



# WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 18, Issue 10

May 21, 2010

## Vegetable Crops

**Vegetable Crop Insects** - *Joanne Whalen, Extension IPM Specialist; [jwhalen@udel.edu](mailto:jwhalen@udel.edu)*

### Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. We are starting to find cucumber beetles, especially in cantaloupe fields. As soon as we get a day of warm, sunny weather we could see a significant increase in activity. So be sure to scout carefully since damage can occur quickly. Since beetles can continue to re-infest fields as well as hide under the plastic, multiple applications are often needed to achieve control. Foliar products labeled for cucumber beetle control on melons include Assail, a number of pyrethroids, Lannate, Sevin and Thionex. The Actara label only states cucumber beetle suppression. Be sure to check all labels for rates, precautions and restrictions, especially as they apply to pollinators.

### Peppers

Continue to sample for thrips and corn borers. On young plants, corn borer larvae can bore into the stems and petioles. In areas where peppers are isolated or corn is growing slowly, moths are often attracted to young pepper plants. Therefore, you should watch for corn borer moths laying eggs in all fields. As a general guideline, treatment may be needed if there is no corn in the area or you are using rye strips as windbreaks. You should also look for egg masses on the leaves. For the most recent trap catches,

you can check our website at (<http://ag.udel.edu/extension/IPM/traps/latestblt.html>) or call the Crop Pest Hotline (in state: 1-800-345-7544; out of state: 302-831-8851).

### Snap Beans

Continue to sample all seedling stage fields for leafhopper and thrips activity. The thrips threshold is 5-6 per leaflet and the leafhopper threshold is 5 per sweep. If both insects are present, the threshold for each should be reduced by  $\frac{1}{3}$ . If both insects are present, Lannate, bifenthrin, Proaxis and Warrior (lambda-cyhalothrin) are labeled for both insect pests on snap beans. Be sure to check labels for comments on thrips management. In addition, be sure to watch for bean leaf beetle. Damage appears as circular holes in leaves and significant defoliation can quickly occur. As a general guideline, a treatment should be considered if defoliation exceeds 20% prebloom. A pyrethroid, dimethoate or Sevin are labeled for control.

### Sweet Corn

Continue to sample for cutworms and flea beetles. As a general guideline, treatments should be applied if you find 3% cut plants or 10% leaf feeding. In order to get an accurate estimate of flea beetle populations, fields should be scouted mid-day when beetles are active. A treatment will be needed if 5% of the plants are infested with beetles. Small corn borer larvae can be found in the whorls of the earliest planted fields. A treatment should be applied if 15% of the plants are infested. Corn earworms can also be found in light traps and pheromone

traps. In sweet corn planted under plastic, silk sprays will be needed for corn borer and corn earworm as soon as ear shanks are visible. For the most recent trap catches, you can check our website at (<http://ag.udel.edu/extension/IPM/traps/latestblt.html>) or call the Crop Pest Hotline (in state: 1-800-345-7544; out of state: 302-831-8851).

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**Sweet Corn Vigor** - *Gordon Johnson, Extension Fruit & Vegetable Specialist; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)*

Each year we see sweet corn fields with stand and plant vigor issues, especially in early planted fields. There can be many causes for stand loss and weak seedlings: surface compaction and crusting, birds, soil insects, cold soils that delay emergence, soil diseases affecting seeds or seedlings, wet soils, fertilizer injury, deep planting, and herbicide injury are just a few examples.

When checking sweet corn fields with vigor and stand problems, it is important to dig up seeds and affected plants and examine the seed remnants, roots, and mesocotyl (stem that pushes the seed leaf to emerge above the ground). Corn seedling survival and early vigor is directly tied to a healthy seed kernel and mesocotyl from planting through the six leaf stage. Any damage to the seed or mesocotyl during this period can lead to stunted or weak seedlings, and in severe cases, seedling death. This is because the corn seedling depends on the seed for food to grow for several weeks after emergence until sufficient leaf area has been produced and nodal roots have become established. The seed kernel provides the means for early roots to grow and these food reserves are also mobilized and transported through the mesocotyl to grow the first stalk and leaf tissue. The mesocotyl also serves to transport water and mineral nutrients from the seedling roots.

Sweet corn is more susceptible stand loss and poor vigor problems than field corn because the seed has less food reserves. Shrunken types (supersweet and sugary enhanced varieties) have even less stored food than “normal” types and therefore are more susceptible to stand problems.

I have looked at sweet corn fields with stand loss and vigor problems (uneven growth) over the years. Often, when digging up the seedlings and examining the seed remnants and mesocotyls, the kernels will be disintegrated and there will be darkening at the mesocotyl attachment. This means that the seeds will have deteriorated prematurely and therefore the full content of the food reserves in the seed were not available for seedling development leading to the stand and vigor issues. The question that needs to be answered is what caused the seed to deteriorate prematurely?

The answer of course will change from field to field. Seed deterioration and/or poor vigor seedlings can be due to diseases that cause seed rots, seedling blights and/or root rots. Fungal disease organisms such as *Pythium*, *Fusarium*, *Rhizoctonia*, *Aspergillus*, and *Penicillium* are common in soils and many can even be carried on seeds. Fungicide seed treatments are critical to control these diseases. Problems occur where seed treatments are not adequate, where disease organisms are at very high levels, or where soil conditions are too cold and seeds remain in the soil for extended periods before germination and emergence. The risk of seedling infection increases as germination and emergence is extended and protecting seed treatments dissipate.

Cold stress and cold soils is a common stress factor leading to poor stands. Often growers are pushing the limits and are planting sweet corn too early. While field corn will start to germinate at 50° F, many types of sweet corn need much warmer soils. This is especially true of supersweets and other shrunken types which perform best at soil temperatures 65° F or higher. Sweet corn germinates best at soil temperatures above 68° F. When soil temperatures are below 55° F, germination is greatly extended. Food nutrients are mobilized in the seed but are not being utilized rapidly by the plant. The seed then becomes a perfect food source for many soil microorganisms.

Soil insects can cause seed deterioration by feeding on seed contents and causing entrance wounds for disease organisms. Seed corn maggots and wireworms can feed on the seed directly causing stand losses. Grubs feed on

seedling roots causing stunting. Wireworms and certain grubs will also feed on the mesocotyl causing seedlings to collapse. Sweet corn that takes more than 10 days to emerge is at great risk of injury due to insects as seed treatments dissipate. In fields with heavy infestations of soil insects seed treatments may not be adequate. Addition of manures or other organic matter sources just prior to early plantings can lead to heavy seed corn maggot populations that overwhelm seed treatments.

Stand issues are often related to the inherent poor vigor of sweet corn. Work with seed suppliers to obtain their best lots for early plantings with the largest seed sizes. Obtain varieties that perform better under cold stress.

The University of Delaware has two separate trials of processing sweet corn varieties from several seed companies that were planted in both early (April) and later (May). Results from these trials will be available later this year for future planning.

**Potato Disease Advisory #3 - May 20, 2010** - *Bob Mulrooney, Extension Plant Pathologist;*  
[bobmul@udel.edu](mailto:bobmul@udel.edu)

We are using the E-WEATHER SERVICE from SkyBit, Inc as we have in the past. The service determines specific requested weather parameters (temperature, relative humidity and rainfall) based on calculations of data from the nearest National Weather Service stations. This weather data is used in the WISDOM software program for predicting late blight and early blight and making spray recommendations.

*Location: Art and Keith Wicks Farm, Rt 9, Little Creek, Kent County.*  
*Greenrow: May 6*

Date	DSV	Total DSV	Spray Recommendation
5/1 - 5/10	0	0	none
5/11 - 5/12	3	3	none
5/12 - 5/13	1	4	none
5/14 - 5/17	0	4	none
5/17 - 5/19	7	11	none

The threat of late blight from seed infection is low, but there was some in Maine last season. Be vigilant anyway, given this recent weather pattern. The first late blight fungicide application is recommended once 18 Disease Severity Values (DSVs) accumulate from green row. Green row occurred approximately on May 6, 2010. Please be vigilant and keep a look out for suspect infections on young plants coming from infected seed pieces! Growers opting not to use the forecast system should put the first late blight fungicide application on when the plants are 6 inches tall, and repeat every 7 days. There are numerous fungicides now labeled for late blight control; however, use of mancozeb (Manzate, Penncozeb, or Dithane), chlorothalonil or Polyram are still very effective early season protective fungicides to use.

The recent wet, cool weather produced 7 DSVs from late Monday night through Wednesday night. This leaves us with only 7 DSVs before the first late blight spray should be applied if it has not already been applied.

The Plant Management Network has just posted an excellent webinar about late blight on potato by Dr. Steve Johnson, Extension Potato Specialist, Maine Cooperative Extension. Steve was an invited speaker at several of our Delaware Vegetable Growers Conference potato grower sessions many years ago. You can find it at: <http://www.plantmanagementnetwork.org/edcenter/seminars/potato/PotatoLateBlight>

**Late Blight in Southern Maryland** - *Kate Everts, Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu*

Late blight on tomato occurred early in 2009 throughout the East Coast. Because the disease arrived early and was disseminated widely on infected transplants, growers had to apply fungicides season-long to maintain crop health. Unfortunately on May 7, 2010 a greenhouse outbreak of late blight on tomato was found in St. Mary's County, MD. The grower destroyed the tomatoes in his greenhouse, but kept some high tunnel production, where the disease is being managed with fungicide applications. We do not know how late blight became established or whether it will spread quickly. The surrounding fields have been scouted extensively and no additional infection has been found. The disease is favored by cool wet weather, which often occurs in spring. Therefore, tomato growers should scout their crop rigorously and apply fungicides as described below.

Late blight is caused by the fungus-like organism *Phytophthora infestans*, which is an obligate parasite. The organism prefers cool moist weather and cannot overwinter in Delaware or Maryland (outside a living host) because only one mating type is known to occur in these states. (If the other mating type is introduced, the pathogen would be able to form resistant oospores.) In the absence of resistant oospores, the late blight fungus overwinters in infected potato tubers or is introduced into an area on wind, or infected plants. We don't believe that the pathogen overwintered in St. Mary's County, however we don't know how it was introduced. The grower did not have any live plants that could have allowed late blight to overwinter.

*Phytophthora infestans* can infect leaves, stems and fruit of tomatoes (Figures 1-3). Lesions on leaves are large and dark brown. Purplish or whitish growth on the lower surface of the lesions occurs under humid conditions. Fruit lesions initially appear water soaked, turn dark brown, expand rapidly, and are shiny.

There are several fungicides available that will help reduce disease spread. No fungicide however, will eradicate the disease. To be most

effective, fungicides should be applied prior to disease onset. For this reason, once plants reach a height of 6 inches, protectant fungicide should be applied every seven days. Chlorothalonil (Bravo), Gavel or mancozeb are good choices.

Once the disease is observed in the area, switch to a translaminar fungicide which can move into and through the leaves. Also, it is important to note that while the most common previously occurring *P. infestans* genotypes were resistant to Ridomil, the genotype that occurred on tomatoes in 2009 (called US22) is sensitive to Ridomil. In addition, there are several other fungicides listed in the [Delaware Commercial Vegetable Production Recommendations](#), which can be used for late blight management.

Rotate between the following tank mixtures:

- Curzate--3.2-5.0 oz 60DF/A *plus* a protectant fungicide
- Forum--6.0 fl oz 4.18SC/A *plus* a protectant fungicide
- Presidio--3.0-4.0 floz 4SC/A *plus* a protectant fungicide
- Previcur Flex--1.5 pt 6F/A *plus* a protectant fungicide
- Ranman--2.1-2.75 fl oz 400SC/A *plus* a protectant fungicide
- Revus Top--5.5-7.0 floz 4.16SC/A *plus* a protectant fungicide
- Tanos--8.0 oz 50WG/A *plus* a protectant fungicide
- Reason -5.5 - 8.2 fl. oz *plus* a protectant fungicide





Late blight symptoms on leaves (Figure 1), stems (Figure 2) and fruit (Figure 3) of tomato (images courtesy of Dr. Meg McGrath, Cornell University).

**Late Blight Reported on Tomatoes in Maryland and Pennsylvania** - Bob Mulrooney, Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)

There was a confirmed report of late blight on greenhouse grown tomato transplants and in a high tunnel in southern Maryland. This is an isolated occurrence and should be no threat to our area at the present time. This outbreak highlights the continued need for timely scouting of tomatoes and potatoes for the early symptoms and signs of late blight.

Just breaking news is that there was a late blight report from Pennsylvania. Beth Gugino, Extension Vegetable Plant Pathologist at Penn State reports that “at the end of the day on Monday, late blight was confirmed (sporangia observed) on locally grown greenhouse tomato transplants in the Northwest region of Pennsylvania. The grower has destroyed the symptomatic plants and is adjusting his fungicide program. The PA Department of Ag is currently conducting a site visit and is working with the grower to avoid potential spread.”As I said before keep a close watch on emerging potatoes and tomato transplants.

**Mocap EC 24c Label for Limas and Snap Beans Withdrawn** - Bob Mulrooney, Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)

Mocap EC section 24c special local need label for lima and snapbeans in DE was withdrawn by Bayer Crop Science after EPA determined that human health risk findings required reduced application rates. The recommended reduced rate can offer control on garden symphylans, but can only provide suppression to nematodes. Since root knot and other nematodes will not be controlled the label was withdrawn. This does not affect the use of Mocap 10G, if growers have granular applicator boxes for their planters this formulation is effective at the label rates.

**Agronomic Crops**

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

**Alfalfa**

When checking regrowth for damage from weevils, be sure to also consider damage from adults. If economic levels were present before cutting and no spray was applied, both adults and larvae can hold back re-growth. With the cool conditions we have had this week, there may not have been enough “stubble” heat to control the weevils with a cutting. Potato leafhoppers are now present in fields so be sure to sample on a weekly basis after the first cutting. Once the damage is found, yield loss has already occurred. The treatment thresholds are

20 per 100 sweeps on alfalfa 3 inches or less in height, 50 per 100 sweeps in 4-6 inch tall alfalfa and 100 per 100 sweeps in 7-11 inch tall alfalfa.

### Field Corn

With the recent cool, wet weather, slugs continue to be the main pest of concern, especially in fields with a history of problems. Options to reduce damage and allow plants to grow ahead of the damage include the use of Deadline M-Ps (or other available metaldehyde baits). In years past, 30% nitrogen applied at night when the plants are dry and there is no wind has also been used with variable success (the rate used in past years was 20 gallons per acre of 30% N on corn in the spike to one-leaf stage and the mix was cut 50/50 with water to reduce - but not eliminate - plant injury). Slugs seem to be most active on the plants between midnight and 3 AM so applications of nitrogen have been most effective when applied between those hours. The best control with the Deadline M-Ps has been observed when applications were made and there was at least one day of sunny weather after an application. In general slugs stop feeding in 2-3 hours even though it may take the slugs 2-3 days to die. Remember that when it comes to slug management all of the available control tactics generally reduce the slug activity - buying time to enable the crop to outgrow the problem.

### Small Grains

We continue to find armyworms, sawflies and cereal leaf beetles in barley and wheat fields that were not treated, so be sure to check fields as soon as it is dry enough in the day to do a good job scouting. Population levels remain variable throughout the state so scouting fields will be the only way to determine if an economic level is present. Also, with the recent weather patterns, the hatch of armyworm larvae will be staggered -i.e. there will be large and small larvae in fields. Although armyworm can attack both wheat and barley, they can quickly cause significant losses in barley. Before treatment, be sure to check all labels for the days allowed between last application and harvest.

### Soybeans

As the earliest beans emerge, be sure to watch carefully for slug damage. Remember, if you had a problem last year, the slugs will still be

present in fields and can quickly damage soybeans if present as plants emerge. Be sure to also watch fields carefully for bean leaf beetles and grasshoppers. Early detection and control of small grasshoppers is necessary to achieve control. Numerous products are labeled for grasshopper control. *As a reminder, OP insecticides (like dimethoate or Lorsban) cannot be combined with SU/ALS herbicides (like Harmony GT).* Since other materials may also state restrictions regarding combinations of insecticide and herbicides, you should be sure to check all labels carefully before combining insecticides and herbicides. *Also all uses and tolerances of Furadan have been cancelled so you cannot use existing stocks on any crop in 2010.*

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**Wheat Scab Situation** - Bob Mulrooney, Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)

Weather was favorable for scab infection in Kent County, DE yesterday if any was flowering at the time. The forecast is not favorable for scab statewide for the rest of the week. This should put us out of the window where we might see scab this season. There may be some secondary tillers with heads that were possibly at risk the last two days which may show symptoms in the next week or so. If there is any scab it will be considerably lower than what appeared last year.

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**Postemergence Pokeweed Control** - Mark VanGessel, Extension Weed Specialist; [mjv@udel.edu](mailto:mjv@udel.edu)

A few questions have come in about controlling common pokeweed postemergence in field corn. We had a trial a few years ago with tall pokeweed (sprayed in late June) and had results similar to a study contacted at Southern Illinois University. Dicamba [Banvel, Clarity, Sterling]; Distinct; NorthStar, and Callisto were the best treatments for conventional corn hybrids. Glyphosate was also effective if Roundup Ready corn was planted. Our trial did not include Lightning, but the SIU trial reported good control with Lightning with Clearfield corn. For soybeans, glyphosate is the best option. In non-Roundup Ready soybeans, Synchrony was fair

(but requires STS-soybeans) or FirstRate which was only fair in the SIU trial.

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**Grain Marketing Highlights** - Carl German,  
*Extension Crops Marketing Specialist;*  
[clgerman@udel.edu](mailto:clgerman@udel.edu)

#### Market Factors Competing with Seasonal Rally

The primary question on many grain producers minds at this point in time has got to be something along the line - "When will the seasonal price rally for corn begin"? The question becomes more pressing each passing day as market forces, both those considered inside and outside, are taking their toll on commodity prices. To further exacerbate the problem, commercial and non-commercial traders have been stepping to the sidelines due to the uncertainty caused by world economic conditions i.e., Greece. Plummeting crude oil prices, a decline in the Dow resulting from the economic uncertainty, lagging world demand, and relative strength in the dollar have also attributed to keeping a lid on commodity prices. Yet, it is too early to call grain prices out for the season. Much can happen between now and harvest, among other things, the weather can change from the near ideal conditions that the U.S. has experienced thus far. On a positive note, U.S. corn and soybean exports were reported to be bullish in this morning's export sales report.

Crop progress is another factor impacting the possibility of getting a seasonal rally for corn this year before the first week of June. As of Monday May 17, 87% of the U.S. corn crop was planted, 26 points ahead of last year and 9 points ahead of the five year average. A little over half of the corn crop has emerged, about double a year ago and 16 points ahead of the five year average. About 40 percent of the soybean crop is planted, double last year's pace and just ahead of the five year average. Soybean crop emergence, reported at 13%, was 8 points ahead of last year and 4 points ahead of the five year average. Crop conditions for new crop corn development were reported at 67% good to excellent.

USDA Export Sales Report (week ending 5/13/10)

Pre-report estimates for weekly export sales of

soybeans (combined old-crop and new-crop) ranged from 18.4 million bushels to 23.9 million bushels. The weekly report showed total export sales of 20.8 million bushels, with old-crop sales of 17.6 million bushels, above the 4.5 million bushels needed this week to stay on pace with USDA's demand projection of 1.455 billion bushels. Total shipments of 10 million bushels were above the 9 million bushels needed this week. This report should be viewed as bullish.

Pre-report estimates had weekly corn export sales at 37.4 million bushels to 49.2 million bushels. The weekly report showed total export sales of 62.1 million bushels, with old-crop sales of 53.3 million bushels, well above the 17.9 million bushels needed this week to stay on pace with USDA's demand projection of 1.95 billion bushels. Total shipments of 38.5 million bushels were below the 45.3 million bushels needed this week. This report should be viewed as bullish.

Pre-report estimates for wheat ranged between 5.5 to 16.5 million bushels. The weekly report showed total export sales of 16.7 million bushels with old-crop sales of 9.2 million bushels, above the 7.3 million bushels needed this week to stay on pace with USDA's projected 865 million bushels. Shipments of 12.3 million bushels were well below the 32.7 million bushels needed this week. This report should be viewed as bearish.

#### Marketing Strategy

Some of the best pricing opportunities for new crop corn the past two marketing years occurred on or about the first of June. The possibility of that event occurring again this year is beginning to look rather remote. However, the possibility still exists and/or for some unknown reason may occur later in the growing season.

New crop Dec '10 corn futures are currently trading in the bottom third of the recent historic price range, closing at \$3.78 per bushel on May 19. New crop Nov '10 soybean futures are trading in likewise fashion, closing at \$9.05 per bushel. When commodity prices are in their bottom third of the price range the opportunities for making sales and the alternatives available for use are greatly diminished.

New crop basis bids for corn and soybeans, currently at 10 over for corn and 35 to 45 under for soybeans in Southern Delaware, are not

indicative that making new crop sales in the cash market are warranted at this time. An at-the-money \$3.80 corn put with a premium of 34 cents per bushel and an anticipated basis of 29 over equates to a minimum selling price of \$3.75 per bushel, excluding commission. Using puts is being suggested as something to think about for those lagging in advancing new crop sales and/or those concerned that new crop prices could turn much lower between now and harvest. Those looking for a way to get back in the market for previously sold corn might consider employing either the purchase of a call or employing a call spread by buying a \$4.00 September call (currently priced at 14 cents per bushel) and selling a \$4.50 Dec call (currently priced at 12 ¾ cents per bushel), both considered speculative market maneuvers. This spread reduces the costs of the call and if exercised places a grain marketer in a short futures (hedge) position at the \$4.50 strike price. Sometimes the best course of action to follow is to do nothing, see what the summer brings. Problem is, waiting could put one in a precarious position in the event that record or near record corn and soybean crops are produced in the U.S. this growing season.

For technical assistance on making grain marketing decisions contact Carl L. German, Extension Crops Marketing Specialist.

## Announcements

### **Agronomic Crops Twilight Tailgate Session**

Wednesday, May 26, 2010 6:00-8:00 p.m.

UD Cooperative Extension Research and Demonstration Area

(3/4 mile east of Armstrong Corner, on Marl Pit Rd. – Road 429, Middletown)

Join your fellow producers and the UD Extension team for an overview of University of Delaware's Demonstration Plots at the Marl Pit Road Demonstration Site. We'll cover highlights on grain marketing, nutrient management and pest management, as well.

We will apply for DE Pesticide and Nutrient Management re-certification credits and Certified Crop Advisor credits.

This meeting is free and everyone interested in attending is welcome.

**Bring a tailgate or a lawn chair.**

**To register, request more information or require special needs assistance for this meeting, please call our office in advance at (302) 831-2506. Please call to register by May 25.**

See you there!

Anna Stoops, New Castle County Extension Agricultural Extension Agent

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## **Workshops on Proposed CAFO Regulations**

The Delaware Department of Agriculture (DDA), the Delaware Nutrient Management Commission (DNMC), and the Delaware Department of Natural Resources and Environmental Control (DNREC) are jointly sponsoring workshops to further understanding and awareness of recently proposed draft Concentrated Animal Feeding Operation regulations. The draft proposed CAFO regulations will be available, beginning May 12, 2010, on the following site: <http://dda.delaware.gov/nutrients/index.shtml>.

**The public is invited to attend**

### **Workshop Schedule**

**Tuesday, May 25, 2010 6:00 – 8:30 p.m.**

**Farmington Fire Hall**

20920 South Dupont Highway

Farmington, DE 19950-2381

(302) 398-4445

**Wednesday, May 26, 2010 6:00 8:30 p.m.**

**Laurel Senior High School**

1133 South Central Avenue

Laurel, DE 19956-1491

(302) 875-6120

**Thursday, May 27, 2010 6:00 - 8:30 p.m.**

**Millsboro Fire Hall**

109 E. State St.

Millsboro, DE 19966

(302) 934-8359



## **Workshop Agenda**

6:00 PM – Workshop begins with open forum discussions

7:00 PM – Introductions and workshop overview

- Regulatory timeline
- Overview of regulations
- Questions and answers

8:30 PM – Adjourn

### **Open forum discussion topics include:**

- Who needs a CAFO permit?
- How is a CAFO permit issued?
- How does my operation benefit from a CAFO permit?
- What is required in a CAFO permit application?
- What are the State Technical Standards (best management practices)?
- What is required for new operations?

*For more information contact:*

**Mark Davis, DDA** at (302) 698-4503 or

[Mark.Davis@state.de](mailto:Mark.Davis@state.de)

**Jennifer Walls, DNREC** at (302) 739-9062 or

[Jennifer.Walls@state.de.us](mailto:Jennifer.Walls@state.de.us)

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## **Soybean Cyst Nematode Workshop**

Tuesday, August 3, 2010

Soybean cyst nematode (SCN) is a widespread and serious pest of soybeans on Delmarva. First discovered in the fall of 1979 it has been causing increased problems for growers in recent years. This workshop will cover some basics about the biology of SCN and its management. The results of the recent DSB sponsored survey of SCN will also be addressed. The workshop will also include visiting a small research plot to see SCN first hand and discuss symptoms, diagnosing SCN from root samples, and proper soil testing procedures. Participants will also observe a demonstration on how SCN are extracted from soil samples and how eggs are extracted from cysts. The workshop is suggested for agricultural professionals on Delmarva who advise soybean growers and growers who want to know more about this important pest.

The date for the workshop is **Tuesday, August 3, 2010** at the Carvel Research and Education Center near Georgetown, DE. Hold the date if you are interested. The program will likely run from 8:30 until noon and

include lunch. Pesticide recertification credits and CCA credits in pest management will be offered for attendees. More information will follow.

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## **Livestock Pasture Walk**

Wednesday, June 9, 2010 6:00 - 8:00 p.m.

DSU, Hickory Hill Research Farm  
Route 42, West of Cheswold, DE

Come learn techniques for good pasture management for livestock!

Experts will be on hand from the University of Delaware, Delaware State University and the Natural Resource Conservation Service (NRCS) to answer your questions!

Please bring a folding chair.

NM and CCA credits will be available.

This meeting is free and everyone interested in attending is welcome.

*To register, request more information or if you require special needs assistance for this meeting, please call our office in advance at (302) 831-2506. Call to register by June 7.*

See you there!

Anna Stoops

NCC Extension, Agricultural Extension Agent

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## **Pea Twilight Meeting**

Thursday, June 10, 2010 6:00 p.m.

Carvel Research and Education Center  
16483 County Seat Highway  
Georgetown, DE 19947

Meeting will include a tour of the late pea variety trial and preliminary results from the early pea trial. UD Extension specialists will be on hand to answer any questions.

There will be refreshments following the tour.

*Please call Emmalea Ernest at (302)856-7303 by Monday, June 7 if you plan to attend.*

**Delaware Organic Food and Farming  
Association Organic Workshop and June  
Business Meeting**

Thursday, June 10, 2010 6:00 - 9:00 pm  
New Castle County Cooperative Extension Office  
461 Wyoming Rd, Newark, DE 19716

Come and listen to Dr. Joseph Heckman from Rutgers University give an interesting and enlightening talk about the history and philosophy of organic farming. We'll also have a presentation on the organic certification process followed by a business meeting for our DOFFA membership. Anyone wishing to stay or join our organization is welcome.

This workshop is free and everyone interested in attending is welcome.

*To register, request more information or if you require special needs assistance for this meeting, please call our office in advance at (302) 831-2506.*

See you there!

Anna Stoops, NCC Extension  
Agricultural Extension Agent  
DOFFA Secretary/Treasurer

*Co-sponsored by: A grant from the Delaware  
Department of Agriculture*

## Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of May 13 to May 19, 2010

Readings Taken from Midnight to Midnight

### Rainfall:

0.37 inch: May 14

0.03 inch: May 17

1.12 inch: May 18

### Air Temperature:

Highs ranged from 86°F on May 14 to 58°F on May 18.

Lows ranged from 56°F on May 15 to 49°F on May 13.

### Soil Temperature:

66.3°F average

Additional Delaware weather data is available at  
[http://www.deos.udel.edu/monthly\\_retrieval.html](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  
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