This is the Last Issue of Weekly Crop Update for the 2004 Season - Tracy Wootten, Sussex County Extension Educator - Horticulture, wootten@udel.edu

2004 has been another challenging year highlighted with optimism and great weather at the beginning, and bad memories of downy mildew at the end. Although this makes three seasons of “worst in thirty years” - worst drought, wettest season and the worst disease year for vine crops, let’s hope the adage “things come in threes” holds true. If so, 2005 should be a better season for Delaware Agriculture. Continue to think positively!

I hope the information that you received in ‘Weekly Crop Update’ has been helpful and relevant. As editor, I would like to recognize the dedication of the individuals that contribute to Weekly Crop Update. They provide the content that makes WCU a great resource for our industry. Thank you to our dedicated office staff that help pull everything together each week, especially as we rush to make the 4:30 p.m. deadline.

You may have noticed, a new name has appeared at the end of the newsletter recently. Emmalea Ernest has accepted the position as Extension Associate for Vegetable Crops. She will be assisting Ed Kee with the Extension Vegetable Program here in Delaware. She comes to Delaware from Lancaster County, Pennsylvania. She is a graduate of Penn State University and Michigan State for her Master’s Degree. Emmalea will be assuming the responsibilities of Weekly Crop Update in 2005. She has been a great addition to Delaware Extension. I hope you will take the time to get to know her at the winter meetings this year.

We welcome your comments and suggestions for improvements to ‘Weekly Crop Update.’ Please feel free to contact Emmalea or myself at 302-856-7303, or by email at emmalea@udel.edu or wootten@udel.edu.

I have enjoyed working with the newsletter. It is time for me to move on to other responsibilities in my role as County Agent. It has been a pleasure interacting with readers and listening to the great impacts this publication has on Delaware Agriculture. I look forward to interacting with many of you during the winter meetings. Best wishes for a safe and prosperous harvest season.

Kind Regards,
Tracy

Derby’s Walker’s Retirement from Sussex County Extension - Tracy Wootten

As many of you know, Derby Walker will be retiring after 31 years as an Agricultural Agent here in Sussex County. He has had a great career here in Sussex, and looks forward to
continued interaction with growers. Derby will not be leaving us and never look back. He has agreed to come back on a part-time basis until we hire a new agent. We hope growers will help us make this transition period as smooth as possible. When growers call into the office after October 4th, we ask that you speak with the secretary and leave a message. Please do not leave a message on Derby’s voice mail. If you call before or after hours, please leave a message in the general voice mailbox. In the interim period, Mark Isaacs, Bill McGowan, Derby (when he is in) and myself will be handling Derby’s phone calls. We will be making every effort to handle the calls as quickly as possible.

We thank Derby for his advice, good natured humor and his dedication to Delaware Agriculture. Best wishes to Derby and his family as he enjoys his retirement.

**Field Crops**

**Barley Planting Tips** - Richard W. Taylor, Extension Agronomist, rtaylor@udel.edu

With harvest season as early as I’ve seen it in the last 20 years, a lot of folks are getting the jump on the small grain planting season and getting their barley in the ground earlier than normal. In a barley study a few years ago, Bob Uniatowski and I found that late September planted barley can actually yield about 6 to 7 percent less than barley planted the first week of October. So, if you have the opportunity to set a planting date shoot for the first two weeks of October, since barley planted then will yield as much or more than early planted barley. This also lets you plant after the Hessian Fly-Free date.

Although most grain crops are now planted on a seeds per foot of row basis, barley is one of the few grain crops still planted using the bushels per acre method. Feed barley (not the new hull-less types) should be planted at 2.5 bu/A for maximum yields. Higher seeding rates produced no increase in yield potential. Lower seeding rates resulted in only slightly decreased yield potential although the difference was significant in our study.

After the last two growing seasons of heavier than normal rainfall and in some areas good to very good yields, the question of nitrogen (N) rates may be on your mind. One of the major concerns with barley is getting too much N applied and causing severe lodging issues. However, if you are planting into corn stubble where the corn yields were high resulting in little likely carryover of soil N, I would suggest considering a small amount of fall N, 15 to 20 lb N/A. This is especially important if you’ve done some type of tillage that incorporates corn residue into the soil. Soil temperatures are still fairly high, soil moisture good to excessive, and with the addition of the high carbon corn residue, the demand on soil N by the bacteria that decompose corn stubble will be very high. This potentially will show up as N stress on barley this fall causing reduced tillering by the crop.

I recently had a question about applying micronutrients to the soil for a small grain crop this fall. Because of the expense of micronutrients, soil applications frequently are not as efficient as foliar applications. For barley if the soil pH is near 6.0 or higher and the field has a history of manganese (Mn) deficiency, I would plan to scout the field frequently this fall and apply foliar Mn at the first sign of deficiency symptoms in the barley. Barley stands can easily be destroyed by Mn deficiency. However, application of the recommended broadcast application rate (20 to 30 lb Mn/A) to barley is cost prohibitive in most cases. Timely scouting and a quick response with foliar Mn will not only save the stand but be much less costly.

**Fall Nitrogen on Winter Wheat** - Richard W. Taylor, Extension Agronomist, rtaylor@udel.edu

After the last two growing seasons of heavier than normal rainfall and in some areas good to very good yields, the question of nitrogen (N)
rates may be on your mind. Research on the value of fall N has been inconclusive with responses on some fields and no response on others. Because I expect little N carryover from previous corn crops and very little soil N left after what I expect to be very high soybean yields, I would recommend applying some fall N on winter wheat this year. In particular where you’ve done some type of tillage that incorporates corn residue into the soil, fall N may be very necessary to get good fall tiller development. Since soil temperatures are still fairly high and soil moisture levels are good to excessive, high carbon, corn residue additions to the soil will increase the demand on soil N by the bacteria that decompose corn residue. This potentially will show up as N stress on wheat this fall and will likely cause reduced tillering by the crop.

I thought a brief explanation of why you could need N after a large soybean crop is in order. Most of us do not realize that the N credit that is given to a grass crop that follows a soybean crop comes from N mineralized from the soil organic matter pool and not used by the soybean crop since as a legume it fixes its own N from N gas from the soil air. Usually, about 40 to 60 percent of the N used by or removed by the soybean crop comes from fixing N through the rhizobia plant symbiotic relationship. The remaining N is taken up from the soil by the soybean crop. This N comes from the mineralization of N containing soil organic matter and whatever is left after the crop is done is available to the next crop. In grass or non-legume crops, they use all the soil N plus the extra fertilizer N that the grower applies to the soil. A very large soybean crop often means that the crop has had to deplete the soil N level as much as a corn crop and thus N may be needed by the following small grain crop.

Please refer to Planting Tips on Barley in this issue for comments about fall soil applications of micronutrients on small grains.

Winterizing Pasture and Hay Fields
Richard W. Taylor, Extension Agronomist, rtaylor@udel.edu

If you haven’t prepared your pastures and hay fields for the upcoming winter, it’s not too late to do it. The key to helping your forage grasses and legumes make it through the winter is applying adequate potassium (K) fertilizer. Potassium uptake by the plants actually acts similar to antifreeze or to adding salt or other ionic compounds to water. The mineral helps lower the freezing point of the cell sap or fluids that exist inside each cell of the plant. This helps prevent ice crystal formation that can quickly injure sensitive plant structures.

So, if you haven’t taken a soil test yet this year to know whether your soil K levels are high enough to support good grass and legume growth, then as a general recommendation have your fertilizer dealer apply about 200 lbs/A of 0-0-60 (muriate of potash). This will provide 120 lbs/A of potash (K₂O) to the pasture or hay field and provide needed K ions for winter survival. If you have legumes in your pasture or hay field, consider having the fertilizer dealer add enough boron (B) to the fertilizer to apply no more than 1 lb B/A.

For those producing alfalfa hay, either follow your soil test recommendations or if your soil test is not current apply 300 to 400 lbs of 0-0-60 per acre and about 2 lb B/A. Alfalfa has a much higher demand for K than the other forage crops we use. Research in Maryland has show yield responses to K up to a rate of 600 lb K₂O/A/year.

Later during late-winter when the ground is well frozen, you should consider mowing hay fields that were allowed to grow enough in the fall to provide plenty of cover to catch snow. This will remove the old growth and make your first cutting hay look much cleaner and depending on the quantity of old material it should improve hay quality as well.
**New Herbicide for Winter Wheat** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

Bayer CropScience has a new postemergence herbicide registered for grass weeds, including annual ryegrass, in winter wheat. The product is called Osprey and its active ingredient is mesosulfuron (an ALS-inhibiting herbicide). It is not labeled for barley. Application timing is emergence to jointing of wheat or 2 leaf to 2-tiller grasses. Osprey requires a non-ionic surfactant plus nitrogen. Fertilizer nitrogen (28 to 32% N solutions) should be used at 1 to 2 qt/A. Ammonium sulfate (AMS) can be used at 1.5 to 3 lb/A. It is also labeled with methylated seed oil. Osprey is used at 3.2 to 4.75 oz wt/A. Osprey is not labeled for use with liquid fertilizer carriers. The label states that liquid fertilizer solutions should be no more than 15 percent of the spray carrier volume. Osprey can be tankmixed with a Harmony GT and Harmony Extra (as well as other herbicides), but tankmixtures with Banvel/Clarity or 2,4-D will reduce grass control. The grasses specifically mentioned on the label that are important in our region are annual ryegrass (it will not control volunteer grain rye), annual bluegrass, and roughstalk bluegrass. The label lists brome species as suppression. Broadleaf activity is good on wild radish and wild mustard plus suppression of henbit and common chickweed. University of Delaware has tested Osprey for ryegrass the past two to three years with favorable results. We do not have experience with the other grass species listed. Soybeans can be planted 90 days after treatment and refer to the label for other crops.

**Fall Herbicide Treatments** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

Fall herbicide treatments have been discussed as options for no-till crops. The idea is to apply an herbicide this fall that will control existing weeds and provide residual weed control so that fields do not have lots of vegetation next spring. This practice has worked in many of the Midwestern states, but their winters are colder and often with more snow cover. This is probably not a real issue in our area for no-till corn if the fields are treated in March or early-April when the weeds are small and very susceptible to the variety of herbicide mixes being used. In soybeans, this may have more utility. We have looked at various herbicides the past few years for no-till soybeans. Products tested include Valor, Canopy XL, and Express. None of the products at any rate provided 100% weed control at time of soybean planting, but they did reduce the number, size, and vigor of many weed species. In almost all cases, a non-selective herbicide was needed at planting, but at lower rates than the no fall treatment. Canopy XL at 2.5 to 4.5 oz did a nice job controlling cress, field pansy, and horseweed. However, it was weak on chickweed. The addition of Express did an excellent job on controlling chickweed. Use of Canopy XL in the fall will limit the rotations (corn and a number of vegetables can not be planted in the spring). There is also concern about developing weed resistance to Canopy XL. Valor applied at 2 to 2.5 oz wt/A did a nice job in controlling horseweed, chickweed, and field pansy. Valor does allow rotation to corn in the spring, but not vegetables. In our trials the fall treatments did get applied with 2,4-D, Gramoxone, and/or Banvel to be sure plants that emerged in the early fall were controlled. Fall treatments should be applied while the plants are still actively growing. If you are considering a fall herbicide program, be sure to consider all pros and cons, including resistance management.

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

Quarterly Grain Stocks; Census Crush; and Wheat Production Estimates.
USDA released the Quarterly Grain Stocks Report this morning along with the final estimate for all U.S. Wheat Production. Stocks of corn in all positions was placed at 958 million bushels; stocks of soybeans were placed at 112.49 billion bushels; and stocks of wheat were placed at
1.942 billion bushels. In all cases, stocks were reported to be slightly lower than corn, soybean, and wheat stocks held in all positions on September 1 a year ago. The September USDA Supply and Demand Estimates had projected ending stocks for U.S. corn at 954 billion bushels; and ending stocks for U.S. soybeans at 105 million bushels.

U.S. wheat production for '04 is now estimated at 2.164 billion bushels, 173 million bushels greater than the September production estimate. The higher production estimate for the '04 U.S. wheat crop and the higher than expected quarterly wheat stocks estimate will be viewed as somewhat bearish for the wheat market, particularly in light of harvest pressure that is coming from the corn and soybean crops.

Census crush figures for soybeans were near the upper end of the range of trade estimates. Bean oil and meal stocks were reported at the low end to below trade expectations.

**Market Strategy.**
This morning's reports are not likely to have much impact upon commodity trading in the longer term, particularly for corn and soybeans. The October Crop report is likely to have more of an impact upon longer term price direction. The wheat pit is taking this report a little harder than might be expected and has taken to bidding wheat prices down hard for the day. However, in the short term harvest pressure from the '04 U.S. corn and soybean crops is likely to assist this morning's report in making a bigger dent in commodity prices than these numbers would normally dictate. Commodity traders are now said to be penciling in a 11.0 to 11.5 billion bushel corn crop. Depending on what the weather does in the Northern tier of the Corn Belt this weekend, is likely to determine the direction of soybean price bidding next week. If a frost occurs over the weekend, we may not make a 3.0 billion bushel soybean crop in the U.S. this year.

For the near term, corn and soybeans being harvested on the Eastern Shore should be placed in short-term storage. That move places the seller in a ‘free’ storage situation until October 15th for corn and until November 15th for soybeans. Harvest pressure is likely to take corn and soybean prices lower from their current levels, which is likely to have an increasing effect upon the level of LDP being offered.

Local basis levels are now 5 under Dec. for corn and 15 under Nov. for soybeans. As harvest progresses and prices decline further, grain sellers will be deciding on placing corn and soybeans under loan or taking the harvest sale and collecting the LDP.

Loan Deficiency Payments are currently being triggered for new crop corn and soybeans. The Farm Service Agency now has the LDP being paid on a given day available on the Internet. The URL for the web site is <http://www.fsa.usda.gov/dafp/psd/ldp/pstatecldp.htm>. The LDP can be found by state and county.

**Upcoming Meetings:**

**Delaware Agronomy/Equipment/Pasture Days**

**Dates:** January 26 – 27, 2005
**Location:** Dover Building and Exhibit Hall, Harrington State Fairgrounds

For more information contact James Adkins. (302) 856-7303 adkins@udel.edu

**Grain Marketing Strategies Conference for Delaware Farmers**

Please hold the week of December 6 - 10th for the “Grain Marketing Strategies Conference for Delaware Farmers”. The program offering is being expanded this year to include a workshop on 'Hedging in the Futures Market'. Details to follow.

For more information contact Carl German. (302) 831-1317 clgerman@udel.edu
Pesticide Safety Education and Testing

**Dates:** December 14 – 15, 2004  
**Location:** Kent Co. Extension Office, Dover, DE Route 113 South  
**Details:** The first day is training from 8:30 am to 4:30 pm. Training continues the morning of the second day, 8:30 am to noon. Be sure to bring your Workbook! You don’t have to register for training, but you must register for the exam. Call DDA, (302) 698-4500, one week in advance to register for the exam. The exam starts at 1:00 pm on the second day. All exams are closed book! Bring your calculator for the calibration questions.

Delaware Vegetable Growers Meeting

**Dates:** January 5 -7, 2005  
**Location:** Exhibit Hall and Dover Building, Harrington State Fairgrounds

For more information contact:  
Emmalea Ernest  
(302) 856-7303  
emmalea@udel.edu  
Or  
Gordon Johnson  
(302) 730-4000  
gcjohn@udel.edu

The Mid-Atlantic Crop Management School

**Dates:** November 16 -18, 2004  
**Location:** Ocean City, MD at the Princess Royale Hotel and Conference Center.

Online registration at:  
https://crayola.hcs.udel.edu/conf/registration/crop_management/

For further information please contact Richard Taylor at (302) 831-1383 or rtaylor@udel.edu

Nutrient Management Certification Sessions

The University of Delaware Nutrient Management Program will be offering certification sessions this fall.

**Session I:** October 4, 2004, Kent Co. Extension Office, Dover, DE Route 113 South

**Session II:** October 11, 2004, Kent Co. Extension Office, Dover, DE Route 113 South

**Session III:** October 18, 2004, Delaware Department of Agriculture, 2320 S. DuPont Hwy. Dover, DE

A complete schedule is available at http://www.rec.udel.edu/nutrient/page3.html

To register for the sessions or for more information contact Jeanie Johnson. (302) 856-2585 ext. 305.

Delaware Annual Pesticide Conference

**Date:** January 13, 2005  
**Location:** Modern Maturity Center, Dover

This year’s conference will be held in conjunction with the Horticultural Industry Expo at the Modern Maturity Center in Dover. Recertification credit will be given in all applicator categories except 7A, 7B, 7C, 7D, 7E and 7F.

For more information contact:  
Susan Whitney King  
(302) 831-8886  
swhitney@udel.edu

The Horticultural Industry Expo will be held on January 12 and is sponsored by the Delaware Nursery and Landscape Association. For information contact Susan Barton. sbarton@udel.edu
**Delmarva Ag Safety & Health Conference**

**Date:** January 19, 2005  
**Time:** 8:30 am – 12 noon  
**Location:** Capitol Grange, Dover, DE

For more information contact Ron Jester.  
(302) 856-7303  
rcjester@udel.edu

**Friends of Agriculture Breakfast Series**

**Schedule:**  
Oct. 22, 2004  Bill Satterfield: Avian Influenza  
Nov. 19, 2004  Sue Snider: Obesity  
Jan. 21, 2005  David Baker: Bayberry Development  
Mar. 18, 2005  Orion Samuelson  
Apr. 29, 2005  Michael Scuse

**Location:** Modern Maturity Center, Dover

To register, or for more information, contact Susan Davis.  
(302) 831-2504  
shurt@udel.edu

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**Weather Summary**

**http://www.rec.udel.edu/TopLevel/Weather.htm**

**Week of September 24 to September 30, 2004**

**Rainfall:**
- 0.66 inches: September 28  
- 0.06 inches: September 29  
- 0.12 inches: September 30

Readings taken for the previous 24 hours at 8 a.m.

**Air Temperature:**
- Highs Ranged from 81°F on September 28 to 71°F on September 29.  
- Lows Ranged from 71°F on September 28 to 50°F on September 25.

**Soil Temperature:**
- 71°F average.  
  (Soil temperature taken at a 2 inch depth, under sod)

**Web Address for the U of D Research & Education Center:**  http://www.rec.udel.edu

**Compiled and Edited By:**

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