



# WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 15, Issue 20

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## Vegetables

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

### Cabbage

In addition to worm pests, be sure to watch for an increase in harlequin bug activity. Although they generally prefer Brussels sprouts and collards, we have seen significant populations and damage to cabbage plants. No thresholds are available for this pest on cabbage. However, if populations and damage increases, the pyrethroids have provided effective control.

### Lima Beans

Continue to scout all fields for spider mites, lygus bugs, stinkbugs and corn earworm. The higher labeled rates of insecticides will be needed for stinkbug control. For corn earworm, higher rates will also be needed if population levels are high and worms are large at the time of treatment. As you approach harvest, be sure to check all labels for days from last application to harvest as well as other restrictions.

### Melons

Aphid populations continue to increase. Be sure to apply treatments before populations explode.

### Peppers

In areas where corn borers are being caught in local traps, fields should be sprayed on a 7-day schedule for corn borer control. As soon as corn borer trap catches increase to above 10 per night, a 5 to 7-day schedule may be needed.

Since trap catches can increase quickly at this time of year, be sure to check local moth catches in your area at <http://ag.udel.edu/extension/IPM/traps/latestblt.html>. We continue to find beet armyworms (BAW) so be sure to watch for feeding signs and apply treatments before significant webbing occurs. With the recent significant increase in corn earworm pressure, you will also need to watch for corn earworms infesting peppers.

### Snap Beans

With the sharp increase in corn earworm populations, you will need to consider treatments for *both corn borer and corn earworm from the bud stage through harvest*. Sprays are needed at the bud and pin stages on processing beans for corn borer control. Since earworm trap catches have significantly increased, an earworm spray will also be needed at the pin stage. Just as a reminder — Orthene will not provide effective corn earworm control in processing snap beans. If Orthene is used for corn borer control you will need to combine it with a corn earworm material (e.g. a pyrethroid). After the pin sprays, you will need to check our website for the most recent trap catches to help decide on the spray interval between the pin stage and harvest for processing snap beans (<http://ag.udel.edu/extension/IPM/traps/latestblt.html>) and (<http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html>). Once pins are present on fresh market snap beans, a 7-day schedule should be considered for corn borer and corn earworm control.

## Spinach

Since webworm and beet armyworm moths are both active, be sure to watch for both worm pests as soon as plants emerge. Controls should be applied when worms are small and before they have moved deep into the hearts of the plants. Also, remember that both insects can produce webbing on the plants.

## Sweet Corn

With the recent sharp increase in corn earworm catches throughout the state, all fresh market silking sweet corn should be sprayed on a 2-day schedule. Be sure to check trap catches for the current spray schedule. Trap catches are generally updated on Tuesday and Friday mornings.

(<http://ag.udel.edu/extension/IPM/traps/latestblt.html> and

<http://ag.udel.edu/extension/IPM/thresh/silksp raythresh.html>).

You can also call the Crop Pest Hotline for current trap catches (in state: (800) 345-7544; out of state: (302) 831-8851).

Continue to watch for fall armyworm feeding in whorl stage corn. We continue to find economic levels in all late planted fields – often at the 50-60% level. A treatment is needed if you find 12-15% of the plants infested. Multiple whorl applications are generally needed for fall armyworm control. In addition, you will need to combine a fall armyworm material with a pyrethroid for the first 2-3 silk sprays for fall armyworm control. Be sure to check all labels for days to harvest and maximum amount allowed per acre.

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**Cucurbit Downy Mildew Update** - *Bob Mulrooney; Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu) and Kate Everts; Vegetable Pathologist, University of Delaware and University of Maryland; [keverts@umd.edu](mailto:keverts@umd.edu)*

Downy mildew was confirmed last Friday on processing cucumbers in Sussex County, Delaware and Caroline and Dorchester counties, Maryland. The downy mildew forecast is favorable for Friday but not favorable Saturday through Monday. Growers are advised to keep pickle crops protected with fungicide programs that rely on downy mildew effective fungicides,

such as Previcur Flex plus Bravo and Ranman, alternated with each other or with Tanos plus mancozeb. We suggest that since it has not been found on any other cucurbit crop yet (pumpkin, watermelon, squash and muskmelon), a good strategy for these crops is to continue (or begin) application of protectant fungicides such as chlorothalonil. Continue to scout these fields and change the fungicide program if additional strains of downy mildew occur in our area. There have not been any confirmed reports - on Delmarva - of downy mildew on any cucurbit other than cucumber. If you believe that you see it on another crop, please get it confirmed by someone with a dissecting scope or microscope. For more information and other fungicide selections consult the 2007 Commercial Vegetable Recommendations.

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**Vegetable Crop Diseases** - *Bob Mulrooney; Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)*

## Downy Mildew on Lima Beans

When cooler nights and heavy dew begin, along with heavy rainfall associated with tropical storms and hurricanes, **downy mildew** can threaten the fall lima crop. Last season downy mildew appeared sporadically. Race F of *Phytophthora phaseoli* was the only race identified in 2006, so it may predominate if downy mildew should appear again. Preventative applications of 2 lbs fixed copper, 2 lbs Ridomil Gold/Copper, or 3 - 4 pts Phostrol have provided control of downy in the past. The best controls continue to be Ridomil Gold/Copper or Phostrol, especially when disease pressure is high. Application at flowering or when pods are first forming is recommended if weather is favorable for disease. If disease is present, Ridomil Gold/Copper and Phostrol have been shown to provide some curative activity if applied when downy mildew is first seen. Be sure to have a copy of the label on hand since Ridomil Gold/Copper and Phostrol have 24c labeling in DE. Labels are available online at [www.rec.udel.edu/Update06/Phostrol24c.pdf](http://www.rec.udel.edu/Update06/Phostrol24c.pdf) (Phostrol) and [www.cdms.net/ldat/ld186002.pdf](http://www.cdms.net/ldat/ld186002.pdf) (Ridomil Gold/Copper). The following is a spray recommendation matrix for control of downy mildew on baby limas.

## Fungicide Rates and Intervals for Control of Downy Mildew of Baby Lima Beans

Fungicide	Preventative		Curative <sup>1</sup>	
	High Disease <sup>2</sup>	Low Disease <sup>3</sup>	High Disease <sup>2</sup>	Low Disease <sup>3</sup>
Ridomil Gold/ Copper	2 lb 2X 7 to 14-day interval	2 lb 1X	2 lb 2X 7 to 14-day interval	2 lb 1 to 2X 10 to 14-day interval
Phostrol	3-4 pt 1 to 2 X 7 to 14-day interval	2-4 pt 1 to 2 X 7 to 14-day interval	3-4 pt 2 X 7 to 14-day interval	4 pt 1X or 2-4 pt 2X 7 to 14-day interval
Copper <sup>4</sup>	2 lb 4X 7-day interval	2 lb 2 to 3X 7 to 10-day interval	Not Recommended	

<sup>1</sup>Curative - when disease first seen, very low incidence, less than 1% of pods and/or racemes infected

<sup>2</sup>High Disease - conditions very favorable for infection and spread, i.e. ample rainfall, dews, fog and cool temperatures

<sup>3</sup>Low Disease - conditions less favorable for disease, i.e. low humidity and rainfall and/or temperatures too high (high 80s and above)

<sup>4</sup>Copper fungicides include Champ DF, Kocide, Cuprofix Disperss and other labeled coppers.

### Phyllosticta Leaf Spot on Lima Beans

We do not see it very often but we had a sample of Phyllosticta leaf spot on lima bean. This is a minor disease and by the time it appears it is too late for control.



Phyllosticta leaf spot on baby lima bean. The early stages of this leaf spot could be confused with anthracnose of lima bean. Look for the raised pimple-like fungal structures in the dead tissue. Older lesions will tear giving the leaf a tattered appearance.

## Agronomic Crops

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

### Soybeans

As the potential for late season insect control increases, be sure to check all labels for the days from last application to harvest as well as other restrictions.

Although we are starting to see mite populations decline in some fields, you will still need to check fields for spider mites. With the extremely hot temperatures this week, we could see a rebound in populations.

Be sure to continue to scout for soybean aphids. We continue to find fields with low levels of aphids in New Castle County, although numbers continue to increase each week. As a general guideline, treatment is needed through the R-5 stage (seed is 1/8 inch long in the pod of one of the four uppermost nodes on the main stem) of soybean development if economic levels are present. It may also be beneficial to spray through R-6 stage (pods containing a green seed that fills the pod cavity at one of the four uppermost nodes on the main stem) – reports vary as to the benefit of spraying once plants reach the R-6 but in some years and some situations there has been an economic return.

Spraying after R-6 stage has not been documented to increase yield in the Mid-West. The suggested treatment threshold from the Midwest is still 250 aphids per plant with 80% of the plants infested with aphids. This number should provide a 5 to 7 day lead time for treatment to avoid economic loss. You can also consider using speed scouting to make a treatment decision. Information on how to use speed scouting can be found at:  
[http://www.nwroc.umn.edu/Cropping\\_issues/2007/Issue9/07\\_17\\_07\\_no4.htm](http://www.nwroc.umn.edu/Cropping_issues/2007/Issue9/07_17_07_no4.htm)  
or  
<http://breeze.ag.vt.edu/speedscouting>

You should also start looking for stinkbugs in fields that are in the pod development and pod fill stages. Economic damage is most likely to occur during these stages. Populations of stinkbugs have been lower this year compared to last but we have just seen an increase in green stinkbug populations in Sussex County. You will need to sample for both adults and nymphs when making a treatment decision. Available thresholds are based on beans that are in the pod development and fill stages. We are currently following the same guidelines that are being used in Virginia. Thresholds are also based on numbers of large nymphs and adults, as those are the stages most capable of damaging pods. As a general guideline, current thresholds are set at 1 large nymph/adult (either brown or green stink bug) per row foot if using a beat sheet, or 2.5 per 15 sweeps in narrow-row beans, or 3.5 per 15 sweeps in wide-row beans.

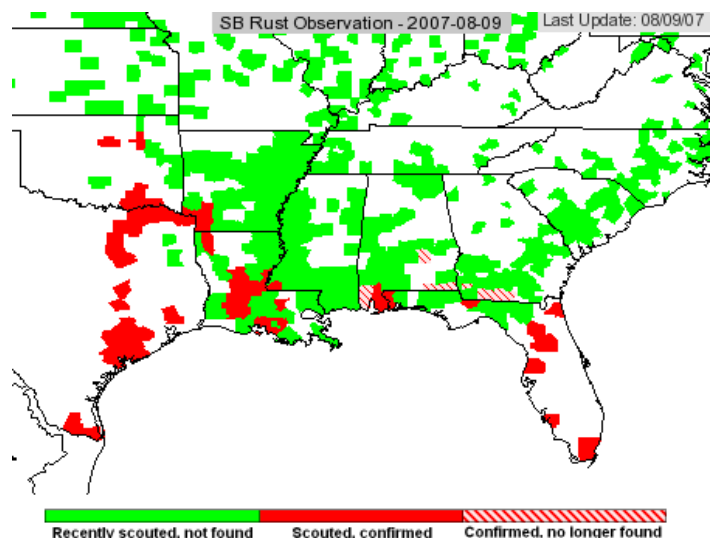
As indicated last week, Virginia reports continue to indicate a high potential for corn earworm in soybeans. They have also indicated this week that soybeans might need to be sprayed twice since moths are now emerging from drought stressed corn and a second group could emerge from irrigated corn in a couple of weeks so close attention to scouting and timing sprays will be important. We have also started to see a significant increase in corn earworm trap catches throughout the state. There have been a few reports of high levels of corn earworm infestations in field corn. The increase in trap catches and the higher than normal infestations in field corn combined with the drought continues to point to a potential for significant

corn earworm pressure, especially in our double crop soybeans. With the recent significant increase in trap catches throughout the state, open canopy blooming fields will be attractive to egg laying moths. A treatment should be considered if you find 3 podworms per 25 sweeps in narrow fields and 5 podworms per 25 sweeps in wide row fields (20 inches or greater).

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**Agronomic Crop Diseases** - Bob Mulrooney;  
Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)

### Soybean Rust Update



As you can see from this recent map of soybean rust distribution, rust has moved as far north as Tulsa County, OK. Soybean rust is heating up in LA (six new parishes found with SBR this week), TX, and OK. Commercial fields have been found with rust and are adding to the spore production for transport north into the Midwest, primarily Kansas and Nebraska. The rust situation in FL and GA is not as active and not posing a threat to the East Coast at the present time. Soybean rust monitoring continues throughout the soybean growing areas. Sixty-eight counties and parishes in the U.S. have soybean rust, vs. 29 by this time last year. With the tropical storm and hurricane season rapidly approaching the conditions can change quickly. So stay tuned to the PIPE website [www.sbrusa.net](http://www.sbrusa.net)



## Corn

As you would expect in a very dry year corn leaf disease levels have been very low in irrigated corn as well as in the northern parts of the state that have had less drought damage. I have seen low levels of several leaf diseases such as anthracnose, Southern corn leaf blight, and gray leaf spot. More of a threat could be contamination of drought damaged corn kernels with mycotoxins, such as aflatoxin (see "Aflatoxins in Corn" by Gordon Johnson in this issue of WCU).

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## Additional Potash (K) Deficient Fields Found - Richard Taylor, Extension Agronomy Specialist; [rtaylor@udel.edu](mailto:rtaylor@udel.edu)

Consultants and crop scouts working in the eastern areas of Delaware should continue checking fields for potash (K) deficiency symptoms as several more fields have appeared in the past weeks since my first article (Vol. 15, Issue 16, July 13, 2007 of WCU) appeared. When it is localized in small areas of a field and is not severe enough to cause significant stunting, K deficiency can be confused with drought injury since often the first leaves hurt are the lower leaves. Drought injury when observed early enough will show the characteristic leaf rolling/curling that is often described as pineapple corn. After prolonged drought the lower leaves will become fired or necrotic and it will involve the entire leaf rather than just the leaf margins as with K deficiency. Again in the eastern portion of northern Delaware, the difference between adequate K in the soil and a very severe problem seems to involve only small soil test level changes. Keep track of soil test K, yields, fertilization practices, and the location of symptomatic plants on these fields and adjust K fertilization upward until the problem is eliminated.

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## Fertilizing Pasture and Hay Fields for Fall Production Following Drought - Richard Taylor, Extension Agronomy Specialist; [rtaylor@udel.edu](mailto:rtaylor@udel.edu)

With much of the state still in the grip of drought, growers need to carefully consider factors that can affect their fall fertilization program as well as impact forages' winter survival. Where grazing is short, fall fertilization may be needed to help feed animals on pasture as late in the season as possible to reduce the need for the inadequate and now expensive hay crop. In addition, fall fertilization of certain forage crops can provide a stockpile of forage available for grazing in late fall and early winter.

Rainfall/soil moisture level is a major factor in determining when late summer/fall nitrogen (N) fertilizer can be applied without damaging the forage planting or causing an increase risk for nitrate toxicity in the available forage. Following a drought similar to that experienced in many areas of the state and region, N fertilization should be delayed until adequate rainfall has been received to recharge moisture levels in the topsoil to near field capacity level. This moisture level should be adequate to stimulate or allow renewed growth following the drought although for maximum growth potential continued rainfall, as well as pasture/hay fertilization, will be needed.

The actual N rate to apply should be geared to the amount of time between when rainfall refills the soil moisture holding capacity and the expected date of the first killing frost. If you begin receiving rainfall in time to fertilize in August or very early September, application of 50 to 75 lbs N/acre can help the pasture or hay field recover and produce enough growth for fall grazing/harvest. If adequate rainfall does not come until mid-to late-September, reduce the N rate to between 25 and 50 lbs N/acre. If rainfall begins in mid-October, a further reduction to 25 lbs N/acre or less is appropriate. Do not adjust the above N rates for the legume (clover) content of the pasture or hay field unless the accompanying legume is alfalfa. Red clover, white clover, alsike clover, and most other pasture legumes with the exception of alfalfa

will have shut down the N-fixing association with the bacteria, *Bradyrhizobia*. Therefore, little to no N will be available for any companion grass.

Producers are often hesitant about applying potash (K) and phosphorus (P) during droughts. Although it might be wise to delay P and K applications until cooler weather arrives in early to mid September, soil test recommended levels of P and K should be applied by no later than the end of September. Potash in particular will be invaluable to the recovering forage grasses in preparation for winter survival. The phosphorus fertilizer will help plants reestablish a vigorous root system and activate recovery from the rhizomes. Next spring growers should watch the stands carefully and provide N at or just before spring green-up to encourage vigorous spring growth. If the stands appear very weak, additional P and K and boron (1 lb B/acre for most legumes and up to 2 lb B/acre for alfalfa) early in the season will help strengthen stands and improve yields.

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**Aflatoxins in Corn** - Gordon Johnson, Kent County Extension Agriculture Agent; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)

There are many mycotoxins that can be produced by fungi in grain. The types of fungi that proliferate and the toxins that are produced depend on weather conditions, insect damage, diseases present, stress encountered and variety interactions. In a dry year, aflatoxins are the predominant mycotoxin present in corn at harvest. Aflatoxins are produced by the mold fungi *Aspergillus flavus* and *Aspergillus parasiticus*. These fungi can be recognized by their yellow-green or gray-green colors respectively on corn kernels.

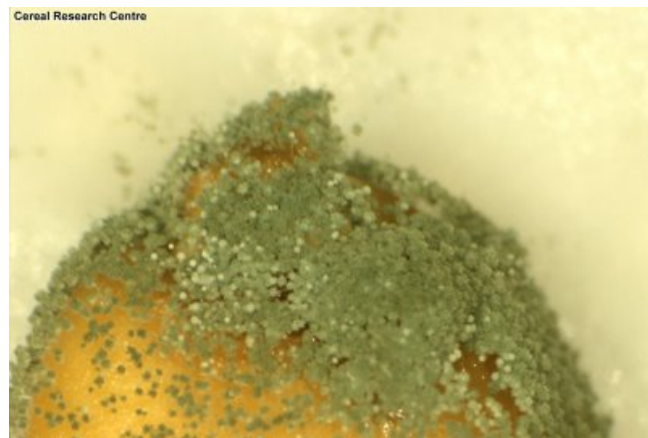
Aflatoxins are often a problem in hot, dry years on drought stressed corn. According to an Iowa State Extension publication on the topic, "The prime conditions for the fungus to produce toxin are warm August nights in a period of drought," which describes most of Delaware (and Delmarva as a whole) at this time.

Aflatoxins are potent poisons and can contaminate feed ingredients leading to health and performance problems in animals (dairy, beef, swine, and poultry). They are also considered carcinogens and are a human health concern.



A Robertson, Iowa State University

*Aspergillus* ear rot - this is the fungus that produces aflatoxin



Cereal Research Centre, AAFC

*Aspergillus* on corn

Table 1. FDA guidelines for acceptable aflatoxin level in corn based on intended use.

Intended Use	Aflatoxin Level (ppb)
Milk (Dairy Feed)	None detected
Corn of unknown destination	<20
Corn for young animals	<20
Corn for dairy cattle	<20
Corn for breeding beef cattle, swine, and mature poultry	<100
Corn for finishing swine	<200
Corn for finishing cattle	<300

A rapid test is often used on corn for initial indication of aflatoxin. This is done with a black light at a wavelength of 365 nm. Contaminated corn will give off a greenish-gold fluorescence. More than four particles showing this fluorescence in a five pound sample indicates levels of aflatoxin above 20 parts per billion (ppb), the initial level of concern. However, this is just an initial screen. More accurate testing is necessary to assess actual levels. This is done using commercially available test kits or by sending samples to an analytical laboratory. Both the Delaware Department of Agriculture and Maryland Department of Agriculture can provide aflatoxin testing for growers (free of charge) in those states. This is particularly of use for growers who store or feed their own grain.

The fungi that produce aflatoxins are found in plant residue. They produce many spores that can infect silks or kernels of corn, usually through insect wounds. The *Aspergillus* fungus grows best in hot, sunny, dry daytime weather conditions with warm nights. Drought damaged corn is most susceptible. Insects can further spread the fungus when feeding on an ear.

Managing for aflatoxins begins with assessing fields for insect or other damage. Fields with heavy European corn borer pressure, corn earworm feeding on tips, bird feeding, or storm damage should be noted and tested before harvest. If a field is suspect, samples should be collected from 20 or more locations, taking at least 5 pounds of grain from every 5 acres. Dry samples to 12-14 % moisture or freeze to stop aflatoxin development (aflatoxin can increase in stored samples if at higher moistures) and immediately deliver to the laboratory for testing. Dried samples can be shipped in paper bags (do not use plastic). Scout fields at black layer and again two weeks before harvest.

If fields test positive for aflatoxins or you expect high levels, you should make provisions to harvest those fields first and dry the grain quickly. Adjust combines to minimize kernel damage as this can cause the fungus to increase. Grain with high levels of aflatoxin should be stored separately if possible. Grain storage facilities should be carefully cleaned to minimize infection of incoming grain by *Aspergillus* and

other mold spores. Avoid grain damage during handling and if possible, clean corn before storage (screening). Do not store grain in non-aerated conditions for more than 4 hours (trucks, wet tanks, combine bin). Aflatoxin production is effectively stopped if grain is dried to 12% moisture. It proliferates at a grain moisture content of 18% and temperatures above 80°F.

Corn that is contaminated at levels greater than 20 ppb may not be sold for interstate commerce. It can be used locally for livestock and poultry if under certain levels, but not for lactating dairy. Check with your grain buyers on how they will handle aflatoxin contaminated corn. Blending with non-contaminated corn to reduce levels to below 20 ppb may be an option. Cleaning grain by screening or a gravity table can also reduce aflatoxin concentrations

*Quotes and table from Aflatoxins in Corn, Iowa State University Extension Publication PM1800*

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**Droughted Soybeans as Hay or Silage** -  
*Gordon Johnson, Kent County Extension  
Agriculture Agent; [gcjohn@udel.edu](mailto:gcjohn@udel.edu)*

I have recently been asked about harvesting drought-damaged soybeans for hay or haylage/silage. Soybeans are a good alternative or emergency source of livestock feed if managed correctly. Ideally, soybean hay should be harvested when 50 percent of the pods have immature beans. If beans have few pods they can also be used to make hay. In practice, soybeans can be cut for forage at any stage from the time the plants have achieved some height until the beans are almost fully developed. Quality of soybean hay is variable but typically contains 16 to 19 percent crude protein, and 50 to 55 percent TDN if harvested when 50 percent of the pods have immature beans. Once leaf drop starts, forage quality drops rapidly and soybeans probably should not be harvested for forage after this point. A common problem with soybean hay is that the immature beans dry slowly in the pods and often mold inside the hay. Crimping the hay with a mower conditioner will make the drying more even, but the pods are

still the slowest drying part of the plant. Waiting to bale until the pods dry fully will also reduce this problem, though more leaves will be lost. Chopping soybeans for silage will minimize this problem.

Another problem with soybean hay is that it does not weather well when stored outside. Large round bales of soybean hay when left unprotected from the rain will deteriorate much more rapidly than grass hay. It is common to lose 50 percent of the forage to weathering if the hay is left unprotected. Storing soybean hay in a well-drained and covered stack or in a barn is imperative. Often, soybean hay is stemmy and may be refused by livestock. Typically, 10-20 percent of soybean hay is wasted during feeding due to the coarse stems. If soybeans are harvested for silage, or if soybean hay is chopped in a tub grinder, cattle will eat almost all of it. However, the stem contains high levels of fiber and low amounts of digestible nutrients.

Soybeans can make good silage if two conditions are met. 1) If seeds are well-developed do not chop for silage (too much oil) 2) If seeds did not develop or are small, silage is an option if dry matter content is ok. Prior to chopping beans for silage, check dry matter content. If the plant contains less than 45% dry matter (at least 55% moisture), the plants should ferment fine in upright and bag silos and will usually ferment ok in bunker silos and wrapped big bales. If the plant contains more than 50% dry matter (less than 50% moisture), fermentation quality will probably be poor in bunker silos and balage. When dry matter is much higher than 55%, fermentation will be poor in all types of silos except sealed structures. If plants do not contain enough moisture for fermentation, water can be added but it takes a lot of water to change the dry matter content. To increase the moisture content of 1 ton of material by 4 percentage units (for example 55 to 51% dry matter), you have to add about 190 lbs. of water (24 gallons per ton).

A word of caution: soybeans treated with many herbicides cannot be used for livestock feed. If in doubt, read the label.

*Excerpted from drought related articles: Whole Soybean Plants For Cattle by Bill Wiess, Ohio State University and Soybeans for Hay or Silage By Rob Kallenbach, Craig Roberts, and Bill Wiebold, University of Missouri, Columbia*

## Announcements

**For Current Agricultural Information from the UD Kent Co. Extension Office Visit the Internet Site**

[www.kentagextension.blogspot.com](http://www.kentagextension.blogspot.com)

### Current Topics:

- More on Downy Mildew
- Aspergillus Fungus that Produces Aflatoxins in Corn
- Aflatoxin Tolerance Table
- Aflatoxins in Corn Will be a Concern This Harvest Season
- Heat Stress and Dairy Cattle
- Heat Stress Can Affect You and Your Workers
- Windrow Composting for Large Poultry Losses
- Know Your "True Bugs" That are Pests of Crops
- Interesting Take on Kids and Dirt
- Irrigated Soybean Water Use Curves
- Sacrifice Lot Management for Horses or Other Livestock
- Molds in Hay
- Forage Nitrate Test Interpretations
- Photos of Downy Mildew on Cucumbers
- Soybean Pests to Watch for in Northern Kent
- Drought Related Resources from Extension Sources and Land Grant Universities
- Northeast Drought Conditions Map
- Droughted Soybeans as Hay or Haylage
- Downy Mildew Has Been Found in Delaware and Neighboring Eastern Shore
- Corn Earworm and Beet Armyworm Pictures
- Corn Earworm (Podworm) and Beet Armyworm Watch

# Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 2 to August 8, 2007

Readings Taken from Midnight to Midnight

## Rainfall:

0.08 inch: August 5

0.07 inch: August 6

## Air Temperature:

Highs Ranged from 98°F on August 8 to 84°F on August 5.

Lows Ranged from 78°F on August 8 to 66°F on August 2.

## Soil Temperature:

85°F average.

(Soil temperature taken at a 2" depth, under sod)

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

*Weekly Crop Update is compiled and edited by  
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Crops*

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