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Vegetable & Fruit Headline News

The University of Maryland Extension Agriculture and Natural Resources Profitability Impact Team proudly presents this bi-weekly publication for the commercial vegetable and fruit industry.

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Vegetable Crop Insect Update

By Joanne Whalen
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Lima Beans - Continue to scout for spider mites, stink bugs, lygus bugs and corn earworm. Early detection and treatment will be needed to achieve spider mite control. In addition, multiple sprays may be needed for mites, especially if populations are high at treatment time and/or numerous eggs are present. As soon as pin pods are present, be sure to watch carefully for plant bug and stinkbug adults and nymphs as well as corn earworm larvae. As a general guideline, treatment should be considered for plant bugs and stink bugs if you find 15 adults and/or nymphs per 50 sweeps. A treatment will be needed for corn earworm if you find one corn earworm larvae per 6 ft-of-row.

Melons - Continue to scout all melons for aphids, cucumber beetles, and spider mites. We continue to find fields with numerous "worm" species feeding on rinds of watermelons including beet armyworms, yellow striped armyworm, variegated cutworms and cabbage loopers.

Peppers - As soon as the first flowers can be found, be sure to consider a corn borer treatment. Depending on local corn borer trap catches, sprays should be applied on a 7-day schedule once pepper fruit is ¼ – ½ inch in diameter. Be sure to check local moth catches in your area by calling the Crop Pest Hotline, instate: 800-345-7544; out of state: 302-831-8851 or visiting our website at:
http://ag.udel.edu/extension/IPM/traps/latestblt.htm
You will also need to consider a treatment for pepper maggot. Be sure to watch carefully for beet armyworm larvae since they can quickly defoliate plants. In addition to beet armyworm feeding on leaves you should also watch for an increase in aphid populations. We are starting to find aphid populations increasing and they can explode quickly, especially where beneficial insect activity is low. As a general guideline, treatment may be needed if you find one or more aphids per leaf and beneficial activity is low.

Snap Beans - As corn borer and corn earworm populations start to increase, you will need to consider treatments for both insect pests. Sprays are needed at the bud and pin stages on processing beans for corn borer control. As earworm trap catches increase, an earworm spray will also be needed at the pin stage. You will need to check our website for the most recent trap catches to help decide on the spray interval between the pin stage and harvest for processing snap beans at:
http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html

Sweet Corn - Continue to sample all fields from the whorl through pre-tassel stage for corn borers, corn earworms and fall armyworm. A treatment should be considered when 12-15% of the plants are infested. Since fall armyworm feed deep in the whorls, sprays should be directed into the whorls and multiple applications are often needed to achieve control. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check both blacklight and pheromone trap catches for silk spray schedules since the spray schedules can quickly change. Trap catches are generally updated on Tuesday and Friday mornings at:
http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/silkspraythresh.html
You can also call the Crop Pest Hotline, in state: 800-345-7544; out of state: 302-831-8851.

Insecticide Label Update: Admire Pro/Provado

By Joanne Whalen
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Admire Pro – Bayer Crop Science is consolidating the insecticide labels for Provado and Admire-Pro into one. The company is phasing out Provado and will only be offering Admire-Pro in the future. Here is the link to the new Admire Pro label: **http://www.cdms.net/LDat/ld74S023.pdf**

Herbicide Carryover Concerns from Dry Weather

By Mark VanGessel
DE Extension Weed Specialist
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The lack of rain this summer could impact herbicide carryover in dryland fields. Most herbicides require moisture to degrade in the soil; Water is required for both microbial and chemical breakdown. In typical summers we get adequate rainfall for this breakdown to occur. Last summer was also dry and we observed herbicide carryover from a summer application in fall planted small grains. Be sure to read the labels of products applied this summer and evaluate the carryover potential. Extension Bulletin 236 also has a compiled reference of crop rotation planting restrictions for herbicides used in field crops and vegetables. See table E-4 on pages E14-E19.

Commercial Vegetable Production Recommendations Maryland EB 236 On-Line at:

http://mdvegetables.umd.edu/files/2011%20COMPLETE%20MARYLAND%20BOOK%20.pdf

Also available in a new very interactive format at the Delaware Extension site at:

http://ag.udel.edu/extension/vegprogram/publications.htm#vegrecs

Sunscald Very Prevalent in Peppers This Year

By Jerry Brust
IPM Vegetable Specialist, UME
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I know this seems very obvious to most growers, as we have sunscald every year in our vegetable plantings. This year just seems to be especially bad as I have gotten several calls from growers about a strange problem in their peppers that looks like sunscald, but couldn't be. The reason given that it could not be sunscald is because the plants have thick foliage and the fruit seem well covered. Sunscald occurs when peppers or other vegetables are exposed to the direct rays of the sun during hot weather; the damaged areas may become papery and bleached or tan colored, and these areas often are covered with a black fungal growth, **Photo 1**. It is more apparent on plants that have sparse foliage or that have lost a large proportion of leaves to a leaf-defoliating disease. But almost all the farms I visited had plants that looked very good **Photo 2**. The problem is that pepper plants often lean to one side or the other because of winds blowing them in certain directions. When this occurs sunscald can be especially prevalent on previously shaded pepper fruit that are suddenly exposed to the sun, even for a short period time. **Photo 3** shows one of these leaning pepper plants and several fruit that were damaged by this sudden exposure resulting in sunscald. The damaged areas are vulnerable to infection by fungi (Black mold), and bacteria, so that at times a pepper fruit will be found that is a soupy, smelly watery mess. Sunscald is most prevalent on green fruit. Staking and tying pepper plants will greatly decrease the leaning plants and greatly decrease sunscald. The pepper plants do not have to be tied often, usually once is all it takes and stakes do not need to be any taller than the pepper plants (so broken tomato stakes work well) **Photo 4**. Peppers in a tied vs. non tied section of field had vastly different sunscald problems. The stake and tied section had less than 2% of fruit sunscald damaged; the non-tied section had 17% sunscald damaged fruit for the same variety planted the same day.

Photo 1. Pepper fruit with small and large areas of sunscald.

Photo 2. Pepper plant that appears to have good foliage and fruit cover but still has sunscald fruit.

Photo 3. Leaned-over plant exposing covered peppers, resulting in several sunscald fruit.

Photo 4. Staked and tied pepper plants, 4-5 plants between stakes, one string.

MDA To Make Changes to the Proposed Rules for the Nutrient Management Program

Valerie T. Connelly
Director of Government Relations
Maryland Farm Bureau, Inc.
(410) 922-3426

Nutrient Management Advisory Committee holds Third Meeting on the Proposed Changes to the Nutrient Management Program

The Nutrient Management Advisory Committee (NMAC), a 20+ member advisory body to MDA required under the state Water Quality Improvement Act, met again on Friday, July 22nd to discuss the changes proposed by the Department to the Nutrient Management program. After several weeks of comments from Farm Bureau, other commodity associations and dozens of individual farmers and livestock owners, MDA made a few changes to one of the draft proposals. The newest versions of the proposed documents are attached. Only the "Nutrient Application Guidelines" has undergone revision since the April 25 meeting.

The revisions include:

1. Clarifying that crops can be grown outside the 10 ft setback.

2. For Spring, Summer and Fall applications of manure and other organic sources, providing exceptions to the injection/incorporation requirement.
   Exceptions include:
   -permanent pastures.
   -livestock manures deposited directly by animals.
   -land used for hay production.
   -fields containing highly erodible land as defined by NRCS.
   -land where nutrients are applied through a spray irrigation system to a growing crop.
   -fields in which a current Soil Conservation and Water Quality Plan or a current USDA/NRCS program requirement prohibits soils disturbance.
   -organic nutrient sources that have a moisture content of less than 90%.

3. Providing for stream crossings provided sediment and erosion issues are addressed. Establish 12 ft max width to avoid animals congregating in the stream. Crossings wider than 12 ft need to be gated.

4. Clarifying that winter application restriction does not apply to manure deposited directly by animals.

5. Based on UMD comment, changing requirement to move location of stockpiles from year to year. (UMD recommends keeping them in the same place to minimize areas of high salt concentration.)

Sustainable Farming Twilight

Cumaptico Farm, Cooper Rd.
Eden, MD
Monday, August 1, 2011
5:00-7:30 p.m.

Sponsored by USDA Agricultural Research Service (ARS) with a grant from USDA National Institute for Food and Agriculture (NIFA),and University of Maryland Extension

5:00 - Catered chicken dinner; ice cream from a local dairy
5:30 - Welcome and Introductions – USDA-ARS and Wicomico County Extension
5:40 - Cumaptico Farm/CutFresh Organics - Aaron Cooper, owner
5:50 - What's Happening with Local Food, CSAs, Farmer and Direct Markets - farmer discussion
6:10 - Combining Cover Crops and Poultry Litter to Supply Corn Nutrients - John Spargo, USDA-ARS
6:30 - Cover Crops, Reduced Tillage, and Pest Management in Sustainable Systems - Steven Mirsky, USDA-ARS
6:50 - NRCS EQIP Funds for Transitioning to Organic - Teresa Kampmeyer, NRCS-Wicomico Co.
7:10 - Organic Snap Bean and Edamame Production – Aaron Cooper
7:30 - Adjourn

Bring lawn chair or blanket for seating while eating and comfortable shoes for touring plots.

Please register by Thursday 7/28 via the Wicomico Extension office at 410-479-6141.

A fee of $10 per participant may be paid at the Extension office or at the field site.

Cut Flower Tour In Southern Maryland

August 1, 2011
8:30 a.m. to 3:30 p.m.

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Sponsored by:
University of Maryland Extension

In cooperation with:
Association of Specialty Cut Flower Growers
Maryland Greenhouse Growers Association

Tour Stops:

Stoltzfus Farm
Mechanicsville, MD - Benjamin Stoltzfus and his family raise a large selection of cut flowers, including sunflowers, lilies, zinnias, lisianthus, and other flowers.

Weaver's Cut Flower Farm
Mechanicsville, MD - The Weavers produce cut flowers in rollup side greenhouses and in the field on approximately 3 acres. They have a large variety of seasonal cut flowers year round, available by the stem or readymade bouquets. They can also make floral arrangements and bouquets to your specifications.

Loveville Produce Auction
Loveville, MD - This auction is a 14,000 square foot facility that held its first auction in April 2006. Auction days are Mondays, Wednesday and Fridays. Produce, plants and cut flowers are sold at this auction.

Suttler Post Farm
Mechanicsville, MD - Judy and John Mast grow cut flowers in the field at their family farm. They have been growing cut flowers at Suttler Post Farm for about 6 years. They produce the flowers on black plastic with drip irrigation. Crops grown include sunflowers, zinnias, purple coneflower, and liatris among others. Suttler Post sells cut flowers on Saturdays at the Silver Spring Farm Market.

University of Maryland Extension Talks
Extension personnel will give short (10 to 15 minute) talks at several of the sites during the day. Topics will include insects and diseases on cut flowers, weed control options and woody cut stems.

Extension Speakers:
Ben Beale, St. Mary's County
Brian Clark, Prince George's County
Stanton Gill, Central MD Research and Education Center
Karen Rane, Plant Diagnostic Lab
Ginny Rosenkranz, Worcester, Wicomico and Somerset Counties
Chuck Schuster, Montgomery County
For more information on the program:
301-596-9413

The first site will be the farm of Benjamin Stoltzfus which is located at:
Benjamin Stoltzfus Farm
28660 Rollins Lane,
Mechanicsville, MD 20659

Annual Field Crops Research Twilight Barbecue & Ice Cream Social

CMREC, Upper Marlboro Farm
August 4, 2011

You are invited to attend a twilight wagon tour of the University of Maryland Central Maryland Research And Education Center, Upper Marlboro Farm, on Thursday, August 4, 2011 from 4:30 p.m. to 8:30 p.m. The University of Maryland Extension will host this Annual Field Crops Research Twilight Barbecue & Ice Cream Social; Served after the barbecue, "Old-fashioned" homemade ice cream. This event will highlight field crops, agronomic and horticultural research projects currently conducted at the CMREC, Upper Marlboro Farm.

Barbecue Begins at 4:30

Ice Cream Served at 5:30

Wagon Tour Begins Promptly at 6:00

University of Maryland Extension Educators and Specialists will showcase their field crop, vegetable and fruit research plots. The twilight tour highlights will include:

Vegetable integrated pest management and reduced risk control methods; Field crops research updates; Meadow orchard concept and Fruit research update for apples, peentos, blueberries and beach plums; and a vineyard research update for wine grapes.

Please call the Anne Arundel Extension Office at 410 222-6759 by August 2nd to reserve your meal ticket. There is no cost to attend; RSVP is required for the meal.

If you need special assistance to participate, please contact the Anne Arundel County Extension office at 410-222-6759 by August 2nd, 2011.

Aronia Twilight Tour

August 23, 2011

Aronia *(Chokeberry)* is a new alternative crop which has high concentrations of flavonoids and several nutraceutical qualities.

University of Maryland Extension will conduct a Twilight Tour of the Aronia research orchard on August 23rd, 5.30 pm at Wye Research and Education Center, 211 Farm Lane, Queenstown MD, 21658.

Participants will learn about highly nutritive Aronia berries; varieties and yield; plant densities and propagation; cultural and production methods; fertility practices; and experience ripe Aronia fruit.

The event is free, however, registration is requested. Please contact Debby Dant for additional information and/or to register at: 410-827-8056 X 115, ddant@umd.edu

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Submit Articles to:
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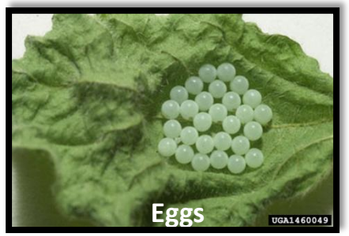
Article submission deadlines for 2011: April 13 & 27; May 11 & 25; June 8 & 29; July 13 & 27; August 17; September 7.

Attachment - Extension Brief 6: *Life of the Brown Marmorated Stink Bug*

Life Cycle of the Brown Marmorated Stink Bug



The Brown Marmorated Stink bug, Halyomorpha halys; is native to China, Japan, Korea, and Taiwan. It was reported in Allentown, PA in 2001 and has since spread to Maryland along with most of the other Mid-Atlantic/Northeastern States.

Adults emerge in the spring depending on temperature, then mate and lay eggs May through August. The light green/whitish clusters of eggs hatch into yellowish/brown mottled with red and black nymphs that go through 5 molts. Adults move to overwintering sites (woods, brushy areas, and buildings) in October/November. Varying times of breeding/egg laying can result in prolonged feeding damage. The extended emergence, egg laying, and hatching can result in the need for multiple treatments or pesticide applications. Above photos courtesy of David R. Lance, APHIS Entomologist.

Brown Marmorated Stink Bug Control Options (2011)

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Extension Brief

EBR-6
2011

Brown Marmorated Stink Bug Control Options

The following table contains most of the crops grown in Maryland on the Y axis and most of the insecticides that will provide some degree of control on the X axis. Some of the insecticides do not have BMSB on the label, but the crop is labeled. According to Dr. Galen Dively, Advisor Consultant & Extension Specialist, Integrated Pest Management; Dr. Cerruti Hooks, Assistant Professor & Extension Specialist, Integrated Pest Management; and Dr. Gerald Brust, Agent & Regional Extension Specialist, Vegetables; they have activity on BMSB and their control rating is listed in the table. For life cycle information, please see pictures on the back page. Always follow the label and use pesticides safely. The user is always responsible for the proper use of pesticides, residue on crops, storage and disposal, as well as damage caused by drift. State and Federal pesticide regulations and labels are continuously being revised. Be sure to follow current regulations and labels. Using pesticides inconsistent with labeled directions is illegal. The trade or brand names given herein are supplied with the understanding that no discrimination is intended and no endorsement by the University of MD Extension is implied. Furthermore, in some instances the same compound may be sold under different trade names, which may vary as to label clearances. It is the user's responsibility to follow the label.