Northeast Mississippi Fruit and Vegetable Growers Association

March 2014 Newsletter



Dr. Jeff Wilson – Regional Horticulture Specialist

I want to sincerely thank all of you who attended the Northeast MS Fruit & Vegetable Growers Conference last month. According to the evaluations the conference was a huge success! We had over 100 attendees on the first day and over 80 the second day. That is truly amazing considering how cold it was that week. About 45 folks even braved the freezing temps to go outside and participate in the outdoor demonstrations. That tells me that the producers in northeast MS are eager to learn about growing fruits and vegetables! For that reason, we will absolutely continue this conference well into the future. Please feel free to call or email me any time if there is anything I can do to assist you.

SPECIALISTS COMMENTS -

Dr. Eric Stafne - Chilling Hour Requirement Affects Peaches

Chilling requirement is a term to express the number of hours below 45 °F necessary to break bud dormancy. Temperatures in the 40 to 50 °F range are most effective in satisfying the chilling requirement. Little chilling is accumulated below 30 °F and temperatures above 60 °F can negate some of the accumulated chilling.

Most peach cultivars require between 600 and 1,000 hours of chilling, although some require as little as 250 hours or less. Dormancy in peaches has two separate stages: rest and quiescence. Rest is a time when the chilling requirement is being accumulated and the buds will not grow. Quiescence is the period of dormancy that peaches enter once their chilling requirement has been met. During this stage, buds will break and grow when sufficient warm weather occurs that is favorable for growth. Often in Mississippi the chilling requirement may be met in mid-winter, but normally cold temperatures will keep buds from swelling until sometime in February or early March.

Below are the accumulated chilling hours for three locations in Mississippi as of February 11, 2014:

Copiah Co.	1203	George Co.	894		
Jones Co.	1102	Lee Co.	1580	Wayne Co.	1249

As this table indicates, any and all cultivars have likely have reached their chilling requirements already and are in the quiescent phase of dormancy. Therefore, if sufficient warm weather commences, bud break may occur earlier than normal this year. As one grower stated, "We may need to sweat out two months of uncertainty (due to cold weather and frosts) instead of just a couple weeks." Such is life for peach growers, so be aware that the potential exists for an early bloom period this year. If this occurs, then other activities will be to be done earlier than normal as well, such as pruning, insect and disease control, and weed control.

*** Dr, Stafne also recently presented a program on Pecan Production in south MS. If you would like to see his presentation, go to this link:

http://msfruitextension.files.wordpress.com/2013/10/basics-of-pecan-production.pdf

Dr. Blake Layton – Soil-applied Systemic Insecticides for Commercial Vegetables

Commercial vegetable growers currently have access to a wide range of effective insecticides to control insect pests. Among these are four neonicotinoid insecticides that can be applied as at-plant or post-planting soil treatments to control important early season insect pests such as: aphids, flea beetles, cucumber beetles, Colorado potato beetles, thrips, and whiteflies (Note that they do not control cutworms or most other caterpillar pests). Most of these products can be applied in a variety of ways, ranging from transplant water drenches, at-planting sprays, post-planting side-dress sprays, or through drip irrigation. When applied as soil treatments these products usually have rather long pre-harvest intervals, but because they are usually applied at or shortly after planting, this is usually not a problem.

It is especially important to read and follow labels carefully when choosing and using soil-applied systemic treatments. First, be sure the product is labeled for use on the crop you plan to treat—these products are not labeled for all vegetable crops. Next check to see if there are any plant-back restrictions that would adversely affect your plans for future crops—plant back restrictions are up to a year for some crops/products. Then be sure the product will control the pests you need to control—some are better for flea beetles, while others work best on whiteflies. Note the pre-harvest interval and be sure it will not be a problem—pre-harvest intervals may be 30 days or longer in some cases. Finally, be sure you understand how to apply the proper rate and have the necessary set-up and equipment to do so.

The active ingredients in these soil-applied neonicotinoid products can also be applied as foliar sprays to many vegetables. In some cases the foliar-applied product has a different brand name and label than the soil-applied product. In other cases the same brand name/formulation can be applied either way. The following table summarizes the active ingredients and their various brand names/ uses. Note that one of these neonicotinoids, acetamiprid, is only applied as a foliar spray; there is no soil-applied version.

The five insecticides listed below all belong to the same class of insecticide chemistry, the neonicotinoid class, and this means they all have the same mode of action. This means that if an insect develops resistance to one of these products, it will be resistant to all other products in the class. This is why it is important for growers to know which products are in this class and to **use only one application of a neonicotinoid insecticide per crop**. In other words, if you use a soil-applied neonicotinoid product at planting, then do not use a neonicotinoid product as foliar spray on the same crop. This requirement is specified on the labels of these products.

Neonicotinoid Insecticides for Commercial Vegetables

	Brand Name	Brand Name	Comments
Active Ingredient	for soil-applied	for foliar-applied	
	formulation	formulation	
imidacloprid	Admire Pro 4.6 F	Provado 1.6 F	Many generic formulations.
			Seed treatment on sweet
			corn
			is known as Gaucho 600
thiamethoxam	Platinum 2 SC	Actara 25 WDG	
dinotefuran	Venom 70 SG	Venom 70 SG	
clothianidin	Belay 2.13 SC	Belay 2.13 SC	Seed treatment on sweet
			corn
			is known as Poncho 600
acetamiprid	(foliar spray only)	Assail 30 SG	

Note: When using these soil-applied products to treat transplants, such as tomatoes or melons, there is usually a lag time between when the product is applied and when the product begins to provide protection. Pests like flea beetles or cucumber beetles can sometimes do a lot of damage, and even destroy stands, in this protection gap. For this reason, it is often a good idea to apply a non-neonicotinoid foliar spray immediately following transplanting to provide immediate and supplemental protection of high value transplants. In cases where cutworms are also a concern, a pyrethroid insecticide, such as Brigade or Mustang Max, may be a good choice for such a

treatment. Be aware however, that both the neonicotinoids and the pyrethroids have a tendency to flare spider mites and scout young plants regularly for building populations of mites and other pests.

UPCOMING EVENTS

Farm to School MS Market Ready Training

There will be a program held in conjunction with the F&V Conference for any producer who wants to hear more about the Farm-to-School program. This program is presented by the MSU Dept. of Ag Econ and the MS Dept. of Ag. Information about GAP/GHP will also be presented. The training includes discussions on current food policy legislation, building relationships with restaurant managers and chefs, proper packaging and labeling, marketing strategies, pricing structures and regulatory concerns. This program will last from 9:00 a.m. – noon. The cost is included with your conference registration and will cover refreshments, lunch, training workbooks, and references materials. For more info please contact Dr. Ken Hood at 662-325-2155 or read the attachment to this email. You can even register for that portion online at: http://www.agecon.msstate.edu/whatwedo/commodity/market_training.asp.

*** The Department of Agriculture would like for each of you to have a chance to fill out a survey about selling to schools. If you would like to do this please go to the following link: http://www.mdac.ms.gov/farmtoschool.

MSU Food-Safety Workshops

Fruit and vegetable growers can learn techniques to make their produce safer for the consumer during one of these upcoming workshops. Specialists with the MSU Extension Service and the MAFES will conduct three separate workshops across the state on developing and implementing good agricultural practices and good handling practices. The last one is from 8:00 a.m. - 5:00 p.m. at the following location: March 11 - Coastal Research and Extension Center, 1815 Popps Ferry Rd., Biloxi.

The voluntary guidelines, referred to as GAPs and GHPs, were issued by the Food and Drug Administration in 1998 to help growers eliminate food safety hazards that can occur during growing, harvesting, cleaning, washing, sorting, packing and transporting unprocessed foods, such as raw fruits and vegetables. Topics include site selection and soil; agricultural water; fertilizer and pesticide use; animal exclusion; worker health and hygiene; produce cleaning and water treatment; packing and storage; traceability; harvesting; cooling; transportation; and U.S.D.A. audit verification checklist.

Registration is free and open to all Mississippi fruit/vegetable growers who sell to the fresh market. Seating at each location is limited to the first 25 participants to preregister. Those completing the course will receive a certificate of completion. Lunch and refreshments will be provided. To pre-register or for more information, contact Mahmoud at <u>228-762-7783</u>, ext. 301, or <u>bmahmoud@ext.msstate.edu</u>.

The workshop is funded by the USDA's National Institute of Food and Agriculture through the Southern Risk Management Education Center. Instructors are MSU Extension and research professors Mahmoud, Christine Coker, Eric Stafne and Gary Bachman, and Alcorn State University food safety specialist Nicole Bell. Please see the following press release from MSU for more information: http://msucares.com/news/releases/13/nr20131125 gapscertification.html

GAP/GHP Cost-Share Program Available

The Mississippi Department of Agriculture and Commerce is currently offering a cost-share program to provide financial assistance to Mississippi fruit and vegetable farmers receiving Good Agricultural Practices (GAP) and Good Handling Practices (GHP) Certification. Eligible farmers will receive reimbursement for 75% of the certification costs up to a maximum of \$500. To receive reimbursement,

farmers must submit a completed application with proper documentation of costs incurred. Only audits completed by an approved USDA certifier will be eligible for reimbursement. A list of auditor contacts is available at www.ams.usda.gov/gapghp. Funds are available on a first-come, first-serve basis until the funds are depleted. Funding for this program is provided through the USDA Specialty Crop Block Grant Program. For more information about this program or to obtain an application, visit www.mdac.ms.gov, call Michael Lasseter at (601) 359-1120 or email michaelL@mdac.ms.gov.

USDA Good Agricultural Practices Webinar - Thursday, March 6, 2014, from 1:00 -2:00 p.m.

Please join USDA for a live, interactive discussion via internet (a webinar), covering the food safety verification program for **USDA's Good Agricultural Practices (GAPs)**. The discussion has been developed for growers of fresh fruits and vegetables, and will cover the "how to's" of planning, plan implementation, and audit preparation. If you grow, pack, ship, or sell fruits and vegetables, you won't want to miss this unique webinar!

Our formal presentation will run about 30 minutes, with the remaining time devoted to a live and interactive **Q**uestion and **A**nswer session. This webinar, hosted by USDA's AMS, is free and available to anyone with Internet access. Space is limited to the first 500 people who sign up, so please register early. **CLICK HERE TO REGISTER**. If you have any questions about the webinars or AMS, please contact Christopher Purdy at (202) 720-3209 or christopher.purdy@ams.usda.gov.

MSU Better Process Control School for Acidified Foods

April 15-16, 2014 at the MS Ag and Forestry Museum in Jackson, MS

The Department of Food Science, Nutrition and Health Promotion will offer a Better Process Control School (BPCS) for Acidified Foods. This course offers instruction which fulfills the FDA and USDA Good Manufacturing Practice (GMP) requirements to certify supervisors of acidification and container closure evaluation operations during the canning of acidified foods. Companies which manufacture acidified foods must operate with a certified supervisor on the premises when processing as specified in 21CFR Part 114 & 108.25(f).

Areas of Instruction: FDA and USDA require approved BPC Schools to follow certain guidelines. To assure the safety of acidified foods, schools must cover the critical factors supervisors must know when processing acidified foods. Participants seeking certification are required to attend a BPC School and pass examinations on these topics: Microbiology of Thermally Processed Foods, Foods Container Handling, Records for Product Protection, Food Plant Sanitation, Principles of Thermal Processing & Process Room Instrumentation, Equipment and Operation.

Participants seeking certification in specific processing systems must attend that session and are required to pass the respective examination. Process systems offered for certification include: Acidified Foods. Participants seeking certification for a specific container closure system must attend that session and pass the respective examination. Closure sessions offered for certification include: Glass containers

Examination questions are prepared by the National Food Processors Association/Food Processors Institute with the approval of FDA and USDA. Each examination consists of 10-20 questions and requires a minimum score of 70% to pass. Participants are encouraged to attend all sessions regardless of their intention to take the qualifying exam. Those not seeking qualification in a specific system area are not required to take that exam.

Pre-registration is mandatory. The registration fee (\$250) includes breaks, instructional materials, tuition and certificates earned. A letter/email confirming receipt of your registration, directions to the Ag

Museum and the book will be mailed to you. After Feb. 24th the fee is \$300 (until March 3rd). Please see the attached brochure for more details and how to register.

USDA-Value-Added Producer Grant

Agriculture Secretary Tom Vilsack announced the availability of nearly \$10.5 million in U.S. Department of Agriculture (USDA) grants to help agricultural producers enter into value-added activities designed to give them a competitive business edge. The funding is being made available through the <u>Value-Added Producer Grant</u> program. Grants are available to help agricultural producers create new products, expand marketing opportunities, support further processing of existing products or goods, or to develop specialty and niche products. They may be used for working capital and planning activities. The maximum working capital grant is \$200,000; the maximum planning grant is \$75,000.

Eligible applicants include independent producers, farmer and rancher cooperatives, and agricultural producer groups. Funding priority is given to socially disadvantaged and beginning farmers or ranchers, and to small- to medium-size family farms, or farmer/rancher cooperatives.

The Value-Added Producer Grant program is one of many USDA programs that support the development of strong local and regional food systems as part of the *Know Your Farmer*, *Know Your Food* initiative. Launched in 2009, the initiative strengthens ties between agricultural producers and their local communities, helping meet growing consumer demand and creating opportunities for small business development. Initiatives like this create new income opportunities for farmers, generate wealth that will stay in rural communities, and increase access to healthy, local foods in underserved communities. All of these actions boost local economies.

Rural Development is encouraging applications from Tribal organizations as well as applications that support regional food hubs. Applications supporting value-added activities related to bio-based products are also encouraged. Since 2009, the Obama Administration has provided agricultural producers with almost \$80 million in Value Added Producer Grant assistance that has supported more than 600 innovative, value-added projects. Additional examples of how VAPGs assist local and regional food producers are available on the USDA *Know Your Farmer*, *Know Your Food* Compass, which is searchable by zip code and key word.

Grant applications are due by Feb. 24, 2014. More information about how to apply is available on page 70260 of the <u>November 25 Federal Register</u>, or by contacting any USDA Rural Development state office. Click here for more information: http://www.rurdev.usda.gov/BCP VAPG.html.

NRCS Conservation Innovation Grants

The U.S. Department of Agriculture (USDA) is accepting applications for competitive grants to develop and accelerate conservation approaches and technologies on private agricultural and forest lands. "Conservation Innovation Grants (CIGs) have contributed to some of the most pioneering conservation work on America's agricultural and forest lands," said Agriculture Secretary Tom Vilsack. "It's an excellent investment in new conservation technologies and approaches that farmers, ranchers and forest landowners can use to achieve their production and conservation goals."

About \$15 million will be made available nationwide by the USDA's Natural Resources Conservation Service (NRCS). State and local governments, federally recognized Indian tribes, non-governmental and educational organizations, private businesses and individuals are eligible to apply. Pre-proposals are due March 7. Vilsack said priority will be given to applications that relate to nutrient management, energy conservation, soil health, air quality, climate change, wildlife, economics, sociology, environmental markets, food safety, historically underserved groups, or assessments of past CIG projects.

In the 10 years that NRCS has administered the program, grants have helped develop water quality trading markets, demonstrated ways to increase fertilizer water and energy efficiencies, as well as address other resource concerns. The grant program enables NRCS to work with public and private partners to accelerate technology development and adopt promising approaches to address natural resource concerns. Funded through the Environmental Quality Incentives Program, the grants are awarded through a competitive process. At least 50 percent of the total cost of grant projects must come from non-federal matching funds, including cash and in-kind contributions provided by the grant recipient. For more on this grant opportunity view the attached document or visit http://www.nrcs.usda.gov/technical/cig/index.html. To apply electronically, visit www.grants.gov.

More Info:

* It's spring (almost) and commercial vegetable growers are searching for supplies and equipment for this year's planting and harvest season. Refer to this link that American Vegetable Grower Magazine compiles each year: http://www.growingproduce.com/production/2014-product-guide-directory

MSU-ES Contact info:

Below are the contact names and numbers that are directly related to the association and your production issues. Please start with your local county Extension agent to help find answers to your questions. They are capable of handling your request and have access to all of our resources

Dr. Jeff Wilson Regional Horticulture Specialist Northeast District 662-566-2201 jwilson@ext.msstate.edu

Dr. David Nagel Vegetable Specialist 662-325-2701 davidn@ext.msstate.edu

Dr. Wayne Porter Regional Horticulture Specialist Southeast District 601-482-9674 wporter@ext.msstate.edu

Dr. Keith Crouse Soil Specialist 662-325-3313 keithc@ext.msstate.edu

Dr. Rick Snyder Greenhouse Vegetable Specialist 601-892-3731 ricks@ext.msstate.edu Scott Cagle Chickasaw County Extension Agent 662-542-8650 scottc@ext.msstate.edu

Dr. Blake Layton Extension Entomologist 662-325-2085 blayton@ext.msstate.edu

Dr. Eric Stafne Fruit Crops Specialist 601-403-8939 estafne@ext.msstate.edu

Dr. Ken Hood Marketing Specialist 662-325-2155 kenh@ext.msstate.edu

Dr. Alan Henn Extension Pathologist 662-325-2311 ahenn@ext.msstate.edu

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