



Spring 2012



Greetings,

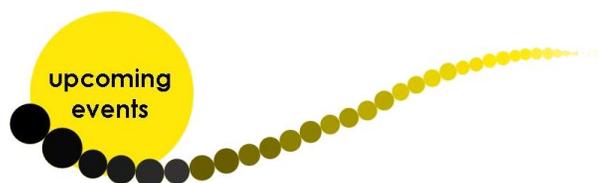
Be on the lookout for increased pest populations this spring. The wet conditions in the fall most likely hampered the populations of many overwintering pest, however those that did survive the fall rains had a better chance to make it to spring given the mild conditions. Aphids and thrips may have been able to survive the winter temps in many areas; both can carry diseases into the next season. There are reports of higher than normal populations of the adult fly of the seed corn maggot actively laying eggs. The seed corn maggot is most prevalent in soils with recent manure or decomposing cover crops. The maggot will infest seedling roots causing seedling decline and/or death.

The economic outlook calls for increasing prices in oil, which will result in increased input costs of fertilizers, fuel, and chemicals. Increases in commodity prices with more corn going to ethanol may offset these increases for some. Crop insurance election for summer crops is due March 15. Now is the time to review your options if you use crop insurance.

The first issues of Fruit and Vegetable News and the Agronomy News, a statewide newsletter for our Maryland agriculture family, will be released in mid-March. This is an initiative of University of Maryland Extension's, Agriculture & Natural Resources Profitability Impact team. The newsletters will be published twice a month during the growing season and will include topics pertinent to agronomic crop production, marketing

and local issues. In Southern Maryland, the hardcopy edition of the newsletter will be sent from the St. Mary's County Extension office. There will also be a companion statewide Vegetable and Fruit Newsletter that will be sent to applicable growers. You may elect to receive either newsletter electronically via email which is quicker and less expensive. To be added to the email list, please send a message to bbeale@umd.edu.

As the next new growing season gets under way, the University of Maryland Extension is committed to providing support for your production agriculture needs to help you, our state and the nation succeed. We are at your doorsteps with offices in every county of Maryland. Let us know how we can be of help. Have a great growing season!



March 10, 2012

Equine Planning Seminar 10:00 a.m. – 12:00 p.m.

March 23, 2012

Poultry and Rabbit Processing Certification Training- 9:00 a.m. – 4:00 p.m.

March 24, 2012

Small Flock Poultry Party

March 26, 2012

Nutrient Voucher Training 5:00-6:30 p.m.
Pesticide Recertification Training 6:30-8:30 p.m.

April 13, 2012

Live On-Line Session, Nutrient Applicator Voucher Recertification 4:00-6:00 p.m.

April 20, 2012

Live On-Line Session, Private Pesticide Applicator Recertification 4:00-6:00 p.m.

April-May

Beginning Farmer Workshop Series

**Equine Planning Seminar
March 10, 2012**

*Presented by: St Mary's Soil
Conservation District*

When: Saturday, March 10th, 2012

Time: 10:00 a.m.-12:00 p.m.

Location: St. Mary's Agricultural Service Center,
Conference Room, Suite C; 26737 Radio Station
Way, Leonardtown, MD 20650

Registration Starts at 9:30 a.m. ♦ Free Admission

LEARN ABOUT:

- ♦ Pasture & Hay Management ♦ Rotational
Grazing ♦ Composting
- ♦ Soil Testing ♦ Nutrient Management ♦ Weed
Management ♦ Equipment Rental

Seating is Limited. Please RSVP by March 8th.

To RSVP contact Sara Lewis at
240-925-2397 or Sara.Lewis@md.nacdn.net or
Online: <http://stmarysscd.com>

**Poultry and Rabbit
Processing Certification
March 23, 2012**

The Maryland Department of Agriculture
(MDA) in partnership with University of
Maryland Extension and the Southern
Maryland Agricultural Development
Commission (SMADC) will conduct training
for on-farm poultry and rabbit slaughter and
processing on **March 23, 2012 from 9 a.m.
to 4 p.m.** at University of MD Extension
Community Resource Building, 30 Duke

Street, MD 20678, in Prince Frederick
(Calvert county).

This one-day workshop is mandatory for
producers who want to become certified to
slaughter their poultry and/or rabbits for sales
(off farm) at farmers' markets, to retailers and
to restaurants in Maryland. (Producers selling
their poultry and/or rabbits directly to
consumers on the farm are not required to
take this training or be certified). To become
certified, producers must:

- complete the training
- pass a brief test at the training
- submit an application for certification
along with a \$75.00 annual fee
- be inspected by MDA

The training and certification program is
great opportunity for small agricultural
businesses to expand into new markets and
meet the increasing consumer demand for
farm fresh, local products.

**To request information please contact
Sherry Weygant (MDA) at 410-841-5769,
or email weygansl@mda.state.md.us** or
contact Susan McQuilkin (301) 274-1922, Ex.
1. **Deadline for registration: March 16,
2012.** Registration fee is \$20 per person
which includes lunch and training materials.
Training registration fee is \$20 per person
which includes lunch and training materials.
Make checks payable and mail with
registration form to: MDA, FQAP, 50 Harry S
Truman Parkway, Annapolis, MD 21401

**Small Flock Poultry Party
March 24, 2012**

University of Maryland Extension is offering an educational, fun-filled workshop for small flock poultry owners. Raising a home poultry flock can be a very rewarding small business or hobby the entire family can enjoy. But a healthy productive flock depends on good management practices and disease prevention.

Attend the Small Flock Poultry Party and have your poultry questions answered by poultry experts and specialists. Topics will include poultry diseases, flock nutrition, farm management, chicken breeds, egg candling and more!

Date: March 24, 2012

Time: Registration begins at 8:00 a.m.

Adults: \$10

Youth (10 – 18 years): \$5

Children 10-under: Free

Workshop: 8:30 a.m.-3:00 p.m.

Location: St. Mary's Agriculture Service Center

<http://stmarysscd.com/Directions.htm>

(for driving directions)

26737 Radio Station Way

Leonardtown, MD 20650

Lunch and snacks will be provided. Please register in advance by calling 410-742-1178. For more information contact Jennifer Timmons at 410-742-1178 ext. 309 or by e-mail at mdchick@umd.edu. Registration deadline is **March 20, 2012**.

**Nutrient Voucher
Training and Pesticide
Recertification Training
March 26, 2012**

On **March 26, 2012** a Pesticide Recertification Training class will be held at the Charlotte Hall Library. The Recertification class will be held from 6:30 p.m. to 8:30 p.m. Please call to register at 301-475-4484.

St. Mary's Extension Office will also host a Nutrient Voucher Training the same evening from 5 p.m. to 6:30 p.m. This class will provide the required credits for Nutrient Voucher holders. If your Nutrient Voucher expires this spring, you may consider attending this update class.

**Live On-Line Session
Nutrient Applicator
Voucher Recertification
April 13, 2012**

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in the On-Line Nutrient Applicator Voucher Recertification Training, scheduled for **April 13, 2012 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 11th 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 410 222-6759.

**Live On-Line Session
Private Pesticide
Applicator
Recertification
April 20, 2012**

If you would like the opportunity to learn from home, yet still be engaged, then be sure to enroll in this New On-Line Private Pesticide Recertification Training, scheduled for **April 20, 2012 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 18th 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 410 222-6759.

**Small Ruminant
Workshop
April 25, 2012**

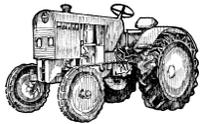
Susan Schoerian, UMD Small Ruminant Specialist, will join us on April 25 for a production update from 5:00-6:00 p.m. followed by an open discussion on the sheep and goat industry in Maryland from 6:00-7:30 p.m..

**Beginning Farmer
Workshop Series**

Are you a beginning farmer? Or are you thinking about starting a farm, but need advice on how to get started and what resources are available? Participants can expect an intensive overview of the local agriculture industry, including classroom instruction on site selection, growing crops, raising livestock, understanding different agencies and resources available. Participants will also learn the basic skills required to operate a farm including basic mechanics, arc welding, equipment selection and operation. See page 12 for more information.

Farm Equipment Available for Rent

New conservation tillage equipment and specialty farm implements are now available to farmers throughout the Southern Maryland region, due in part to grants from the



Southern Maryland
Agricultural Development
Commission (SMADC).

SMADC has compiled a complete inventory of new and existing equipment available throughout the five Southern Maryland counties hosted at www.smadc.com.

Here is a quick summary of available equipment for rent through the St. Mary's Farm Bureau:

Equipment available through the St. Mary's County Farm Bureau.

The Farm Bureau equipment is stored at Guy Brothers Implements, 23480 Budds Creek Road, Clements, MD 20624. Guy Brothers has agreed to store in order to support the local farm community.

For rental information contact: Joe Wood - (301) 481-5544 (c) or (301) 884-3086 (h)

2 Row No-till Vacuum Seed Planter: Mater Mac. This planter can be used for direct seeding most vegetable crops, either no-till or conventional till. Common crops planted with this unit include sweet corn, beans, peas, squash, pumpkins, winter gourds, broccoli, and watermelon. Unit comes with various size seed plates. Requires a three point hitch with PTO.

Raised Bed Plastic Mulch Layer: Rainflo 2600. This is a heavy duty 8 inch raised bed plastic mulch layer with drip tape attachment. Use for making raised beds, laying plastic and drip tape in one pass. Farmer will need to purchase drip-tape and plastic. Requires a three point hitch and at least a 55 hp tractor.

Mulch Planter: This unit sets transplants through plastic. It is set up with water barrels and for twin rows. This is not a water wheel transplanter. Two person ride on the unit, place plants in planting cup. The planter punches through the plastic and sets the transplant. While the transplanter is most useful for planting through plastic, it may also be used for bare ground transplanting. Requires a three point hitch

Plastic Mulch Lifter and Wrapper: This is a two unit set. The first unit slices and lifts the plastic mulch from the field. The second unit is used to wrap and collect the plastic from the field. Both units require three point hitch.

Direct Seed Planter: Ferris. This unit lays plastic and direct seeds crops into the plastic. It is most commonly used for early sweet corn planting through plastic. The planter can be modified by removing the plastic roller to direct seed into existing plastic. It is best used on flat beds. This unit will take time to set-up but can be very useful for direct seeding larger fields.

Grain Vacuum: This unit is used to move grain from one area (truck or bin) to the next. Unit comes with suction and discharge lines. Will move about 1200 bushels per hour. Often used to clean out grain bins. Self contained unit with own motor.

Equipment Available through the St. Mary's Soil Conservation District:

The St. Mary's Soil Conservation District has several pieces of equipment available for rent. Call (301)475-8402 ext 108 for more information. Rental rates are \$25 per day plus \$10 per load or acre. The post driver is \$150 per day.

No-Till Drill – 10 foot, John Deere, #1590

Manure Spreader – 16 foot Gehl side discharge.

Turbo Till—12 foot, heavy duty package

No-Till Drill – 7 foot ft, Great Plains

Pasture Seeder – 6' Frontier

Post Driver –Trailer mounted, Self contained unit with own motor. Shaver model.

Sweet Corn Insect Pest Control – New Transgenic Technology

Galen P. Dively
Department of Entomology,
University of Maryland

Sweet corn producers must rely on timely pest monitoring and effective insecticide sprays to minimize ear damage by corn earworm, European corn borer, and fall armyworm. The fresh market and processing industry can tolerate only minimal damage to the ears. Pyrethroids are the popular choice for worm control but efficacy has declined in recent years due to resistance in corn earworm populations. Spray mixtures of Lannate or Larvin plus a pyrethroid have become a common practice to circumvent a potential



resistance problem. Also, rotations and mixtures with the newer but more expensive insecticides such as Coragen, Belt and Radiant, as well as some premix products (i.e. Voliam Xpress, Hero EC) are recommended options and provide excellent control. However, despite what insecticide is used, timing the first spray at the first signs of silking, followed by a prescribed schedule based on moth pressure, and adequate spray coverage of the ear zone are critical steps to achieve effective control. For example, most corn earworm eggs are oviposited directly on sweet corn silks; once larvae hatch, they quickly move down the silk channel, and begin feeding on the ear tip, where they are protected from insecticidal sprays. It is thus important to maintain a residual level of insecticide on silk tissue at all times.

These problems with conventionally applied insecticides have been solved by transgenic delivery of insecticide within the sweet corn plant. As an alternative, the most potent bioinsecticide for sweet corn insect control is provided by transgenic hybrids expressing one or more insect-active toxins from the bacterium, *Bacillus thuringiensis* (Bt sweet corn). Attribute® Insect Protected hybrids from Syngenta Seeds have been commercially available since 1996. Acreage of Bt sweet corn has increased significantly in recent years with the introduction of improved ROGERS® Brand fresh market hybrids. The availability of seed in 25K units has also made it easier for the small producer to use the Bt technology. Attribute Bt hybrids express a single Cry1Ab toxin (event Bt11) that is highly effective against European corn borer but this toxin alone does not provide 100% control of corn earworm or fall armyworm. Based on multiple-year field trials in Maryland, Attribute® hybrids eliminated all whorl treatments and reduced silk sprays by at least four applications. Although these hybrids provide excellent protection against the caterpillar complex, two and sometimes

three supplemental insecticide sprays are needed to ensure fresh market quality ears, especially during high moth activity. Moreover, corn earworm populations may be developing tolerance to the Cry1Ab toxin in mid-Atlantic region, where this insect successfully overwinters.

Biotech and seed companies are continually working on new Bt gene combinations in corn to broaden the spectrum of activity and to prevent resistance development. The development and commercialization of new Bt field corn events by Syngenta Seeds have isolated a novel vegetative insecticidal protein from *B. thuringiensis* – Vip3A (MIR162 event). This toxin is highly effective against a range of agriculturally important lepidopteran larvae including black cutworm, fall armyworm, corn earworm, and western bean cutworm. In field studies conducted in Maryland and Minnesota, hybrids expressing the Vip3A trait and pyramided with the Cry1Ab Bt protein were compared to near isogenic non-Bt hybrids. Over all years and locations, the non-Bt hybrids, without insecticide protection, averaged between 43 and 100% ears infested with a range of 0.24 to 1.74 *H. zea* larvae per ear. By comparison, no larvae were found in the pyramided Vip3A x Cry1Ab hybrids, indicating virtually 100% of all lepidopteran larvae. Compared to the single gene Bt11 event, this combination of Bt proteins significantly increases control efficacy against a broader spectrum of lepidopteran pests for several reasons. First, the MIR162 event has been shown to express a high dose of Vip3A protein against fall armyworm and a “near high dose” against corn earworm. Second, the average expression per ear in the endosperm of the kernels is higher due to the segregation pattern of the two independent genes encoding the Cry1Ab and Vip3A proteins compared to the segregation pattern of a single gene. For example, Attribute Cry1Ab sweet corn hybrids are hemizygous

for the Bt11 trait. Due to open pollination and gene segregation in the ear, approximately 75% of the kernels per ear will express the Bt11 trait (50% hemizygous and 25% homozygous) while 25% of kernels will not inherit the gene.²³ This is true for any single insect resistance trait sold as a hemizygous hybrid Hybrids containing two unlinked insect resistance traits, such as the pyramided Bt11 x MIR162 hybrids will have only 6% of the kernels that will not inherit at least one trait, with 94% expressing either the Cry1Ab, the Vip3A or both insecticidal proteins. This is an important point because larvae hatching later in the crop cycle can invade the ear without feeding on silk tissue, depending on the ear tip coverage and tightness of the silk channel. Reducing the number of non-protein expressing kernels increases the average expression per ear as well as the likelihood of larval mortality via consumption of protein expressing kernels. The pyramided Vip3A x Cry1Ab hybrids will be marketed under the Attribute II trade name and Syngenta Seeds plans to commercialize this next generation technology in sweet corn in 2013 .

Monsanto’s Seminis Seeds also has developed and is marketing pyramided Bt sweet corn under the Performance Series trade name. Bt hybrids available are Temptation, Obsession, and Passion. These hybrids express three insecticidal proteins: Cry1A.105 and Cry2Ab (events MON89034/ MON88017) to control lepidopteran larvae, and Cry3Bb1 to control rootworms, as well as herbicide tolerant traits. Maryland studies have shown that the Performance Series hybrids provide virtually 100% control of corn borers and fall armyworms and more than 95% control of corn earworms, of which the few surviving larvae were small and caused only minor injury on the ear tip. Depending upon insect pressure, Performance Series hybrids may show some minor ear damage compared with the Attribute II sweet

corn. The reason is that the toxin expression per ear is lower than Attribute II because the Cry1A.105 and Cry2Ab genes were vectored into the plant as a coupled transgene and thus the segregation pattern in the same as the segregation pattern of a single gene (that is 25% of kernels do not express).

The Attribute II and Performance Series sweet corn hybrids ideally fit the IPM philosophy by combining host plant resistance traits, different modes of action to prevent resistance, and a reduced risk bioinsecticide, and by providing an environmental safe option to conserve beneficial insects. Clearly, the Bt technology can significantly reduce pesticide use and control costs, but control efficacy may vary under adverse growing conditions or very high insect pressure. And finally, the Bt hybrids will not be insect pest free, so regular monitoring of insect pests not affected by the expressed proteins will be essential for successful IPM.

**Maryland FarmLINK is
Getting Even Better!**

A little more than a year ago, the Southern Maryland Development Commission (SMADC) rolled out the Maryland FarmLINK website. SMADC was formed just over a decade ago to administer the tobacco buyout program and assist the community in transitioning from a tobacco-based economy to new enterprises.

SMADC's commitment is 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.

Despite successes in these areas, SMADC realized that the buyout participants were getting older and feared that a great deal of farmland would be sold for development as farmers got their last buyout checks. MD FarmLINK was developed to:

- connect existing retiring farmers with new farmers,
- help with training and mentoring of new farmers, and
- provide information and links to resources for farmers.

In November, SMADC brought on Greg Bowen to strengthen the resources on Maryland FarmLINK and to increase its utilization. Since then, we are seeing new changes and improvements to the website. First, a new workshop page has been added and staff is working to see that all farmer workshops are being posted in a timely fashion with the information that interested participants may need. Next, there are more forum posts, with new farm discussion topics. Finally, staff is tweeting hot farm news stories and maintaining a facebook page. Both of these forms of social media are linked to our Maryland FarmLINK page.

We are working to make Maryland FarmLINK the one-stop shop online forum to find or market properties for sale or lease, to seek out experts for advice, to join a farm discussion, and to find workshops, tools, and organizations to assist you. Check us out at <http://www.marylandfarmlink.com/> !



Home Grown Farm Market

21078 Three Notch Road,
Lexington Park, Maryland

The Home Grown Farm Market is a producer only market aimed at providing fresh produce, flowers, plants, meats, cheeses and baked goods to the Southern Maryland community while promoting sustainable agriculture.

HOURS OF OPERATION:

Spring Season - **March 31, 2012 until July 7, 2012** on **Saturdays only** from **9 am to 1 pm**.

Peak Season - **July 10, 2012 until November 3, 2012** on **Tuesdays** from **11 am to 3 pm**, **Thursdays** from **2 pm to 6 pm**, and **Saturdays** from **9 am to 1 pm**.

Winter Season - **November 10, 2012 until December 31, 2012** on **Saturdays only** from **9 am to 1 pm**

New Vendor Open House
March 20, 2012 at 6:30p.m

For more information:

Email: homegrownfarmmarket@gmail.com

Facebook: [facebook.com/homegrownfarmmarket](https://www.facebook.com/homegrownfarmmarket)

Twitter: twitter.com/HomeGrownFarm

Pumpkin Virus Diseases: How to select new cultivars with virus resistance

*Kathryne L. Everts, Gerald Brust,
and Karen Rane
University of Maryland;
Mark VanGessel, and Barbara
Scott, University of Delaware*

Although there are approximately thirty virus diseases of pumpkin (*Cucurbita* spp.) reported worldwide, only four or five virus diseases are considered to be problematic in the mid-Atlantic. These include *Watermelon mosaic virus* (WMV, which was formerly called WMV-2) *Papaya ringspot virus* type W (PRSV-W, which was previously called *Watermelon mosaic virus* 1 or WMV-1), *Zucchini yellows mosaic virus* (ZYMV), and *Cucumber mosaic virus* (CMV).

Few options have been available to manage virus diseases. The main recommendation has been to plant pumpkins as far away as possible from other cucurbit crops to minimize the spread of infected aphids into a pumpkin planting. Recently, virus host resistance in pumpkin has become available in a few cultivars. It is expected that in the future many, if not most, pumpkin cultivars that will be grown commercially will have virus resistance.

In order to benefit from the use of the new cultivars, growers will need to know what virus diseases are present in their area. However, identification of pumpkin virus diseases is difficult because the diseases cannot be identified reliably by their symptoms. CMV, PRSV-W, WMV and ZYMV may exhibit different symptoms at times, and at other times have overlapping

symptoms. Mixed infections also may yield unusual symptoms.

Previous surveys throughout the eastern U.S. indicated that the most prevalent cucurbit viruses vary both temporally and geographically.

We conducted a survey in Maryland and Delaware in 2008 and 2009. The objective of the survey was to determine the prevalence of virus diseases on pumpkins in Maryland and Delaware to assist pumpkin growers in selection of cultivars with virus resistance for the region.

In both years, the most common virus disease in Maryland and Delaware was WMV. ZYMV was also prevalent in 2008 and PRSV in 2009. So to benefit our region, cultivars should have had a minimum of WMV resistance. ZYMV and PRSV resistance would also be beneficial in our region.

When the project began, there were no commercially available pumpkin cultivars with multiple virus resistance. Magician, which was available, was resistant only to ZYMV, and often developed severe virus symptoms in our region. Recently, Hollar Seeds and Seigers have introduced 'Corvette' which has tolerance to WMV and ZYMV. Outstanding Seed Company, LLC has introduced 'Triumph', which has intermediate resistance to WMV, PRSV and ZYMV. 'Orange Bulldog', which was developed at the University of Georgia, is also available and has virus tolerance (virus not specified).

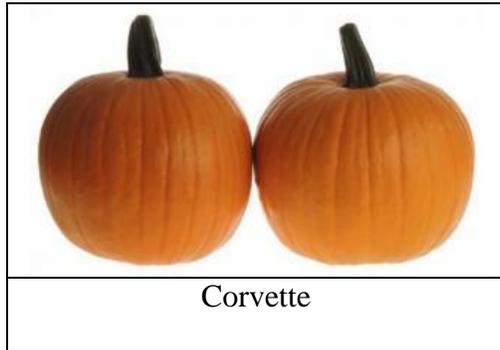
These cultivars are not yet recommended due to lack of field testing. However, our survey results indicate that a cultivar with WMV and ZYMV tolerance, such as Corvette or Triumph, would perform well (in terms of reduced virus disease) in our region.

Nutrient Management Plan Update Spring 2012

Now is the perfect time to update your Nutrient Management Plan before you get the next crop in the ground. Please remember that regulations do not allow us to write your plan for the 2012 season after the crop has been planted. After the crop has been planted we can only provide recommendations for the following year. Below is a list of items that will need to be addressed in order to update your plan:

- 1. Soil tests** must be less than three years old.
 - Fields with differing crop or nutrient application histories, as well as differing soil types should be sampled separately.
 - Please keep in mind that Pastures should be sampled as well, even if no nutrients are currently being applied.
 - We have plenty of soil sampling supplies here in the office that you may use.
- 2. Manure samples**, if applicable, must be taken every year, and analyzed before manure is spread.
 - If manure is collected from animals and spread onto crop or pastureland, samples of that manure must be analyzed before spreading.
- 3. Animal units**, if applicable, should be documented.
 - Type of animal, average weight, confinement time, and bedding material.
- 4. Field histories** should be updated, showing crops from previous years.
 - Multiple cropping scenarios can be planned for. A plan can be developed that covers many different crops that you may want to plant in each field!
 - Manure/Sludge, as well as Legume histories should be documented.
- 5. Yield Goals** for every crop should be developed based on prior yield records.
 - If you are unsure, or have no realistic yield goals developed, we can help!

Plans should be updated **every year**, depending on the type of operation. please give Adam a call at (301)-475-4480, or email at adamlyon@umd.edu and he will do his best to meet your needs.



Cultivar	Size (lbs.)	Days to Maturity	Powdery Mildew Tolerance	Virus Resistance	Field Tested
Corvette PMR	12-15	110	Yes	Tolerance to WMV and ZYMV	No*
Triumph (<i>Cucurbita maxima</i>)	30-40	115	Yes	Intermediate resistance to WMV, ZYMV and PRSV	No
Magician	8-16	110	Yes	Intermediate to ZYMV	Yes
Orange Bulldog (<i>Cucurbita maxima</i>)	10	Not found	Yes	Intermediate virus resistance (specific virus unknown)	No

*No indicates that the cultivar has not been tested for horticultural traits in the mid-Atlantic region.

Beginning Farmer Workshop Series

St. Mary's Agriculture Service Center
5:00-8:30 PM

The Nuts and Bolts of Farming in Southern Maryland

Workshop to be conducted by **Ben Beale**; Extension Educator for UME-St. Mary's and other invited speakers. For further information or to register call **301 475 4484**. Program cost: \$30.00. Light dinner will be provided. April 3rd, 24th, 26th, and May 3rd will be held at the Agriculture Service Center in Leonardtown. Other dates to be held at an off-site location.

April 12, 2012

Introduction and Overview

- What does it mean to be a farmer?
- Review of farming statistics in St. Mary's
- Setting some realistic goals
- Walk the walk, and talk the talk

April 19, 2012

The Practical Side of Farming: Learn how to weld, use a cutting torch, and perform minor repairs to farm equipment.

Dress accordingly. To be held at a local machine shop.

April 24, 2012

Focus on Livestock Production: Goats, Sheep, Cattle, Poultry

Pasture Management

- Species selection
- Understanding growth patterns
- Grazing management
- Palatability and nutrition
- Making pastures last

April 26, 2012

Focus on Crops:

Vegetable Production

Small Fruit Production

Field Crop Production

- Soil fertility
- Pest management-identification and control
- Growing Practices
 - Variety selection
 - Production practices
 - Drip and plasticulture

May 3, 2012

Connecting the Dots:

- Overview of sources for farm supplies, equipment and services for the farm community.

Overview of services offered by various agencies:

- Soil Conservation Programs
- University of Maryland Extension
- Agricultural Land Preservation
- Farm Service Agency Programs
- Southern Maryland Ag Commission
- Colonial Farm Credit
- Farm Bureau
- Local Farmers' Markets

May 10, 2012

Tractor and Equipment Selection.

Learn how to safely operate farm equipment. To be held at a local farm or equipment dealership. Dress accordingly.

Optional Add-On Activities:

Poultry Production Workshop: March 24, 2012, Leonardtown

Small Ruminant Workshop: April 25th, Leonardtown

Production Updates 5:00pm-6:00pm

Open Discussion on Expanding Sheep and Goat Production in Southern Maryland 6:00pm-7:30pm

Tour of Loveville Produce Auction: May 4th, Loveville, MD

Small Fruit Learning Day: May 8th, Upper Marlboro Research Farm

On the Lighter Side

TOP 10 REASONS FARM TRUCKS AREN'T STOLEN:

#10 They have about 20 miles before they overheat, breakdown or run out of gas.

#9 Only the owner knows how to operate the door to get in or out.

#8 It is difficult to drive fast with all the fence tools, grease rags, ropes, chains, syringes, buckets, boots and loose papers in the cab.

#7 It takes too long to start, and the smoke coming up through the rusted-out floorboard clouds your vision.

#6 The Border Collie on the toolbox looks mean.

#5 They're too easy to spot. The description might go something like this:
The driver's side door is red, the passenger side door is green, the right front fender is yellow, etc.

#4 The large round bale in the back makes it hard to see if you're being chased. You could use the mirrors if they weren't cracked and covered with duct tape.

#3 Top speed is approximately 45 mph.

#2 Who wants to steal a truck that needs a year's worth of maintenance, u-joints, \$3,000 in body work, tail-lights and windshield?

#1 It is hard to commit a crime with everyone waving at you.

**Wishing you a good spring
and productive 2012!**



Benjamin E. Beale, CED Extension Educator
UME – St. Mary's County
Agriculture & Natural Resources

Adam Lyon, Nutrient Mgmt. Consultant
UME – St. Mary's County
Agriculture & Natural Resources

Jennifer Horton, Master Gardener Coordinator,
Program Assistant
UME – St. Mary's County
Agriculture & Natural Resources

Jamie Fleming, Administrative Asst. I
UME – St. Mary's County

EQUAL OPPORTUNITY PROGRAMS