Dave’s Ramble

They call it a wolf tree, a tree that for whatever reason had several years jump on any neighboring trees; becoming the crowning jewel of a woodland.

I approached the base of the woodland noble, and allowed my eyes to follow the massive and perfectly straight trunk to its outstretched crown. Seemingly out of place, this perfect tulip poplar was deserving of a royal position in the king’s forest. So fixated on this giant, I almost failed to notice that all of the neighboring trees were twisted and distorted, tortured in the shadow of this cruel master; beggars at the table of the king.

Many have said that I love fields more than forests. It can’t be denied that farm crops won’t fare well in the shadow of trees; hence, I tend to love sunlight more than shade. In my humble opinion, both are crops, the forest and the farmed fields; each due a harvest in their own good time.

Many have cried, “Good King May You Live Forever!” However, humbled by a single heavenly strike, the mighty wolf tree’s crown of glory fell to the earth. In the middle of the forest a rejoicing meadow sprung forth; grasses, wildflowers, herbs, berries and young maiden trees.

Yet, it was with the call of the whippoorwill and the sweet notes of the bobwhite, that my senses were shook. My admiration of the wolf tree was so misguided. I opened my eyes and peered closely; my forest was full of wolves. The woodsman’s axe was raised, and the big eyes, the big ears and the big teeth yielded.

From a dark and dreary world of dungeons, life emerged in colorful pageantry. Released from tyranny, a new conquest, for all manner of life to enjoy and share. May it be so, I shouted to the reapers, “Farms, Orchards, Vineyards, Meadows and Young Vibrant Forests, Rise Up Forever!”

Calendar of Events

Spring 2012

Mark Your Calendars --- Plan To Participate

♦ April - May - Producer’s Digital Toolbox Seminars
♦ April-July - Pasture Management Series
♦ April 18 - Pasture Walk & Avoiding Founder
♦ April 20 -- On-Line Pesticide Applicator Recertification
♦ April 25 - Cover Crop Twilight Meeting
♦ April 25 - Sheep & Goat Production Workshop
♦ April 25 - Poultry Processing & Marketing
♦ May 9 - Strawberry Twilight, Wye REC
♦ August 2 - Crops Twilight & BBQ, Upper Marlboro

Inside This Issue

• Spring & Summer Events
• Agronomic Crop Update
• Response of Full Season Soybean to Nitrogen Fertilizer
• Getting Pasture off to Fast Start
• Quick Note on Cover Crop Management
• Vegetable Crop & Fungicide Updates
• Monitor for Spotted Wing Drosophila
• Strawberries, Row Covers & Freeze Protection
• Nutrient Management Update
• Grain Market Highlights
• MDA & USDA News Release
• EPA Environmental News
• Arysta LifeScience Suspends MIDAS(R)
• AA County Farmers’ Markets Opening
• Spray Program
• Production Websites
• On-Line Farmer Education Series
• Bay Area Fruit School View On-line
Pasture Walk & Avoiding Founder

April 18, 2012
6:00-8:00 pm
PEMBERTON EQUESTRIAN CENTER
26627 Pemberton Drive
Salisbury, MD 21801

Pastures have noticed the spring weather and have started growing along with those pesky weeds. If you are like most, trying to keep an upper hand on weed control is a challenge. Discuss various management techniques to help promote optimal pasture productivity, including weed suppression.

There will also be discussion on avoiding founder. Knowing all the factors that can play a role in founder can have tremendous impact on good horse health. Great opportunity to come out and expand your horse knowledge! Topics include: Pasture Management, Soil Testing, Weed ID, What is Founder, Q & A session.

This is a free program but pre-registration is recommended to ensure program materials.

Contact Jessie Renshaw at 410-632-1972 for additional information and driving directions.

Cover Crop Twilight Meeting
April 25, 2012
University of Maryland
Central MD Research and Education Center, Clarksville, MD
4240 Folly Quarter Road
Ellicott City, Maryland
5:30 P.M.-7:30 PM

Dr. Ray Weil and Natalie Lounsbury of the University of Maryland will give a tour of their experimental plots using forage radish, spring oats and other winterkilled cover crops for early spring vegetable planting without herbicides.

The experiment includes tilled and no-till treatments and a variety of early spring vegetables. There will be equipment demos of modified push seeders for no-till planting and Dr. Weil will demonstrate how to take soil samples for nutrient analysis and new field techniques for measuring nitrate, potassium and pH in the field. Use of the pre-sidedress nitrate test for vegetable production will be discussed. Refreshments and seed samples will be provided.

Schedule:

5:30-6:30 Field Tour, equipment demos and soil sampling
6:30-6:40 Move indoors and get refreshments
6:40-7:00 Presentation by Natalie Lounsbury. Discussion of the effect of cover crop and tillage on soil moisture, temperature, nitrate, sulfate and early vegetable crop growth (grower experiences)
7:00-7:30 Presentation by Ray Weil on using the pre-sidedress nitrate test for vegetable production and demonstration of field techniques for measuring nutrients

This meeting will count for 2 hours of Nutrient Management Voucher credit.

To register please call the University of Maryland Extension Carroll County Office at 410-386-2760 or send an e-mail to chill1@umd.edu with attendee name(s) and telephone number(s).

If you need special assistance to participate in this program, please contact the University of Maryland Extension Carroll County office at 410-386-2760.
Sheep and Goat Production Workshop
April 25, 2012
5:00-8:00 PM
St. Mary’s Agriculture Service Center

Topics:
5:00 - 6:30 - Production Updates
- Question/Answer Forum
6:30 - 8:00 - Open Discussion: Advancing the sheep and goat industry in Southern Maryland

Speakers:
Susan Schoenian; Sheep & Goat Specialist
University of Maryland Extension
Ben Beale; Agricultural Extension Educator
University of Maryland Extension, St. Mary’s County

Take the opportunity to meet with other producers, visit our sponsors and enjoy a day of learning and fun!
Call 301-475-4484 to register or for more information

Directions to the St. Mary’s Ag Services Center
26737 Radio Station Way, Leonardtown, MD 20650

From Waldorf and points north - Take Rt. 5 south.
Continue for approximately 30 miles—You’ll pass Hughesville, Charlotte Hall, Mechanicsville. (Be sure to turn right at the WaWa in Mechanicsville to continue on Rt. 5). Continue on Rt 5 towards Leonardtown through the town of Loveville. Continue on Rt 5 for 1/2 mile past Banneker Elementary School. On the left will be a State Roads Salt Dome. Make the first left past the salt dome onto Radio Station Way. Continue to the end of the access road past Northeast Plumbing Supply. The Ag Services will be the brick building on the left.

From Virginia: Take Rt 301 North across Nice Bridge. Proceed about 3 miles and make right turn at Rt 234. Follow 19 miles to the end and turn left onto Rt 5 North. Take Rt 5 north 1/2 mile. Take the first right turn past Dunkirk Supply onto Radio Station Way. Continue to the end of the access road past Northeast Plumbing Supplies. The Ag Services will be the brick building on the left.

From South of Leonardtown: Take Rt 5 north through Leonardtown. Proceed pass the McDonalds, Wendy’s, etc. Take the first right turn past Dunkirk Supply onto Radio Station Way. Continue to the end of the access road past Northeast Plumbing Supplies. The Ag Services will be the brick building on the left.

Poultry Processing and Marketing Group Launching in
Central Maryland
Wednesday, April 25, 2012
7:00 PM
Farmer Tom’s 427 Cockeys Mill Road
Reisterstown, MD  21136

Got poultry? Need them processed? Looking to rein in production costs through group purchases and services? Could you use an additional volume market for your sustainable raised poultry? Then you need to attend an information and organizational meeting of a new group forming in Central Maryland whose mission is to:

Provide safe, environmentally responsible, and economically feasible processing services to small and mid-sized poultry producers.
Organize a buying group for chicks, poults, feeds, and poultry supplies to secure quantity discounts.
Provide training and continuing education about regulations, marketing, and production.
Service volume sales accounts through aggregation of group member birds to provide an additional outlet to group members and sufficient supplies to volume buyers.

Please contact Ginger Myers, University of Maryland Extension, gsmyers@umd.edu, 301-432-2767, ext. 338 to register. This new community development and economic development initiative is sponsored by the University of Maryland Extension's Rural Enterprise Development Center with funding provided by a Northeast SARE Partnership grant.

2012 Strawberry Twilight Meeting
Wednesday May 9th
6:00 – 8:00 PM
Wye Research and Education Center
211 Farm Lane
Queenstown MD

The 2012 Annual Strawberry Twilight Meeting at the WREC in Queenstown, MD, will be held May 9, 2012 from 6-8 PM, rain or shine.

This year’s program will focus on high tunnel trials, with both University of Maryland and USDA specialists discussing current research, other small fruit growing topics, and "programmed production" of small fruit.
We’ll have refreshments and pre-registration is not necessary. If you need special assistance to attend this program, please call Debby Dant at 410-827-8056 X115, no later than May 3, 2012.

For additional program information, contact Michael Newell, Horticulture Crops Program Manager, 410-827-7388 or mnewell@umd.edu.

Crops Twilight
Barbecue & Ice Cream Social
CMREC Upper Marlboro Farm
August 2, 2012

You are invited to attend a Field Crops Research Twilight, Barbecue and Ice Cream Social at the Central Maryland Research & Education Center, Upper Marlboro Farm on Thursday, August 2, 2012 from 4:30 pm to 9 pm. A barbecue dinner will be served at 4:30 pm followed by homemade ice cream prior to the evening tour!

The research farm is located at 2005 Largo Road, Upper Marlboro, Maryland. The University of Maryland conducts equal access programs.

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, peenuts, blueberries and beach plums; and a vineyard research update for wine grapes.

Barbecue Begins at 4:30
Ice Cream Served at 5:15
Crops Twilight at 6:00

➢ Please arrive on-time as the tour will start promptly at 6:00 pm. This event is free. However, a reserved meal ticket is required.

If you need special assistance to participate, please contact the Anne Arundel County Extension office at 410-222-6759 by August 1, 2012.

For full meeting details, and registration information contact any of the Southern Maryland Extension offices. For more information contact David Myers at the Anne Arundel County Extension office at 410-222-6759.

Pasture Management Training Series
for Horse Owners

After a mild winter, grass is already starting to green up in most areas! As you get out into your fields this spring and plan for your 2012 pasture needs, consider attending our 2012 Pasture Management Training Series! We have a variety of sessions to offer designed to help you manage your pastures and care for your pastured horses.

Twilight horse pasture events train horse farm operators to better manage pastures for the benefit of their horses, wallet, and the environment. Participants tour our unique rotational grazing system, learn about our latest research findings, and acquire important skills in a pasture management. Twilight events are free, but advanced registration is requested. Educational materials will be pro-vided, and refreshments will be served.

April 19, 2012 6:00 pm—8:00 pm
Rejuvenating Overgrazed Winter Pastures
Has winter grazing trashed your pastures? Learn how to convert your dirt back into a productive pasture.

May 24, 2012 6:00 pm—8:00 pm
Tricks to Managing Horse Farmette Pastures
Small farms present a variety of challenges in design and management. Learn how to have productive pastures even when dealing with limited acreage.

June 21, 2012 6:00 pm—8:00 pm
Nutrition and Health of the Pastured Horse
Is pasture alone enough to meet the nutritional needs of your horse? How can parasites and flies be con-trolled when horses are out all the time? Learn how to meet the nutritional and health needs of pastured horses.

July 19, 2012 6:00 pm—8:00 pm
Au Natural! Non-Chemical Weed Control
Just because you don’t want to spray doesn’t mean your horse has to live with weeds! Learn about what can be done to control weeds in the pasture without using chemicals.

To register for horse pasture twilight events, RSVP to Jennifer Reynolds at jenreyn@umd.edu call 301-405-1547. For more details and registration form go to http://www.anse.umd.edu/ERG/index.cfm?directory=events.cfm
**Agronomic Crop Update**

**Agronomic Crop Insects** -
Joanne Whalen, Extension IPM Specialist
jwhalen@udel.edu

---

**Alfalfa**

Economic levels of pea aphids and alfalfa weevil (http://ag.udel.edu/extension/IPM/ExtensionFactSheets/AlphalfaWeevilIPM-1.pdf) can be found in fields at this time. When sampling for aphids and weevils, collect a minimum of 30 random stems throughout a field and place them top first in a white bucket. For aphids, you want to count the number present per plant as well as any that have dislodged from the stem into the bucket. As a general guideline, you should consider a treatment in alfalfa less than 10 inches tall if you find 40-50 aphids per stem. The treatment threshold for alfalfa 10 inches or taller in height is 75-100 per stem. Although beneficial insects can help to crash aphid populations, cooler temperatures will slow their activity. As a general rule, you need one beneficial insect per every 50-100 aphids to help crash populations. For alfalfa weevil, you will want to record the number of weevil larvae per stem. The following thresholds, based on the height of the alfalfa, should be used as a guideline when making a treatment decision: up to 11 inches tall – 0.7 per stem; 12 inches tall – 1.0 per stem; 13 to 15 inches tall – 1.5 per stem; 16 inches tall – 2.0 per stem and 17 to 18 inches tall – 2.5 per stem.

**Field Corn**

We recently received a 24(c) Special Local Needs Registration for Avipel Hopper Box (dry) Corn Seed Treatment for bird management on field corn in Delaware. It is my understanding that product should be available this week and the 24(c) label with use instructions and restrictions will be on the canisters. If you have any questions, you can call David Pyne at the Delaware Department of Agriculture: (302) 698-4570.

**Small Grains**

Aphids and cereal leaf beetle eggs and small larvae can be found in fields throughout the state. The next important time to consider aphid management in small grains is at grain head emergence. During heading, check 50 to 100 heads throughout a field. At grain head emergence, a treatment may be necessary once populations exceed 20-25 per head. Since cereal leaf beetle populations are often unevenly distributed within the field, it is important to carefully sample fields so that you do not over or under estimate a potential problem. Eggs and small larvae should be sampled by examining 10 tillers from 10 evenly spaced locations in the field while avoiding field edges. This will result in 100 tillers (stems) per field being examined. Eggs and larvae may be found on leaves near the ground so careful examination is critical. You should also check stems at random while walking through a major portion of the field and sampling 100 stems. The treatment threshold is 25 or more eggs and/or small larvae per 100 tillers. If you are using this threshold, it is important that you wait until at least 50% are in the larval stage (i.e. after 50% egg hatch). The following links provide additional information on cereal leaf beetle in small grains:

http://ag.udel.edu/extension/IPM/ExtensionFactSheets/CerealLeafBeetleFactSheetIPM-5.pdf

Low levels of small true army worm larvae have been found in an occasional small grain field in Kent and Sussex Counties. Our black light traps will not start running until mid-April so we do not have a record of moth activity at this point. However, pheromone traps being run as part of a research project at our Research and Education Center in Georgetown found the first moths two weeks ago and populations have increased this past week. So be sure to scout all fields for armyworms and grass sawflies. The following link provides information on these two insect pests:

http://ag.udel.edu/extension/IPM/ExtensionFactSheets/SawflyAndArmywormIPM-6.pdf

**Timothy**

Economic levels of the cereal rust mite (http://ag.udel.edu/extension/IPM/ExtensionFactSheets/CerealRustMiteIPM-9.pdf) can be found feeding on timothy. Symptoms can appear as retarded growth, leaf curling, stunting, and plant discoloration. Injured plants appear to be drought stressed even when adequate moisture is available for plant growth. There are no established economic thresholds for the pest; however, treatment is recommended in fields April 6, 2012 Weekly Crop Update Volume 20, Issue 3 8 with a previous history of cereal rust mites and/or when 25% of the plant tillers exhibit curled tips of the new leaf blades within several weeks following green-up. The use of a 20x magnifying lens is often necessary to find mites on leaves. The only effective and labeled material on timothy is Sevin XLR Plus. Be sure to read the label for information on the number of applications per season as well as the days to harvest. For effective rust mite control, the use of the higher labeled rate and at least 25 gal/acre of carrier to get good coverage of leaf surfaces generally results in better control.

---

**Response of Full Season Soybean To Nitrogen Fertilizer**

Dr. Bob Kratochvil, Extension Specialist
Agronomic Crop Production, University of Maryland
Email: rkratoch@umd.edu

Has your fertilizer dealer been suggesting to you that your soybean crop needs a little nitrogen fertilizer in order to maximize yield? Have you questioned the wisdom of this suggestion because you know that soybean is a legume that via its symbiotic relationship with Bradyrhizobium japonicum, a nitrogen-fixing bacteria, obtains from 50-75% of its nitrogen requirements from the air. Additional nitrogen needed to maximize production is supplied from 1) soil residual nitrogen and 2) nitrogen supplied via mineralization of organic matter during the growing season. University of Maryland Extension
currenecessarily recommends that no additional nitrogen fertilizer be supplied to soybean. But, this recommendation recently has been questioned by some Maryland fertilizer dealers who are suggesting to their customers that some starter N fertilizer (25-50 lb N/acre) is required for soybean to attain maximum yield. With funding support from the Maryland Soybean Board, a study to investigate the response of full season soybean to nitrogen fertilizer was conducted during 2011.

The study was conducted at four University of Maryland Research and Education Center (REC) farms: 1) Lower Eastern Shore REC – Poplar Hill; 2) Wye REC; 3) Central Maryland REC - Beltsville; and 4) Central Maryland REC - Upper Marlboro. Two Asgrow soybean varieties (3539RR2 and 4630RR2) were planted between the dates of 6 and 21 May in 30-inch rows, a spacing that would accommodate in-season nitrogen applications. Nitrogen treatments were rates of 25 and 50 lb N/acre supplied as UAN that was directed to the ground by drop nozzles at time of application. Three application time treatments were tested: 1) at planting; 2) at R1 (appearance of first flower); and 3) at R3 (appearance of first pod). And, a treatment of no fertilizer nitrogen was used as the control. Root samples for the purpose of assessing soybean nodulation were collected between growth stages R1 and R2 from the control treatment and the two at planting nitrogen treatments at all locations except the Wye. The number of nodules on the roots of 5 plants/plot was counted.

Different numbers of nodules were observed at the three locations. Approximately eleven nodules per plant were present for the soybeans collected at Poplar Hill and Beltsville while the plants from Upper Marlboro averaged 42 nodules/plant. The two varieties did not differ for nodule number at Poplar Hill and Beltsville while at Upper Marlboro Asgrow 4630RR2 had nearly 48 nodules/plant compared to 36 for Asgrow 3539RR2. The primary reason for assessing nodules was to determine if the addition of nitrogen fertilizer to the system changed the soybean plant’s ability to nodulate. At both Poplar Hill and Beltsville, the addition of either 25 or 50 lb N/acre had no influence on nodule formation. However, at Upper Marlboro significantly more nodules (30%) were present for the two nitrogen fertilizer treatments compared to the control.

Soybean yield differed across the locations; 34.5 bu/acre at Poplar Hill and Beltsville; 55 bu/acre at Upper Marlboro; and nearly 73 bu/acre at Wye. However, there was no significant nitrogen response observed at any of the locations. The nitrogen treatments averaged 49.4 bu/acre across the four locations and were neither different from each other nor different compared to the control (no nitrogen) which averaged 48.7 bu/acre. The only difference of note was between varieties with Asgrow 4630RR2 producing 4 and 9 bu/acre better than Asgrow 3539RR2 at Wye and Beltsville, respectively.

Seed protein, oil content and seed size were quality factors measured. And, nitrogen fertilizer application had no effect on any of these variables.

This study will be repeated at a number of Maryland locations during 2012. However, at this time, I do not see a different result and thus see no reason to alter University of Maryland Extension’s current recommendation that nitrogen fertilizer application to soybean is not necessary to optimize yield. In order to ensure that your soybean will be able to manufacture an adequate supply of nitrogen, University of Maryland Extension does recommend that a seed inoculant be used at planting whenever soybean has not been part of a field’s crop rotation during the past 2-3 years.
pastures and where air and soil temperatures are cool to cold at this time of year, the loss of N from urea fertilizer is minimal. In fact when I worked in the Deep South, pastures or hay fields were fertilized with urea rather than ammonium nitrate all the way into April as long as the temperatures did not warm up into the mid to upper 70’s. Through March at least in Delaware, fertilization with urea should be the most cost effective way to provide N for pastures since losses will be minimal.

What about animal health concerns? Since urea like other fertilizers is a salt, animals can become ill if they gain access to bags of urea fertilizer and consume too much of it. As long as the applicator practices safe handling and storage principles and ensures that the fertilizer is evenly spread without large clods, animal safety should be ensured. For those that prefer to err on the side of more caution, we suggest that they keep animals off a fertilized field until it has received from ¼ to ½ inch of rainfall. Rainfall or irrigation water will move the urea quickly into the soil eliminating any concerns for animal health; and, at the same time, will reduce or eliminate the concern with ammonia volatilization.

Another way to get pastures off to a fast start which also plays into the above health concern is to keep animals off pastures early in the greenup period to promote more growth. As an analogy, think of a tiny little tomato seedling. It can double in size a number of times but until it reaches a critical size the doubling amounts to only a very small increase in dry weight of the plant. Pastures that are grazed even before the permanent grasses green up in the spring will produce little useable forage compared with a pasture that is fertilized and then allowed to grow to a height of 3 to 4 inches before being lightly grazed, rested a couple of weeks and then grazed again. If the grazing animals are removed when 3 inches of pasture remains, recovery and the pounds of dry matter produced per day will be much greater than for a pasture kept constantly at a grazed height of 0.5 to 1 inch. It may mean using more hay initially but once the pasture reaches that 3 to 4 inch height, it often will produce more feed per day than your animals will consume.

Once you begin grazing a pasture, the best thing you can do to promote growth is to practice rotational grazing where you allow animals on a subdivision of your pasture for a short period, usually no more than 3 to 5 days at most, and then remove the animals to another subdivision while the plants in the recently grazed subdivision rest and recover and renew growth.

Another suggestion is to take that soil test sample you’ve been meaning to get and send it in for analysis. Soil tests should be taken at least every three years and as often as every year at the same time of year each time. The soil test will help you decide if you need to correct a pH problem or apply nutrients to relieve any nutrient deficiencies. If the pasture soil pH level has declined below 6.0, an application of lime will help both grasses and legumes grow better.

I mentioned N fertilization earlier. How much N should you apply? This does depend a bit on the pasture you are fertilizing and your goal for that pasture. Where you either have too much legume (clover) or where you have so little clover that is isn’t contributing N to the surrounding grass, an application of about 100 lb urea per acre (this is about 46 lb N/acre) will stimulate grass growth helping to reduce the percentage legume in the pasture or will replace the N lacking when legumes are grown with grasses. This rate should be enough to jump start the pasture grasses without a risk of over-fertilization and risking damage to the environment. On pastures where maintaining the legumes presence is important, you should apply only half the rate of urea (50 lb urea per acre). At this rate of N, the legume can continue growing and will not slough off the bacteria nodules that help the legume by fixing atmospheric N (N₂ gas) in a plant available form.

A Quick Note on Cover Crop Management

Dr. Richard W. Taylor, Extension Agronomist
University of Delaware, rtaylor@udel.edu

In many areas of Delaware, this winter has not only been lacking in significant snow cover but also marginal to deficient in rainfall resulting in soil moisture levels that are at risk of becoming short as we move to corn planting season in April. Although the forecast doe call for rainfall this week, growers who have established cover crops on their 2012 corn fields will need to carefully monitor their soil moisture levels. Cover crops when spring growth begins can remove a large amount of soil moisture in a relatively short space of time. This is not only because of their rapid growth rate in the spring but also because they have a well-developed and often deep root system already established. Cover crops can remove not only surface moisture but the subsoil moisture we often depend on to hold corn during early- to mid-summer drought conditions.

If rainfall between now and early corn planting time remains below normal, growers should think seriously about killing cover crops early before too much soil moisture is removed. If using a systemic herbicide to kill the cover crop, you should also account for the week to two weeks it will take for the crop to die when determining the timing of herbicide application versus soil moisture levels.

Finally, a number of growers around the state planted the tillage radish or daikon radish as a cover crop this past fall. Although the weather was cold enough on some fields in New Castle County to winter kill the tillage radish, not all fields were completely killed. I suspect that the same is true in the lower counties of Delaware. You should carefully monitor these fields so you can make the decision on whether or not you will need to spray these fields with an herbicide to clean them up in time for corn planting time. Again, you should also monitor the subsoil moisture levels since this crop can
send roots very deep into the soil. If it remains alive, a large amount of the subsoil moisture may be loss through transpiration as the radish enters the reproductive stage later this spring.

**Vegetable Crop Update**

**Vegetable Crop Insects –**

Joanne Whalen, Extension IPM Specialist

jwhalen@udel.edu

**Asparagus**

The first asparagus beetles are now active. Since harvest has started, be sure to check for asparagus beetles laying eggs on asparagus spears. As a general guideline, a treatment is recommended if 2% of the spears are infested with eggs. Since adults will also feed on the spears, a treatment is recommended if 5% of the plants are infested with adults.

**Cabbage**

Imported cabbage worm (ICW) and diamondback moths (DBM) can be found laying eggs in recently planted fields. Be sure to begin scouting fields within a week of transplanting for recently hatched larvae. As a general guideline, a treatment is recommended if you find 5% of the plants infested with larvae. If DBM is the predominant species, be sure to select an insecticide for this insect pest since it can be difficult to control. Materials labeled on DBM include Avaunt, Coragen, the Bt insecticides, Proclaim, Rimon, Radiant, Synapse, Vetica, and Voliam Xpress.

**Peas**

This week's weather has been favorable for aphid development so be sure to sample for pea aphids as soon as small seedlings emerge. On small plants, you should sample for aphids by counting the number of aphids on 10 plants in 10 locations throughout a field. On larger plants, take 10 sweeps in 10 locations. As a general guideline, a treatment is recommended if you find 5-10 aphids per plant or 50 or more aphids per sweep. In general, aphid development is favored by cool, dry weather which slows beneficial activity but is favorable for the development of aphids. *Insecticide Label Updates for Vegetable Crops*

**Potatoes**

Please note that there is no longer a Special Local Needs 24C Label for the use of Diazinon AG500 for wireworm management in potatoes in Delaware. This label has been cancelled by the manufacturer so it is no longer legal to use diazinon on potatoes in Delaware.

**Besiege and Voliam Xpress Labels**

Syngenta Crop Protection recently announced that succulent beans (peas and beans) and sweet corn have been removed from the federal Voliam Xpress label and have been added to the federal Besiege label (you will see this change in the labels currently posted on cdms). We also have the state label for Besiege in Delaware which includes sweet corn and succulent beans (as a reminder — you need both a state and federal label to apply any product). It is my understanding that all states will eventually have a Besiege state label that includes sweet corn and succulent beans; however, you will need to contact your state Department of Agriculture to determine when this will occur in other states. At this point, Syngenta has indicated that sweet corn and succulent beans will eventually be pulled in all states from the Voliam Xpress label. However, they will not be producing any new Voliam Xpress until September 2012 with the new label. So existing stocks of Voliam Xpress that have sweet corn and succulent beans on the label should be OK to use until new product is in the market place – be sure to check with your Department of Agriculture for confirmation as well as read the label on the container – the label is the law. At this point, all other vegetable crops (except sweet corn and succulent beans) will remain on the Voliam Xpress label.

**Besiege Federal Label Currently on cdms —**

http://www.cdms.net/LDat/ldA7G007.pdf

**Voliam Xpress Label Currently on cdms —**

http://www.cdms.net/LDat/ld8N5003.pdf

**Vegetables Added to the Belt Insecticide Label**

Bayer CropScience recently announced that a number of vegetables have been added to the Belt insecticide label. The insecticide product Synapse, which also contains the same active ingredient as Belt, flubendiamide, will be phased out. Once the Synapse inventory is depleted, Bayer will carry only Belt as their flubendiamide product. Please see the Belt label for crops labeled, use rates and restrictions. (http://www.cdms.net/LDat/ld8LJ012.pdf)

**Vegetable Fungicide Updates for 2012**

Kate Everts, Vegetable Pathologist

University of Delaware and University of Maryland

keverts@umd.edu

The following is a very brief overview of recent registrations and new updates that may be of use to vegetable growers in 2012. This is not meant to be a comprehensive list. Also, I have not run research trials for most of these product uses, and therefore cannot say anything about efficacy in comparison to other products. Remember to follow all label directions carefully. Before use, check each label for rates, information on resistance management, tank mix incompatibilities and other information.

- Prophyte and some other phosphorous acid fungicides are available for use on bean cottony leak (Pythium cottony leak).
- Quintec now has a Section 2ee label for the suppression of bacterial leaf spot on pepper in some
Be Sure to Monitor for Spotted Wing Drosophila in Strawberry and Brambles This Year

Jerry Brust, IPM Vegetable Specialist
University of Maryland; jbrust@umd.edu

By now everyone should know that the newest invasive pest, the spotted wing drosophila (SWD), is here in the mid-Atlantic. It was found heavily infesting blackberries and raspberries in central Maryland this past summer and fall. Just about everywhere we trapped for it (I am still trapping adults in February in brambles, SWD overwinter as adults) we have found it on the western shore. We know it is on the eastern shore through trapping efforts by the University of Delaware. What we do not know about the eastern shore is how bad SWD infestations might be this coming season. The first crop that may get hit is strawberries. Information from Oregon and Michigan shows that their strawberries are not attacked to any great extent, but we DO NOT know what the fly may do to our strawberry crop. That is why it would be prudent to put SWD traps out and monitor for the adult flies. Males have a spot at the end of their wings (Photo 1), females do not (Photo 2), but the females do have a strong ovipositor they use to saw into non ripe fruit and lay their eggs—which is why they are such a devastating pest.

Most growers we visited did not think they had SWD on their farm and yet we found it everywhere we looked. The damage is often mistaken for early rotting berries or fruit (Photo 3). Early control is essential, if this fly is allowed to build its population through the summer into the early fall it will be very difficult to control and will be present on your farm basically forever. There are several web sites you can use to build your own traps (just Google spotted wing drosophila traps), or you could ask for help from me or your Extension educator about trapping. The key is to use a very common, inexpensive product as bait in the traps – apple cider vinegar. Traps should be placed in the field within the plant canopy, out of the sun if possible, and checked once a week for flies. Some traps should be located near the edge of the strawberry field and others along a woods edge. There will be many fly species in the trap, if you are not sure you have SWD take it to your local Extension educator for identification.

Photo 1. SWD adult male
Strawberries, Row Covers & Freeze Protection
Gordon Johnson, Extension Vegetable & Fruit Specialist
gcjohn@udel.edu

Row cover management in plasticulture strawberries has been difficult this year due to the mild winter. In normal winters, row covers applied in December serve as winter protection to limit stand losses, dessication damage, and low temperature damage to buds. While plants are in a dormant state or when buds are not yet active in strawberries, the buds can tolerate temperatures down to 10°F.

Removing row covers during warmer winter periods can help to delay bud activity and reduce susceptibility to later freezes. Replace row covers in times when freezes are expected. Highest yield potentials are usually obtained by uncovering and covering in the late winter and spring based on expected temperatures when compared to the practice of keeping row covers on continuously into the flowering stage.

Once buds have begun to emerge, even when tight, they can only tolerate temperatures down to 22°F. As they begin to open, the critical temperature for damage increases (popcorn stage 26°F, open blossom 30°F).

For growers that have not been taking row covers on and off and will be leaving them on until bloom, the potential for losses due to freeze events will be greater during March due to the increased bud activity. Prior to forecasted freeze events, check the plant bud stage, and apply additional freeze production to limit losses. This may include double covering with row covers (2 layers), or the use of low volume sprinklers through the night and into the morning as a frost protection over the row covers. Loss of buds or flowers due to freeze events will reduce yields and profits substantially. A single 1.2 ounce floating row cover will give about 4 degrees of protection.

Nutrient Management Update
Krista Mitchell
Nutrient Management Advisor for Anne Arundel & Howard Counties

Existing clientele will be contacted in the near future, especially horse operations, to get started on 2013 nutrient management plan updates, in order to accommodate a planned maternity leave of mid-August – mid-November. Producers should check their most recent soil analyses and if they will expire (soil analyses are good for 3 years) before or during the 2013 growing season, be sure to plan soil sampling ahead of time to be ready for nutrient management plan updates.

PRE-SIDEDRESS NITRATE TEST FOR CORN

Most producers are aware of the importance of applying nitrogen at the right time for the corn crop to absorb and utilize it. With the cost of nitrogen this year, and the amount of rainfall we had last year which depleted much residual soil nitrogen, it will be even more important to feed grain corn at the appropriate time this growing season. While University of Maryland nutrient recommendations for grain corn already recommend appropriate times and amounts of nitrogen fertilizer applications, there is a tool that can help determine if a producer needs to adjust their nutrient management plan grain corn recommendations for sidedress nitrogen by applying more or less to achieve optimum yields. That tool is the pre-sidedress nitrate test (PSNT) for corn and the analysis can be run by a nutrient management advisor in any county’s Extension office.

If you grow corn and forage legumes in rotation, have a history of manure applications, and have applied less than 50 pounds per acre of commercial fertilizer nitrogen to your corn this season, you may benefit from the PSNT. Call your nutrient management advisor a couple weeks prior to when your corn is 6-12 inches tall to obtain instructions on soil
sampling, which differs greatly from normal soil sampling procedures, and to schedule your analysis.

**NUTRIENT MANAGEMENT PLANS FOR FRUIT GROWERS:**

If your operation has tree fruit, brambles, grapes or blueberries, the small window of time to take plant tissue samples is coming up soon.

**Timing for plant tissue sampling:**

- Blueberries: 1st week of harvest
- Grapes: at full bloom
- Fruit trees: July 15th - September 1st
- Brambles: August 1st - 20th

Contact your county’s nutrient management advisor for plant tissue sampling instructions and a list of approved labs that conduct plant tissue analysis. Soil samples taken from the area where tissue samples were gathered are also needed. Like soil samples, tissue samples are an integral part of a nutrient management plan, and are required content. Tissue and soil analyses are needed in order to generate fertilizer recommendations for tree and small fruit crops and to keep producers in compliance with MD’s Nutrient Management Law.

---

**Grain Marketing Highlights**

Carl German, Extension Crops Marketing Specialist; clgerman@udel.edu

**U.S. Corn Planting May be Ahead of Crop Progress Report?**

As of the week ending April 1, 2012 three percent of the nation’s corn crop was reported as planted compared to two percent this time last year and the five year average of two percent. Next week’s report is expected to bump planting progress up considerably based upon anecdotal evidence from states such as Illinois where planting began to some degree as early as mid-March and not yet on the radar screen, meaning Illinois planting progress was reported to be at zero as of last Sunday.

**USDA Export Sales Report 04/05**

Pre-report estimates for weekly corn exports ranged between 15.7 to 31.5 million bushels. The weekly report placed total export sales at 44.2 million bushels with 36.9 million bushels scheduled for ‘11/12. This was well above the 17.2 million bushels needed this week to stay on pace with USDA’s demand projection of 1.7 billion bushels. Weekly shipments of 31.2 million bushels were below the 34.2 million bushels needed this week. This report is viewed as slightly bullish.

Pre-report estimates for weekly export sales of soybeans ranged from 22 to 36.7 million bushels. The weekly report placed total export sales at 40.9 million bushels with 15 million bushels scheduled for ‘11/12. This was well above the 5.4 million bushels needed this week to stay on pace with USDA’s demand projection of 1.275 billion bushels. Shipments of 31.4 million bushels were well above the 13.5 million bushels needed this week. This report is viewed as bullish.

Pre-report estimates for wheat exports ranged from 11 to 25.7 million bushels. The weekly report placed total export sales at 22.3 million bushels with 15 million bushels scheduled for ‘11/12. This was above the 6.6 million bushels needed this week to stay on pace with USDA’s demand projection of 1 billion bushels. Weekly shipments of 14.9 million bushels were below the 23.1 million bushels needed this week. This report is viewed as bearish.

**Market Strategy**

The incentive for farmers to switch from corn to soybeans has increased since the release of the planting intentions report with Nov ’12 soybean futures closing at $13.76 in yesterday’s day trade and the corn-to-soybean price ratio now favoring soybeans in some areas. New crop soybean futures are 71 cents per bushel higher than they were the day before the report, with new crop corn futures currently about 20 cents per bushel higher. Commercial interests are said to be supportive of the corn and soybean markets this week. At today’s open, Dec ’12 corn futures are trading at $5.46; Nov ’12 soybeans at $13.80; and July ’12 SRW wheat at $6.57 per bushel.

For technical assistance on making grain marketing decisions contact:

Carl L. German, Extension Crops Marketing Specialist  
Dept. of Food & Resources Economics  
208 Townsend Hall, University of Delaware  
Newark, DE 19716-2130  
Phone: 302-831-1317 Fax: 302-831-6243

---

**Production Websites to Bookmark**

By Shannon Dill  
UME Extension Educator  
Talbot County

“The web” is where many of us go to get up-to-date information. At times it can be frustrating trying to find the site or information you need. Below are some great farm production websites that you may find helpful if you have not already visited or bookmarked.

**Production**

- [www.extension.umd.edu](http://www.extension.umd.edu) Extension Website, publications, events
- [www.mdvegetables.umd.edu](http://www.mdvegetables.umd.edu) Vegetable production website
- [www.mdcrops.umd.edu](http://www.mdcrops.umd.edu) Field Crop production website, including variety trials, agronomy news
- [www.mdgrainmarketing.umd.edu](http://www.mdgrainmarketing.umd.edu) Crop budgets, market information, leases, custom rates
Missed the 2012 Bay Area Fruit School? View the On-line Sessions at QACTV

By Michael Newell
Horticultural Crop Program Manager, UME
mnewell@umd.edu

Aronia, Something for Maryland Growers? presented at the Annual WREC Bay Fruit School by Mr. Andrew Ristvey, Agent & Extension Horticulture Specialist, UME
http://origin.peg.tv/pegtv_player?id=affiliate1&video=50955

Research Update on Fire Blight Tolerance; Apple Cultivar/Rootstock Interactions presented at the Annual WREC Bay Fruit School by Mr. David Myers, Sr. Agent, Extension Educator, UME Anne Arundel County
http://origin.peg.tv/pegtv_player?id=affiliate1&video=51167

Food Safety - What Direct marketers Need to Know presented at the Annual WREC Bay Fruit School by Ms. Donna Pahl, Faculty Research Assistant, University of MD Agriculture & Natural Resources.
http://origin.peg.tv/pegtv_player?id=affiliate1&video=51163

Bee Pollinator Concerns - An Update presented at the Annual WREC Bay Fruit School by Mr. Michael Embrey, Apiary Specialist, UM Wye Research & Education Center.
http://origin.peg.tv/pegtv_player?id=affiliate1&video=51173

Welcome to the Maryland Grapes & Fruit Research and Extension Page

Statewide Extension and research programs in viticulture (grape growing), enology (winemaking), and tree and small fruits are being created and implemented at the Western Maryland Research & Education Center (WMREC) by Dr. Joseph A. Fiola, Viticulture and Small Fruit Specialist. Dr. Fiola has over 20 years of academic and industry experience in research and extension in viticulture and enology.

Fruit Resources at:
http://www.grapesandfruit.umd.edu/index.html
Spray Programs for Multi-Tree Fruit Orchards
By R. David Myers, Extension Educator
myersrd@umd.edu

Many local orchards are composed of multi-tree fruit combinations producing for fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree spray programs are required to achieve high quality fruit. These multi-tree fruit orchards create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-tree fruit orchard spray program for the control of major tree fruit pests and diseases may offer some assistance:

Labeled as noted in 2012 for All Tree Fruit – Pomes: Apples & Pears Stones: Peaches, Plums, Nectarines, and Cherries.


See Attachment - Page 23

Spray Programs for Multi-Small Fruit Plantings
By R. David Myers
myersrd@umd.edu

Many local farms are composed of multi-small fruit combinations producing for fresh market blackberries, raspberries, blueberries, strawberries and grapes. Aggressive fruit spray programs are required to achieve high quality fruit. These multi-small fruit plantings create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-small fruit spray program for the control of major small fruit pests and diseases may offer some assistance:

Labeled as noted in 2012 for All Small Fruit – Strawberries, Brambles: Blackberries, Raspberries, Blueberries, and Grapes.


See Attachment - Page 24


A PDF version of the newsletter is also available for downloading.


*Wild & Woolly* is a quarterly newsletter for sheep and goat producers and anyone else interested in small ruminants. It is published by the Western Maryland Research & Education Center.

Susan Schoenian, Sheep & Goat Specialist
W. MD Research & Education Center
University of Maryland Extension
sschoen@umd.edu - (301) 432-2767 x343
www.sheepandgoat.com
City Council Votes Yes:
Laying Hens have a Home
in Annapolis

The Annapolis city council voted 6 to 3 to adopt Ordinance No. O-53-11 on Monday, April 9th, 2012. An ordinance concerning Keeping or Maintaining Chickens Within the City of Annapolis. The following is excerpted from the proposal:

CITY COUNCIL OF THE
City of Annapolis
Ordinance No. O-53-11

Introduced by: Mayor Cohen

An ORDINANCE concerning Keeping or Maintaining Chickens Within the City of Annapolis

FOR the purpose of allowing chickens, but not roosters, to be kept or maintained within the City of Annapolis.

BY repealing and re-enacting with amendments the following portions of the Code of the City of Annapolis, 2011 Edition Section 8.04.010

SECTION I: BE IT ESTABLISHED AND ORDAINED BY THE ANnapolis City Council that the Code of the City of Annapolis shall be amended to read as follows:

8.04 – ANIMAL CONTROL.

8.04.010 - Maintaining animals.

A. No person shall keep or maintain any mule, cow, calf, cattle, sheep, swine or poultry, with the exception of chickens, no roosters, within the City.

1. A maximum of five chickens are allowed on any one property.

2. All persons shall provide their chickens with a sturdy coop and an attached, secure enclosure set back at least five (5) feet from the property line.

3. All persons keeping chickens shall receive approval from all abutting owners of their intent to keep chickens using the Department of Neighborhood and Environmental Programs Backyard Chicken Registry and Approval form. Prior to keeping any chickens, said form shall be submitted to the Department of Neighborhood and Environmental Programs along with accompanying fees and approved inspection.

B. No person shall keep or maintain any animal within the City for the purpose of human consumption, except where the animal is maintained for the purpose of consumption as part of a religious observance.

SECTION II: AND BE IT FURTHER ESTABLISHED AND ORDAINED BY THE ANnapolis City Council that this Ordinance shall take effect from the date of its passage and, three years after the date of passage, and with no further action by this council, this provision of law shall be deemed abrogated, of no further effect and stricken from the code of the City of Annapolis.
NEWS RELEASE www.mda.state.md.us

The new U.S. EPA Pesticide Container and Containment Rule went into effect as of August of 2011 and may have rendered many refillable pesticide mini-bulk containers as unusable. As a result, tanks that are not in compliance with the new requirements will need to be either retrofitted or taken out of service. While Maryland currently has a recycling program for plastic pesticide containers (1.0, 2.5 gallons, and drums) mini-bulk tanks are not routinely recycled. In an effort to help solve the challenge of increasing stockpiles of old or damaged mini-bulk tanks that are taking up space in warehouses, mixing yards, and storage facilities, we are considering a voluntary program, in conjunction with other mid-Atlantic states, to recycle standalone and/or caged pesticide mini-bulk tanks that have a capacity of 85 to 300 gallons.

In order to help us determine if there is a need for the recycling of these containers, we would like you to complete a brief survey (attached—page 25). This information is necessary to determine if a program is warranted, how many pesticide mini-bulk tanks are available for recycling, and which locations will be selected as collection/pick-up/chipping sites.

This program would be separate from our traditional recycling program. The following issues would be specific to the mini-bulk program:

- Advance registration of the mini-bulk tanks for recycling would be required;
- There will be an estimated cost to the dealer/grower of approximately $15.00 per tank. (Chemical companies are providing the major funding for their containers under their return programs.);
- Preparation of the tanks would be required, and detailed instructions would be provided. This includes the removal of metal, the rinsing of tanks and leaving them whole;
- Tanks must be plastic and between 85 gallons to 330 gallons in capacity, and;
- Steel and fiberglass mini-bulk containers will not be accepted.

Maryland Department of Agriculture

MDA Provides Tips to Help Consumers Avoid Illness from Eggs, Chicks During Holidays

MDA reminds citizens that incorrectly handling eggs or live poultry, such as chicks and ducklings, can cause very serious illnesses, and any plans to decorate eggs or purchase chicks for the Easter or Passover holidays should be undertaken with care and forethought.

"MDA's Food Quality Assurance Section enforces the Maryland Egg Law, which has some of the most stringent quality control standards in the nation, and our Animal Health Section is responsible for controlling animal diseases transmissible to humans," said Agriculture Secretary Buddy Hance. "The Easter and Passover holidays can challenge both of these efforts because the risk of people contracting illnesses through inappropriate handling of eggs or live poultry is significantly higher than most any other time of year."  Click here for tips and more information.

Training Offered for On-Farm Poultry/Rabbit Processing

To help farmers meet growing consumer demand for local meats, MDA, in partnership with the University of Maryland, will conduct a training workshop for on-farm poultry and rabbit slaughter and processing. Training will be conducted April 27 from 9:00 a.m. to 4:00 p.m. at the Washington County Agricultural Education Center in Boonsboro. The training fee is $20 and includes lunch and materials. Download the registration form. For more information about the workshop.

New Specialty Crop Grant Program Announced

Grant Application Deadline is May 4

MDA is seeking grant applications from eligible organizations and government entities for projects that promote or enhance the production of, and access to, Maryland specialty crops. Specialty crops are defined by the U.S. Department of Agriculture as fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops. Click here for a complete list of eligible crops. Electronic grant applications must be submitted by 4:00 p.m. on May 4. Paper applications must be postmarked by May 4. For more information.

Survey Says: Most Marylanders Want to Buy Local

More than three-quarters of all Marylanders (78%) say they are more likely to buy produce that is identified as having been grown by a Maryland farmer, according to the recently released 2012 Policy Choices Survey by the University...
of Baltimore Schaefer Center for Public Policy. In addition, a full 92 percent of those surveyed said that it is at least “somewhat important” that the state preserve land for farming while 61 percent said it was “very important.” These results, which are similar to those in the 2010 Policy Choices Survey, show consistent support for Maryland agriculture. For more information.

Exotic Pest Threatens Eastern Shore Trees; MDA Reminds Residents to Buy It Where You Burn It

Emerald Ash Borer Expected to Emerge Early This Year

The emerald ash borer (EAB), a small exotic beetle that has been destroying ash trees since it was found in Maryland in 2003, has not yet been found on the Eastern Shore, but 2012 may be the year that changes if residents are not vigilant about where they bring firewood. Last year, Agriculture Secretary Buddy Hance quarantined all 14 counties west of the Chesapeake Bay and Susquehanna River, making it illegal for Marylanders to move firewood to the Eastern Shore without a federal permit. The EAB, which is expected to appear as early as mid-April this year, hides in firewood. MDA encourages everyone to buy their firewood at their destination rather than take it with them so they do not unknowingly infest an area with the pest. For more information.

Motorist and Farmers Can Share the Road Safely

The spring planting season has started throughout much of Maryland. That means motorists traveling Maryland highways and rural roads may find themselves sharing the road with the large, slow-moving farm equipment from one of Maryland’s 12,800 farms. Farmers are legally allowed to operate farm equipment on public roadways and there are times when farm vehicles must operate on highways to move between farm and field. For more information and safety tips.

New Regional Meats & Seafood Guide Now Available

The Southern Maryland Agricultural Development Commission (SMADC) has published the first-ever directory showcasing Southern Maryland’s meat, seafood and aquaculture producers.

The “Southern Maryland, So Good” Meats and Seafood Guide was created in response to the growing consumer demand for quality local meats and seafood. The guide helps consumers find local meats produced under safe, humane and environmentally responsible conditions. Also listed are local seafood producers, many family-owned over generations, that harvest crabs, oysters, finfish, and aquaculture-farmed oysters fresh from the region’s waterways. These products can be found in a variety of venues, from on-farm sites to farmers’ markets and more typical retail outlets.

The Meats and Seafood Guide is distributed free to the general public, and will be available from the first week of April at listed producers and businesses and Southern Maryland libraries. For a full list of pick-up sites and to view the guide on-line, visit www.smadc.com or call SMADC staff at: 301-274-1922, Ex. 1.

Applications Invited to Southern Maryland Meats Program

Meat and poultry producers in the five Southern Maryland Counties (Anne Arundel, Calvert, Charles, Prince George’s, and St. Mary’s) are invited to apply to join the Southern Maryland Meats program.

Launched in 2011 by the Southern Maryland Agricultural Development Commission (SMADC) together with meat producers from the five county area, Southern Maryland Meats (SMM) was created in response to the growing demand by consumers for meats that are produced locally on the region’s family farms in conditions that are safe, humane and environmentally responsible.

SMM livestock operations must be located in Southern Maryland. Participating farms raise, feed and finish their livestock according to their own style and preference, however agree to the strict SMM standards of quality and humane care and to use clearly defined terms when marketing their meat products.

Southern Maryland Meats are now available at a growing number of farms and farmers’ markets throughout Southern Maryland and also at farm stores, farmers’ markets, butcher shops and grocers that host freezer cases specifically dedicated to Southern Maryland Meats producers’ products.

Livestock producers that would like to join the Southern Maryland Meats program are encouraged to apply. Applications are reviewed on a quarterly basis, and must be received by March 23, 2012 to be considered at the next meeting of the Southern Maryland Meats Steering Committee.

Visit www.southernmarylandmeats.com to download application forms, and for more information about Southern Maryland Meats quality standards and participating producers. Or call SMADC staff at (301) 274-1922, Ex.1

The Southern Maryland Agricultural Development Commission (SMADC) is committed to: a) a market-driven and sustainable
farming future as Maryland transitions away from tobacco. b) a Maryland where farmland preservation, and environmental stewardship positively impact the quality of our air and water and c) cultivating awareness among consumers and leaders of the vital role our farms play in a balanced community, safe, nutritious food and a cleaner and healthier environment. To learn more about additional programs and resources, contact SMADC, P. O. Box 745, Hughesville, MD 20637; phone: 301-274-1922, Ex. 1, fax: 301-274-1924; email cbergmark@smadc.com; or visit www.smadc.com.

EPA Environmental News

Poisoning is a Major Cause of Death from Injury in the U.S.

US Government raising awareness of accidental exposures during National Poison Prevention Week

WASHINGTON - The Environmental Protection Agency is joining forces with its federal partners to raise awareness of the dangers of poisoning, especially to children, during National Poison Prevention Week, March 18-24. In just the past year, America's 57 poison control centers fielded 4 million calls, treating 2.4 million human poison exposures and handling 1.6 million information calls.

EPA, the Centers for Disease Control and Prevention, Health Resources and Services Administration, Consumer Products Safety Commission, Department of Housing and Urban Development, as well as the American Association of Poison Control Centers are urging parents and caregivers to be vigilant and take steps now to prevent unnecessary exposures and poisonings throughout the year.

In recognition of National Poison Prevention Week, EPA urges parents and caregivers to secure chemicals and pesticides in locked cabinets out of children's reach. According to recently published poison-center data, annually more than 150,000 calls to poison centers involved pesticides and disinfectants. Greater than half of pesticide exposures involved children five years or younger. Additionally, the top five most-common exposures to children include cosmetics and personal care products, pain medication, cleaning products, foreign objects, and creams.

The development of child-resistant packaging on medicines and household chemicals and the banning of lead-based paint have had a significant impact in preventing poisonings and making homes safer. In addition, new EPA packaging requirements ensure that children and pets cannot access certain pesticides. For example, manufacturers of rodenticides now must enclose the products in plastic bait stations so that only the target pests are affected.

Even though progress has been made there is need for increased awareness about existing hazards posed from pest control products, prescription medicine abuse and household chemicals.

At the front line of the effort to reduce poisonings are the activities of the National Poison Prevention Week Council, which is marking its 50th anniversary this year. The council's key goal is to create national awareness about the risk of injury or death due to poisoning.

The themes for the Seven Days of Poison Prevention are:

Sunday: Poisonings Span a Lifetime
Monday: Children Act Fast, So Do Poisons
Tuesday: Poison Centers: Saving Lives 24/7
Wednesday: Take Your Medicines Safely
Thursday: Home, Safe, Home
Friday: Poison Prevention Superhero: Share Your Stories
Saturday: 50 Ways to Prevent Poisonings

The best defense is preparation. Here's what people can do to reduce exposure to poisons:

• Post the Poison Control Centers' national helpline number, 1-800-222-1222, near your phone. Program the number into your phone's "address book" or redial feature.

• Read the product label first and follow the directions to the letter.

• Use the safest possible cleaning products. Look for the Design for the Environment (DfE) label on products.

• Never leave products unattended when you are using them.

• Re-close products if interrupted during application (e.g., phone call, doorbell, etc.).

• Use child-resistant packaging properly by closing the container tightly after use.

• Never transfer pesticides to other containers; children may associate certain containers with food or drink.

• Remove children, pets, and toys before applying pesticides (inside or outside the home). Follow label directions to determine when children and pets can re-enter the area that has been treated.

• Never use illegal pesticides (such as Tres Pasitos or unregistered Insecticidal Chalk). These products have not been reviewed by EPA and their use may pose a danger to public health. Always look for an EPA Registration ID number on the label. (Example: EPA Reg. No. 500-123456)

More information about poisoning prevention in your home: http://www.epa.gov/pesticides/health/poisonprevention.htm
Arysta LifeScience Suspends MIDAS(R) in United States

March 20, 2012 -- Arysta LifeScience Corporation today announced the immediate suspension of product sales for all formulations of the fumigant MIDAS® in the United States. The announcement is limited to MIDAS® and applies to no other product the company markets. The decision was made as part of an internal review of the fumigant and based on its economic viability in the marketplace.

"Arysta LifeScience remains committed to growers through our many other products," said Amy Yoder, Head of Arysta LifeScience North American Business Unit. "We will continue to develop and bring to market innovative solutions for growers in the crop protection market."

The company would like to express its gratitude to growers, researchers, business partners and supporters who helped MIDAS® achieve U.S. EPA registration and registration in 48 states. LifeScience will continue to support the use of iodomethane outside of the U.S. where it remains economically viable.

SOURCE: Arysta LifeScience

ANNE ARUNDEL COUNTY FARMERS’ MARKETS OPENING FOR THE SEASON

ANNEARUNDEL COUNTY FARMERS’ MARKETS OPENING FOR THE SEASON

ANNAPOLIS, MD (March 15, 2012) - Anne Arundel County Farmers’ Markets are opening for the season. The Westfield Annapolis Winter Market remains open on the first and third Sunday through the end of April. The Riva market will kick off their growing season by opening on Saturday, April 7th from 7 AM to Noon.

The Westfield Annapolis Winter Market will remain open the first and third Sunday from 10am to 2pm through April 29th. Beginning May 6 the market will be open every Sunday through October 28th. The Westfield market recently moved to a new location, located in the Orange parking garage next to Macy’s. The market will remain in that location during the spring and summer months. The move has allowed the market to expand vendors and keep temperatures cooler for both produce and customers in the hot summer months. Customers can expect to find a wide variety of locally produced agricultural products at the Westfield market including, organic greens and seasonal produce, milk, yogurt, cheese, beef, pork, chicken, eggs, baked goods, jams, jewelry and much more. The Riva market opens for the season on Saturday, April 7th from 7am - Noon at the corner of Harry S. Truman Parkway and Riva Road. In June the Riva market will also be open on Tuesdays from 7am - Noon.

The Westfield and Riva Road Farmers’ Markets are the first of 6 markets to open in Anne Arundel County this year. On opening day, the Riva market expects to see well over 500 visitors and will offer early season bedding plants, potted plants, hanging baskets, herbs, spring vegetables, baked goods, jams, jellies, cut flowers, flavored vinegars, fresh eggs, soaps and many other specialty items.

Anne Arundel Count Farmers’ Markets are producer only markets, featuring locally grown seasonal produce. As the season progresses a much wider variety of fruits, vegetables, herbs and plants will be available.

2012 Anne Arundel County Farmers’ Market Schedule:
Arundel County Farmers’ Market
Annapolis: Riva Rd & Harry S. Truman Parkway
Saturday: 7 a.m. to Noon Apr 7 – Dec 22
Tuesday: 7 a.m. to Noon Jun 5 – Oct 23
Contact: Brenda Conti 410-349-0317

Deale Farmers’ Market
Deale: Cedar Grove United Methodist Church Parking Lot
5965 Deale-Churchton Rd.
Thursday: 3 p.m. to 6 p.m. Jul 5 – Oct 25
Contact: Gail Wilkerson 410-867-4993

Piney Orchard Farmers’ Market
Odenton: Stream Valley Drive off Rt. 170
Piney Orchard Community & Visitors Center Parking Lot
Wednesday: 2 p.m. to 6:30 p.m. Jun 6 – Nov 21
Contact: Bill Morris 410-867-9162

Severna Park Farmers’ Market
Severna Park: Ritchie Hwy (Rt. 2) & Jones Station Rd
Saturday: 8 a.m. to Noon Apr 28 – Oct 27
Contact: Anita Robertson 410-924-3092

Westfield Annapolis Farmers’ Market
Annapolis: Orange Parking Garage near Macy’s
Palet Court Parking Lot
Wednesday: 2 p.m. to 6:30 p.m. Jun 6 – Nov 21
Contact: Brenda Conti 410-349-0317

Winter Market -- Sunday, Jan 1 – Apr 29
1st & 3rd Sunday: 11:00 a.m. to 2:00 p.m.

Summer Market -- Sunday, May 6 – Oct 28
10:00 a.m. to 2:00 p.m.

Department of Natural Resources
DNR Parking lot off Taylor Avenue
Thursday: 3 p.m. – 6 p.m. June 7 – Sep 5
Contact: Lisa Barge 410-222-7410

Note: WIC and Senior FMNP Checks Accepted at all AA County Farmers’ Markets. For additional information on agriculture programs or Farmers Markets’ in Anne Arundel County please contact Lisa Barge at the Anne Arundel Economic Development Corporation, (410) 222-7410 or visit our website at www.aaedc.org
County Website Features:

Anne Arundel County Extension website:
http://annearundel.umd.edu/

Ag Newsletter Production Pointers
The current and past agricultural newsletter additions are available for viewing or copy at:
http://annearundel.umd.edu/AGNR/agnews.cfm

Ag Bulletins
An agricultural bulletin page is also available for viewing or copy under our hot topics section at:
http://annearundel.umd.edu/AGNR/agbulletins.cfm

Ag Web Modules
Website features Anne Arundel County Agricultural Program Teaching Modules:
http://annearundel.umd.edu/Agriculture.cfm

New website features in Anne Arundel County - Agricultural Program Teaching Modules:
http://annearundel.umd.edu/AGNR/agmedia.cfm

1. Pasture Management
https://connect.moo.umd.edu/p12049696/

2. Pasture Herbicides
https://connect.moo.umd.edu/p13059797/

3. Handling Tall Fescue Toxicity Events
https://connect.moo.umd.edu/p59425434/

4. Modern Vegetable Production Technology for Early Market
https://connect.moo.umd.edu/p75657057/

5. Vegetable Herbicides for Controlling the Top 10 Weeds of Southern Maryland
https://connect.moo.umd.edu/p25962088/

6. Sustainable Low Input Strip-Till & No-Till Vegetable Planting Tactics
https://connect.moo.umd.edu/p55665058/

7. Fruit Establishment Tactics to Maximize Our Coastal Plain Advantage
https://connect.moo.umd.edu/p61165608/

---

Farmer School

On-Line Farming Education Series
“Tomorrow’s Farmers” Web Modules
http://annearundel.umd.edu/AGNR/FarmersSchool.cfm

Module 1: Introduction to Farming & Course Orientation: “Tomorrow’s Farmers”

Module 2: The Science and Stewardship of Soils

Module 3: Fundamentals of Farm Machinery

Module 4: Plants that Farmers Grow

<table>
<thead>
<tr>
<th>Future Module Topics</th>
<th>Release Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Pest Management</td>
<td>4/20/12</td>
</tr>
<tr>
<td>Farm Business and Enterprise Development</td>
<td>5/13/12</td>
</tr>
<tr>
<td>Modern Vegetable Farmer</td>
<td>6/15/12</td>
</tr>
<tr>
<td>Modern Fruit Farmer</td>
<td>8/17/12</td>
</tr>
<tr>
<td>Grain Farming</td>
<td>10/19/12</td>
</tr>
<tr>
<td>Pasture and Hay Management</td>
<td>12/14/12</td>
</tr>
<tr>
<td>Livestock that Farmers Raise</td>
<td>2/15/13</td>
</tr>
</tbody>
</table>

Whether you grew up on a farm or not, the web modules will open your eyes to the world of farming. A course designed for the young and old alike. It just may make a farmer out of a “city kid” or a “hayseed.”

After viewing the series in its entirety take the Final Exam. All participants receiving a final Exam Grade of 70% or above will receive a “Certificate of Farming Competency,” compliments of the Anne Arundel County Extension Office.
Producer’s Digital Toolbox Seminars

Learning Objective:
This seminar will assist you in capitalizing on the hardware and digital tools now available through the internet. 3 courses packaged into a 1 day seminar that are offered at 4 locations. It will cover topics on:

- **Digital Databases - Getting Your Business Listed** — How to enter their business information in the 8-9 digital databases, such as Google Maps and others.
- **Fingertip Marketing for Portable Devices** — Incorporating digital service and application into your marketing plan.
- **Apps, and Social & Professional Applications** — An introduction to the basics of Facebook, Twitter, and LinkedIn for businesses. This seminar will explore basic fundamentals of popular social networking sites, examples of use, and the potential benefits social media could bring to your business and community.

Time: 8:30 AM - 1:30 PM
Cost: $40.00 per person (includes lunch and course materials)

Dates & Locations:

- **April 20, 2012**
  Chesapeake College, Building: Economic Development Center, Room #: EDC-27
  Routes 50 & 213, Wye Mills, MD 21679
  Directions: [http://www.chesapeake.edu/about/mindir_main.asp](http://www.chesapeake.edu/about/mindir_main.asp)
  Campus Map: [http://www.chesapeake.edu/locator/locmap4.asp](http://www.chesapeake.edu/locator/locmap4.asp)
  Contact: Shannon Dill - [sdill@umd.edu](mailto:sdill@umd.edu)
  Registration Deadline: April 11, 2012

- **May 15, 2012**
  Cecil College - Elkton Station Campus Building:
  Elkton Station, Room #: 303
  107 Railroad Avenue, Elkton MD 21921
  Campus Map: Contact: Shannon Dill - [sdill@umd.edu](mailto:sdill@umd.edu)
  Registration Deadline: May 6, 2012
  - You must pre-register!
  - No walk-ins will be accepted.
  - Register for the date and location by going to: [http://agnradmin.umd.edu/training/description.cfm?ID=179](http://agnradmin.umd.edu/training/description.cfm?ID=179)

  You will need to mail your check, and make it payable to “EAC” to:
  University of Maryland Extension - Talbot Office
  Producer’s Digital Toolbox
  28577 Mary’s Court, Suite 1
  Easton, Maryland 21601

  For more information about this program please contact:
  Shannon Dill [sdill@umd.edu](mailto:sdill@umd.edu)
  Ginger S. Myers [gsmyers@umd.edu](mailto:gsmyers@umd.edu)
  Jonathan Kays [jkays@umd.edu](mailto:jkays@umd.edu)

- **May 10, 2012**
  Hagerstown Community College, Building: Career Programs Building, Room #: CPB142 11400
  Robinwood Dr., Hagerstown, MD 21742
  Directions: [http://www.hagerstowncc.edu/about-hcc/our-locations/hcc-main-campus/map](http://www.hagerstowncc.edu/about-hcc/our-locations/hcc-main-campus/map)
  Contact: Shannon Dill - [sdill@umd.edu](mailto:sdill@umd.edu)
  Registration Deadline: May 1, 2012

CDMS:
Pesticide Labels and MSDS On-Line at: [http://www.cdms.net/](http://www.cdms.net/)
Did you Get Vegetable & Fruit Headline News?

Vegetable & Fruit Headline News
On-line at:
http://annearundel.umd.edu/AGNR/VegFruitNews.cfm

Did you Get Agronomy News?

Agronomy News
On-line at:
http://annearundel.umd.edu/AGNR/AgronomyNews.cfm

4-H News
Amanda Wahle, 4-H FEA
University of Maryland

Are you between 8 and 18 or know someone who is? If so have you considered joining 4-H?
The Anne Arundel County 4-H program is growing and is always looking for new members and volunteers. The program has community clubs located throughout Anne Arundel County but is also looking for volunteers and members to lead new groups. There are a variety of projects members can participate in including animal science, environmental sciences and human sciences. We are also looking for adults to do seminars or presentations to help 4-Hers learn how they can further their projects. To receive more information, please contact Amanda Wahle in the Anne Arundel Extension Office at 410-222-6759 or at: awahle@umd.edu

Gardening questions? Pest problems?
The Home and Garden Information Center can help!

Consultants are available by phone Monday-Friday 8:00 AM - 1:00 PM. Call 1-800-342-2507 or 410 531-1757 or visit the HGIC website at: www.hgic.umd.edu.
Anne Arundel County Extension
http://annearundel.umd.edu/files/Extensionflyer.pdf

Family & Consumer Sciences
For more information, contact Naeemah Raqib at nraqib@umd.edu or call 410-222-6756

Master Gardener Program
For more information, contact Mike Ensor at mensor@umd.edu call 410-222-6757

4-H Youth Development
For more information, contact Amanda Wahle at awahle@umd.edu or call 410-222-6755

Nutrient Management
For more information, contact Krista Mitchell at kristaw@umd.edu or call 410-222-6759

Sea Grant
For more information, contact Matt Parker at mparke11@umd.edu or call 410-222-6759

Thanks for Partnering

Thanks for partnering with the University of Maryland Extension, and supporting our programs. I also hope you enjoy this newsletter. If you are no longer interested in receiving this newsletter, please call or write the office for the removal of your name from the mailer.

R. David Myers, Extension Educator
Agriculture and Natural Resources
Anne Arundel & Prince George’s Counties

Prince George’s County Extension
6707 Groveton Drive
Clinton, MD 20735
301 868-8783

Anne Arundel County Extension
7320 Ritchie Highway, Suite 210
Glen Burnie, MD 21061
410 222-6759 or 301 970-8250

NACAA Communication Award
Individual Newsletter
2002 National Winner

Note: Registered Trade Mark® Products, Manufacturers, or Companies mentioned within this newsletter are not to be considered as sole endorsements. The information has been provided for educational purposes only.

See the Attachments!
Spray Program for Multi-Tree Fruit Orchards

Many local orchards are composed of multi-tree combinations producing for fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree sprays are required to achieve high quality fruit. These multi-tree orchards create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-tree orchard spray program for the control of major tree fruit pests and diseases may offer some assistance: Labeled as noted in 2012 for All Tree Fruit – Pomes: Apples & Pears Stones: Peaches, Plums, Nectarines, and Cherries.

**FUNGICIDES: [IRAC]** *RATE* NOTES
Captan® 80WDG [M4] 3-5.0 lbs General Protectant
Kocide® DF [M1] 6.0 lbs Other Fixed Copppers
Dormant Oil [NC] 4.0 gal Apply Temp 35-85°F

**NOTES**
(Stones: Dormant Spray Only)
Rally® 40W [3] 4.0 ozs Powdery Mildew
Sulfur 95W [M2] 3.0 lbs General Protectant
(Stones Only) or
Adaman® 50WG [3/11] 6.0 ozs Brown Rot, Peach Scab & Powdery Mildew
Pristine® [7/11] or 14.5 ozs Brown Rot, Powdery
With Only 2 Consecutively Fruit Spots
Indar® 2F [3] 6.0 ozs Powdery Mildew & Rusts
Topsin-M® 70W [1] 8.0 ozs General Protectant
Ziram 76DF [M3] 5.0 lbs Dormant Peach Leaf Curl
(Agrimycin® 17 W 24.0 ozs Fireblight Control
(Apples & Pears Only)

**NOTES**
Imidan® 70W [1A] 2.0 lbs Curcillo, Scale & Fruit Moths
Warrior® [3] 4.0 ozs Borners, Curculio & Fruit Moths
Tombstone® [3] 2.0 ozs
Aptara® [4A] 4.5 ozs Aphids & Curculio
Lorsban® 4E [1B] 1.5 qts Dormant & Trunk Borer
Acrimate® 50WS [25] 1.0 lbs Mites Only
Sevin® 50W [1A] 4.0 lbs Japanese Beetles,
(Apple Thinning Agent)

**Rate for 50-100gal Acre Concentrate Spray**
**Be sure to follow all labels closely for PHI and REI**

Multi-Fruit Spray Calendar*

March 15 - Dormant Spray
Dormant Oil 4.0 gal (Scales & Mites) Kocide® DF 6.0 lbs
Lorsban® 4E 1.5 qts (Mites)
April 5 - Peach Bloom
Peach® 80WDG 3.0 lbs
April 15 - Peach Petal Fall
Apple Bloom
Captan® 50W 3.0 lbs
Indar® 2F 6.0 ozs Agrimycin® 17 W 24.0 ozs (Fireblight Control Add for Apples & Pears Only)

April 25 - Peach Shuck Split
Apple Petal Fall
Pristine® 14.5 ozs Warrior® 4.0 ozs (Curculio) Agrimycin® 17 W 24.0 ozs (Fireblight Control Add for Apples & Pears Only)

May 5 - 1st Cover Spray
Captan® 80WDG 4.0 lbs (Cedar Apple Rust - Higher Rates for Wetter Conditions) Indar® 2F 6.0 ozs (Powdery Mildew & Rusts) Actara® 4.5 ozs (Curculio & Aphids; PHI: 35- Days Pomes, 14-Days Stones)

May 15 - 2nd Cover Spray
Captan® 80WDG 3-4.0 lbs Rally® 40W 4.0 ozs (Peach Rusty Spot Only) Warrior® 4.0 ozs (Curculio; PHI 21-Days Pomes, 14-Days Stones)

June 15 - 4th Cover Spray
Captan® 80WDG 3-4.0 lbs Sulfur 95W 3.0 lbs (0-day PHI; Stones Only) Tombstone® 2.0 ozs (Borners, Curculio & Fruit Moths – 7-day PHI)

July 1 - 5th Cover Spray
Early Peach Harvest
Captan® 80WDG 3-4.0 lbs (0-day PHI; 1-day REI); or Pristine® 14.5 ozs (Early Stones 0-day PHI; Limited to 4 Sprays/Season With Only 2 Consecutively) Tombstone® 2.0 ozs (Borners, Curculio & Fruit Moths – 7-day PHI)

August 1 - 7th Cover Spray
Peach Harvests
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); or Pristine® 14.5 ozs (Early Pomes 0-day PHI) Sevin® 50W 4.0 lbs (Japanese Beetle & Hornets – 3-Day PHI for All Fruit)

August 15 - 8th Cover Spray
Early Apple Harvests
Late Peach Harvest
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); or Pristine® 14.5 ozs (Pomes 0-day PHI)

September 1 - 9th Cover Spray
Apples and Pears Only
Captan® 80WDG 4.0 lbs (0-day PHI; 1-day REI); or Pristine® 14.5 ozs (Pomes 0-day PHI) Sevin® 50W 4.0 lbs (Japanese Beetle & Hornets – 3-Day PHI for All Fruit)

September 15 - Trunk Bore Spray
Lorsban® 4E 1.5 qts (Post Harvest for Borners)

HERBICIDES: [HRAC] *RATE* NOTES
Gramoxone® [22] 1.0 qts Burndown, Directed Spray
Roundup® [9] 1.0 qts Burndown, Shielded & Directed Spray
Devrinol® 50 DF [15] 4.0 lbs Spring/Summer 35-day PHI
Princep® 4L [5] 1.0 qts Spring Dormant, Avoid High pH Soils
Solnicam® [12] 2.5 lbs Spring/Fall Dormant, 1-year Established
Goal® [14] or Galigan® [14] 2.0 pts After Harvest to Spring Bud Swell
Aim® [14] or Shark® [14] 2.0 ozs Directed Spray to Weeds, 3-day PHI
Matrix® [2] 4.0 ozs Late Spring, 1-year Established
Poast® [1] 1.5 pts Summer Grasses, Variable PHI
Karmex® [7] or Diuron® [7] 1.6 qts Spring/Fall Dormant, 3-year Established

*Lowest Use Rate Recommended Initially

Organic Approach Substitutions:

<table>
<thead>
<tr>
<th>Conventional Product</th>
<th>Organic Certified Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captan® &amp; Topsin-M®</td>
<td>Surround® (9) or Sulfur or Lime Sulfur</td>
</tr>
<tr>
<td>Rally®</td>
<td>Kalligreen (Powdery Mildew Eradicant)</td>
</tr>
<tr>
<td>Listed Insecticides</td>
<td>Neem® or Pyganic® or Entrust® (Stone Fruits Only)</td>
</tr>
<tr>
<td>Agrimycin®</td>
<td>Agrimycin® or Fixed Copper (Apples &amp; Pears Except During Bloom)</td>
</tr>
<tr>
<td>Gramoxone® or Roundup®</td>
<td>Scythe®</td>
</tr>
</tbody>
</table>

* Important Note: The calendar spray dates given are an average estimate for Anne Arundel and Prince George’s County Orchards, and may vary by location in Southern Maryland. Be sure to adjust your spray schedule application dates accordingly. The above recommendations very closely reflect the current spray program utilized at the University of Maryland Research and Education Center, Upper Marlboro Facility for its research orchards. Remember to always “Read the Label”

R. David Myers
Extension Agent, Agriculture
Reviewed by Alan R. Biggs, Professors, Extension Pathologist, WVU
Spray Program for Multi-Small Fruit Plantings

Many local farms are composed of multi-small fruit combinations producing for fresh market blackberries, raspberries, blueberries, strawberries and grapes. Aggressive fruit spray programs are required to achieve high quality fruit. These multi-small fruit plantings create many spray management challenges for the achievement of good pest control in accordance to label guidelines.

Therefore, the following multi-small fruit spray program for the control of major small fruit pests and diseases may offer some assistance:

Labeled as noted in 2012 for All Small Fruit – Strawberries, Brambles: Blackberries, Raspberries, Blueberries, and Grapes.

**Multi-Small Fruit Spray Calendar**

<table>
<thead>
<tr>
<th>Date</th>
<th>Product Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 5</td>
<td>Spring Dormant Spray: JMS® Styl J 1.0 gal (Scales &amp; Mites)</td>
</tr>
<tr>
<td>April 10</td>
<td>Early Strawberry Bloom: Captain® 5W0.2 lbs</td>
</tr>
<tr>
<td>April 15</td>
<td>Strawberry Bloom/Blueberry Early Bloom: Captain® 5W0.2 lbs</td>
</tr>
<tr>
<td>April 25</td>
<td>Strawberry Full bloom/Blueberry Mid-Bloom/; Grape Bud Break</td>
</tr>
<tr>
<td>May 5</td>
<td>Strawberry 1st Cover &amp; Early Harvest Spray/Blueberry Full Bloom/Grape &amp; Bramble Shoot Growth Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Elevate® 5.1 lbs (0-Day PHI) Protop® 4.5 ozs (Curculio &amp; Aphis; 7-Day PHI)</td>
</tr>
<tr>
<td>May 15</td>
<td>Strawberry 2nd Cover &amp; Harvest Spray/Blueberry 1st Cover/Grape Bloom Spray/Bramble Cane Development Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Switch® 11.0 ozs (0-Day PHI) Malathion® 2.0 pts (Curculio, Scale &amp; Fruit Moths; 0-3-Day PHI)</td>
</tr>
<tr>
<td>June 1</td>
<td>Strawberry 3rd Cover &amp; Harvest Spray/Blueberry 2nd cover/Grape 1st Cover/Bramble Bloom Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Pristine® 14.5 ozs (0-Day PHI) Malathion® 2.0 pts (Curculio, Scale &amp; Fruit Moths; 0-3-Day PHI)</td>
</tr>
<tr>
<td>June 15</td>
<td>Strawberry 4th Cover &amp; Harvest Spray/Blueberry 3rd Cover &amp; Early Harvest/; Bramble 1st Cover/Grape 2nd Cover Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Elevate® 7.5 lbs (0-Day PHI) Sevin® 5W 4.0 lbs (Spinach, 3-Day PHI)</td>
</tr>
<tr>
<td>July 1</td>
<td>Strawberry Renovation/Blueberry 4th Cover &amp; Harvest/; Bramble 2nd Cover &amp; Early Harvest/Grape 3rd Cover Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Pristine® 14.5 ozs (0-Day PHI) Rally 40 W 4.0 ozs (Except Blueberry, 0-Day PHI) Brigade® WSB12.0 ozs (0-3-Day PHI)</td>
</tr>
<tr>
<td>July 5</td>
<td>Strawberry Post Harvest/Blueberry 5th Cover &amp; Harvest/; Bramble 3rd Cover &amp; Harvest/Grape 3rd Cover &amp; Verasion Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Switch® 11.0 ozs (0-Day PHI) Sulfur 95W 3.0 lbs (0-Day PHI) or Kocide DF 2.0 lbs (0-Day PHI) Malathion 2.0 pts (0-3-Day PHI)</td>
</tr>
<tr>
<td>August 1</td>
<td>Strawberry Post Harvest/Blueberry 6th Cover &amp; Harvest/ Bramble 4th Cover &amp; Harvest/Grape 4th Cover &amp; Early Harvest Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Pristine® 14.5 ozs (0-Day PHI) Sevin® 5W 4.0 lbs (Japanese Beetles, 3-Day PHI)</td>
</tr>
<tr>
<td>August 15</td>
<td>Strawberry, Blueberry &amp; Bramble Post Harvest/; Grape 5th Cover &amp; Harvest Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Elevate® 1.5 lbs (0-Day PHI) Phostro® 4.0 pts (0-Day PHI) Sevin® 5W 4.0 lbs (Hornets – 3-Day PHI for All Fruit)</td>
</tr>
<tr>
<td>September 1 - October 30</td>
<td>Strawberry Post Harvest/; Grape 6th Cover &amp; Harvest Captain® 5W0.2 lbs (0-3 Day PHI &amp; 4-Day REI) Phostro® 4.0 pts (0-Day PHI) Sevin® 5W 4.0 lbs (Hornets – 3-Day PHI for All Fruit)</td>
</tr>
<tr>
<td>November 25</td>
<td>Fall Dormant Spray: Lime Sulfur 10.0 gals Kocide DF 2.0 lbs (0-Day PHI)</td>
</tr>
</tbody>
</table>

**Herbicides:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Product Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gramoxone</td>
<td>1.0 qts Burndown, Directed Spray</td>
</tr>
<tr>
<td>Roundup</td>
<td>1.0 qts Burndown, Shielded &amp; Directed Spray</td>
</tr>
<tr>
<td>Devrinol</td>
<td>4.0 lbs Spring/Summer 35 PHI</td>
</tr>
<tr>
<td>Princep</td>
<td>1.0 qts Spring Dormant, Avoid High pH Soils</td>
</tr>
<tr>
<td>Solicam</td>
<td>2.5 lbs Spring/Fall Dormant, 1-year Established</td>
</tr>
<tr>
<td>Aim® or Shark®</td>
<td>2.0 ozs Directed Spray to Weeds, 3-day PHI</td>
</tr>
<tr>
<td>Sunflan®</td>
<td>2.0 qts Spring/ Summer, Once per Year</td>
</tr>
<tr>
<td>Sinbar®</td>
<td>4.0 ozs Fall Dormant, 1-year Established</td>
</tr>
</tbody>
</table>

*Lowest Use Rate Recommended Initially*

**Organic Approach Substitutions:**

<table>
<thead>
<tr>
<th>Conventional Product</th>
<th>Organic Certified Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captain®</td>
<td>Surround® &amp; Sulfur</td>
</tr>
<tr>
<td>Rally®</td>
<td>Kaligreen (Powdery Mildew Eradicant)</td>
</tr>
<tr>
<td>Listed Insecticides</td>
<td>Neem® or Pygamic® or Entrust® or Dipel®</td>
</tr>
<tr>
<td>Gramoxone® or Roundup®</td>
<td>Scythe®</td>
</tr>
</tbody>
</table>

* Important Note: The calendar spray dates given are an average estimate for Anne Arundel and Prince George’s County small fruit production, and may vary by location in Southern Maryland. Be sure to adjust your spray schedule application date accordingly. The above recommendations very closely reflect the current spray program utilized at the University of Maryland Research and Education Center, Upper Marlboro Facility for its research fruit plots. Remember to always “Read the Label”.

R. David Myers
Extension Agent, Agriculture
Maryland Department of Agriculture
Pesticide Regulation Section

Survey Form For The Mini-bulk Container Recycling Program

The new EPA Pesticide Container and Containment Rule went into effect August of 2011 and may have rendered many refillable pesticide mini-bulk containers as unusable. Any non-compliant tanks will need to be retrofitted or taken out of service which may result in increasing stockpiles of old or damaged mini-bulk tanks in warehouses, mixing yards, storage facilities and farms. The Maryland Department of Agriculture is seeking information in an effort to determine if there is a need for a recycling program for standalone and/or caged pesticide mini-bulk tanks of 85 to 300 gallons. Please complete this survey form and it can be returned as instructed below.

1. How many out of service mini-bulks do you have for recycling?
   
   Total ____________

2. How far would you be willing to transport these containers?
   
   Miles: __________

3. Would you be willing to pay to have the tanks recycled?
   
   Yes No

4. Would you be willing to act as a collection or chipping site?
   
   Yes No

5. Company Name and Address: _______________________________

Thank you for your participation. The attached survey form can be returned via mail, fax to 410/841-2765, or email to either Rob Hofstetter’s, or Ed Crow’s attention. Survey’s can be sent via email to hofsterj@mda.state.md.us, or crowea@mda.state.md.us. Should you have any further questions please feel free to contact either Rob or Ed at 410/841-5710.

Pesticide Regulation Section
50 Harry S Truman Parkway
Annapolis, MD 21401
Telephone: (410)841-5710
FAX: (410)81-2765