



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 20, Issue 23

August 24, 2012

Vegetable Crops

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

Cole Crops

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

Lima Beans

Continue to scout for stink bugs, lygus bugs, and corn earworm. A treatment will be needed if you find one corn earworm larvae per 6 ft-of-row. With the increase in local corn earworm catches we are starting to see a significant increase in larval populations. We have also found beet armyworm and soybean loopers in fields. Remember that they are a migratory pest, difficult to control and pyrethroid resistance has been documented in states to our south. If they are present in the mix, you will need to select a material labeled for these 2 insects. Be sure to check the label for rates, restrictions (including plant back/rotational crop restrictions) and days from last application to harvest.

Melons

Continue to scout all melons for aphids, cucumber beetles, and spider mites. We continue to see a significant increase in aphid populations. Treatments should be applied

before populations explode and leaf curling occurs.

Peppers

At this time of year, corn borer, corn earworm, beet armyworm and fall armyworm are all potential problems in peppers. So be sure to select the material that will control the complex of insects present in the field. Be sure to check local moth catches in your area by calling the Crop Pest Hotline (in state: (800) 345-7544; out of state: (302) 831-8851) or our webpage at <http://ag.udel.edu/extension/IPM/traps/latestbtl.html>. We continue to see aphid populations increasing, especially in fields where pyrethroids have been used on a weekly basis. Labeled materials are only effective if applied before populations explode.

Snap Beans

With the high trap catches, you will need to consider a treatment for both corn borer and corn earworm. You should also watch for beet armyworms and soybean loopers. Sprays are needed at the bud and pin stages on processing beans for worm control. With the diversity of worm pest that may be present in fields, be sure to scout fields and select materials that will control the complex of insects present. 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/latestbtl.html> and <http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html>).

We continue to find fields with high levels of whiteflies. Be sure to check the Vegetable Crop Recommendations for materials labeled for whitefly control on snap beans:

<http://ag.udel.edu/extension/vegprogram/pdf/Beans.pdf>

Spinach

Be sure to watch for webworms and beet armyworms. Both moths are active at this time and controls need to be applied when worms are small and before they have moved deep into the hearts of the plants. As a reminder, the pyrethroids have not provided effective beet armyworm control in past years. Since webworm populations are generally heavier during hot, dry seasons, it is important to apply controls before any webbing occurs. Remember that both insects can produce webbing on the plants. Generally, at least 2 applications are needed to achieve control of webworms and beet armyworm.

Sweet Corn

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

(<http://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 (in state: 1-800-345-7544; out of state: 302-831-8851). Be sure to check all labels for days to harvest and maximum amount allowed per acre.

Using Winter Kill Cover Crops as a Part of Your Vegetable Cropping System - Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

Cover crops that will put on significant growth in the fall and then die during the winter can be very useful tools for vegetable cropping systems and the University of Delaware, University of Maryland, and other universities in the region have been conducting research on a number of these winter killed crops for use with vegetables.

Winter killed cover crops that are late summer and fall planted include spring oats, several mustard species, and forage and oilseed radish. Earlier planted summer annuals (millets; sorghums, sudangrasses, and hybrids; annual legumes such as sun hemp or forage soybeans; buckwheat and many others) can also be used as winter killed species. Timing of planting will vary according to the species being used and winter killed species selection will depend on when fields will be available for seeding. Spring oats, mustards, and radishes can be planted from late August through September. Once into October, they do not put on adequate fall growth. Summer annuals should be planted in late July or during August for use in a winter killed system to obtain sufficient growth.

The winter of 2011-2012 was extremely mild and gave us a good look at issues that occur when crops that normally winter kill do not. In our plots at the Georgetown, DE research farm last winter, forage radish, oilseed radish, spring oats, and edible greens type mustard (Tendergreen) did not winter kill completely. All the biofumigant mustards (Pacific Gold, Idagold, Caliente, and Kodiak) winter killed completely (as did summer annuals).

The following are several options for using winter killed species with vegetables:

- 1) Compaction mitigation for spring planted vegetables. Where there are compacted fields, the use of forage radishes has worked very well as a winter killed cover crop by "biodrilling". The extremely large taproot penetrates deep into the soil, and after winterkilling, will leave a

large hole where future crop roots can grow. Oilseed radish also provides considerable “biodrilling”. Winter killed radishes works well with spring planted crops such as peas, early sweet corn, and early snap beans.

2) Early planted vegetables. A wide range of early planted vegetables may benefit from winter killed cover crops. For example, peas no-till planted or planted using limited vertical tillage after a winter killed cover crop of forage radish, oilseed radish, or winter killed mustard have performed better than those planted after conventional tillage. Early sweet corn also has potential in these systems as do a wide range of spring vegetables. Winter killed radishes and mustards also have the advantage of outcompeting winter annual weeds leaving relatively weed free fields and also in recycling nutrients from the soil so that they are available in the spring for early crops (decomposition has already occurred).

3) Mixed systems with windbreaks for plasticulture. By planting planned plasticulture bed areas with winter killed cover crops and areas in-between with cereal rye you can gain the benefits of these soil improving cover crops and eliminate the need make tillage strips early in the spring. The winter killed areas can be tilled just prior to laying plastic.

4) Bio-strip till. By drilling one row of forage or oilseed radish and other adjacent rows with rye or other small grains, you can create a biodrilled strip that winter kills and that can be no-till planted into the spring without the need for strip-till implements. This opens up dozens of options for strip tilling (seed or transplanted) spring vegetables.

Lima Bean Downy Mildew Season Ahead -
Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

The following was modified from a 2011 article from Bob Mulrooney, Extension Plant Pathologist (now retired), University of Delaware

As we move into late August and September, cooler temperatures, heavy dews and fogs, and

the potential for heavy rains from tropical storms can be favorable for development of downy mildew in lima beans. Conditions are most favorable when fields receive 1.2 inches or more of rain within 7 days and when average daily temperature during this period is 78°F or less (heavy dews and fogs reduce the amount of rainfall necessary to start infection). Temperatures over 90°F will break the infection cycle. Lima bean fields should be scouted in the next 4 weeks for the presence of downy mildew as well as white mold. Race F of *Phytophthora phaseoli* was the only race of downy mildew identified from 2008 to 2011.

Preventative applications of 2 lbs fixed copper such as Kocide 3000 (1.3 lbs/A), Champ DP, or other coppers; 2 lbs Ridomil Gold/Copper; or 3-4 pts Prophyt have provided control of downy mildew in the past. The best controls continue to be Ridomil/Gold Copper, and Prophyt, or other labeled phosphonate fungicides 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 phosphonate fungicides have shown to provide some curative activity if applied when downy mildew is first seen. If downy is present in the field do not use copper fungicides alone for curative control, they will not provide control. Another product that is labeled on lima beans for white mold control is Omega and while not specifically labeled for downy mildew, three years of data has shown that it has excellent control of downy mildew at 5.5 fl oz and 8.0 fl oz/A as a preventative application before disease is found in the field. In DE this would be a 2ee use since the fungicide is labeled on lima beans and is appropriate where a mix of white mold and downy mildew are in the field. Omega has a 30 day preharvest interval. Headline from BASF is also labeled for downy mildew. It has been tested in Delaware and it has provided good control of downy when applied on a 10 day schedule at 6.0 fl oz. /A. It does not give as good disease control as Ridomil Gold/Copper or the phosphonates preventatively but the yields have been comparable. It is also labeled for anthracnose which the other products do not control. See the [2012 DE Commercial Vegetable](#)

[Production Recommendations](#) for more information on fungicides for lima beans.

We would appreciate samples and reports of lima bean downy mildew this season. Samples should be fresh and packaged in a zip lock plastic bag with dry paper towels. Samples can be dropped off at any of the county Extension offices or delivered directly to Nancy Gregory at Townsend Hall in Newark. Reports should be made to Nancy Gregory at ngregory@udel.edu.

Agronomic Crops

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

Soybeans

Be sure to continue to scout carefully for earworms as well as defoliators during the next few weeks. As we get closer to harvest be sure to check all labels for the days between last application and harvest.

Threshold levels of corn earworm continue to be found in fields in Kent and Sussex counties but they are not present in every field. Although we can find various sizes of larvae, in most cases they are still relatively small. In addition they are being found in some full season (especially where canopy is not closed) and double crop fields so the only way to know if you have an economic level will be to scout. If fields were already sprayed, be sure to watch for newly hatched larvae. With the sustained flights, we are starting to see a new hatch of small larvae.

Since last week's report, we also are starting to find an increase in stinkbugs, especially in full season fields. The population levels as well as species vary from field to field depending on your location in the state. In Sussex County, the predominant species are native green and brown stink bugs. From the Milford and Harrington areas in Kent County through New Castle County, the brown marmorated stink bug (BMSB) can be found in the mix. We are just starting to find a few hot spots of BMSB with the highest populations generally still along woods edges. You will need to continue to scout for stinkbugs in fields that are in the pod development and

pod fill stages. Economic damage is most likely to occur during these stages. You will need to sample for both adults and large 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 based on numbers of large nymphs and adults (native green and/or brown stink bugs), as those are the stages most capable of damaging pods. As a general guideline, current thresholds are set at 2.5 per 15 sweeps in narrow-row beans, or 3.5 per 15 sweeps in wide-row beans.

Once again we are finding a few fields with high levels of whiteflies. Although we have limited experience with whiteflies in our area, as far as we know, whiteflies have generally not been a problem in the past, especially if moisture is adequate. They are related to aphids (that is they are in the same order of insects) and so can cause yellowing on the leaves if populations are high enough. Damage is most likely to occur when beans are stressed. The following links provides pictures of whiteflies and some additional comments regarding whiteflies in soybeans:

<http://bulletin.ipm.illinois.edu/article.php?id=832>

<http://ipcm.wisc.edu/blog/2012/07/questions-about-whiteflies-in-soybean/>

We continue to find a significant number of defoliators including beet armyworm (BAW), fall armyworm, yellow striped armyworm, green cloverworm, soybean loopers and grasshopper in double crop and a few full season fields. All of these insects are defoliators and you will need to use percent defoliation to make a treatment decision. There are no available thresholds for the number of the above insects per sweep. Remember, that in addition to defoliation, grasshoppers can feed on and/or scar pods. In full season soybeans in the pod fill stage, the threshold is 10-15% defoliation. Remember, double crop soybeans cannot tolerate as much defoliation since they often do not reach the leaf area index needed for maximum yields. As a reminder, the pyrethroids have not provided effective control of beet armyworm or soybean loopers so a product labeled for these 2 species

in soybeans will be needed if defoliation is present.

Since many of our pests in soybeans migrate to us from the south, the following two links provide information on what is occurring in Virginia and North Carolina:

<http://www.sripmc.org/Virginia/>

<http://www.nccrops.com/>.

Nitrogen Fertilization and Irrigated Soybean Production - *Richard Taylor, Extension Agronomist; rtaylor@udel.edu*

A number of people have been asking about applying nitrogen (N) fertilizer to irrigated soybeans so I thought I would make a few comments about the practice in case they might help you in making the decision as to whether to spend the money in hopes of getting a yield response.

To begin with, I have tried this practice on both full-season and double-cropped soybeans at one time or another. I've tried applications of N at both 25 and 50 lbs N/acre at R2 (full flower) and R4 (full pod) and for double-cropped soybean I've tried these rates broadcast at planting. I never got a significant response to the treatments although for double-cropped soybeans I was close to seeing an increase in early plant height and pod set. For yield, the treatments were all within a bushel or two of each other.

That being said, I should point out that significant responses have sometimes been reported from down South but only when the N was applied through an irrigation system (for the reports I've seen) and when both boron (B) and N were applied in combination. At the time of the research that I conducted, we did not have the capability to apply N to my plots through the irrigation system. I had to apply the N with a back-pack CO₂ sprayer while walking through the soybeans. I did have the studies irrigated immediately after applying the treatments to minimize the chance of foliar burn. I remember hearing from the southern researchers that they felt that the leaf damage caused by walking on N or applying N with a ground rig would negate the slight yield response that they were able to

obtain using fertigation. I also did not apply B along with the N which may have also reduced the chances of obtaining a positive yield response since B is important in sugar transport and in helping flower set.

I understand that some people suggesting that N should be applied to irrigated soybeans are suggesting the inclusion of sulfur (S) (probably as ammonium sulfate) along with the N. This makes some sense from a biological point-of-view in that the plant requires enough S to make the S-containing amino acids required for protein synthesis. However by the time soybeans reach the full bloom or full pod stage, the root system has reached or will soon reach its deepest penetration of the soil. Even the sandy soils in Sussex County, Delaware, were found to have large quantities of S (typically 300 to 500 lbs S/acre) stored in the clay lenses found in the 1 to 2 foot depth of soil and soybean roots should be able to tap into this S reserve by reproductive stage.

Let me summarize below some of my thoughts on trying to increase soybean yields with N fertilizer.

- If soybeans already have matured to the full seed stage (R6) where a full size seed is found in a pod at one of the four upper most nodes with a fully expanded leaf, it is much too late for N application to increase yield potential in my opinion. All the research that I've seen involves the application of N at full bloom (R2) to full pod (R4) stage.
- I doubt that the addition of S as ammonium sulfate is going to increase your chance of obtaining any return on your investment since soybeans are very likely to have more than an adequate supply of S available by this time of year due to root growth. An exception would be where there is a root restricting compaction layer in the top 12 inches of soil but in this case the chance that fertilizer will improve yield is very low.
- If your expected yield potential is not at least 60 to 70 bushels/acre, N fertilization will not help. Next year, try using either the liquid seed Bradyrhizobia inoculants or some of the new

graphite soybean inoculants since the new strains available can really help increase your yield potential.

- If you still plan to apply N fertilizer to your soybean crop, be sure to add about 0.5 pound of boron per acre. The data I've seen where a yield response was obtained with late season (R2 or R4) N application were always where B had been included with the N.
- I would suggest limiting any N application to no more than 30 lb N/acre since levels higher than this have often been shown to reduce the nitrogen fixing activity of the soybean nodules. If this occurs, you'll be trading dollars essentially since the nodules will either stop N fixation or reduce fixation to a degree where the plant will need the N you apply just to produce the original crop's yield potential. Some studies with early season manure applications have shown yield reductions because the crop ran out of N during the reproductive stages and had to reinitiate nodulation because the crop ran out of available N.
- Do not consider N applications on non-irrigated soybeans. Keep in mind that in the case of a dryland soybean crop, the overall limiting factor is water availability not nutrient availability.
- Also if your field has a history of soybean cyst nematode (SCN) infestations, do not add N fertilizer since SCN will be your yield limiting factor not N or S or B fertilizer.

Corn and Corn Silage Dry Down Rates -

Richard Taylor, Extension Agronomist;
rtaylor@udel.edu

I was asked this week about how fast corn dries down. The first question was about corn silage. Actual dry down rate varies depending on factors such as air temperature, solar radiation/day length (whether in August, early- or late-September, or October), hybrid, soil moisture levels, and a host of other factors. Most sources report an average drying rate of 0.5 percentage points per day during the month of September although the average rate by year has varied from 0.4 to 0.7 percent per day. If you look at

the daily dry down rate within a given year, the rate varies tremendously from as little as 0% per day to as much as 1% in a given day. So for silage even though the average rate is 0.5% per day since making good silage is so dependent on having just the right amount of moisture so the silage will pack well and will ferment properly, you will need to watch your corn very carefully and do frequent checks to ensure the corn does not get too dry.

For grain, a number of factors impact the rate of dry down and these include weather, hybrid, maturity group, planting date, accumulated growing degree days or heat units, and husk and ear characteristics such as husk leaf number, thickness, and tightness of wrap and ear position (drop) and length protruding from husk. By far the most impact occurs with the type of weather we experience in any given fall. In years when the weather is cool and rainy, dry down will be very slow, perhaps less than 0.3% per day. In years where we have warm days, dry conditions, and plenty of sunlight, kernel dry down can reach 1% per day.

Dr. Bob Nielsen with Purdue University has studied the many factors involved in corn dry down and reports that the average daily dry down rate can range from about 0.8 percentage points per day for corn that nears black layer (physiological maturity) in late August to about 0.4 percentage points per day for corn that does not reach maturity until mid- to late-September. Although monitoring grain moisture loss is not quite as critical as with corn silage, we do know that harvest losses do increase as grain moisture falls below about 18 to 22%. With grain prices quite high, minimizing losses by harvesting when grain moisture is still slightly high can pay a healthy premium as can making adjustments to your combine to ensure the most efficient grain recovery possible.

Mid-Atlantic Crop Management School Program - *Richard Taylor, Extension Agronomist;* rtaylor@udel.edu

For those who like to come to the Mid-Atlantic Crop Management School that's held each year in Ocean City, Maryland, this year's school will

take place from November 13 (Tuesday) to November 15 (Thursday) again hosted at the Princess Royale Oceanfront Hotel and Conference Center. The program for this year's school is not finished as of the date I'm writing this so if you expect a brochure in the mail, it will be arriving later than usual. The website for registration cannot be constructed until the program is finished but will be made active as soon as we can do so. For those who like to register early, I wanted to make you aware that I will post in our Weekly Crop Update, a web address so you can download a pdf version of the brochure as soon as it is finished. You will be able to use the registration form in the brochure to register right away either by faxing the form to the number given in the brochure or mailing it in to the address on the form.

I hope to see you at this year's Mid-Atlantic Crop Management School. At least from what I've seen of the program so far, it should be a very good school with a lot of outside speakers.

Reducing Weed Seed Production in Harvested Fields - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

Corn harvest has begun in some areas and the drought has resulted in large areas with stunted plants and very poor leaf development for shading weeds. Both of these situations have created conditions for late season weed growth that could result in significant weed seed production. I believe this is one of the reasons why plants like Texas panicum have become such a big problem in some areas.

The earlier these plants are destroyed, the fewer number of seeds will be produced. The longer weeds are allowed to grow and develop after harvest (or after the decision to not harvest those fields severely impacted by drought) the more likely the weeds are to regrow and eventually produce seed. Disking or non-selective herbicides are options to prevent seed production as well as mowing. Many of these early harvested fields will need at least two mowings to prevent seed production.

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

Volatile Markets Remain Long Term Bullish
The corn market has made an attempt to take out the August 10 new crop Dec '12 futures contract high of \$8.49 this week, currently trading at \$8.37 per bushel. The soybean new crop Nov '12 futures market contract achieved a new high on August 21, trading at \$17.28 per bushel on Wednesday morning, August 22. These markets have bid higher for several reasons, among them, supplies will be short for both new crop corn and soybeans and while it is believed that U.S. corn demand can be cut enough to keep corn from running out before the end of the '12/'13 marketing year the same may not hold true for soybeans due to a short 2012 Southern Hemisphere crop combined with a short 2012 U.S. soybean crop. The SRW wheat market has also been making a run toward taking out the recent life-of-contract high for the July '13 SRW wheat futures contract of \$8.68 achieved on August 10, currently trading at \$8.61 per bushel. The wheat market has benefitted from a slackening in the value of the dollar and production problems in several wheat producing regions/countries throughout the world e.g., Russia, Ukraine, Black Sea Region, and Australia.

Meanwhile, unless the Pro Farmer Crop Tour being conducted this week produces more dismal reports concerning potential 2012 U.S. corn and soybean yields these markets could remain in a sideways trading pattern until the September 12 USDA Supply and Demand report is issued based upon the idea that lower production numbers are already bid into the market. My gut feeling is that those that think the worst news from the tour came in on Monday, August 20 just need to wait until Illinois, Indiana, and Iowa yield reports come in from the tour results. Nebraska corn yield results reported last evening were in line with USDA's August S&D report. Note: Nebraska has thousands of acres of irrigated corn, the three "I" states of the Corn Belt do not irrigate much corn. Yield reports from the states of IL, IN, and IA are likely to feed the bull in this market.

Announcements

UD Corn Hybrid Trial Tour & Twilight Meeting

Wednesday, August 29, 2012 4:00-7:30 p.m.
Dickerson Farms
1730 Bayside Drive, Dover, DE

Farmers, Crop Advisers, and all those interested are invited to attend. The corn hybrid plots will be open for viewing at this irrigated location starting at 4:00 PM. Extension specialists and agents will be on hand to discuss insect pest management in corn, disease identification, weed control, and fall nutrient management.

Dinner will be provided therefore RSVP is required.

Please RSVP by calling (302) 730-4000 or email Phillip Sylvester: phillip@udel.edu

CCA, DE Nutrient Management, and DE Pesticide credits will be available. Contact Phillip Sylvester, Extension Agriculture Agent, at (302) 730-4000 with any questions.

UD Extension Tour and Discussion Improving Soil Health / Cover Crops for Agronomic and Commercial Vegetables

Thursday, September 13, 2012 4:00 - 8:00 p.m.
Carvel Research and Education Center
16483 County Seat Hwy
Georgetown, DE 19947

Come see and hear about many of the UD Extension's field research projects for Agronomic and Commercial vegetables which involve soil health or cover crop components.

A variety of projects will be presented including:

- Reduced tillage/no-till for limas
- Evaluation of biofumigant and winter kill cover crops
- Pumpkins produced with rye cover crop - influence of rye on weed control and fruit quality
- Use of cover crop and reduced tillage in a rotational system for commercial vegetable production - strategies for fitting cover crops into different systems

- Soybean production with rye cover crops - advantages and challenges

- Also discussion of on-going projects with bee pollination and irrigation

Dinner will be served. There is no charge for this field day.

Please pre-register by contacting Karen Adams at 302-856-2585 ext. 540 or adams@udel.edu. Register by September 6.

Upcoming Workshops Aim to Benefit Farmers with Drought-Plagued Fields

Monday, September 17, 2012 8:00 a.m.
Paradee Center
69 Transportation Circle
Dover, DE

Monday, September 17, 2012 7:00 p.m.
Carvel Research and Education Center
16483 County Seat Highway
Georgetown, DE

Nearly 50% of the nation's farmers' crops have suffered losses from extremely dry conditions during the current growing season. Sharply rising prices and crop devastation will affect not just producers themselves, but all channels of the U.S. and global economies. Therefore, it is important Delaware farmers stay informed about risk management and farm safety-net options available to them, in order to keep funds available and cash flow steady.

Two workshops are to be held on September 17, 2012 featuring discussion and instruction on crop insurance, grain marketing, pending ag legislation, and general risk management. Admission is free and each meeting includes complementary risk management related materials and refreshments.

To register for either event **please call 302-424-8340 or 877-673-2767** (registration is not required, but ensures availability of materials for all attendants). Setting aside the time to attend may save you time and money in the future.

2012 Delmarva Poultry Conference

Wednesday, September 26, 2012

Ronald E. Powell Convention Center
Ocean City, MD

7:00 - 8:00 am REGISTRATION/CHECK-IN

8:00 am Switchgrass as a Litter Alternative

Bill Brown, University of Delaware

Jennifer Timmons, University of Maryland

8:25 am Managing Water for Performance

Susan Watkins, University of Arkansas

8:55 am Ten Steps to Drier Houses and Better Paw Quality

Jesse Campbell, Auburn University

9:25 am Vegetative Environmental Buffer Update

Jim Passwaters, Delmarva Poultry Industry, Inc.

9:45 am Break/Refreshments/Exhibits

10:15 am Considerations for Attic Vent Installation

Jody Purswell, USDA-ARS

10:50 am Infectious Laryngotracheitis Disease Prevalence Patterns

Dan Bautista, University of Delaware

11:15 am Infectious Laryngotracheitis Control Strategies

David Shapiro, Perdue Farms, Inc.

11:40 am Using Technology to Enhance Management Decisions

Dan Goss, Verible

12:05 pm Flock Supervisors' Award

12:15 pm Lunch and Exhibits

1:30 pm Solar Energy for Poultry Farms

Jim Glancey, University of Delaware

2:00 pm Poultry Grower Experiences with Solar Energy

Dan Heller, Flintrock Farm

Robbie Issacs, Issacs Farm

Terri Wolf King (unconfirmed), Cornerstone Farm

2:45 pm LED Lights - New Technology in Lighting

Susan Watkins, University of Arkansas

3:15 pm Poultry House Water Supply

Jesse Campbell, Auburn University

A block of rooms has been reserved at the *Princess Bayside Beach Hotel* (Standard: \$55 + tax, Bayfront

efficiency: \$69 + tax)

800-854-9785 www.princessbayside.com

Rooms are reserved under:

Delmarva Poultry Conference

Reservations must be made BEFORE August 27, 2012

Registration form and additional information is online at: <http://agdev.anr.udel.edu/weeklycropupdate/wp-content/uploads/2012/08/2012DelmarvaPoultryConference.pdf>

or contact:

Lisa Collins: (302) 856-2585 x702 or

lcollins@udel.edu

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 16 to August 22, 2012

Readings Taken from Midnight to Midnight

Rainfall:

0.31 inch: August 18

0.05 inch: August 19

Air Temperature:

Highs ranged from 88°F on August 17 to 77°F on August 20.

Lows ranged from 66°F on August 16 and August 17 to 59°F on August 19.

Soil Temperature:

79.3°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, Extension Associate - Vegetable Crops

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