Dave’s Ramble

“Slow down!” the words of the Crops Master to the new Field Hand rang out clear as a bell, “Four miles an hour is plenty fast for any machine!” A farmer’s lifetime spent at four miles an hour, an amazing balm for the mind and soul; our watchword, ever present as the earth’s bounty unfolds. I am certain that it’s this monotonous pace of farming that inspired all of mankind’s deepest thoughts and heavenly perceptions. Such freedom of the mind for just thinking is not comprehensible until you have experienced days-on-end of slow, methodical, purposeful motion of machinery in the field. The machine crawls while the farmer’s mind mathematically calculates each moment, sings a song and writes a sermon; His eye captures each scene in time, things ordinarily unseen.

My wife reminds me from time to time that I am not on the tractor, as I travel down the highway a bit slow; what a shame I think to myself. Where is the harmony and life balance in this fast paced world that we live in? Are we ever going to slow down and think about what will unfold next for mankind? We are so concerned, fretting over the loss of farmland, pressures of development on our precious resources, loss of species diversity and habitat, and pollutants in our food and water. We are powerless even, for a moment, to slow down this out of control machine that we have set in motion. Where’s the Crops Master?

I chuckle at the thought of us somehow reverting back to a simpler agrarian life of four miles an hour. In my eye’s apparition abides no highways, only country lanes, a bay as blue as the sky, earthen meadows and woodlands teaming with companions by streams of cool water. People working the countryside, consumed with chores, but never too busy to stop and share some laughter. A turtle on pilgrimage passes by at mid-day, as the fox pups on spring training scramble to keep up with the vixen. A covey of quail lift and light again in the meadow as the cows move by. The fragrance into the evening hours of wild flowers, mown hay, and turned earth overwhelms my soul. The Crops Master shouts at me, “Four miles an hour!” but I keep hearing my wife plead, “At least do fifty, your driving is embarrassing!”

Winter 2015

Calendar of Events

Mark Your Calendars -- Plan To Participate
♦ Jan-March - Annie’s Project Courses – see page 3
♦ Jan-March - Continuing Education for Certified Nutrient Management Consultants/ Certified Farmers - Winter Webinar Series – see page 3
♦ January 13 - Pesticide Certification Training - Ext Office
♦ January 14 - Southern MD Forage Confer.– Brandywine
♦ January 22 - MD Buyers-Grower Expo - Annapolis
♦ January 24 - Beekeeping 101 - WYE REC, Queenstown
♦ January 27 - Pesticide Certification Exam - Ext Office
♦ January 30 - Central MD Vegetable Meeting - Upperco
♦ Feb-March - Webinar Course: Pasture Management for Small Ruminant Producers - see page 4
♦ February 4 - So. MD Vegetable & Fruit Mtg. - Clements, MD
♦ February 13 - Women in Agriculture Annual Conf.- Delaware
♦ February 25 - Bay Area Fruit School - WYE REC, Queenstown
♦ February 28 - MD Small Ruminant Expo - Frederick
♦ March 10 - Pasture & Crop Workshop NM/PAT - Ext Office
♦ April 10 - On-Line Private Pesticide Applicator Recertification
♦ April 17 - On-Line Nutrient Applicator Voucher Recertification

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• NEWSLETTER RENEWAL SUBSCRIPTION
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• USDA News
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WINTER & SPRING MEETINGS
Mark your calendars now and plan to be a part of the fall and winter meetings.

Become a MD Certified Private Pesticide Applicator
If you have allowed your Private Pesticide Applicator Certification to expire or are a new applicant, then you are invited to attend the Private Pesticide Applicator Certification Training and Examination. It’s a two-step process:

Step 1: A Private Applicator Certification Training will be conducted at the Anne Arundel Extension Office from 6:00 to 8:00 p.m. January 13, 2015.

Step 2: A Private Pesticide Applicator Exam will be given at the Anne Arundel Extension Office from 6:00 to 8:00 p.m. January 27, 2015.

Maryland/Delaware Forage Council
Southern MD Hay & Pasture Conference
January 14, 2015
Make plans to attend the Southern Maryland Hay & Forage Conference, on January 14, 2015, at the Baden Volunteer Fire Department, Brandywine, MD.

Topics will be presented covering all aspects of hay and pasture production. The programs will address key issues and concerns facing hay and pasture producers.

The conferences also features displays and exhibits by numerous agribusinesses. Attendees will be able to obtain information on seed, fertilizer, equipment, fencing, etc. needed for hay and pasture production and management.

Registration fee for the Southern Maryland conference will be $15 per person by January 7 and $20 at the door.

Checks should be made payable to University of Maryland and sent to Hay & Pasture Conference, University of Maryland Extension, P.O. Box 663, Leonardtown, MD 20650 (phone: 301-475-4484).

Further information is being posted at: https://www.psla.umd.edu/extension/maryland-forages-program/upcoming-forage-events.

* Please refer to the attached Agenda for more details and directions.

2015 Maryland Buyer-Grower Expo
January 22, 2015
The MD Department of Agriculture would like to invite you to the 2015 Maryland Buyer-Grower Expo on January 22, 2015, 10 a.m. to 2 p.m. at the Navy-Marine Corps. Stadium – “N” Room in Annapolis, MD. The show connects Maryland growers, producers, and processors with buyers from grocery retailers, restaurants, schools, institutions, and other venues.

The event is set up as a trade show, where growers, producers, and processors are each provided a table to display their business information and products. Products from past events have ranged from fruits and vegetables to dairy, meats, specialty foods, seafood, and wine. With the growing demand for local foods, businesses that buy local can attract more customers and help support farmers throughout our community.

To register, or for more information, visit www.marylandsbest.net. The exhibit fee for Maryland growers, producers, and processors is $20 if received before December 23 and $40 thereafter. There is no fee for buyers to attend. Those registered by Jan. 7 will be included in the directory. For questions or help registering, contact Stone Slade at MDA at 410- 841-5779 or stone.slade@maryland.gov.

2015 Beekeeping 101
January 24, 2015
Mike Embrey, UME Apiculturist, is offering his beginner beekeeping class again starting January 24, 2015.

Each class is held on Saturday at the Wye Research and Education Center. There will be seven classes total, five in the winter/spring and two in the fall. Participants will learn the basics of beekeeping, including setting up a hive; pests and diseases; how to use beekeeping equipment, etc. The cost of the course is $110.00, which includes the textbook.

To register contact Debby Dant, Wye Research & Education Center, P. O. Box 169, Queenstown, MD 21658, 410-827-8056 x115, fax 410-827-9039, ddant@umd.edu. Registration deadline is January 10, 2015 in order to purchase books for each registrant. Make check payable to: University of Maryland.

Central Maryland Vegetable Growers Meeting
January 30, 2015
The Central Maryland Vegetable Growers Meeting held on January 30, 2015 at the Friendly Farms Restaurant in Upperco from 9:00 a.m. to 3:30 p.m. This well sponsored, large grower meeting always offers a great deal of vegetable industry information. Pesticide recertification credits are awarded for attending this meeting. For full meeting details, and to register call
Continuing Education for Certified Nutrient Management Consultants and Certified Farmers
2015 Winter Webinar Series

These online training sessions will be held via Adobe Connect. You will need access to a computer with speakers and a high-speed internet connection to participate. Two continuing education credits will be awarded for each webinar.

⇒ Attendance Information: On the day of each webinar, please join the webinar five minutes prior to the meeting time.

January 8, 2015, 2 pm - 4 pm
• Soil Testing for Effective Nutrient Management
  Speaker: John Spargo, Penn State
• Rational Use of Plant Analyses
  Speaker: Trish Steinhilber
Conference URL: https://webmeeting.umd.edu/january8/

February 12, 2015, 2 pm - 4 pm
• Low Residue Winterkilled Cover Crops
  Speaker: Natalie Lounsbury, UMCP
• Soil Tillage: Impact on Soil Properties
  Speaker: Sjoerd Duiker, Penn State
Conference URL: https://webmeeting.umd.edu/february12/

March 12, 2015, 2 pm - 4 pm
• Nitrogen Cycle: Beyond the Basics
  Speaker: Trish Steinhilber
• Denitrification: Lessons from the Chesapeake Conservation Effects Assessment Project (CEAP)
  Speaker: Jarrod Miller, UME
Conference URL: https://webmeeting.umd.edu/march12/

⇒ Important Note: In order to receive continuing education credits for attending the webinar you must:
1. Type your name, as it appears on your nutrient management certification card, when you enter the meeting.
2. Be prepared to provide your Nutrient Management Certification number when asked.
⇒ This information must be accurate in order for you to receive credit for attending the webinar.

Annie’s Project

January – March, 2015

Annie’s Project courses have been announced for 2015! The project will be offered at seven locations in Delaware, Maryland and Virginia. Annie’s Project focuses on the many aspects of farm management and is designed to empower women in overall farm decision making and to build local networks throughout the state. The target audience is women with a passion for business, agriculture and involvement in the farm operation. Topics for the sessions cover the five areas of Risk Management – Production, Marketing, Financial, Legal Risk, Human Resources. This course is open to anyone interested in farm management practices. The program is sponsored by the University of Maryland Extension, Delaware Cooperative Extension, and Virginia Cooperative Extension. Annie’s Project has been approved for FSA Borrower Training. For more information, please contact your FSA loan officer.

The cost of the course including meals and materials is $75. For more information, and other class sites or to register visit the webpage at www.extension.umd.edu/annies-project or call 410-758-0166.

Please register by January 1st, space is limited. If you require special assistance to attend the classes please contact the site at least two weeks prior.

The course will be 6 sessions held at a variety of sites in Maryland and Delaware. Locations include:

January 13 - February 17, 6-9 pm - Baltimore County Ag Center, Cockeysville, MD, 410-887-8090;

January 21 - March 11, 6-9 pm - Cecil County Government Administration Bldg., Elkton, MD, 410-996-5280;

January 21 - March 11, 10 am-1:30 pm - Howard County Extension, Ellicott City, MD, 410-313-1908;

January 21 - March 11, 6-9 pm - Southern MD, North East Community Center, Chesapeake Beach, MD, 410-257-2554.
Southern Maryland Vegetable & Fruit Production Meeting  
February 4, 2015

Make plans to attend the Southern Maryland Vegetable and Fruit Production Meeting on February 4, 2015, at A-Maze-N-Place, Clements, MD in St. Mary’s County.

This meeting will provide Private Applicator Recertification & Nutrient Applicator Voucher Recertification. Speakers will provide IPM updates and present on a broad range of production topics.

Also meeting sponsors will showcase their products and services, and state vegetable organization leaders will be present to recruit and answer your questions. Please attend and make this meeting the best ever.

Call your local Extension office to register.

Webinar Short Course:  
Pasture Management for Small Ruminant Producers

**Wednesday Evenings in February and March**

The University of Maryland Small Ruminant Extension Program will host a winter webinar series on consecutive Wednesday evenings in February and March 2015. The focus of the webinar series is Pasture Management for Small Ruminant Producers. Sub-topics include:

- planning a pasture system - Feb. 4;
- pasture plants, including alternative forages- Feb 11;
- pasture and grazing management - Feb 18;
- pasture nutrition – Feb 25; and
- pasture health problems - March 4.

The instructors for the webinars will be Jeff Semler and Susan Schoenian. Jeff is the county extension agent in Washington County, Maryland. Susan is the University of Maryland Extension Sheep & Goat Specialist. Jeff and Susan conduct the Western Maryland Pasture-Based Meat Goat Performance Test.

Each webinar will begin at 7 p.m. EST and last for approximately 60 minutes. It will be followed by a 30 minute question and answer period. Interaction will be via a chat box. Anyone with an internet connection may participate in the webinars. High speed access is recommended.

Pre-registration is not necessary for any of the webinars. Instead, interested persons are asked to subscribe to the University of Maryland’s webinar listserv. To subscribe, send an e-mail message to listserv@listserv.umd.edu. In the body of the message, type subscribe sheepgoatwebinars. The webinar listserv is used to communicate with webinar participants and notify subscribers of upcoming webinars. All webinars are recorded. The recordings will be converted to YouTube videos.

For additional information, contact Susan Schoenian at sschoen@umd.edu or go to http://www.sheepandgoat.com/programs/2015webinars.html.

Women In Agriculture Annual Conference  
February 13, 2015

The 14th Annual MidAtlantic Women In Agriculture Regional Conference will be held on February 13, 2015 at Dover Downs Hotel and Casino in Dover, Delaware. The conference goals are to offer women who are involved with agriculture the opportunity to come together to learn about current issues and topics so they can make informed decisions concerning their agribusinesses and family lives. Sessions will cover marketing, USDA Farm Bill, business planning, crops and much more.

A preconference will also be offered. The preconference will take place on February 12, 2014 from 1-5 pm. Participants can choose between two track offerings: Agritourism or Agriculture Law. A Hamess Racing Reception will immediately follow the preconference. The reception is included with the purchase of a pre-conference or main conference ticket.

The cost of the conference is $55. A discount will be given if tickets are purchased before 1/1/2015. The cost for the preconference is $30.

For more information or to register visit the website www.extension.umd.edu/womeninag or call 410-822-1244. If you require special assistance to attend the conference please contact the us at least two weeks prior. The event is open to all and hosted in cooperation with the University of Maryland Extension, Delaware Cooperative Extension, Delaware State Extension, Rutgers Cooperative Extension and Virginia Cooperative Extension.

Bay Area Fruit School  
February 25, 2015

Attention all fruit growers! Plan to attend the Bay Area Fruit School on February 25, 2015 at the WYE Research and Education Center in Queenstown, MD from 8:30 a.m. to 3:30 p.m.

This all day meeting will provide

Private Pesticide Applicator Recertification Credit.

For full meeting details and registration call Debbie Dant, WYE REC at 410-827-8056, Ext. 115.
2015 Small Ruminant Expo
February 28, 2015
The Maryland Small Ruminant Expo will be held Saturday, February 28, 2015, at the Frederick County 4-H Camp & Activities Center in Frederick, Maryland. For additional information contact Susan Schoenian at sschoen@umd.edu

Field Crops & Pasture IPM Workshop
March 10, 2015
Make plans to attend the Field Crops & Pasture IPM Workshop, on March 10, 2015 at the Anne Arundel Extension Office, 97 Dairy Lane, Gambrills, MD from 6:00 p.m. to 9:00 p.m. This workshop will explore advanced concepts of pasture and field crop production in the Southern Maryland region from establishment to harvest, including animal utilization. Topics will include: Crop selection; integrated crop management; soil fertility; weed control; insect control; and disease control for soybeans, corn, wheat, barley and hay crops.

Private Pesticide Applicator Recertification & Nutrient Applicator Voucher Recertification will be awarded for full class participation.

To register for this event contact the Anne Arundel County Extension Office at 410-222-3906.

Live On-Line Session
Private Pesticide Applicator Recertification
April 10, 2015
If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in this Live On-Line Private Pesticide Recertification Training, scheduled for April 10, 2015 from 4:00 to 6:00 p.m.

The session will focus on pesticide use and related topics for all field crops, fruits and vegetables. This Adobe Connect recertification session will be live via the internet directly from the University of Maryland. Adobe Connect is a student interactive system that will document your attendance. To participate in a live Adobe Connect session a high speed cable or satellite internet connection is required.

Private Pesticide Applicator Recertification credit will be awarded for full 2-hour session participation.

Registration by April 8 is required in order to receive Adobe Connect login instructions.

To register for this on-line event contact the Anne Arundel County Extension Office at 410-222-3906.

Live On-Line Session
Nutrient Applicator Voucher Recertification
April 17, 2015
If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in the Live On-Line Nutrient Applicator Voucher Recertification Training, scheduled for April 17, 2015 from 4:00 to 6:00 p.m.

This session will focus on fertility and production related topics for all field crops, fruits and vegetables. This Adobe Connect recertification session will be live via the internet directly from the University of Maryland. Adobe Connect is a student interactive system that will document your attendance. To participate in a live Adobe Connect session a high speed cable or satellite internet connection is required.

Nutrient Applicator Voucher Recertification credit will be awarded for full 2-hour session participation.

Registration by April 15 is required in order to receive Adobe Connect login instructions.

To register for this on-line event contact the Anne Arundel County Extension Office at 410 222-3906.
The Contribution of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050

The CAST (Council for Agricultural Science and Technology) article entitled, The Contribution of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050 summarizes topics and issues regarding the use of pesticides in a scientific and responsible manner. View the article at:

http://www.cast-science.org/download.cfm?PublicationID=283018&File=10308add8ca42e36d835a6f703631805525TR

Raising Your Home Chicken Flock

Online at:

http://extension.umd.edu/sites/default/files/_docs/articles/EB-409%202013%20Raising%20Your%20Home%20Chicken%20Flock.pdf

Maryland Honeybee Workgroup

The Maryland Honeybee Working Group membership represents a statewide partnership of organizations and individuals interested in engaging in and supporting research to address the plight of honeybees and other pollinators in Maryland.

There are two newly posted articles at the Extension IPM website:

http://extension.umd.edu/ipm

Protecting Plants and Pollinators - Part I

Protecting Plants and Pollinators - Part II

Department of Entomology Maryland Honeybee Workgroup at:

http://entomology.umd.edu/extension/marylandhoneybeeworkinggroup

Spotted Lantern Fly - New invasive pest, potentially destructive to grapes and fruit, detected in Pennsylvania

Grzegorz Krawczyk, Extension Tree Fruit Entomologist
Email: gxk13@psu.edu

On November 3, 2014 the Pennsylvania Department of Agriculture announced the discovery of a new invasive insect species, spotted lanternfly, Lycorna delicatula (White) (Hemiptera: Fulgoridae). This new species of fulgorid hopper (i.e., planthoppers), also known under the name of spot clothing wax cicada, is native to China and South-East Asia where it has one generation per season. Both nymphs and adults are known to feed on wood (sap feeding) of multiple tree species including fruit trees and grapes.

The Pike and District Township areas in Berks County PA are currently under quarantine regulations to stop the spread of this new invasive insect pest. Read PDA News Release...

More information about the spotted lanternfly please see:

http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS_0_10297_0_43/AgWebsite/ProgramDetail.aspx?name=SPOTTED-LANTERNFLY

FARM BILL PAGE

A webpage has been developed to house information that is related to the implementation of the 2014 farm bill. Currently it just has the presentations from the farm bill meetings posted but new resources will be added as they become available. Producers and anyone else interested can view it at:

http://www.arc.umd.edu/extension/crop-insurance/2014-farm-bill

Extension Bulletin EB-420

Manure as a Natural Resource: Alternative Opportunities

A new publication discussing alternative management of manure is available from University of Maryland Extension. New technologies are coming available to help manage various types of manure. Extension Bulletin 420, Manure as a Natural Resource: Alternative Opportunities, discusses some options (transport, composting, energy use) and what some of the benefits and costs may be. It is meant to be a general guide for any future discussion of technology choices, which change rapidly. See more at:

http://extension.umd.edu/sites/default/files/_docs/articles/EB%20420-Manure%20as%20a%20Natural%20Resource.pdf

Article of Interest

“The Contribution of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050”

The CAST (Council for Agricultural Science and Technology) article entitled, The Contribution of Pesticides to Pest Management in Meeting the Global Need for Food Production by 2050 summarizes topics and issues regarding the use of pesticides in a scientific and responsible manner. View the article at:

http://www.cast-science.org/download.cfm?PublicationID=283018&File=10308add8ca42e36d835a6f703631805525TR
The 2014 Maryland Corn Hybrid Performance Test Report has been posted:  
http://www.psla.umd.edu/extension/md-crops

Soybeans & Corn in Maryland  
Latest Soybean and Corn Trial Results available:  
http://www.psla.umd.edu/extension/extension-project-pages/soybeans-maryland  
http://www.psla.umd.edu/extension/extension-project-pages/corn-maryland

Commercial 2014 Vegetable Production Recommendations Maryland EB 236  

Lawn Fertilizer Blackout Dates Begin November 15 for Homeowners; December 1 for Lawn Care Pros  
The Maryland Department of Agriculture (MDA) reminds citizens that November 15 is the last day they may fertilize lawns under Maryland’s Lawn Fertilizer Law.  
Lawn care professionals have until December 1, provided they use specially formulated products that reduce the risk of nutrient runoff into streams, rivers and the Chesapeake Bay.  
Both citizens and lawn care pros may resume lawn fertilizer applications of nitrogen and phosphorus on March 1, as long as the ground is not frozen or heavy rain is not predicted.  
For more tips and information on Maryland’s Lawn Fertilizer Law, visit the University of Maryland’s Home and Garden Information Center website at http://extension.umd.edu/hgic/lawns

MDA Offers Fast Track Option for Manure Transport Program  
New Application Can be Processed within 48 Hours of Receipt  

OCEAN CITY, MD (December 9, 2014) – The Maryland Manure Transport Program has launched a new streamlined application process labeled the “Fast-Track” option.  
Applicants will complete a shortened form that can be processed within 48 hours of receipt by the Maryland Department of Agriculture announced Secretary Buddy Hance today during a speech at the 99th annual Maryland Farm Bureau convention.  
“We created the new ‘Fast Track’ option to make the Manure Transport Program application process easier, faster and more user friendly for those who are transporting and land applying poultry litter,” said Secretary Hance.  
This is a dual purpose application that can be used to facilitate the fast track process as well as the standard review process we currently use.  
This application can only be used when transporting and land applying poultry litter.  
Under the Fast-Track application process, MDA will continue to:  
• Check nutrient management and MACS compliance  
• Perform an animal health check  
• Verify the poultry company contracting with the sending poultry operation.  

Once these checks are completed a conditional approval will be given to allow the poultry litter to be transported to a receiving farm.  
If there are problems that arise because of the above compliance checks, the application may be delayed or denied.  
When using the “Fast-Track” process the nutrient management components (soil tests, manure nutrient analysis, and manure application recommendations) will be required before cost share is provided to determine eligibility and payment amount.  
The applicant choosing the ‘fast track’ option assumes responsibility for adhering to program requirements.  
Failure to meet program requirements can impact eligibility to receive payment.  
Although not eligible for the fast track option, non-poultry producer payment caps were raised last year to $15,000 per application and up to $30,000 per year.  
Established in 1998, Maryland’s Manure Transport Program helps poultry, dairy, beef and other livestock producers cover the costs of transporting excess manure.  
Animal producers with high soil phosphorus levels or inadequate land to properly utilize their manure can receive cost-share assistance of up to $18 per ton to transport excess manure to other farms in accordance with an approved nutrient
management plan, or alternative use facilities that can use the product safely.

In FY 2014, MDA provided Maryland farmers with $608,259 in grants to transport 118,995 tons of manure to approved farms and businesses—more than double the amount of manure transported the previous year. More than 39 percent of this tonnage was shipped to alternative use facilities and not land applied in the watershed. Delmarva poultry companies provided matching funds to transport poultry litter, bringing the total amount of financial support provided to farmers in FY 2014 through the Manure Transport Program to $1.03 million.

CDMS: Pesticide Labels and MSDS On-Line at: http://www.cdms.net/

USDA Provides Greater Protection for Fruit, Vegetable and Other Specialty Crop Growers

Free Basic Coverage Plans and Premium Discounts Available for New, Underserved and Limited Income Farmers

WASHINGTON, Dec. 12, 2014 – Agriculture Secretary Tom Vilsack today announced that greater protection is now available from the Noninsured Crop Disaster Assistance Program for crops that traditionally have been ineligible for federal crop insurance. The new options, created by the 2014 Farm Bill, provide greater coverage for losses when natural disasters affect specialty crops such as vegetables, fruits, mushrooms, floriculture, ornamental nursery, aquaculture, turf grass, ginseng, honey, syrup, and energy crops.

"These new protections will help ensure that farm families growing crops for food, fiber or livestock consumption will be better able to withstand losses due to natural disasters," said Vilsack. "For years, commodity crop farmers have had the ability to purchase insurance to keep their crops protected, and it only makes sense that fruit and vegetable, and other specialty crop growers, should be able to purchase similar levels of protection. Ensuring these farmers can adequately protect themselves from factors beyond their control is also critical for consumers who enjoy these products and for communities whose economies depend on them."

Previously, the program offered coverage at 55 percent of the average market price for crop losses that exceed 50 percent of expected production. Producers can now choose higher levels of coverage, up to 65 percent of their expected production at 100 percent of the average market price.

The expanded protection will be especially helpful to beginning and traditionally underserved producers, as well as farmers with limited resources, who will receive fee waivers and premium reductions for expanded coverage. More crops are now eligible for the program, including expanded aquaculture production practices, and sweet and biomass sorghum. For the first time, a range of crops used to produce bioenergy will be eligible as well.

"If America is to remain food secure and continue exporting food to the world, we need to do everything we can to help new farmers get started and succeed in agriculture," Vilsack said. "This program will help new and socially disadvantaged farmers affordably manage risk, making farming a much more attractive business proposition."

To help producers learn more about the Noninsured Crop Disaster Assistance Program and how it can help them, USDA, in partnership with Michigan State University and the University of Illinois, created an online resource. The Web tool, available at www.fsa.usda.gov/nap, allows producers to determine whether their crops are eligible for coverage. It also gives them an opportunity to explore a variety of options and levels to determine the best protection level for their operation.

If the application deadline for an eligible crop has already passed, producers will have until Jan. 14, 2015, to choose expanded coverage through the Noninsured Crop Disaster Assistance Program. To learn more, visit the Farm Service Agency (FSA) website at www.fsa.usda.gov/nap or contact your local FSA office at offices.usda.gov. The Farm Service Agency (FSA), which administers the program, also wants to hear from producers and other interested stakeholders who may have suggestions or recommendations on the program. Written comments will be accepted until Feb. 13, 2015 and can be submitted through www.regulations.gov.

These new provisions under the Noninsured Crop Disaster Assistance Program were made possible through the 2014 Farm Bill, which builds on historic economic gains in rural America over the past five years, while achieving meaningful reform and billions of dollars in savings for the taxpayer.

Since enactment, USDA has made significant progress to implement each provision of this critical legislation, including providing disaster relief to farmers and ranchers; strengthening risk management tools; expanding access to rural credit; funding critical research; establishing innovative public-private conservation partnerships; developing new markets for rural-made products; and investing in infrastructure, housing and community facilities to help improve quality of life in rural America. For more information, visit www.usda.gov/farmbill.
**USDA Releases 2013 Annual Summary for Pesticide Data Program**

*Report confirms that pesticide residues do not pose a safety concern for U.S. food*

WASHINGTON, December 19, 2014 – The U.S. Department of Agriculture's (USDA) Agricultural Marketing Service (AMS) has posted data from the 2013 Pesticide Data Program (PDP) Annual Summary. The PDP summary confirms that overall pesticide chemical residues found on the foods tested are at levels below the tolerances established by the Environmental Protection Agency (EPA) and do not pose a safety concern. This information, along with an explanatory guide for consumers, can be found at [www.ams.usda.gov/pdp](http://www.ams.usda.gov/pdp).

The 2013 PDP Annual Summary shows that over 99 percent of the products sampled through PDP had residues below the EPA tolerances. Residues exceeding the tolerance were detected in 0.23 percent of the samples tested. The PDP pesticide residue results are reported to FDA and EPA through monthly reports. In instances where a PDP finding is extraordinary and may pose a safety risk, FDA and EPA are immediately notified. EPA has determined the extremely low levels of those residues are not a food safety risk, and the presence of such residues does not pose a safety concern.

Each year, USDA and EPA work together to identify foods to be tested on a rotating basis. In 2013, surveys were conducted on a variety of foods including fresh and processed fruits and vegetables, infant formula, butter, salmon, groundwater, and drinking water. AMS partners with cooperating state agencies to collect and analyze pesticide chemical residue levels on selected foods. The EPA uses data from PDP to enhance its programs for food safety and help evaluate dietary exposure to pesticides.

**Statement from USDA:**

"The Pesticide Data Program provides reliable data through rigorous sampling that helps assure consumers that the produce they feed their families is safe. This report confirms again that pesticide residues are below levels deemed safe."

**Statement from FDA:**

"The U.S. Food and Drug Administration is responsible for assessing whether pesticide chemical residues found on food make the food unlawful under the Federal Food, Drug, and Cosmetic Act. FDA is able to conduct its own tests, interpret the reported violations, and determine if additional testing is needed in order to take enforcement action, as appropriate."

**Statement from EPA:**

"PDP is invaluable to EPA in its work to evaluate pesticide residues in food. EPA remains committed to a rigorous, science-based, and transparent regulatory program for pesticides that continues to protect people's health and the environment."

Since its inception, the PDP has tested 112 commodities including fresh and processed fruits and vegetables, dairy, meat and poultry, grains, fish, rice, specialty products, and water. In 2013, the program expanded to include samples of infant formula, raspberries and salmon. The data are a valuable tool for consumers, food producers and processors, chemical manufacturers, environmental interest groups, and food safety organizations.

The findings of the Pesticide Data Program Annual Summary, Calendar Year 2013 can be downloaded at [www.ams.usda.gov/pdp](http://www.ams.usda.gov/pdp). Printed copies of can be obtained by contacting the USDA, Agricultural Marketing Service, Science and Technology Program, Monitoring Programs Division by e-mail request to [amsmpo.data@ams.usda.gov](mailto:amsmpo.data@ams.usda.gov). For more information on EPA pesticide residue tolerances, visit the EPA website at [www.epa.gov/pesticides/food](http://www.epa.gov/pesticides/food).

**New Website on Soil Fumigants**

As part of the EPA's effort to build a more user-friendly website, we have compiled all of our information on soil fumigants into a microsite so that visitors can find the information they need more quickly and easily. The Soil Fumigant Toolbox contains material on

- training,
- fumigant management plans,
- buffer zones and
- other safety measures for the protection of agricultural workers and bystanders.

You will find background information on soil fumigants and links to fact sheets and the National Association of State Departments of Agriculture Research Foundation's Soil Fumigation Manual, a national pesticide applicator study guide.

This toolbox will be useful to fumigant handlers and certified applicators, state and tribal agencies, and communities that may be affected by the fumigation of soil. It can be accessed at [http://www2.epa.gov/soil-fumigants](http://www2.epa.gov/soil-fumigants).

**EPA Pesticide Program Updates**

**From EPA's Office of Pesticide Programs**

**Disinfectants for Use against Ebola and Guidance to Companies**

In August 2014, EPA and the Center for Disease Control provided hospitals with guidance on how to select effective disinfectants that work against Ebola. This information is available on the CDC website, the primary source of guidance for hospitals at [http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html](http://www.cdc.gov/vhf/ebola/hcp/environmental-infection-control-in-hospitals.html)

CDC guidance states: "Use a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with a label
claim for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect environmental surfaces in rooms of patients with suspected or confirmed Ebola virus infection.” EPA continues to refer manufacturers, hospitals and others to the CDC guidance.

To make it even easier to find disinfectants, EPA has posted a list of EPA-registered disinfectants that meet CDC’s criteria for use against the Ebola virus on hard, non-porous surfaces. The list is available here: http://www.epa.gov/oppad001/list-l-ebola-virus.html.

EPA has also posted guidance to pesticide companies on referring to registered disinfectant products that meet the CDC Criteria for use against the Ebola Virus. This guidance can be found here: http://epa.gov/oppad001/ebola-efficacy-claims.html.

### EPA Site Quick Finder

**About EPA’s Pesticides Program**
Overview of EPA’s program
evaluating potential new pesticides and uses, providing for special local needs and emergency situations, reviewing safety of older pesticides, registering pesticide producing establishments, enforcing pesticide requirements, pesticide issues in the works, overview of risk assessment in the pesticide program

**Types of Pesticides**
Pesticides are often grouped according to the type of pest they control or by chemical or source.
type of pest, chemically-related

**Frequently Asked Questions**
Answers to questions from the public.

**Fact Sheets**
Search general interest and technical fact sheets, health and safety, regulatory actions, specific chemicals

**Information Sources**
Additional information of general interest, General information, hotlines, information centers, databases

**Pesticide Program Reports**
Reports produced by the Office of Pesticide Programs Annual Reports, Performance Management & Accountability, Pesticide Industry Sales and Usage, Progress Reports, Restricted Use Products Reports

**Pesticide News Stories**
Pesticide related articles appearing in news media

**Publications** | **Glossary** | **A-Z Index** |
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 410-222-3900 or at: awahle@umd.edu

Farmer School
On-Line Farming Education Series
“Tomorrow’s Farmers” Web Modules
https://extension.umd.edu/anne-arundel-county/agriculture/tomorrows-farmer-web-modules

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
Module 5: Integrated Pest Management

Future Module Topics:
- Farm Business and Enterprise
- Development Modern Vegetable Farmer
- Modern Fruit Farmer
- Grain Farming
- Pasture and Hay Management
- Livestock that Farmers Raise

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.
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, Principal Agent
Agriculture and Natural Resources
University of Maryland Extension
Anne Arundel & Prince George's Counties

Anne Arundel County Extension
97 Dairy Lane
Gambrills, MD 21054
410-222-3906 Fax 410-222-3909

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

Anne Arundel County Extension
https://extension.umd.edu/anne-arundel-county

4-H Youth Development
For more information, contact Amanda Wahle at awahle@umd.edu or call 410-222-3900

Family & Consumer Sciences
For more information, contact Vanessa Bright vbright@umd.edu call 410-222-3903

Agriculture & Natural Resources
For more information, contact Dave Myers myersrd@umd.edu or call 410 222-3906

Master Gardener Program
For more information, contact Mike Ensor mensor@umd.edu call 410-222-3906

Nutrient Management
For more information, contact Emileigh Rosso Lucas erosso@umd.edu call 410-222-3906

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.
Southern Maryland Hay & Pasture Conference
Wednesday, January 14, 2015
Baden Volunteer Fire Department
Waldorf, MD
Program Agenda

8:30  Registration, refreshments, visit exhibits

8:50  Moderator Welcome
Moderator: Ben Beale, Senior Agent, University of Maryland Extension St. Mary’s Co.

9:00  Summary of Cool Season Grass Variety Trials
Dave Myers, Principal Agent, University of Maryland Extension Anne Arundel Co.

9:30  Some Little Known Forage Facts That Can Make a Difference in Your Bottom Line
Dr. James Green, Professor & Extension Forage Specialist Emeritus, Dept. of Crop Science, NC State University

10:15 Break

10:30  Nutrient Needs and Common Deficiencies of Forage Crops
Dr. Richard W. Taylor, Extension Agronomist, University of Delaware

11:15  Improved Bermudagrass as a Forage for Southern Maryland
Dr. Lester Vough—Forage Crops Extension Specialist Emeritus, University of Maryland

12:00 Lunch

12:45  Greetings from the Maryland-Delaware Forage Council
Les Vough, President-MDFC

1:00  Q & A: Answers to Topics of Interest from the audience . . . A Time to Ask Your Hay/Pasture Question
Dr. James Green

1:45  Herbicides for Hay and Pasture Use in the Mid-Atlantic Region
Ben Beale, Extension Agent-St. Mary’s
Dave Myers, Extension Agent-Anne Arundel

2:30  Improving Hay and Pasture Quality Through New Developments in Alfalfa
Dick Kauffman, Regional Manager; W-L Research

3:15  Pesticide Recertification and Nutrient Voucher Required Topics
Southern Maryland Ag Agent Team, University of Maryland Extension

4:00  Adjourn

University of Maryland Extension programs are open to all citizens and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.
Directions To Baden Volunteer Fire Department
16608 Brandywine Road, Brandywine, MD 20613

From St. Mary’s County and Points South:
Take Rt 5 North to Hughesville. Turn right onto Rt 231 and proceed 2 miles. Turn left onto MD-381/Brandywine Road. Proceed 10 miles to the Fire Department on the right.

From Calvert County and Points East
Take Rt. 2/4 to Prince Frederick. Turn onto Rt. 231 and proceed 10.5 miles. Turn right onto MD-381/Brandywine Road. Proceed 10 miles to the Fire Department on the right.

From Points North:
Take Rt. 301 South towards Waldorf. Just before you get to Waldorf, turn left onto MD-381/Brandywine Road. Proceed 6 miles to the Fire Department on the left.

From College Park and Points West
Take Rt. 5 South from the beltway towards Waldorf. Just before you get to Waldorf and the 301/5 merge, turn left onto MD-381/Brandywine Road. Proceed 6.5 miles to the Fire Department on the left.
Newsletter Subscription Renewal

Check all that apply:  Anne Arundel County AG Newsletter (Quarterly)

☐ I wish to receive a mailed newsletter.

☐ I wish to receive an EMAILED newsletter.

State Impact Team Newsletters:

☐ Fruit & Vegetable Headline News (Biweekly) EMAIL only

☐ Agronomy News (Biweekly) EMAIL only

Email Address: ____________________________________________________________

(Please Print Clearly)

Name: ____________________________________________ Phone: ______________________

Address: ____________________________________________________________________________

City: ___________ State_________ Zip: ______________________

Optional Information: Race: ___ Asian ___ Black ___ Hispanic ___ White ___ Other

Sex: ___ Male ___ Female

Check areas below that describe your farm interests:

___ Aquaculture ___ Turfgrass ___ Greenhouse
___ Corn ___ Beef ___ Nursery
___ Hay ___ Horses ___ Agribusiness/Government
___ Small Grain ___ Poultry ___ Full-time Farmer
___ Soybeans ___ Sheep/Goats ___ Part-time Farmer
___ Tobacco ___ Swine ___ Hobby/Enthusiast
___ Fruit ___ Farmers Markets ___
___ Vegetables ___ Commercial Tree ___ Production
___ Ethnic/Specialty Vegetables

Other: _____________________________________________________________

Mail to: University of Maryland Extension
97 Dairy Lane
Gambrills, MD 21054

Email to: gbrownin@umd.edu or FAX to: 410-222-3909

University of Maryland Extension programs are open to all citizens and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.
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 2015 for All Small Fruit – Strawberries, Brambles: Blackberries, Raspberries, Blueberries, and Grapes.

### FUNGICIDES: [FRAC]

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime Sulfur [M2]</td>
<td>1.0 gals</td>
<td>Dormant Fall Sanitizer</td>
</tr>
<tr>
<td>JMS’ Stylet Oil [NC]</td>
<td>1.0 gal</td>
<td>Apply Temp 35-85°F</td>
</tr>
<tr>
<td>Kocide® DF [M1]</td>
<td>2.0 lbs</td>
<td>Other Fixed Coppers</td>
</tr>
<tr>
<td>Captain® 50W [M4]</td>
<td>2.0 lbs</td>
<td>General Protectant</td>
</tr>
<tr>
<td>Ziram® 76DF [M3]</td>
<td>5.0 lbs</td>
<td>General Protectant</td>
</tr>
<tr>
<td>* (Except for Strawberry use Thiram®)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur 95W [M2]</td>
<td>3.0 lbs</td>
<td>General Protectant</td>
</tr>
<tr>
<td>* (Grape variety sensitivity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rally® 40W [3]</td>
<td>4.0 ozs</td>
<td>Powdery Mildew &amp; Black Rot</td>
</tr>
<tr>
<td>Pristine® [7/11]</td>
<td>14.5 ozs</td>
<td>Fruit Rot, Fruit Spots, Powdery &amp; Downy Mildew &amp; Cane Blight</td>
</tr>
<tr>
<td>Elevate® 50 WG [17]</td>
<td>1.5 lbs</td>
<td>Botrytis &amp; Powdery Mildew</td>
</tr>
<tr>
<td>Switch® 62.5 WG [9/12]</td>
<td>11.0 ozs</td>
<td>Anthracnose, Mummy Berry, Phomopsis, Sour Rot &amp; Botrytis</td>
</tr>
<tr>
<td>Phostrol® [33]</td>
<td>4.0 pts</td>
<td>Downy Mildew &amp; Red Stele</td>
</tr>
</tbody>
</table>

### INSECTICIDES: [IRAC]

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provoado® Admire® [4A]</td>
<td>4.0 ozs</td>
<td>SWD, Grubs, Aphids, Hoppers, Curculio &amp; Whitefly</td>
</tr>
<tr>
<td>or Actara® [4A]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brigade® 1WB [3]</td>
<td>12.0 ozs</td>
<td>BMSW, SWD, Clipper Beetle, Plant Bug, Mites &amp; Root Weevil</td>
</tr>
<tr>
<td>Malathion® [1B]</td>
<td>2.0 pts</td>
<td>SWD, Scale, Fruit Moths &amp; Whitefly</td>
</tr>
<tr>
<td>Sevin® 50W [1A]</td>
<td>4.0 lbs</td>
<td>SWD, Japanese Beetles, Hornets &amp; Sap Beettle</td>
</tr>
</tbody>
</table>

*Rate for 50-100gal Acre Concentrate Spray

**Be sure to follow all labels closely for PHI and REI!**

### Multi-Small Fruit Spray Calendar*

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 5</td>
<td>Spring Dormant Spray</td>
</tr>
<tr>
<td>April 10</td>
<td>Early Strawberry Bloom</td>
</tr>
<tr>
<td>April 15</td>
<td>Strawberry Bloom/ Blueberry Early Bloom</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</td>
</tr>
<tr>
<td>May 15</td>
<td>Strawberry 2nd Cover &amp; Harvest Spray/ Bramble Cane Development</td>
</tr>
<tr>
<td>June 1</td>
<td>Strawberry 3rd Cover &amp; Harvest Spray/Blueberry 2nd Cover/Grape 1st Cover/Grape Bloom Spray/Bramble Cane</td>
</tr>
</tbody>
</table>

### HERBICIDES: [HRAC]

<table>
<thead>
<tr>
<th>Product</th>
<th>Rate</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gramoxone® [22]</td>
<td>1.0 qts</td>
<td>Burndown, Directed Spray</td>
</tr>
<tr>
<td>Roundup® [9]</td>
<td>1.0 qts</td>
<td>Burndown, Shielded &amp; Directed Spray</td>
</tr>
<tr>
<td>Devrinol® 50 DF [15]</td>
<td>4.0 lbs</td>
<td>Spring/Summer 35-day PHI</td>
</tr>
<tr>
<td>Princep® 4L [5]</td>
<td>1.0 qts</td>
<td>Spring Dormant, Avoid High pH Soils</td>
</tr>
<tr>
<td>Soloram® [12]</td>
<td>2.5 lbs</td>
<td>Spring/Fall Dormant, 1-yr Established</td>
</tr>
<tr>
<td>Aim® [14] or Shark® [14]</td>
<td>2.0 ozs</td>
<td>Directed Spray to Weeds, 3-day PHI</td>
</tr>
<tr>
<td>Venue® [14] (Grapes only)</td>
<td>2.0 ozs</td>
<td>Directed Spray, 0-day PHI</td>
</tr>
<tr>
<td>Chateau® [14]</td>
<td>12.0 ozs</td>
<td>After Harvest to Spring Bud Swell</td>
</tr>
<tr>
<td>Surflan® [3]</td>
<td>2.0 qts</td>
<td>Spring/ Summer, Prowl 60-day PHI</td>
</tr>
<tr>
<td>Paste® [1]</td>
<td>1.5 pts</td>
<td>Summer Grasses, Variable PHI</td>
</tr>
<tr>
<td>Sinbar® [5]</td>
<td>4.0 ozs</td>
<td>Fall Dormant, 1-yr Established</td>
</tr>
</tbody>
</table>

*Lowest Use Rate Recommended Initially

### Organic Approach Substitutions:

<table>
<thead>
<tr>
<th>Conventional Product</th>
<th>Organic Certified Product (OMRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captain®</td>
<td>Surround® or Sulfur or Lime Sulfur</td>
</tr>
<tr>
<td>Rally®</td>
<td>Kaligreen (Powdery Mildew Eradicant)</td>
</tr>
<tr>
<td>Listed Insecticides</td>
<td>Neem® or Pyganic® or Entrust® or Dipel®</td>
</tr>
<tr>
<td>Gramoxone® or Roundup®</td>
<td>Avenger®, Burnout® or Scythe® (no OMRI label)</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 dates accordingly. The above recommendations very closely reflects 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
myersrd@umd.edu
Spray Program for Multi-Tree Fruit Orchards

Many local orchards are composed of multi-tree fruit combinations providing fresh market apples, peaches, pears, plums, nectarines, and cherries. Aggressive fruit tree spray programs 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 fruit orchard spray program for the control of major tree fruit pests and diseases may offer some assistance: Labeled as noted in 2015 for All Tree Fruit – Pomes: Apples & Pears:

Peaches, Plums, Nectarines, and Cherries.

FUNGICIDES: [FRAC] RATE NOTES

Captain® 80WG [M4] 3-5.0 lbs General Protectant
(Not Labeled for Pears; Reduce Rates for Cherries)

Dormant Oil [NC] 4.0 gal Apply Temp 35-85°F

Kocide® DF [M1] 6.0 lbs Other Fixed Coppers
(Stones: Dormant Spray Only)

Rally® 40W [3] 4.0 ozs Powderly Mildew

Sulfur 95W [M2] 3.0 lbs General Protectant

(Stones: Dormant Spray Only)

Pristine® [7/11] or 14.5 ozs Brown Rot, Peach Scab &
(Pome except Plums)

Indar® 2F [3] 6.0 ozs Powderly Mildew & Rusts

Topsink-M™ 70W [1] 8.0 ozs General Protectant

Ziram 76DF [M3] 5.0 lbs Dormant Peach Leaf Curl
(Capent Substitute for Pears)

Agrimycin® 17 W 24.0 ozs Fireblight Control
(Apples & Pears Only)

INSECTICIDES: [IRAC] RATE NOTES

Imidan® 70W [1A] 2.0 lbs Curullo, SWD, Scale &
Fruit Moths

Warrior® [3] 4.0 ozs Borers, Curullo, SWD, BSMB
or Tombstone® [3]

Actara® [4A] 4.5 ozs Aphids & Curullo

Lorsban® 4E [1B] 1.5 qts Dormant & Trunk Borer

Agrimycin® 50WS [25] 1.0 qts Mites Only

Sevin® 50W [1A] 4.0 lbs SWD, Japanese Beesles,
(Apple Thinning Agent)

Hornets & Sap Bejes

*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
Apple Tight Cluster
Captain® 80WG 3.0 lbs

April 15 - Peach Fall Spray
Apple Bloom
Captain® 50W 3.0 lbs

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

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

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

June 1 - 3rd Cover Spray
Captain® 80WG 3-4.0 lbs
Topsink-M™ 70W 8.0 ozs (Apple Scab Resistance Likely)
Imidan® 70W 2.0 lbs (Curullo, Scale & Fruit Moths;
PHI: 7-Days Pomes, 14-Days Stones)

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

July 1 - 5th Cover Spray
Early Peach Harvest
Captain® 80WG 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 (Borers, Curullo & Fruit Moths –
7-day PHI)

July 15 - 6th Cover Spray
Peach Harvests
Captain® 80WG 3-4.0 lbs (0-day PHI; 1-day REI);
or Pristine® 14.5 ozs (Stones 0-day PHI)
Sevin® 50W 4.0 lbs (Japanese Beetle & Moths –
3-day PHI for All Fruit)

August 1 - 7th Cover Spray
Peach Harvests
Captain® 80WG 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)

September 1 - 9th Cover Spray
Apples and Pears Only
Captain® 80WG 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 Borers)

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 Soil
Solinex® [12] 2.5 lbs Spring/Fall Dormant, 1-yr Established Spray
Goal™ or Galigan® [14] 2.0 pts After Harvest to Spring Bud Swell
Chateau® [14] 12.0 ozs After Harvest to Spring Bud Swell
Aim® or Shark or Venue [14] 2.0 ozs Directed Spray, 0-3 Day PHI
Matrix® [2] 4.0 ozs Late Spring, 1-yr Established Spray
Post® [1] 1.5 pts Summer Grasses, Variable PHI
Karmex® [7] or Diuron® [7] 1.6 qts Spring/Fall Dormant, 3-yr Established

*Lowest Use Rate Recommended Initially

Organic Approach Substitutions:

<table>
<thead>
<tr>
<th>Conventional Product</th>
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<tbody>
<tr>
<td>Captain® &amp; Topsink-M™</td>
<td>Surround® or Sulfur or Lime Sulfur</td>
</tr>
<tr>
<td>Rally®</td>
<td>Kailigreen (Powdery Mildew Eradicant)</td>
</tr>
<tr>
<td>Listed Insecticides</td>
<td>Neem® or Pygaic® 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>Avenger®, Burnout® or Scythe® (no OMRI label)</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 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”.

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