



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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May 22, 2009

Vegetable Crops

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

Cabbage

Economic levels of diamond back and imported cabbage worm larvae continue to be found. A treatment should be applied when 5% of the plants are infested and before larvae move to the hearts of the plants.

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. Economic levels of aphids and spider mites continue to be found. Also, 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).

Potatoes

We are starting to see an increase in Colorado potato beetle egg laying and the first small larvae have been detected. 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. If adults are the predominant stage, the following neonicotinoids are labeled but should not be used if an at-planting neonicotinoid was applied: Actara, Assail, Endigo, Leverage, Provado (imidacloprid), or Venom. These materials should provide control as long as beetles are not resistant to this class of chemistry. Once eggs hatch and larvae are present, the previous materials as well as Avaunt + PBO, Agri-mek (abamectin), Coragen, cryolite, Radiant, Rimon, or Spintor have provided control. Be sure to read all labels to select the correct rate, maximum number of applications and observe resistance management statements on the labels.

A corn borer spray may be needed 3-5 days after an increase in trap catches or when we reach 700-degree days (base 50). If you are counting infested terminals, the first treatment should be applied when 10% (fresh market) or 20-25% (processing) of the terminals are infested with small larvae. A number of insecticides are labeled for corn borer control. Please refer to the [Delaware Commercial Vegetable Production Recommendations](#) for labeled materials.

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, Brigade (bifenthrin), Mustang MAX, Proaxis and Warrior (lambda-cyhalothrin) are labeled for both insect pests on snap beans. 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. The first earworms have been detected 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. You can call the Crop Pest Hotline for the most recent trap catches (in state: 1-800-345-7544; out of state: 302-831-8851) or check our website at <http://ag.udel.edu/extension/IPM/traps/latestblt.html>

Troubleshooting Sweet Corn Stand and Early Vigor Problems-Gordon Johnson, Extension Ag Agent, Kent Co.; gcjohn@udel.edu

This year has been challenging for early planted sweet corn and a number of fields have reduced stands and poor seedling growth. There are many causes for poor sweet corn stands and low vigor in emerging seedlings. The following is a list of possibilities from my observations over the years:

- Often farmers 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.
- One the obvious issue is early planting in cold soils. Sweet corn that takes more than 10 days to emerge is at great risk of injury due to insects and diseases as seed treatments dissipate. It is also at risk to damage from soil applied herbicides due to prolonged exposure of the mesocotyl to the chemicals.
- Seedling blights can be an issue, especially in overly wet soils. A recent article on seedling blights from the Iowa State Integrated Pest Management News relating to field corn applies well to sweet corn (<http://www.extension.iastate.edu/CropNews/2009/0519robertson.htm>). The following are some excerpts:

“Survival of young corn seedlings depends on a healthy kernel and mesocotyl which should remain firm and white through at least growth stage V6. Damage to the kernel or mesocotyl prior to establishment of the nodal root system can result in stunted, weak or dead seedlings. A developing corn seedling relies on the kernel endosperm for nourishment until the nodal root system has fully developed, usually around the 6-leaf stage. Thus the mesocotyl acts as the “pipeline” for translocation of nutrients from the kernel and seminal roots to the seedling stalk and leaf tissues.”

“Seedling diseases of corn (seed rots, seedling blights and/or root rots) are caused by numerous fungi including Pythium, Fusarium, Rhizoctonia, Aspergillus, Penicillium, and Trichoderma, all of which are common inhabitants of soils. In addition, these fungi also can be seed-borne in corn, except Pythium. Seedling susceptibility to infection increases the longer the seed sits in the ground, and the more stress germinating corn undergoes. Corn germinates well at soil temperatures above 68°F. When soil temperatures are below 55°F, germination is greatly retarded. Thus seedling disease often is more severe in early planted or no-till/reduced tillage fields because of cool soil temperatures.”

“Typical below ground symptoms associated with seedling disease include rotting seed and brown discoloration (rotting) of the mesocotyl and seminal roots. It is sometimes possible to determine in the lab which fungus is the culprit, however this information is not crucial since management options are the same for all seedling disease: plant high quality fungicide-treated seed, plant when soil temperatures are above 50°F, and ensure planting depth is not too deep.”

- A number of times, I have found that stand issues are related to poor vigor in seed lots. Ideally, a cold germination test should be run on all seed lots to be used for very early plantings. Never use year old seed - this is especially critical for early plantings.
- Soil compaction and crusting over will lead to delayed emergence. The coleoptile and mesocotyl will be thickened and may “snake” or “corkscrew” below ground. Often you will also see the corn seedling leafing out underground in these conditions. Rotary hoes can be used to break up the crust in severe cases. If seedlings are underground for extended periods or leaf out underground, they may never resume normal growth. Sidewall compaction in the seed slot due to smearing when planting in soils that are too wet will restrict early root growth to the slot and cause stunting.

- Waterlogging and compaction will lead to low oxygen conditions. In these conditions, the seedling root system will be intact but small and the corn shoot will also be smaller than normal with poor color. Seedlings will be thin and weak. Low oxygen restricts the mobilization and movement of reserves from the seed. Seedlings can sustain direct injury as cells in the mesocotyl and coleoptile die from oxygen starvation. This will appear as a water soaked area and the seedling will eventually collapse.

- Insect, slug, and bird damage is often a cause of poor stands. 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. Cutworms will eat seedlings at the ground level. Slugs can feed heavily on emerging seedlings and are especially damaging when seed slots are open (due to planting in wet soils). Birds can pull out seedlings and eat the seed. In larger seedlings, stink bugs can pierce the growing point of emerged plants, killing the main shoot.

- Problems with planter fertilizer applicators may lead to fertilizer being placed too close to the seed resulting in salt damage to seedlings and reduced stands.

- I have often seen pH and nutrient deficiencies lead to dead spots or stunted seedlings in sweet corn. If the pH of the soil drops below 5.2, corn will often emerge and then die. This may be due to aluminum toxicity or to severe magnesium deficiencies induced by the low pH. In addition, roots will not grow in soils with this low of pH. High pH (above 6.5) can lead to chlorotic seedlings and stunting in some soils, due to manganese and/or zinc deficiency.

- Finally, I have seen sweet corn fields with dead areas and poor stands due to certain species of nematodes. In troubleshooting, this is another possibility to consider, especially in very sandy soils.

Late Blight Advisory

Location: Shadybrook Farms, Little Creek, DE (Kent County)

Greenrow: May 1

Date	DSV	Total DSV	Spray Recommendation
5/3 -5/6		41	
5/7	2	43	
5/8	1	44	
5/9- 5/13	0	44	10-day spray interval
5/14	1	45	10-day spray interval
5/15	3	48	10-day spray interval
5/16	2	50	7-day spray interval
5/16- 5/20	0	50	7-day spray interval

Fungicide sprays are recommended if no applications have been made this season. Apply sprays of mancozeb (Dithane, Manzate, Pencozeb, Manex II), Gavel or Bravo (chlorothalonil) now and then repeat before plants canopy down the row. See the [Delaware Commercial Vegetable Production Recommendations](#) for more information on fungicides.

Fortunately late blight has not been a problem here in Delaware for many years and unless you have seed from an unknown source the risk of late blight is low.

Please note: I have reversed my decision to use Blightcast from Skybit to predict late blight. I have used Wisdom in the past and all my original data calibration for predicting late blight was done with Wisdom, and it has worked as best as I know, so I will continue with it this season as well. Sorry for any confusion this may have caused. You may notice that the DSVs are higher which is due to the way that Wisdom calculates these values compared to other programs.

Controlling the Crown Rot Phase of Pepper Phytophthora Blight - *Andy Wyenandt, Assistant Extension Specialist in Vegetable Pathology, Rutgers University;*
wyenandt@aesop.rutgers.edu

To control the crown rot phase of Phytophthora blight in pepper apply 1.0 pt Ridomil Gold 4E/A or 1.0 qt Ultra Flourish 2E/A (mefenoxam, 4), or MetaStar metalaxyl, (4) at 4.0 to 8.0 pt 2E/A. Apply broadcast prior to planting or in a 12-16 inch band over the row before or after transplanting. **Make two additional post planting** directed applications with 1 pint/A Ridomil Gold 4E or 1 qt/A Ultra Flourish 2E to 6 to 10 inches of soil on either side of the plants at 30-day intervals. Use the formula "Calibration for Changing from Broadcast to Band Application" on page E6 in the [Pest Management](#)

[Section](#) of the [Delaware Commercial Vegetable Production Recommendations](#) to determine amount of Ridomil Gold needed per acre when band applications are made. When using polyethylene mulch, apply Ridomil Gold 4E at the above rates and timing by injection through the trickle irrigation system. Dilute Ridomil Gold 4E prior to injecting to prevent damage to the injector pump.

Agronomic Crops

Agronomic Crop Insects - Joanne Whalen,
Extension IPM Specialist; 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, there would 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

Slugs continue to be the main pest of concern in many fields. Options to reduce damage and allow plants to grow ahead of the damage include the use of Deadline M-Ps or night time applications of 30% liquid nitrogen when plants are dry (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 - not eliminate -- plant injury). Also, 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. Last season, we also had reports of good results in commercial fields where a potash application was needed and slugs were also present in the field. It was probably effective due to its high salt index. Remember that when it comes to slug management all of the available control tactics only reduce the slug activity - buying time to enable the crop to outgrow the problem.

Research conducted by *Galen Dively from the University of Maryland* in 2003 indicated that "populations of five or more slugs around each plant prior to the 3-leaf stage may be economic, especially if injury is heavy, plant growth is slow, and cool, wet conditions prevail. If the weather turns hot and dry, 10 or more slugs per plant may be tolerated if the seedlings reach the 3-leaf stage. Generally, if a heavily infested field reaches the 3-leaf stage without severe seedling mortality, the crop has survived the critical period and should outgrow further slug injury, regardless of the population pressure."

Small Grains

We continue to find armyworms, sawflies and cereal leaf beetles in barley and wheat fields 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. 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 this year and can quickly damage soybeans 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 including a number of pyrethroids, dimethoate, Lorsban, Orthene 97 and Sevin XLR. *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. Combinations of certain formulations, especially emulsifiable concentrates (ECs), can cause significant phytotoxicity. *Also, it should be noted that the use of Furadan on soybeans has been cancelled. Please refer to the Federal Register notice from EPA regarding existing*

stocks

http://www.epa.gov/opp00001/reregistration/carbofuran/carbofuran_noic.htm#cancel.

Agronomic Crop Disease Update - Bob

Mulrooney, *Extension Plant Pathologist*;

bobmul@udel.edu

Corn

Pythium seedling damping-off as well as Fusarium seedling blight have been diagnosed from several fields that were very wet and the corn took from 10-14 days to emerge. The cool wet weather contributed to the widespread damping-off problem we are seeing. The amount of disease experienced depended on when the corn was planted in relation to the rains. With the warmer temperatures and more normal soil moisture, there should be no problems replanting with treated seed. No additional soil fungicide treatments should be needed if soil moisture is normal at replanting.

Barley

After evaluating the variety trials in all three counties I can report that there are low levels of the **spot blotch form of net blotch, scald, and powdery mildew** on susceptible varieties.

'Thoroughbred' varies in the amount of powdery mildew infection but it has been high overall.

Fusarium head blight or scab was also seen on two barley varieties, Nomini and FS 950. The incidence was fairly low (3-5%) and the severity

was low as well, maybe only 10-15% of the head was infected. Head scab in barley is a rare occurrence on Delmarva.



Fusarium head blight on barley.

Wheat

If this weather continues we may have missed a potential scab problem in wheat. So far scab has not been seen. Low levels of powdery mildew and tan spot were seen while evaluating the wheat variety trial.

Postemergence Herbicides with Residual Activity - Mark VanGessel, *Extension Weed Specialist*;

mjv@udel.edu

The recent rain and favorable conditions for weed growth have resulted in situations where postemergence herbicides are needed earlier than normal. Corn does not form a competitive crop canopy as quickly as soybeans and other crops, so weeds can become established after an early postemergence application and compete with corn. Do not wait to apply postemergence herbicides because early-season weed competition in corn can reduce corn yields.

The strategy is to use a postemergence herbicide that will provide residual weed control. Many of our postemergence herbicides provide little to no residual control (including glyphosate, Ignite, Banvel, Aim). The residual herbicides that are typically used at planting can be applied early postemergence, but they will not control emerged weeds (see the article titled [Delayed Soil Applied Herbicide Application in WCU 17:8](#)). The following herbicides provide postemergence and residual weed control: Accent, atrazine, Beacon, Callisto, Hornet, Option, Resolve, and Sandea.

Postemergence Herbicides That Can Provide Residual Weed Control

Herbicide	Premixes ¹	Strength	Weakness
Accent	Steadfast	some grasses, pigweed	crabgrass, limited spectrum of control
atrazine	numerous	broadleaf weeds; residual control depends on rate	grasses, triazine-resistant biotypes
Beacon	NorthStar	pigweed	grasses, limited spectrum of control
Callisto	Halex GT	broadleaf weeds (Halex GT contains Dual for grass control)	grasses, ragweed, morningglory
Option	Equip	some grasses	crabgrass, limited spectrum of control
Resolve	Steadfast, Basis	some grasses, pigweed, lambsquarters	crabgrass, large-seeded broadleaf weeds
Sandea	Yukon	lambsquarters, nutsedge, pigweed, ragweed	grasses
Hornet	Sure Start	SureStart is broad-spectrum, grass and broadleaves (contains acetochlor ²)	morningglory

¹The premixes of Halex GT and SureStart significantly improve the spectrum of control over Callisto or Hornet, respectively.

²Sure Start **will not** control emerged grasses.

Nightshade is a species that can emerge for an extended period of time and fields infested with it should include a residual herbicide when treated postemergence. Atrazine and Callisto are the best two options for residual control of eastern black nightshade.

Grain Marketing Highlights - *Carl German, Extension Crops Marketing Specialist;*
clgerman@udel.edu

U.S. Corn Crop; Sixty-Two Percent Planted

One thing for certain, getting this year's U.S. corn and soybean crop in the ground is a mixed bag. Overall, a quick glance at Table 1 tells us that 62% vs. the five-year-average planting progress of 85% doesn't appear to be all that bad, just 8 points behind last year's pace for the same date. What's troubling is the rate of progress in the major corn producing states of Illinois, Indiana, and Ohio. Illinois, typically the nation's number two corn producer, reported only 20% of their corn crop planted, compared to the five year average of 92%. Indiana reported

corn plantings at 24% as compared to the five year average of 83%. Both states are also well behind last year's pace. Ohio is 39% planted compared to the average of 82%. Iowa, the nation's number one corn producer, reported their planting progress to be equal to the average and slightly ahead of last year at 90%. Next week's planting progress will be critically important to market participants.

Table 1. Corn: Percent Planted, Selected States¹

State	Week Ending			2004-2008 Avg.
	May 17 2009	May 10 2009	May 17 2008	
	<i>Percent Planted</i>			
CO	63	44	78	74
IL	20	10	73	92
IN	24	11	67	83
IA	90	81	73	90
KS	73	48	84	90
KY	45	39	72	89
MI	41	18	82	77
MN	90	81	62	85
MO	54	39	52	84
NE	93	78	79	88
NC	100	95	97	98
ND	23	7	76	75
OH	39	22	52	82
PA	48	29	56	69
SD	63	29	51	71
TN	79	75	89	95
TX	94	80	93	95
WI	62	43	52	72
18 States	62	48	70	85

¹These 18 states planted 92% of last year's corn acreage.

Worth mentioning is the spring wheat planting progress, which is running well behind last year's pace and the average (see Table 2). It has been suggested that delayed planting in spring wheat plantings could result in a reduction in ending stocks for all wheat. This in turn could prove to be beneficial to the winter wheat market.

Table 2. Spring Wheat Percent Planted, Selected States¹

State	Week Ending			2004-2008 Avg.
	May 17 2009	May 10 2009	May 17 2008	
	<i>Percent Planted</i>			
ID	93	85	92	93
MN	34	24	88	90
MT	69	48	92	90
ND	31	13	92	87
SD	94	85	95	97
WA	96	85	97	99
6 States	50	35	92	90

¹These 6 states planted 98% of last year's spring wheat acreage.

Market Strategy

The general economy continues to limit possible gains in the commodity markets by the skittishness reflected in economic reports recently coming to bear. Specifically, the U.S. economy is now projected to grow by about one-half the rate previously projected. Further, we are not out of the woods as yet regarding the weather for '09 crop planting and development. However, we have experienced sizable gains in both old crop and new crop futures prices for corn, soybeans, and wheat since March, led by the soybean market and, more recently, non-commercial interests. USDA's May projection for ending stocks of U.S. soybeans for the '08/'09 marketing year was placed at 130 million bushels. That number was no sooner released when the trade started to speculate that U.S. soybean stocks could grow even tighter than the May projection. To some degree, that possibility may depend upon whether we see an acreage shift from corn to soybean production and/or from spring wheat to soybean production. With new crop Dec '09 corn futures trading at \$4.42 per bushel; new crop Nov '09 soybean futures at \$10.15 per bushel; and new crop July '09 SRW wheat trading at \$5.89 per bushel one has to consider advancing new crop pre-harvest sales.

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

Announcements

Come. Play. Experience. A Day on the Farm

Saturday, May 30, 2009 10:00 a.m. – 4:00 p.m.
Woodside Farm Creamery, Hockessin, DE
(Corner of Little Baltimore and North Star Rd.)

Free Admission!

Enjoy...

- More than 40 entertaining & educational exhibits
- Interactive Agricultural Demonstrations
- A LIVE Honey Bee Colony
- Hayrides
- Woodland Walks
- "Guiding Paws" Dog Show & Much More!

Bring your family and friends but, please, no pets.

Join Delaware Cooperative Extension in supporting the Food Bank of Delaware. Bring nonperishable food to our Day on the Farm Food Drive – and help feed Delawareans in need.

For more information contact New Castle County Cooperative Extension at (302) 831-2506 or visit www.woodsidefarmcreamery.com.

Agronomic Crops Twilight Tailgate Session

Wednesday, June 10, 2009 6:00 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 UD's Weed Science Program—Fall Soybean Herbicide Applications research trial; updates on the latest disease and insect outbreaks and a grain market update. We will wrap things up with the traditional ice cream treat!

Bring a tailgate or a lawn chair.

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. Please register by June 5. 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, New Castle County Agricultural Extension Agent

Attention Produce Growers!! On Farm Delaware Food Safety Training – Level I Certification

Tuesday, June 30, 2009 9:00 a.m. – 4:00 p.m.

Filasky's Produce, Inc.

1343 Bunker Hill Road, Middletown, DE

Recent food safety concerns emphasize the need for fresh produce growers to reduce potential exposure of fruits and vegetables to organisms that cause food-borne illness, as well as other contaminants. Keeping produce safe should be a priority for Delaware produce growers, packers and shippers. Attend this training and you will receive Level 1 Delaware Voluntary Produce Food Safety Certification.

Lunch will be provided.

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.

Co-sponsored in part by Northeast Center for Risk Management Education.

See you there!

Anna Stoops, New Castle County Agricultural Extension Agent

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of May 14 to May 20, 2009

Readings Taken from Midnight to Midnight

Rainfall:

0.13 inch: May 15

0.22 inch: May 17

Air Temperature:

Highs ranged from 81°F on May 16 to 60°F on May 18.

Lows ranged from 66°F on May 15 to 39°F on May 20.

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

Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops. For subscription information, contact her at emmalea@udel.edu or (302) 856-2585 x 587.

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