-winter cold took its toll on wine grapes. Blueberries too, were damaged somewhat by the sub-zero temperatures. Bluecrop in particular had a light bloom (50-75% of normal), however, at least the fruit size should be good.

Nonetheless, we still have a long growing season ahead of us with many challenges. As always, I am committed to service and excellence to you. If you have any questions, or would like to arrange a farm visit, don't hesitate to get in touch with me by phone, e-mail, or WWW.

Sincerely,



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Michigan State University, U.S. Department of Agriculture and counties cooperating.

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Codling Moth Biofix Date

Sustained trap capture of codling moth in Berrien County began approximately May 14. The model for predicting spray timing to control this pest accumulates degree days from the date of first sustained moth catch. The first spray is applied at 250 DD (base 50 F), which corresponds with 3% egg hatch. Assume we will reach this point during the last week of May. To control the second generation, the timing is 1260 DD after this same biofix date.



EPA Presents Risk Assessment Of Guthion

This information is from Kraig Naasz, US Apple Association. On the day of the technical briefing, EPA will also put the documents presented in the briefing in the public docket and on their WWW site, <<http://www.epa.gov/pesticides/>>. It will kick off the next 60 day comment period for Azinphos. You are encouraged to comment on the potential loss of use of this product on fruit crops.

Here are Kraig's comments:

"The Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) held a joint public briefing on Wednesday, May 19 to present their risk assessment for azinphos-methyl (Guthion)."

"Azinphos-methyl is among the apple industry's most heavily relied-upon insecticides. This is the first public release of risk assessments required by the Food Quality Protection Act (FQPA)."

"According to EPA, this "technical briefing" is intended to provide interested stakeholders an opportunity to learn about the data, information and methodologies used by the agency in developing the risk assessment for this chemical. In addition, USDA will provide its suggestions on possible risk mitigation options available to producers utilizing this chemical."

"Although the risk assessment for azinphos-methyl may be further refined to the benefit of our industry, recent indications suggest EPA plans to disclose that the current risk

assessment exceeds the FQPA's newly-established safety standard."

"According to information provided by EPA at an FQPA Tolerance Reassessment Advisory Committee meeting held April 27-28, its current risk assessment of azinphos-methyl suggests that children aged 1-6 and children less than one year of age are exposed to an unacceptable dietary risk. In addition, EPA is expected to identify apples, pears and peaches as the principal "risk drivers" (i.e. sources of exposure) at the May 19 technical briefing."

"Growers looking for alternatives to azinphos-methyl should be aware that most of the organophosphate pesticides will undergo the same FQPA review process during the marketing period for the 1999 apple crop. USApple recommends that growers base their application decisions on available reliable information, recognizing that much more will be known after the May 19 briefing."

"For technical information concerning the FQPA implementation process, please contact USApple Vice President for Industry Services Jim Cranney at (800) 781-4443, or via e-mail at jcranney@usapple.org. USApple's Director of Communications Julia Daly should be contacted at (800) 781-4443, or via e-mail at jdaly@usapple.org, for information concerning our association's communications strategy."



EPA Technical Briefing on Guthion Uneventful

The Environmental Protection Agency's technical briefing on its risk assessment for azinphosmethyl (Guthion) was a non-event, at least related to media coverage and activities by environmental groups.

There were no television cameras present, and only two print reporters, an environmental reporter from the Bureau of National Affairs, a DC-based newsletter service, and a reporter from "Pesticide

and Toxic Chemical News," another inside the Beltway, limited circulation newsletter.

There were no surprises, EPA emphasized the scientific program and presented the material in a similar fashion as it had for the TRAC meetings. On a positive note, the dietary risk assessment was even lower than expected for infants and children.

Less than 200 people attended the briefing. A representative from NRDC was there, and a few lower profile advocate groups. EPA gave a reasonable presentation, emphasizing the importance of a balanced diet, and the benefits of consuming fruits and vegetables. EPA also noted that there was no reason that today's event should scare people away from eating fruits and vegetables.

Apples, pears and peaches were identified as the key crops.

Finally, EPA emphasized that agriculture should look at ways to move toward alternative crop protection tools (from guthion), in part, because the cumulative exposed data with this product is a greater issue than dietary exposure.



Dwarf Sweet Cherry Training Needs

The popularity of dwarf sweet cherry trees is on the upswing with the (limited) availability of new, dwarfing rootstocks. Like high-density apple orchards, however, dwarf sweet cherries need special attention to training and pruning. Here are a couple of timely tree training and pruning pointers from Ron Perry and Jim Nugent that should be of interest to those with young sweet cherry trees. If you have any questions or would like more information on these techniques, please give me a call.



Debudding Aids Sweet Cherry Tree

Training

By Jim Nugent, District Horticulturist, MSU Extension

Debudding is a technique that can be used successfully to help with sweet cherry tree training. It causes lateral limbs to form on the central leader over a greater distance and generally with wider crotch angles than normal. This is particularly useful for sweet cherries to overcome the tendency to produce relatively few laterals, all generally within about 8" of the terminal and the uppermost generally with narrow crotch angles.

I tried a couple of debudding techniques last season on sweets. The most successful was to remove all but the terminal bud from the top 3-5", then remove approximately 50% (every other one) of the remaining buds on last year's terminal growth. The result was that many buds produced laterals and nearly all had spread the limbs over a much larger area of the leader.

Debudding is a technique that will work particularly well in the spring of year two on trees that do not have adequate limbs (at the proper height with wide crotch angles) to select as potential scaffolds, so the tree is to be taken back to a "nub whip". However, even when 1-3 scaffolds are saved at this time, so that 1-3 more scaffolds are desired, this technique can again be used to produce limbs that are better spread along the leader to improve the likelihood of getting the desired limbs in good locations.



Debudding could also be used on newly planted trees following whipping to produce limbs over a greater distance on the leader. However, this is generally not advantageous if trees are to be mechanically harvested, as low limbs must be removed anyway.



Clothespins Spread Young Limbs On Dwarf Sweet Cherries

Ron Perry, Horticulture Dept., MSU

Once the buds start to develop, the next operation involves the spreading of branches to form 90 degree crotch angles. Thus far, there is only one way and with only one instrument that this can safely and effectively be accomplished.

As in the previous article that describes the SS for cherry, a plastic clothespin is placed on the leader (perpendicular and clasped to the leader) and obstructs the development of young branches when they are about 3-4 inches in length (the length of a clothespin).

If this is not done and the grower waits until the branches are 10-12" long (which is ok in apples), the crotch angle is lignified and formed. Then when you attempt to spread the succulent branch, many of the branches break immediately or by the next day and you are left with broken cherry branches.

Secondly, spreading the branches to 90 degrees from the start avoids "bark inclusion" on the upper side of branch attachment to the leader. When this occurs, a mechanical pinching of the meristematic tissue occurs which inhibits vascular function and causes weakness. Eventually, canker and cold injury occurs at these points and the branch is ultimately destroyed. Therefore, it is critical that a clothespin is used from the beginning.

We have found that not just any clothespin works for sweet cherry. Wooden pins used in apples, have too narrow a jaw opening and slip out of position on sweet cherry branches. Other plastic pins don't last or don't have a wide enough jaw.

In North America, the only product that I have found that works is one distributed by Seymour Housewares Corp., Seymour, IN. They handle several products and specifically the one that works is called the "Super Grip" Clothes pin (model # 12-123-33). It is sold off the shelf through Meijer's stores in Michigan at \$1.80 for 24 count packages and \$2.99 for 36 count packages.

However, a distributor LDK Sales, 1469 Kings Way, Highland, MI 48356 (248-887-3956 voice and 248-889-2609 fax) can take orders and deliver the same product to growers at a price of \$.96 per 24 count package. Not only does this pin have the largest jaw and best design to fit a branch snugly, it also has a wide surface area and is most effective in obstructing branch development.

Once the branch crotch is formed and branches are 10-12" long, we recommend the tying down of branches with elastic bands or cotton string to keep them directed in a horizontal angle. Clipping wooden clothespins (multiple) to the ends of branches can also be effective (wooden pins are cheaper and heavier in weight than plastic pins).



Weather Monitoring Options

Knowing weather conditions in your orchard is an important component of practicing IPM -- most disease and insect life cycles are intimately tied to temperature, precipitation, and leaf wetness. In addition, weather has an impact on your day-to-day orchard management decisions, particularly when it comes to spraying.

Recently, more options for monitoring weather on your farm have become available. If you do not already have a weather station, or otherwise have access to good, site-specific weather information, you need to think of the consequence -- perhaps that of not being able to make sound, IPM-based pest and orchard management decisions.

Clearly, a well maintained on-farm weather station is the best for getting a handle on potential disease and insect pest conditions, however, for forecasts, you also need access to other weather information sources. Here is a quick review of some weather monitoring options:

'Traditional' Weather Forecasts/Current Conditions -- these include newspaper, radio, television, etc. Unfortunately, lots of variability exists in these products -- you probably have your

own favorite that is familiar and has proven reliable over the years. If you have cable or a satellite dish, 'The Weather Channel' is the most frequently updated, and arguably most accurate source of current conditions and forecasts.

Weather Radio -- the National Weather Service broadcasts frequently updated weather information that can only be received via the special 'Weather Radio' broadcast band. These originate from National Weather Service offices in Grand Rapids, Kalamazoo, and South Bend. The South Bend site is closest (transmitters have a range of about 40 miles), and it broadcasts at a frequency of 162.400 Mhz. You need to invest in a special weather radio to receive broadcasts. 'Weather Radio' has the added benefit of audible warnings/alerts when severe weather is imminent.

Internet -- the Internet has become a good resource for up-to-date weather information. Numerous World Wide Web sites prominently feature weather information. Noteworthy sites include 'The Weather Channel' (weather.com); 'Accuweather' (accuweather.com); the National Weather Service (www.nws.noaa.gov) and the MSU Agricultural Weather Office (<http://www.agweather.geo.msu.edu>).

Of particular note are Accuweather and the MSU Agricultural Weather Office. Accuweather offers a 'Personal Accuweather,' which for a subscription fee, customizes weather observations and forecasts for a location specified by zip code. They offer a 30 day trial, so it is worth looking into. The MSU Agricultural Weather Office posts frequently updated observational weather data and forecasts for Michigan based on the National Weather Service, and it's own ground-collected weather data, which is part of the Michigan Automated Weather Network (MAWN). As a part of the GREEN initiative, MAWN "will eventually provide high quality, detailed weather data as input into Integrated Pest Management (IPM) and other weather-related decision-making activities as well as updated meteorological and climatological information available via the Internet."

Commercial Weather Services -- Perhaps the commercial weather service growers are most familiar with is the 'Data Transmission Network' (DTN, www.dtn.com). They offer frequently updated satellite weather images and forecasts, as well as commodity information, all for a monthly or annual fee.

Another commercial weather service is 'SkyBit' (www.skybit.com). SkyBit offers detailed (hourly) and site-specific (down to one meter square, based on latitude/longitude and elevation) weather observations and forecasts. SkyBit has also taken basic weather data and taken the 'value-added' approach to products that are of particular interest to fruit growers, including spraying keys and apple disease/insect predictions. SkyBit has a monthly subscription fee, and they also offer a free trial period. Their products can be delivered via fax or e-mail.

On-Site Weather Stations -- Growers have traditionally been reluctant to purchase farm weather stations largely because they were expensive and difficult to calibrate and maintain. Now, however, there are some relatively inexpensive and reasonably accurate weather monitoring stations available. Often, they are paired with a personal computer application that graphs the collected weather data and inputs it into pest and disease models that aid decision-making.

For example, 'Spectrum Technologies' (www.specmeters.com) sells a 'Mini-Weather Station' that records temperature, relative humidity, leaf wetness, and precipitation. Coupled with a laptop computer and the appropriate software, weather data can be graphed, and scab or fireblight infection models can be run. 'Davis Instruments' (www.davisnet.com) is another producer of reasonably priced agricultural weather stations that are reliable, and simple to set-up and use. Their weather equipment also interfaces with a computer application that allows easy manipulation and graphical viewing of collected weather data.

Although powerless to change the weather, when armed with one or several of these weather monitoring options, you should be able to get a pretty good handle on the weather conditions on your farm that impact insect and disease pressure. Without good weather data, your pest management program takes on more of a 'shot-in-the-dark' approach. Hence, weather monitoring is implicit in practicing good IPM.



Southwest Michigan Fruit Hot- Lines

There are three telephone 'Fruit Hot-Lines' available for southwest Michigan fruit growers. One is mine, the other two are provided by District Agents Bill Shane and Mark Longstroth. I encourage you to check out all of them, as we all have different styles and areas we focus in. If you have any suggestions on how to improve any of the 'Fruit Hot-Lines,' please feel free to get in touch with any of us.

Southwest Michigan Fruit Hot-Lines

944-4126, ext. 1: Berrien County Horticulture Agent, Jon Clements. (NOTE: this message is available toll-free from anywhere in Berrien County. You just need to dial any of these local to you numbers and press extension 4000, then ext. 1 for the 'Fruit Hot-Line:' (684-5274; 695-3887; 756-9571; or 465-5373).

944-1477, ext. 4 for fruit message; ext 6 for upcoming meetings, ext. 7 for fireblight information: SW District Fruit Agent, Bill Shane

616-657-6380: SW District Fruit Agent, Mark Longstroth.



Calendar

1999 MSU Extension Fruit Management Monday Meetings (all start at 4 P.M.)

- June 7 Southwest Michigan Research and Extension Center, Benton Township
- June 14 Overhiser Orchard, South Haven

- June 21 Southwest Michigan Research and Extension Center, Benton Township
- June 28 Overhiser Orchard, South Haven
- June 27-29 IDFTA Summer Tour, Grand Junction, CO



Bramble Variety Trial Established At SWMREC

In April, campus-based small fruit specialist Eric Hanson and myself established a bramble variety planting at the Southwest Michigan Research and Extension Center. The objective of this trial is to evaluate the productivity and fruiting characteristics of recently released raspberries and blackberries.

There continues to be significant interest in summer and fall-fruiting raspberries in southwest



Michigan. The last variety testing in the region was an observational trial at the Sodus farm (1985-1987) that compared eight fall-fruiting and no summer bearing raspberries.

Since then, numerous new fall fruiting and summer bearing raspberry varieties have been released. Some may have better fruit quality and be more profitable than currently planted varieties such as Heritage and Canby. These new varieties need to be tested to see if they offer improvements over current varieties.

A sampling of some of the new varieties in the planting include:

Summer Raspberries	Fall Raspberries	Blackberries
Canby	Autumn Brittan	Apache
Encore	Caroline	Black Butte
Lauren	Ruby	Chickasaw
Nova		Loch Ness
Prelude		Siskiyou
Titan		

We will begin evaluating fruit from these brambles next year. Feel free to get in touch with me if you would like more details on the planting or would like to take a look at it.

I am also in the process of gathering information on winter greenhouse raspberry production.

Apparently, raspberries for fresh-market sales are being successfully produced in New York and Ontario greenhouses during the early winter months. This is a high-value crop, and may be worth seriously investigating if you have unused greenhouse space during the early to mid-winter period. Feel free to contact me for more information.



Three Apple Cultivar Trials Established In Michigan

As part of Regional Research Project NE-183, "Multi-disciplinary Evaluation of New Apple Cultivars," three new apple research plantings have been established in Michigan.

The objective of NE-183 is to "evaluate horticultural qualities and pest susceptibility of new apple cultivars, strains, and advanced selections at numerous locations throughout the United States to determine both the limitations and positive attributes of these cultivars." Recommended horticultural and pest management practices will be developed for growers wishing to take advantage of the marketing opportunity presented by new, high quality apple cultivars.

NE-183 cooperators from 18 states and two Canadian provinces established 28 uniform plantings of promising apple cultivars and advanced selections in the spring of 1995. Similarly, a second group of plantings is being established in 1999 with a new group of apple cultivars.

In Michigan, plantings have been established at the Clarksville and Trevor Nichols Research Stations, and at the Horticultural Research Farm in East Lansing. Dr. Alan Jones, Michigan State University researcher in the Botany and Plant Pathology Department is the project coordinator. Other MSU cooperators in the project include: Dr. Larry Gut, Assistant Professor, Entomology; Philip Schwallier, West-central District Fruit Agent; and Jon Clements, Berrien County Horticulture Agent.

Apple cultivars in the trial represent some of the newest named and numbered cultivars or selections from apple breeders throughout North America, including those from the Cornell-Geneva (New York), and British Columbia (Canada) breeding programs.

The NE-183 plantings in Michigan will be used to do horticultural (Clarksville); insect pest (Trevor Nichols); and disease (East Lansing) evaluations. The cultivar/selections are planted on M.9 rootstock so data collection can commence as soon as the trees start bearing fruit, within two to three years.

For more information about the NE-183 Project, visit the Project's web-site, <<http://www.virtualorchard.net/ne183/>>, or contact any one of the Michigan cooperators.



USDA Makes Over \$25 Million Available For Housing Farm Workers

WASHINGTON, May 10, 1999 - Agriculture Secretary Dan Glickman today announced that more than \$25 million in loans and grants is available to finance construction of more than 500 new units of rental housing for domestic farm laborers. This funding is \$ 10.3 million more than last year's.

"The increased funding and improvements in the program's operation demonstrate USDA's continued emphasis on improving living conditions for farm workers and their Notice Of Funding Availability (NOFA) for this program, which will help us better funnel program dollars to areas of greatest need and maximize the number of housing units built."

Also new to the program is the ability to lend money to limited partnerships if they have a nonprofit general partner. Limited partnerships are able to use low-income housing tax credits to construct housing facilities. The proceeds of which can be leveraged with USDA program funds to increase the number of rental housing units.

"Our goal is to create better living conditions and to build a better future for U.S. farm workers," said

Jill Long Thompson, under secretary for USDA Rural Development. "Farm workers ensure the successful production and distribution of our nation's agricultural commodities and they allow us to be competitive in world markets. At the same time, they suffer some of the worst housing conditions in the United States."

Applicants must submit loan applications to their USDA Rural Development state office by 5 p.m., July 15, 1999. For more information on this program, contact your local Rural Development office, or call (202) 720-4323 to be connected to your state office. You can, also check our Web site at: <http://www.rurdev.usda.gov>. The announcement and program guidelines appear in the May 6, 1999, Federal Register.



Agricultural Mediation

"Where You Are Part Of The Solution"

By Joel Toonstra, Program Manager, Dispute Resolution Center of West Michigan

If you had a credit dispute with your local bank, Farm Credit Services, or the USDA, what would you do? How about if you had a problem with your neighbor, over anything from pesticide application to odor control. And what if you had a crop insurance dispute with your local agency. Would you hire an attorney? Would you go to court over it? Perhaps you'd turn to MSU Extension for help.

Thanks to funding from the USDA, **mediation** is now available at no charge to resolve agricultural-related disputes. Mediation is a process that brings disputing parties together on a voluntary basis to reach mutual agreement on how things can be resolved. This meeting is conducted in a confidential setting, in the presence of a trained, volunteer mediator from within the community. The role of the mediator is a third neutral party who facilitates communication between both parties. The mediator does not act as an advocate or judge by offering advice, deciding who is right or wrong, or imposing any decisions. Once the parties reach

their own agreement, this is put into writing, which the parties sign, and this agreement becomes a legally-binding contract.

With all the problems facing Michigan producers today, mediation is a credible alternative to the formal court system. It is beneficial in comparison in that it expends less time, money, and energy, but also empowers parties to reach a creative solution to their own respective problem. Mediation provides disputants with a "win-win" opportunity, rather than a "win-lose" situation.

If you would like to request mediation, or would like more information through a brochure or newsletter, please contact the Dispute Resolution Center of West Michigan at 616-774-0121, or e-mail at drcwestmich@igc.org. Staff at the Center will be happy to assist you.



Berrien County MSU Extension Building Dedication and Open House

The Berrien County Board of Commissioners and Michigan State University Extension invite you to the 'Building Dedication' ceremony for the Berrien County MSU Extension Office on Friday, June 25, 1999, at 10:00 a.m. Participating in the event will be: State Senator Harry Gast; Arlen Leholm, Director, MSU Extension; and Ian Gray, Acting Provost and Director, Agricultural Experiment Station. A public open house will follow until 7:00 p.m.



Brazil Apple Export Certification of Apple Maggot Scouts Training Seminars

The following are the dates and sites of the 1999 training seminars to certify apple pest scouts to conduct the trapping program required by the Brazilian "systems approach". Attendance is mandatory for all scouts and optional for exporters, packers, and growers. Each meeting is scheduled to last approximately two hours. Only a few packers in Michigan have shipped to Brazil in recent years

under this program. Listed below are the dates, times and locations:

June 2, (Wednesday), 8:00 a.m., Swan Inn Restaurant, 5182 Alpine Ave., N.W., Comstock Park, Michigan.

June 3 (Thursday), 10:00 a.m., Southwest Michigan Research and Extension Center, 1791 Hillandale Road, Benton Harbor, Michigan.



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