



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 24, Issue 14

June 24, 2016

Vegetable Crops

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

Cucumbers

Populations of cucumber beetles vary from field to field but higher populations are still present in fields with a history of problems. Fresh market cucumbers are susceptible to bacterial wilt that is vectored by the beetles, so treatments should be applied before beetles feed extensively on cotyledons and the first true leaves. Although pickling cucumbers have a tolerance to wilt, a treatment may still be needed for machine-harvested pickling cucumbers when 5% of plants are infested with beetles and/or plants are showing fresh feeding injury.

Lima Beans

Be sure to watch for spider mites, especially in dry land fields. Controls are only effective if treatments are applied before populations explode. Labeled materials include dimethoate, Hero (zeta-cypermethrin + bifenthrin), bifenthrin (numerous trade names are available), and Acramite (bifenazate). Be sure to check the labels for rates and restrictions, including the minimum gallons per acre for ground and aerial application.

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. Economic

levels of all three insects have been found in fields this past week. When fields are blooming, be sure to consider pollinators when making an insecticide application as well as read all labels for pollinator protection statements and restrictions. We continue to see an increase in spider mite populations in the earliest planted fields. The threshold for mites is 20-30% infested crowns with 1-2 mites per leaf. Acramite, Agri-Mek, Oberon, Portal and Zeal are miticides labeled on melons for mite control. Be sure to read all labels carefully for rates and restrictions since some are restricted to only one application as well as ground application only.

Peppers

As soon as the first flowers can be found, be sure to consider a corn borer treatment. Depending on local corn borer trap catches, sprays should be applied on a 7 to 10-day schedule once pepper fruit is ¼ - ½ inch in diameter. Be sure to check local moth catches in your area by calling the Crop Pest Hotline, (302) 831-8851, or visiting our website at <http://agdev.anr.udel.edu/trap/trap.php>.

Potatoes

Continue to scout fields for Colorado potato beetle (CPB) and leafhoppers. Adult CPB as well as the small and large larvae can now be found. A treatment should be considered for adults when you find 25 beetles per 50 plants and defoliation has reached the 10% level. Once larvae are detected, the threshold is 4 small larvae per plant or 1.5 large larvae per plant. As a general guideline, controls should be applied for leafhoppers if you find ½ to one adult per sweep and/or one nymph per every 10 leaves.

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 one third. As a general guideline, once corn borer catches reach 2 per night, fresh market and processing snap beans in the bud to pin stages should be sprayed for corn borer. Sprays will be needed at the bud and pin stages on processing beans. After the pin spray on processing beans, the spray schedule will be determined by a combination of moth catches for corn borer and corn earworm and field scouting.

<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/>

Sweet Corn

The first silk sprays will be needed for ear feeders as soon as ear shanks are visible. Be sure to check both blacklight and pheromone trap catches since the spray schedules can quickly change. Trap catches are generally updated on our website

(<http://agdev.anr.udel.edu/trap/trap.php>) and the Crop Pest Hotline (302-831-8851) by Tuesday and Friday mornings. Information on how to use the trap catch information in combination with field scouting can be found at

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

addition to corn borer and corn earworm, you will also need to start scouting whorl stage corn for fall armyworm larvae. A treatment should be considered for whorl feeders when 12-15% of the plants are infested. Since fall armyworm feeds deep in the whorls, sprays should be directed into the whorls and multiple applications are often needed to achieve control.

Hail Damage to Vegetables - Jerry Brust, IPM Vegetable Specialist, University of Maryland; jbrust@umd.edu

It was not too much of a surprise to see some hail damage to vegetables after the storms that rolled through our area on Tuesday. The damage on tomatoes and onions that I saw was very characteristic of damage from pea-size hail (Figures 1 and 2). The damage to tomatoes was always one-sided or even a quarter of a side of the tomato that was not covered by foliage. There was some tomato damage to tomato foliage, but not much as the noticeable and important damage to the developing fruit. Onion leaves were more beat up, but the bulbs all looked good in the fields I visited. If you have not had a chance to check out your vegetables or fruit be sure to do so in the next few days to get an idea of how much if any damage occurred.



Figure 1. Hail damage to tomato fruit, only one side of fruit damaged by pea-size hail



Figure 2. Hail damage to onions

Potato Late Blight Update #13: June 24, 2016 - Nathan Kleczewski, Extension Specialist - Plant Pathology; nkleczew@udel.edu

Green row: April 29th, 2016

If you notice symptoms of black leg, please contact me or the Plant diagnostic clinic to have the disease confirmed.

Date	Townsend		Camden		Leipsic		Kenton	
	DSV	Total DSV	DSV	Total DSV	DSV	Total DSV	DSV	Total DSV
5/5-5/9	3	6	0	11	2	12	0	13
5/9-5/12	3	9	6	17	2	14	4	17
5/12-5/18	2	11	0	17	3	17	0	17
5/18-5/22	2	13	2	19	2	19	2	19
5/22-5/26	2	15	0	19	2	21	2	21
5/26-5/30	5	20	5	24	5	26	5	26
5/30-6/2	2	22	4	28	5	31	3	29
6/2-6/6	6	28	4	32	5	36	5	34
6/6-6/9	0	28	0	32	0	36	0	34
6/9-6/15	0	28	0	32	0	36	0	34
6/15-6/24	11	39	6	38	6	42	8	42

Notes: Season severity of 18 severity values indicates the need for the first fungicide application. An accumulated severity of 7 after fungicide application identifies the need for a subsequent fungicide application.

You can personalize your late blight forecasts for specific fields, sign up for email or text alerts, and enter in management information at <http://blight.eas.cornell.edu/blight/>. Real time fungicide application timing tables for locations within Delaware can be accessed at <http://blight.eas.cornell.edu/blight/DE>

See the [2016 Commercial Vegetable Production Recommendations-Delaware](#) for recommended fungicides.

Any suspect samples can be sent to the Plant Diagnostic Clinic or dropped off at your local extension office. Dr. Nathan Kleczewski can also be contacted at nkleczew@udel.edu or 302-300-6962.

The website USABlight tracks tomato and potato late blight across the nation and can be found here: <http://usablight.org/>. Information on scouting, symptomology, and management can also be found on this website.

Fall Vegetables - Timing Plantings - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Plantings for fall harvested vegetables will be underway in the next few weeks. Timing these plantings can be a challenge, especially where multiple harvests are needed. Plantings from early July through the beginning of September may be made, with cutoff dates depending on the crop, variety, and season extension methods

such as row covers, low tunnels, and high tunnels.

These plantings can be divided into 2 groups: 1) warm season vegetables for harvest up to a killing frost and 2) cool season vegetables for extended harvest in the fall.

The three main factors influencing crop growth and performance in the fall are daylength, heat units, and frost or freeze events. A few days

difference in planting date in the summer can make a big difference in days to maturity in the fall.

Warm season vegetables for fall harvest include snap beans, squash, and cucumbers. July plantings of sweet corn can also be successful to extend seasons for farm stands. Mid-July plantings of tomatoes and peppers also are made for late harvests, particularly in high tunnels.

Cool season vegetables for fall harvest include cabbage, broccoli, and cauliflower; the cole crop greens, kale and collards; mustard and turnip greens; turnips for roots; spinach; beets; lettuce; leeks; green onions; and radishes.

To extend harvest in the fall, successive plantings are an option. However, days between plantings will need to be compressed. One day difference in early August planting for a crop like beans can mean a difference of several days in harvest date.

Another option to extend harvest in the fall is with planting different maturing varieties at the same time. This is particularly successful with crops such as broccoli and cabbage where maturity differences of more than 30 days can be found between varieties.

Another way to get later harvests is to use row covers or protecting structures (high tunnels). This can allow for more heat accumulation and will aid with protection against frost and freezes. Decisions on what type or combination of covers/protection to use and when to apply the protection will influence fall vegetable maturation and duration of harvest. In general, plantings of cool season crops can be made 30-45 days later in high tunnels than in outside production.

A final factor for summer planting for fall production is on planting cutoff dates. For example, a crop such as cucumber may produce well with an August 2 planting but poorly with an August 8 planting; broccoli has a wider planting window than cauliflower; turnip greens have a wider planting window than kale.

Planting Window for Fall Harvested Warm Season Vegetables
(harvest September through Frost)

Snap Beans: July 10 through August 10

Lima Beans: June 15 through August 15

Cucumbers: July 10 through August 7 (high tunnel transplanted up to September 1)

Peppers: Transplant up to July 10 (high tunnel up to July 30)

Pumpkins and Winter Squash: Direct seed through June 30

Summer Squash: Direct seed July 15 through August 15 (high tunnel up to September 1)

Sweet Corn: Direct seed July 1 through July 30

Tomatoes: Transplant July 20 through July 5 (high tunnel up to July 30)

Planting Window for Fall Harvested Cool Season Vegetables

(harvest September - December)

For transplants, seed 3-6 weeks prior to desired planting date (8 weeks for leeks and onions).

Beets: Direct seed July 1 through August 10

Swiss Chard: Direct seed July 15 through August 20 (high tunnel up to September 30)

Broccoli: Transplants July 15 - August 20

Brussels Sprouts: Transplants June 20-July 10

Cabbage: Transplants July 1 - August 10

Cauliflower: Transplants July 20 through August 10

Kale: Transplants July 15 through August 30

Kale: Direct seed July 1 through August 15 (high tunnel up to September 30)

Collards: Direct seed July 15 through August 15

Carrots: June 20 through July 5 (high tunnel up to August 1)

Turnip Greens: August 1 through September 10 (high tunnel up to September 30)

Turnip Roots: August 1 through August 30 (high tunnel up to September 20)

Mustard Greens: August 1 through September 10 (high tunnel up to September 30)

Leeks: Transplant July 20 through August 10

Lettuce (full head stage): Direct seeded August 1 through August 20

Lettuce (full head stage): Transplants August 10 through August 30

Lettuce (baby stage and cut salad mix): Direct seed August 1 through September 15 (high tunnel up to October 15)

Onion (green bunching): Direct seed July 1 through August 30 (high tunnel through September 30)

Parsley: direct seed July 15 through August 15 (high tunnel through September 15)

Pumpkins and Winter Squash: Direct seed through June 30

Radishes (salad): Direct seed August 1 through September 30 (high tunnel through November 30)

Radishes (Daikon): Direct seed August 1 through September 10 (high tunnel up to September 30)

Spinach: Direct seed August 10 through August 30 (high tunnel up to September 30)

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

In the past I have talked about several different problems with garlic, be it mites, nematodes, fungal or bacterial diseases. However, this year I am seeing something different that I will just call 'garlic viruses' that may have been there in past years, but is more prominent now for some reason. Symptoms of virus infection are plants that display yellowing tips on many leaves with some that are completely yellow (Fig. 1). If you look closely at the yellow leaves you'll see mottling or striping on the leaves (Fig. 2). Symptoms are usually more pronounced in young leaves. Infected plants are stunted and bulb size can be reduced. Garlic crops infected with some of these viruses are more susceptible to weather conditions like frost, and do not keep well in storage.

What I am calling garlic virus is caused by several different viruses that can be grouped

under the term "potyvirus"--the garlic we tested was positive for potyvirus. Some people lump these viruses under the name "garlic mosaic". In this case garlic mosaic can be thought of as a disease caused by one or more viruses belonging to the potyvirus group, which includes onion yellow dwarf virus, leek yellow stripe virus, and others. These viruses can be transmitted through the planting stock or by aphids and it is thought by some that because garlic is clonally propagated that much of the planting stock is infected with some type of virus. These viruses are usually mild and do not affect yield to any great extent. The problem comes when the plants are infected with several different potyviruses, and then there can be moderate to severe yield reductions. For instance, when infected with 2 or more potyviruses yield loss in garlic bulbs can be as much as 70% or germination rates can be reduced by 55%. Some hosts of these potyviruses include: garlic, great-headed garlic, leek, pearl onion, wild garlic, onion and shallot. The two most common aphid vectors are the green peach aphid (*Myzus persicae*) and the black bean aphid (*Aphis fabae*).

Management Usually virus infections are not a problem, but for this season they seem to be more prominent. We will need to see if this is an aberration or a trend. If the frequency of the virus continues then growers will need to move to virus-free stocks that are produced from meristematic tip culture. The use of this "virus-free" stock should result in significantly greater yields.



Figure 1. Garlic plants showing symptoms of garlic virus infection



Figure 2. Streaking and striping on leaves of garlic infected with virus

Fruit Crops

Section 18 Label for Brown Marmorated Stink Bug (BMSB) Management in Stone and Pome Fruit- *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

We just received the notice that our Section 18 request for the use of two dinotefuran products (Trade Names: Venom from Valent U.S.A. Corporation; and Scorpion 35SL from Gowan Company, LLC) to control BMSB on stone and pome fruits has been approved by EPA. This use expires on Oct 15, 2016. You must have a copy of the label in your possession before making an application. The labels contain information on use rate, restrictions, PHI and REI as well as information on pollinator protection. The Sect 18 label for Scorpion 35SL from Gowan Company LLC is online at <https://cdn.extension.udel.edu/wp-content/uploads/sites/12/2016/06/24134718/DE-Scorpion35SL2016.pdf>. Please contact either Christopher Wade at the Delaware Department of Agriculture (Christopher.Wade@state.de.us) or Joanne Whalen (jwhalen@udel.edu) for more information.

Agronomic Crops

Agronomic Crop Insect Management - *Joanne Whalen, Extension IPM Specialist; jwhalen@udel.edu*

Alfalfa

Continue to sample for potato leafhoppers on a weekly basis. As temperatures increase you will see an increase in populations. Once plants are

yellow, 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

As stink bugs move from weeds and wheat into corn, be sure to start sampling corn for this insect pest. Please see the most recent report on stink bug sampling and treatment timing in field corn from North Carolina

<https://entomology.ces.ncsu.edu/2016/06/stink-bugs-moving-into-corn/>

Soybeans

Be sure to sample the earliest planted fields for bean leaf beetles, potato leafhoppers, thrips, grasshoppers, green cloverworm, silver spotted skippers and spider mites. Grasshopper populations have increased significantly in some double crop fields and in fields with small grain cover crops. If stand reductions are occurring from plant emergence to the second trifoliolate, a treatment should be applied. Although no precise thresholds are available, a treatment may be needed if you find one grasshopper per sweep and 30% defoliation from plant emergence through the pre-bloom stage. Numerous products are labeled for grasshopper control in soybeans. ***Be sure to check all labels carefully before combining insecticides and herbicides since there are a number of restrictions, including cautions on phytotoxicity.***

Orchardgrass Decline - *Nathan Kleczewski, Extension Specialist - Plant Pathology; nkleczew@udel.edu*

Over the past 2-3 weeks we have had several questions and concerns pertaining to "orchardgrass decline." Orchardgrass decline is not something new to the area, and has been something Richard Taylor mentioned observing on several occasions. Orchardgrass decline is a common syndrome with several factors contributing to the overall problem. Factors that can contribute to decline include imbalances, particularly nitrogen and potassium; leaving inadequate stubble to allow adequate regrowth; infestation by insect pests such as white grubs,

wireworms, thrips, aphids, and arthropods such as mites; and diseases including anthracnose, stripe rust, Septoria leaf spot, brown stripe, and barley yellow dwarf virus. Due to the complexity of the syndrome, it is difficult to recommend a single tactic that could improve the situation in a problematic field. However, the persistent wet weather we had earlier in the season could have spurred some issues that are now becoming more apparent.

If you are having issues with Orchardgrass decline consider the following:

- Consider rotating from grass hay to a legume such as alfalfa.
- Test the soil, paying special attention to potassium levels and pH.
- Look into newer varieties of orchardgrass and be sure to purchase certified seed.
- Plant into well drained fields with organic matter
- Allow the roots of recently established fields to establish deep into the plow layer before grazing or cutting.

Comments on Glyphosate Resistant Weeds

- *Mark VanGessel, Extension Weed Specialist;*
mjv@udel.edu

Glyphosate-resistant horseweed, Palmer amaranth, and common ragweed have all been identified in Delaware. In addition, many fields have plants of these species resistant to Group 2 herbicides; AND a few fields in the region have common ragweed resistant to glyphosate, Group 2 plus Group 14 (PPO-resistant).

Horseweed control in soybeans is very limited. Liberty (glufosinate) with Liberty Link soybeans; Synchrony with STS soybeans (but will not control ALS-resistant horseweed); for Roundup Ready soybeans FirstRate has been very inconsistent in our trials, but no other postemergence herbicide has sufficient activity on horseweed. Glyphosate will stunt horseweed and in situations with small horseweed plants or light infestations, this may be enough to provide acceptable horseweed suppression.

Palmer amaranth in corn can be controlled with a Group 27 herbicide plus atrazine. These herbicides include mesotrione (active ingredient in Callisto and Halex GT), Impact/Armezon, and Laudis. Liberty is an option with Liberty Link corn. Dicamba will control small Palmer amaranth in areas where it is appropriate to use. Control in soybeans is limited to Group 14 or Liberty with Liberty Link soybeans. Reflex (fomesafen) or Ultra Blazer should be used at 1.25 to 1.5 pt/A rate or Cobra at full rate. Other PPO-herbicides do not provide sufficient control. Flexstar GT contains the active ingredient of Reflex (fomesafen), but should be used at 4.5 pts to get the appropriate rate of fomesafen.

Postemergence control of common ragweed in corn can be achieved with atrazine, dicamba, or 2,4-D. The Group 27 herbicides (Impact, Laudis, Callisto) are not very effective for common ragweed unless they contain atrazine. In soybeans, metribuzin should be used at planting to provide some early-season control. Postemergence control for Liberty Link soybeans with Liberty is the only option if the field contains plants resistant to glyphosate/Group 14/Group 2 herbicides. If common ragweed is still sensitive to Group 14, Reflex (fomesafen), Ultra Blazer or Cobra can be used postemergence.

Liberty is a contact herbicide that needs good plant coverage to be most effective. Spray volume should be 20 gallons per acre or higher. Be aware that large spray droplets will reduce coverage. Application under high light intensity will improve control, so avoid applications in early morning or during evening hours.

Perennial Weed Management - *Mark VanGessel, Extension Weed Specialist;*
mjv@udel.edu

Modified from Dwight Lingenfelter and Bill Curran, Penn State

Perennial broadleaf weeds are seldom controlled with soil-applied herbicides and are best targeted with postemergence application. Canada thistle, the bindweeds, horsenettle, hemp dogbane, milkweed, and pokeweed are some of the more common perennial species.

One challenge for successful management is targeting herbicide application when these perennials are more susceptible to a systemic herbicide. In general, applications at bud to bloom or later in the summer are most effective, and this can be difficult to achieve, particularly in corn. Systemic herbicide application in soybean, following small grain harvest, or in grass hay or pasture can be more effective than earlier in the summer. Herbicide options in soybean are few and Roundup Ready technology

with glyphosate is an important tool for perennial weed management. Glyphosate rates for perennial control are generally at the upper end of the rate range; refer to specific glyphosate labels for appropriate rate. In corn and grass hay, the plant growth regulator herbicides (Group 4) become important choices in situations where these products are appropriate. Below is a quick summary for the herbicide effectiveness on perennial broadleaf weeds.

Herbicide Effectiveness on Perennial Broadleaf Weeds

	Canada thistle	Bindweed	H. dogbane	Horsenettle	Milkweed	Pokeweed
Corn						
2,4-D	7	8	7	6	6	7
Callisto (mesotrione)	8	N	7	7	7	7
Dicamba (Banvel/Clarity)	8	8+	7	7	6	7
Glyphosate	8+	7+	8	7	8	8
Status	8+	8+	7	7	7	8
Stinger	9	N	N	6	N	N
Yukon	8+	8	7	7+	8	8
Soybean						
Basagran	7	7	N	6	N	N
Classic	7	8	7	7	6	6
Glyphosate	8+	7+	8	7	8	8
Synchrony	7+	7	7	N	7	6
Grass hay						
2,4-D +dicamba	7+	8+	7	7+	7	7
Crossbow	8	8	8	8	7	9
Metsulfuron	7	N	N	7	N	N

N = none; 6 = 55-65%; 7 = 65-75%; 8 = 75-85%; 9=85-95% control.

Tankmixing Reflex (fomesafen) with Glyphosate - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

There have been many situations where both fomesafen (active ingredient in Reflex) and glyphosate will complement each other for weed control. Syngenta has a premix of fomesafen plus glyphosate called Flexstar GT. Also, Reflex and glyphosate can be tankmixed, but there are instances when these two products do not mix well. The following is excerpted from an article by Ken Smith from University of Arkansas entitled "Problem Solving Incompatible Tankmixes of Glyphosate and Reflex®"

"Some growers have experienced cottage cheese spray mixtures when Reflex® and glyphosate were tankmixed in an effort to burn down existing weeds while applying Reflex® prior to cotton or soybean planting.

"It seems that the potassium salts of glyphosate (WeatherMax, Touchdown, PowerMax etc.) are not very compatible with Reflex® Many of the generic glyphosate formulations are isopropyl or diammonium salts (not potassium salts) and will mix fine. A quick check of the label will give the salt used in the formulation.

"If Reflex® and the potassium salt of glyphosate is mixed and found to be incompatible, it can likely be brought back into solution by adding household ammonia. Start with 1% ammonia and begin agitation. More ammonia may be added if needed."

Announcements

Free Webinars in July, Sponsored by the Mid-Atlantic Women in Agriculture

7/13: Basics of Creating and Using Infographics - There are many ways to create infographics and you don't need to be a designer with Photoshop. There are also many ways to use this type of graphic to enhance a story or more visually summarize a lengthy report. Break things out by number or by topic. It's fun to do AND it's very shareable.

7/27: Farm Diversification - Ideas on alternative crops - Farm diversification opens opportunity and increases potential profitability! Adding specialty fruit and vegetable crops to your farm can increase profit margins in several ways. Like diversifying in the stock market, engaging in more than one enterprise and adding value to what you already grow will spread profit risk, not to mention "growing" interest in locally produced foods. This webinar will introduce participants to some new potential specialty crops, discuss new federal regulations to be aware of and regional research that has been done with specialty crops over the past few years.

To register:

<http://www.eventbrite.com/e/wednesday-webinars-registration-11452674257>

Webinars begin at noon EST. Duration is approximately 1 hour. For optimal performance we suggest using Internet Explorer as your web browser and connecting via Ethernet connection instead of wireless (wireless will work, but a hard line is more stable)

See website for more information and other upcoming topics: <https://extension.umd.edu/womeninag/webinars>

If you do not have access to high speed internet and would like to participate in one of the above webinars, contact Tracy Wooten at wooten@udel.edu.

2016 Horticulture Short Courses

For the complete list of 2016 courses go to:

<http://extension.udel.edu/lawngarden/commercial-horticulture/2016-horticulture-short-courses/>

Plant Identification - Herbaceous Plants

June, 29 4:30 – 5:30 p.m.

University of Delaware Botanic Gardens
531 S College Avenue, Newark, DE

Cost: \$15

Credits: 1 Pest., 1 CNP

Learn to identify some of the great herbaceous plants used in the landscape. We will cover the common disease and insect pests of each and strategies for incorporating into the landscape. Meet at UDBG Herbaceous Garden. Instructors: Valann Budischak and Sue Barton

Register with Carrie Murphy (302) 831-2506 or cjmurphy@udel.edu.

Landscape Weed Walk

July 7 4:00-5:30 p.m.

University of Delaware Botanic Gardens
531 S College Avenue, Newark

Cost: \$15

Credits: 1 Pest., 1 CNP

Learn to identify several common landscape weeds found in turf and flower beds during the spring. We will also discuss management. Meet at the entrance to Fischer Greenhouse. Instructors: Brian Kunkel and Susan Barton

Register with Carrie Murphy (302) 831-2506 or cjmurphy@udel.edu.

Disease and Insect Identification Workshop

July 13, 4-6 pm

Townsend Hall, 531 S College Avenue, Newark,
Room 012 Townsend Hall

Cost: \$15

Credits: 2 Pest., 2 ISA, 1 CNP

Learn what signs and symptoms the Extension Specialists use to identify pests and diseases! Tips and techniques will be shared. Fresh and preserved specimens will be available to look at using hand lenses and microscopes. Instructors: Nancy Gregory and Brian Kunkel

Register with Carrie Murphy (302) 831-2506 or cjmurphy@udel.edu.

2016 UD Weed Science Field Day

Wednesday, June 29 8:30 a.m.

University of Delaware

Carvel Research and Education Center

Route 9 (16483 County Seat Highway), Georgetown,
DE

The 2016 Weed Science Field Day will be held **Wednesday, June 29** at the University of Delaware Research and Education Center, Route 9 (16483 County Seat Highway), Georgetown, DE.

The day will begin with **registration beginning at 8:30** at the Grove near the farm buildings and new office building on the north side of the road. We will start to view the plots at 8:45 am. Coffee, juices, and donuts will be provided. We will also provide sandwiches for lunch.

Pesticide credits and Certified Crop Advisor continuation credits will also be available.

Dr. Charlie Cahoon, VA Tech, will hold a field day on Tuesday, June 28th at the Painter Research Facility

Dr. Burkhard Schulz, Univ of MD, will hold a field day on Thursday, June 30th.

Beginning Farmer Workshop Series: Irrigation Basics

Monday, June 27, 2016 6:00 – 8:30 p.m.

University of Delaware

Carvel Research and Education Center

16483 County Seat Highway, Georgetown, DE

Meet at the Picnic Grove

As part of the University of Delaware Beginning Farmer Workshop series a workshop on irrigation basics will be held on Monday, June 27. James Adkins, agricultural engineer with the University of Delaware Cooperative Extension will lead the workshop.

Topics and activities will include:

Types of Irrigation – drip, hand move pipe, travelling gun, pivot

Tour the farm to see various types demonstrated

Flow and pressure requirements for each.

Setup Labor and economics discussion

Well/Pumps – pros and cons of centrifugal vs submersibles for use with each type of irrigation.

Crop water demands vs application demands

Water needs, timing, application method versus evaporation and disease.

Drip System Design

Pressure regulators, filters

Tape emitter sizes and spacing, flowrate, length of run

Trunk line design and layout, valving

Connection and hookup

Management, run times, pulsing, automatic controls

Fertigation

Injectors - pumps, siphons etc,

Calibration

Products and timing

To register email Tracy Wootten (wootten@udel.edu) or leave a message at (302) 236-0298

Save the Date

2017 MidAtlantic Women In Agriculture Regional Conference

February 8-9, 2017

Dover Downs Hotel & Conference Center

Dover, DE

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of June 16 to June 22, 2016

Readings Taken from Midnight to Midnight

Rainfall:

0.54 inch: June 16

0.25 inch: June 17

0.87 inch: June 21

Air Temperature:

Highs ranged from 89°F on June 20 to 70°F on June 16.

Lows ranged from 67°F on June 21 to 57°F on June 18 and June 19.

Soil Temperature:

76.3°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, Associate Scientist - Vegetable
Crops*

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