



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 21, Issue 21

August 16, 2013

Vegetable Crops

Vegetable Crop Insects - Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu

Cole Crops

Continue to sample for cabbage looper, diamondback larvae, armyworms and Harlequin bug. Although the pyrethroids will provide control of Harlequin bugs they are not effective on diamondback. So be sure to scout and select controls options based on the complex of insects present in the field.

Lima Beans

Continue to scout for spider mites, stink bugs and lygus bugs. Be sure to sample for corn earworm larvae as soon as pin pods are present. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row. You will also need to watch for soybean loopers that can quickly cause defoliation.

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. We continue to see an increase in aphid populations. Treatments should be applied before populations explode and leaf curling occurs.

Snap Beans

Sprays are needed at the bud and pin stages on processing beans for corn borer control. An earworm spray may also be needed at the pin stage. You will need to check our website for the most recent trap catches to help decide on the spray interval between the pin stage and harvest for processing snap beans. Once pin pods are

present on fresh market snap beans, a 7 to 10-day schedule should be maintained for corn borer and corn earworm control.

<http://agdev.anr.udel.edu/trap/trap.php>

<http://extension.udel.edu/ag/insect-management/insect-trapping-program/ecb-and-cew-moth-catch-thresholds-for-processing-snap-beans/>

Spinach

As soon as the earliest planted spinach emerges from the ground, be sure to watch for webworms and beet armyworms. Both moths are active at this time and controls need to be applied when worms are small and before they have moved deep into the hearts of the plants. As a reminder, the pyrethroids have not provided effective beet armyworm control in past years. Remember that both insects can produce webbing on the plants and it is important to apply controls before any webbing occurs.

Sweet Corn

With the recent increase in corn earworm pheromone trap catches, be sure that a spray is applied as soon as ear shanks are visible on plants. If fall armyworms are present in the whorl, you will need multiple whorl sprays for this insect before the ear shank spray to achieve effective control and to prevent larvae from dropping into the ear zone. Once fields are silking, you will need to check both blacklight and pheromone trap catches for silk spray schedules since the spray schedules can quickly change. Trap catches are generally updated on Tuesday and Friday mornings

<http://agdev.anr.udel.edu/trap/trap.php>

<http://extension.udel.edu/ag/insect-management/insect-trapping-program/action-thresholds-for-silk-stage-sweet-corn/>

Lima Bean Curiosities - *Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu*

I have had very interesting conversations with growers, fieldmen, consultants, and extension staff about lima beans recently. There is a wealth of experience with this crop to be mined with the long history of production in the region.

One of the curiosities has been with how lima beans respond to cultivation. Growers have noted that after each cultivation lima beans really “jump”, going through a growth spurt. One of our consultants has noted that lima beans are one of the most responsive vegetable crops to cultivation. Yields are often increased by as much as 30% with cultivation. Is this related to plant responses to increased soil aeration, looser soil and better soil exploration by roots, or other factors? We don’t really know. We also do not know if some varieties are more responsive than others. However, this has implications for trying to grow high yielding lima beans in reduced tillage or no-till situations.

Past experience with no-till has shown that even with good weed control, yields are lower than conventional systems with cultivation, especially after small grain. Vertical tillage is also a common practice now and growers are interested in using these tools ahead of lima bean production in reduced tillage systems. However, the same problem applies, without cultivation, yield potential is lost. Use of cultivators designed for high residue and no-till situations can recover yield potential in such fields but you have now lost the advantage of no-till (reduced trips across the field, no soil disturbance). In addition, weed control can be a challenge in no-till and reduced tillage lima bean plantings.

A question we will be asking in our Extension and breeding programs and of growers is: Should we invest time and effort into testing breeding

material for better adaptation to no-till and reduced till situations?

An additional curiosity with cultivation has been that late cultivation is often advantageous, even if some damage is done because it opens up the crop to better aeration and in varieties that produce runners, removes the runners, concentrating set on the upright part of the plant. Little if any yield is lost with late cultivations. While several of our newer varieties (Cypress, Meadow, Maestro) do not runner much others such C-elite Select and 184-85 do produce some runners. It is interesting to note that in the past with varieties with heavy runnering, the common practice was to cut the runners off with discs.

Another curiosity is how lima beans respond to irrigation. While highest yields have been obtained in irrigated production, lima beans can be very productive in dryland plantings. Over-irrigation or improper irrigation of lima beans has caused increased pod disease pressure and seed quality issues (brown beans). Lima beans respond best to less frequent, heavier irrigations and need a greater drying period than other crops for disease management. More frequent, light irrigations can actually reduce yield.

Another curiosity is the great ability of lima beans to regrow after a harvest. The potential for a two-harvest system is there if we can get a better adapted, heat tolerant, early maturing variety to work with.

A final curiosity that we have seen in May plantings most years and in June plantings in years with very hot July and early August temperatures is that lima beans will drop most if not all immature pods, flowers, and buds if day temperatures exceed the mid-90s and night temperatures are high. In some years, harvest is delayed by 2-3 weeks because the first sets have been dropped. In other years, severe split sets occur. We have a narrow genetic base in the varieties that are currently available and they are not well adapted to our heat. To address this, efforts are underway to cross and select with heat tolerant types from the Caribbean, and the southern and southwestern U.S.

Lima Bean Downy Mildew and Other Pod

Diseases - Gordon Johnson, *Extension Vegetable & Fruit Specialist*; gcjohn@udel.edu and Nathan Kleczewski, *Extension Specialist - Plant Pathology*; nkleczew@udel.edu

Much of the information below was taken from the Commercial Vegetable Production Recommendations Publication <http://extension.udel.edu/ag/files/2012/03/Beans.pdf>.

Lima bean fields are flowering and setting pods currently and should be scouted in the next 4 weeks for the presence of downy mildew as well as white mold and *Phytophthora capsici*.

As we move into late August and September, cooler temperatures, heavy dews and fogs, continued rainfall in some locations during this wet 2013 season and the potential for heavy rains from tropical storms can be favorable for development of downy mildew in lima beans. Wet conditions also favor the development of other diseases, such as white mold, *P. capsici*, and *Pythium*.

Conditions for downy mildew are most favorable when fields receive 1.2 inches or more of rain within a 7-day period and when average daily temperature during this period is 78° F or less. Heavy dews and fogs reduce the amount of rainfall necessary to start infection. Temperatures over 90° F have broken the infection cycle in the past and an additional 7-day period with the above weather conditions is necessary to start infection again. Research is underway to verify temperature and moisture conditions favorable for downy mildew disease development and to develop improved predictive modes.

Race F was the only race of downy mildew identified in baby lima beans in the past 4 years in the region and most of our acreage is being planted to susceptible varieties (Cypress, Meadow, C-elite Select, Maestro, and 184-85 are all susceptible to race F). The M-15 variety that was planted on significant acreage in the past is resistant to race F of downy mildew (but not race E); however, it is not being planted currently to any extent.

Since environmental conditions vary from field to field and in different locations within a field, use the above information as a guideline. Fields that are not rotated and planted to susceptible varieties should be scouted regularly for disease occurrence.

Under favorable environmental conditions the following preventative fungicides are recommended: copper, fixed (Champ DP, 2.0 lb 58DF/A, Kocide 3000 1.25 lb DF/A or other labeled fixed copper product), Forum - 6.0 fl oz 4.18SC/A, Headline - 6.0 to 9.0 fl oz 2.1 EC/A, ProPhyt -3.0 to 4.0 pts/A, K-Phite -1.0 to 3.0 qt/A, Rampart -1.0 to 3.0qt/A, Phostrol -4.0 pt/A, or Ridomil Gold Copper--2.0 lb 65WP/A. Application at flowering or when pods are first forming is recommended if weather is favorable for disease.

If disease pressure is high, use Ridomil/Gold Copper, or the phosphonate fungicides (ProPhyt, K-Phite, Phostrol, and others).

Ridomil/Gold Copper and phosphonate fungicides provide some curative activity if applied at the first signs of disease. If downy mildew is present in the field do not use copper fungicides alone for curative control. Another product that is labeled on lima beans for white mold control is Omega, which has shown excellent control of downy mildew at the 8.0 fl oz/A rate when used as a preventative application where control of both white mold and downy mildew are targeted.

Phytophthora capsici will most commonly be found in low lying wet field areas, irrigation wheel tracks, and shaded field borders. In fields with a history of *P. capsici*, applications of Ridomil Gold Copper 2.0 lb 65WP/A or Forum 6.0 fl oz 4.18SC/A when applied for downy mildew may suppress the disease.

See the 2013 DE Commercial Vegetable Production Recommendations for more information on fungicides for lima beans.

Unusual Virus Found in Maryland Pumpkin

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

Last week I was in a pumpkin field that had foliar symptoms of a Potyvirus (Fig. 1), but also had some other strange foliar symptoms (Fig. 2). Foliar samples were sent off to Agdia, Inc. (Elkhart, IN) for virus testing. All samples tested positive for a potyvirus (most likely watermelon mosaic virus), and one field tested positive for a virus called Melon necrotic spot virus (MNSV). MNSV is in a family of viruses called carmoviruses, which have been reported worldwide, primarily in hydroponic and greenhouse cucurbit production. The virus is soil borne, which means it stays in the soil and is vectored by a soil inhabiting chytrid fungus, *Olpidium sp.* Chytrids are primitive root fungi that infect roots but usually do not cause serious damage on their own. When the fungus releases spores into the soil, the virus attaches itself to the outer shell of the spore. Then when the spore germinates and penetrates a healthy root, it transmits the virus into the plant. The virus can also be transmitted to other plants mechanically, such as when plant leaves rub together or during harvest activities. The virus can also be transmitted through infected seed. Symptoms of MNSV begin as tiny, clear, round spots, usually on the youngest leaves. These spots gradually enlarge, becoming brown in the centers (Fig. 2). Eventually, the brown spots expand and coalesce to the point that they resemble a foliar disease such as anthracnose (Figs. 2 and 3).

MNSV has been found on most cucurbits such as watermelon, cantaloupe, squash, pumpkin, and cucumber; usually under greenhouse situations. Although found on pumpkin, very little is known about this virus in field production. It was found in about 10% of the pumpkin fields in Oklahoma in 2011. At this point in time we do not think it presents much of a problem, except in certain scenarios. Growers who grow pumpkins (or any cucurbit) in a field on a very short rotation (1-2 years) or keep their own seed may have a greater chance for MNSV infection, which may show as virus-like or other odd unexplained foliar symptoms in the field early in the growing season, producing weaker plants and reduced

yield. If a grower had a situation like this it would be important for them to take a sample and test it for the presence of viruses. Longer rotations may be warranted if MNSV is found.



Figure 1. Potyvirus infection of pumpkin



Figure 2. Symptoms of MNSV infection of pumpkin



Figure 3. MNSV symptoms on a GH cucumber leaf

Fruit Crops

Blueberry Tissue Testing - Gordon Johnson,
Extension Vegetable & Fruit Specialist;
gcjohn@udel.edu

It may not be too late to take tissue tests for your blueberries. Tissue tests are important tools for monitoring blueberry fertility. Leaf

samples should be collected from mature leaves in the mid-portion of current season's growth the first two weeks after last harvest. A double hand full of leaves should be harvested from across the field, washed in tap water, dried and sent to a testing laboratory. Below are critical nutrient values for blueberries.

Critical Nutrient Values for Blueberries

Element	Deficient	Below Normal	Normal	Above Normal	Excessive
N (%)	1.65	1.70	1.90	2.10	>2.50
P (%)	0.05	0.06	0.10	0.18	>0.22
K (%)	0.35	0.40	0.55	0.65	>0.80
Ca (%)	0.35	0.40	0.60	0.80	>1.00
Mg (%)	0.18	0.20	0.25	0.30	>0.40
Mn (ppm)	45	50	250	500	>650
Fe (ppm)	65	70	200	300	>400
Cu (ppm)	4	5	11	15	>20
B (ppm)	29	30	40	50	>65
Zn (ppm)	14	15	25	30	>40

If values are below normal or deficient use the following recommendations:

- Low N (if N is below 1.7 percent): Increase rate of N application by 10 percent for each 0.1 percent that sample is below desired level. If soil pH is above 5.0, use ammonium sulfate; if below 5.0, use urea. Apply half of the nitrogen fertilizer at bud break and the remaining half four weeks later.
- Low P (below 0.06 percent): Apply 180 pounds per acre superphosphate (45 percent P₂O₅) at any time.
- Low K (below 0.40 percent): Apply 400 pounds per acre potassium magnesium sulfate or 160 pounds per acre potassium sulfate in fall or early spring.
- Low Ca (below 0.4 percent): Refer to soil test and apply lime as needed if soil pH is below 4.0. Apply 1,000 pounds per acre calcium sulfate in fall or early spring if pH is above 4.0.

- Low Mg (below 0.2 percent): Refer to soil test and apply dolomitic limestone if pH is below 4.0. If pH is above 4.0, apply 250 pounds per acre magnesium sulfate or use Sul-Po-Mag (400 pounds per acre) if K is also low. Apply in fall or early spring.

- Low Mn (below 50 ppm): Apply a foliar spray of manganese chelate at 6 pounds per 100 gallons per acre twice during the growing season. If product label offers a different recommendation, follow label recommendation.

- Low Fe (below 70 ppm): Apply a foliar spray of iron chelate at 6 pounds per 100 gallons per acre in late summer and again after bloom the following year, but check product label and follow its recommendation.

This information was taken from the Mid-Atlantic Berry Guide

<http://pubs.cas.psu.edu/freepubs/pdfs/AGRS097l.pdf>

Agronomic Crops

[Agronomic Crop Insects](#) - Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu

Alfalfa and Grass Hay Crops

Continue to watch for defoliators in grass hay crops and alfalfa. It is important to catch populations before significant damage has occurred and when larvae are small. In addition to checking labels for rates, be sure to check for all restrictions including but not limited to comments on control under high populations and size of larvae; days to harvest and forage/silage restrictions. Be sure to continue to scout alfalfa for leafhoppers. Once yellowing has occurred, significant in-season damage and long-term stand damage has already occurred.

Soybeans

We are starting to hear about economic levels of earworms in fields in states to our south. In general, economic populations are reported as spotty. They are also finding areas where earworms are causing economic levels of defoliation. In past years, we have also observed corn earworms feeding on foliage and blossoms as well as the pods. During the last week, we have seen an increase in corn earworm pheromone trap catches. So far, low levels of larvae have been found in full season and double crop fields in Kent and Sussex counties. Since population levels vary from field to field, the only way to know if you have an economic level will be to scout all fields. Although there is no threshold for corn earworm feeding on flowers or leaves, the data from North Carolina has indicated that feeding on flowers can result in reduced yields by delaying pod set. When looking at foliage feeding by corn earworm, you will need to use defoliation thresholds to make a treatment decision - the defoliation level during bloom to pod fill is 15% defoliation. Once pods are present, the best approach to making a decision on what threshold to use for corn earworm is to access the Corn Earworm Calculator developed at Virginia Tech (<http://www.ipm.vt.edu/cew/>) which estimates a threshold based on the actual treatment cost and bushel value you enter.

Be sure to continue to scout for stinkbugs in fields that are in the pod development and pod fill stages. Economic damage is most likely to occur during these stages and a combination of species can be found in fields throughout the state. You will need to sample for both adults and nymphs when making a treatment decision. Available thresholds are based on beans that are in the pod development and fill stages. As a general guideline, current thresholds for stink bugs are set at 1 large nymph/adult (either brown or green stink bug) per row foot if using a beat sheet, or, 2.5 per 15 sweeps in narrow-row beans, or 3.5 per 15 sweeps in wide-row beans.

We are also seeing an increase in soybean aphid populations in fields throughout the state. The current cooler weather pattern will be favorable to population increase. As a reminder, there is both a conventional method and a speed scouting method that can be used to make a decision on management for soybean aphid. Please see the following link for more information on scouting and treatment thresholds.

<http://cropwatch.unl.edu/web/cropwatch/archive?articleID=5278671>

During the past week, we have also observed an increase in soybean looper populations. It is important to identify soybean looper correctly because they can quickly defoliate fields and they can be difficult to control. Identification can be difficult because although there is a "black footed" phase of the soybean looper there is also a "green phase" that can be confused with cabbage looper - which is easier to control. One characteristic that might help is the presence of microspines on soybean loopers that are not present on cabbage loopers; however, you will need high magnification to see the microspines. Soybean loopers are a migratory pest, difficult to control and pyrethroid resistance has been documented in states to our south. Be sure to select a material that lists soybean looper control on the label. Belt, Besiege, Blackhawk and Steward all list soybean looper on the label. In most cases, higher labeled rates will be needed so be sure to read all labels for rates and restrictions.

Your Input Requested to Assess Needs for Agronomic Crops Pathology Research -
Nathan Kleczewski, Extension Specialist - Plant Pathology; nkleczew@udel.edu

I would like to hear from you about specific questions or concerns regarding plant disease management of agronomic crops in the DelMarVa region. Your needs direct the focus of my program, which in turn provides you with critical information on the management of your crops. It's a win-win situation!

Examples of requested research thus far have included:

- Best timing of fungicides for wheat
- Best management practices for control of Fusarium head blight in wheat/barley
- Impacts of fungicides on double crop soybeans
- Profitability of single vs. multiple fungicide sprays for control of foliar diseases of corn

So leave your comments at my blog: <http://extension.udel.edu/fieldcropdisease/2013/08/15/im-looking-for-your-input/>, send them to me directly at nkleczew@udel.edu, or call me at 302-831-6674.

I'm looking forward to hearing from you!

Winter Grazing - How and When to Stockpile Tall Fescue - *Richard Taylor, Extension Agronomist; rtaylor@udel.edu*

Would you like to be able to reduce your winter hay feeding bill? If so and if you have a pasture that has a large percentage of tall fescue, why not consider stockpiling the tall fescue to winter graze. Depending on fall weather conditions, tall fescue stand density, stocking rate for grazing, and the type of grazing system employed, a grazer can get an extra 6 to 8 or possibly more weeks of grazing starting in early December.

What is involved in the process of stockpiling tall fescue? The first thing to do is to stop any grazing or hay harvesting on the selected pasture and then to apply from 50 to 70 lbs. of nitrogen

(N) per acre as soon as possible but between August 15 and September 1. Grazing of the pasture should not begin again until late-November or December whenever the other pastures become depleted of feed.

The applied N fertilizer should be a quick release form such as urea or ammonium sulfate rather than a slow release form such as manure, other organic sources, or polymer coated urea. The use of a nitrification and/or urease inhibitor is useful especially with the history of heavy rainfall so far this growing season (2013). Products designed to reduce N loss from leaching and/or denitrification include nitrapyrin (N-serve®), SuperU®, agrotain®, or agrotainplus®. These products do slow the conversion of N from urea to ammonium or from ammonium to nitrate but the activity is limited to one to two weeks and do not interfere with the uptake of N by the tall fescue crop. They help prevent the environmental loss of N and therefore help increase plant uptake and promote more top growth.

A second application of 30 to 50 lbs. N/acre is suggested from early or mid-October to early November to help increase the protein content of the stockpiled tall fescue, possibly increase the total yield produced, and to encourage more and deeper rooting of the tall fescue for next year's production. It is thought that late-fall N may help tall fescue plants lay down tillers that will help thicken the fescue stand next year.

When the available forage in the remaining pastures becomes too little to support the grazing animals, the accumulated tall fescue forage can be grazed. Palatability really increases following some hard frosts or freezes so we generally recommend that grazing not begin until December. The freezing process is thought to release or convert carbohydrates to simple sugars which encourages the grazing animals to select the fescue and consume it readily. If the accumulated fescue pasture can be grazed in strips to limit animal access to the forage, there will be substantially less wasted forage. The use of moveable fences (usually electric) so that just a day or a few days' supply of forage is provided each time the fence is

moved really helps extend the number of grazing days you can have from the stockpiled fescue.

Like any grazing system, if the weather is too wet, animals should be kept either inside or in a sacrifice holding lot and fed hay rather than allowed onto a pasture where their hoofs can cause compaction problems or tear up the forage stand.

Stockpiling tall fescue is an effective way to extend the grazing season and stretch hay supplies. The rainy and often unpredictable weather this year has made hay production very difficult and good quality hay likely will be in short supply and only found at a high cost. With the expense of a little money for N fertilizer and the time and effort of moving fences, a grazer can significantly reduce their feed cost.

Worried About ODS? Scout Orchardgrass Now to Check for Orchardgrass Decline Syndrome - *Richard Taylor, Extension Agronomist*; rtaylor@udel.edu

Over the past few weeks, I've been called out to a couple of orchardgrass fields that are showing initial evidence of orchardgrass decline syndrome (ODS). This syndrome often results from a mix of several problems that develop on orchardgrass. ODS can be caused by one or more of the following problems: an imbalance between the rate of nitrogen (N) fertilizer and potash or potassium (K) fertilizer applied to the crop; an infestation by one or more pest species (white grubs, wireworms, billbugs, curculio, mites, thrips, aphids, and/or nematodes); mowing too close to the soil surface and leaving too little stubble for orchardgrass regrowth; and the development of a series of diseases such as anthracnose, septoria leaf spot, brown stripe, brown leaf blight, and barley yellow dwarf virus.

In the fields that I observed, the browning leaf tips and leaves (photo below) were an indication that the disease complex was present in the field. The real telling story however was where woods that were on two sides of the field blocked wind movement and resulted in higher humidity and longer periods of moisture on the leaves following dew or rain events. Near the

wood line, the orchardgrass stand had been reduced by 95 to 99 percent with only a few small plants showing a few struggling small tillers.



Leaf symptoms on orchardgrass from a complex of diseases

Along some of the wood line, the stand loss extended only a few tens of feet into the field; but where the two sides of woods came together, the stand loss extended as much as several hundred feet into the field. This suggests that if anyone is interested in determining if they have a potential situation developing with ODS, they should evaluate the orchardgrass stand along wood lines or wherever the winds are blocked, resulting in longer periods of moisture on the leaves or higher humidity conditions. The excessive rainfall that we've had this year could have resulted in a number of fields at risk for ODS.

Now is the time to evaluate orchardgrass fields to determine if it will be necessary to replant the field early this fall. The best thing to do would be to rotate to another less susceptible grass crop or to rotate completely away from grass hay if there's a market available to you for legume (such as alfalfa) hay. No matter what the decision is, you should take a soil test for the field to determine the K status. Inadequate soil K levels have been linked to the disease especially when a lot of N fertilizer is applied to boost hay yields.

Small Grain Crop Insurance Deadline for Delaware is September 30 - Laurie Wolinski, Extension Agent; lgw@udel.edu

September 30, 2013 is the final date for Delaware small grains producers to apply for (or make changes to their current policy) crop insurance on wheat or barley. See the following links for more information:

http://www.rma.usda.gov/fields/nc_rso/2014/2014smallgrains.pdf

<https://extension.udel.edu/weeklycropupdate/files/2013/08/2014SmallGrainsDE.pdf>

Announcements

Alternative Fruit Production Twilight Meeting at T.S. Smith and Sons

Wednesday, August 21, 2013
5:00 p.m.

T.S. Smith and Sons
Bridgeville, DE

Come see and hear about alternative fruit production initiatives at T.S. Smith and Sons and cooperative projects with the University of Delaware.

Highlighted will be:

Strawberries: summer and fall production with day neutral varieties, shade, and row covers

Sweet Cherries: high tunnel production, training systems, pruning practices, varieties

Other: Plantings of specialty fruits such as figs, paw paw, quince, tart cherries, and others

This initiative is part of a specialty crop block grant from the Delaware Department of Agriculture and the USDA and is in cooperation with the Fruit and Vegetable extension program at UD.

TS Smith and UD Extension staff from will be on hand to discuss the grant, talk about research and demonstration projects and answer questions.

This event is rain or shine. Please bring an umbrella or rain gear if necessary.

Meet at the Smith's pavilion. Located on the northbound side of US 13 directly across from the Goodwill store, the entrance is both 2 miles north of Rt. 404 and 2 miles south of the Redden Rd on US 13. Turn on to dirt farm road named "Orchard's End".

Please pre-register by August 16 by contacting Karen Adams at 302-856-2585 ext. 540 or adams@udel.edu.

DSU Local Bus Tour

Wednesday, August 21 8:30 a.m.-4:00 p.m.
Student Outreach Research Center
884 Smyrna Leipsic Rd Smyrna, DE 19977

Get the chance to visit local farmers who are doing demonstrations in partnership with DSU. There will be irrigation tips, weed suppression tips, rolled down rye practices, alternative livestock practices, fruit tree production, Asian vegetable production, and much more to learn. Seats are limited, so call today to reserve your spot!

This DSU Cooperative Extension Small farms Program events is **FREE**.

Register with Megan Pleasanton: (302) 857-6438 or mpleasanton@desu.edu

Delaware Soybean Board Tour

Thursday, August 22 9:30 a.m. – 3:00 p.m.
Meet at University of Delaware
Carvel Research and Education Center
16483 County Seat Highway
Georgetown, DE

What happens to your beans after you drop them off at Perdue? Join the Delaware Soybean Board on Aug. 22 to find out – take a bus tour of Perdue Farms in Salisbury, Md. The tour will leave the University of Delaware Carvel Research and Education Center in Georgetown at 10 a.m. and return from Perdue Farms by 3 p.m. In order to attend you must arrive at the Carvel REC by 9:30 a.m. The "Respect the Rotation" herbicide resistance management workshop will begin at 4 p.m. at the farm.

Lunch will be provided.

In order to attend you must pre-register by August 15. Contact Karen Adams at 302-856-2585 ext. 540 or adams@udel.edu.

Respect the Rotation

Thursday, August 22 4:00-6:00 p.m.
UD Research and Education Center
(old office building)
16684 County Seat Hwy
Georgetown, DE

The University of Delaware, Bayer CropScience, and the Delaware Soybean Board are holding a field day to highlight ways to better control weeds without pushing weed resistance to herbicides.

Respect the Rotation is an initiative to elevate the importance and adoption of herbicide diversity and integrated weed management.

Rotate modes of action - reduce the selection pressure of a single mode of action by using multiple modes of action during both the growing season and from year to year.

Rotate crops - crop rotation diversifies weed management tools.

Rotate herbicide-tolerant traits - alternate herbicide-tolerant (HT) traits and/or use HT trait stacks for more efficient herbicide rotation.

Field plots and demonstrations on rotations for integrated weed management will be discussed. For more information contact Mark VanGessel 302/856-7303. CCA and pesticide credits will be available.

There will be a free BBQ Dinner after the meeting.

There is no cost to attend, but please RSVP by August 15 so that we can prepare enough meals for everyone. RSVP to Karen Adams at (302) 856-7303 ext 540 or adams@udel.edu.

Wye Research and Education Center Horticultural Crops Twilight Meeting

Wednesday, August 28, 2013 5:00 – 7:30 p.m.
WyeREC, 211 Farm Lane
Queenstown MD 21658

This educational meeting is intended to provide producers and the general public the opportunity to get a firsthand look at several of the ongoing Horticultural crops projects at the University of Maryland's research facility in Queenstown.

Highlights include, but not limited to:

- Updates from University of Maryland Extension and University researchers and specialists
- The latest on the Brown Marmorated Stink Bug (BMSB) and Spotted Wing Drosophila on Fruit and Vegetables
- Updates on disease control in vegetable crops
- Tour of ongoing projects, including
- Pumpkin IPM Spray Trials
- Asian Pear Variety Trial
- NC140 Size-Controlling Rootstock Evaluation
- Aronia Trials
- Impact of Buckwheat on the mortality of exotic and native Pentatomids in Organic Sweet Corn planting

Sandwiches and refreshments will be provided. Registration is not required, but will help us to plan for handouts, food and drinks.

Reply to: Debby Dant, 410-827-8056 x115, ddant@umd.edu or Michael Newell, 410-827-7388, mnewell@umd.edu

High Tunnel Fall Plantings with Fruits and Vegetables

Wednesday, August 28 6:00-8:00 p.m.
Delaware State University
Smyrna Outreach & Research Center
884 Smyrna Leipsic Road
Smyrna, DE 19977

This workshop is designed for you to immediately implement techniques that you observe and learn on DSU's Outreach and Research Farm. We will address what it takes to successfully extend your growing

season into the fall and early winter, as well as preparing to have early strawberries ready for next spring. We now showcase five different types of high tunnels and you can walk through and compare each one. During this workshop, we will be planting strawberries and vegetables as well as providing classroom presentations.

More information is online at:
<https://extension.udel.edu/weeklycropupdate/files/2013/08/DSUFall2013HighTunnelWorkshop.pdf>

Light snacks and beverages will be provided. We hope to see you there!

To register or for more information contact Jason Challandes at (302) 388-2241 or jchallandes@desu.edu

Organic and Sustainable Agriculture Field Tour

Wednesday, September 4, 2013

Hold this date for a late afternoon or evening field day highlighting research and demonstration projects for organic and sustainable agricultural production. More details to follow.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 8 to August 14, 2013

Readings Taken from Midnight to Midnight

Rainfall:

0.01 inch: August 8
1.06 inch: August 9
0.16 inch: August 12
0.02 inch: August 13
0.01 inch: August 14

Air Temperature:

Highs ranged from 88°F on August 9 to 74°F on August 14.

Lows ranged from 73°F on August 9 to 57°F on August 14.

Soil Temperature:

78.6°F average

Additional Delaware weather data is available at
http://www.deos.udel.edu/monthly_retrieval.html
and
<http://www.rec.udel.edu/TopLevel/Weather.htm>

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Agent - Vegetable Crops

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