



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Last Issue of Weekly Crop Update for 2012 and Weekly Crop Update User Survey -

Emmalea Ernest, Extension Associate - Vegetable Crops; emmalea@udel.edu

This is the last issue of Weekly Crop Update for the 2012 season. I hope that this newsletter has been a useful resource to you as you dealt with the challenges of this past growing season. My thanks to the Extension specialists and agents who have contributed articles this year – the WCU would obviously not be possible without them. My thanks as well to our office staff at the REC, who make sure the WCU gets to our fax and mail subscribers.

As I noted in the previous issue, it has been several years since we surveyed you, the Weekly Crop Update's readers and subscribers, to see what you find useful about this publication and to try to get some ideas on how it could be improved. If you have not already done so [please participate in our WCU User Survey](#) and help us make this publication better. You can take the survey online at: https://delaware.qualtrics.com/SE/?SID=SV_bmyPKOsFJVnkkp

Best wishes for a safe and prosperous fall harvest season. I look forward to seeing many of you at meetings this winter.

Kind regards,
Emmalea

Vegetable Crops

Continuing Vegetable Sales in Fall and Winter - *Gordon Johnson, Extension Vegetable & Fruit Specialist; gjohn@udel.edu*

While most vegetable growers finish up with fall crops around Thanksgiving, there is potential to produce throughout the fall and winter. There are fall and winter sales potentials with schools, institutions, and restaurants; for CSA's; and for specialty wholesale markets.

One strategy is using storage to have products available out of season. This has been a common practice on a large wholesale scale with potatoes and apples where large controlled environment storage facilities are used. On a smaller scale, there are many vegetables that can be stored in sheds, cold boxes, or greenhouses as long as products are kept above freezing and have adequate humidity. It should be noted that critical minimum temperatures will vary according to the type of produce.

Probably the easiest vegetables to store are hard shelled winter squash such as butternuts. If kept around 50°F, most of the hard shelled squashes can be kept for at least 3 months, some for over 6 months. Potatoes store best at 45°F in high humidity and sprouting can be a problem for longer storage. Sweet potatoes, once cured, can be stored for months as long as the storage temperature is kept around 60°F. Colder temperatures damage the roots. Onion storage

depends on the type but longest storage is just above freezing in dry conditions. Cabbage can also be stored for long periods. The key is to grow storage varieties that are dense. Longest storage is at 32 F° in high humidity. Napa type chinese cabbage also stores well in refrigeration (several months). Other crops successfully stored include carrots, parsnips, rutabegas, and turnips. In fruits, long keeping apple varieties can be stored for months in cool temperatures.

Field storage is another way to extend sales of some vegetables. Root crops such as carrots, parsnips, and beets can be kept for extended periods in the field if kept from freezing with row covers or straw mulch. Certain cabbage varieties can field store into winter if protected from hard freezes with row covers. Green onions and leeks also field store well.

An alternative strategy is to make use of high tunnels, low tunnels, row covers, or a combination to grow cool season crops for fall and winter harvest. Greens crops in the mustard family (mustard, turnip, kale, collard, cress, many asian greens); spinach, chard, and beet greens; and lettuces and endive can be planted in the late summer or fall and harvested repeatedly through the fall and winter in these protected systems without additional heat. Some day neutral strawberries can be harvested into the late fall in high tunnels or low tunnel/row cover systems. The use of row covers can also extend harvest periods for crops such as broccoli where side shoot production can be maintained after main heads are harvested, often through Christmas, and Brussels sprouts where sprout production can be extended into winter.

Of course, there is potential for production of many crops in heated greenhouses. The choice of varieties becomes important for greenhouse production because of the lower light and reduced daylength conditions in fall and winter. Specific greenhouse varieties of crops such as tomatoes, lettuce, and cucumbers have been developed for fall and winter production.

Timing Pumpkin Harvest - Jerry Brust, *IPM Vegetable Specialist, University of Maryland*; jbrust@umd.edu

Many pumpkin fields in the mid-Atlantic have poor foliage cover and weak vines at this time due to foliar diseases such as powdery and downy mildews (Fig. 1). Some growers are looking at their pumpkin field wondering if they should harvest now and store the pumpkins or wait a little longer. Maintaining vine health through harvest is one of the most important considerations for good fruit and stem hardiness. Once the fruit is mature (you can test to see if the pumpkin is mature by pressing the end of your thumbnail into the flesh of the fruit, if little indentation is left in the fruit the pumpkin is mature) the pumpkins can be harvested at any time. The best time to harvest mature fruit is while foliage is still green and relatively healthy. If there is poor foliage cover before pumpkins reach full maturity the fruit and stem quality will be diminished leading to premature fruit breakdown. This includes fruit rotting in the field, sunscald and collapsed stems. Fruit can appear healthy, but the stems still collapse (Fig. 2).

Over the last 2 weeks I have seen a great deal of sunscald damage to pumpkins. Sunscald starts as a reddish area on the fruit that becomes sunken and appears flat (Fig. 3). Over time, this area usually becomes tan with secondary pathogens often invading the area oftentimes causing a black 'mold' to cover the damaged spot. If you do have reduced foliage due to disease or insect damage it is best to harvest the fruit and store. Although some growers use chlorine solutions as a post-harvest dip to protect pumpkins taken early from fields our research has shown no value from these dips. Pumpkins can be stored in a well-ventilated shaded area with temperatures between 50-70°F. In general, fully mature, disease free fruit can be stored for months under these conditions. I have kept healthy pumpkins (not jack-o-lanterns) in good shape on my front door step from mid-September until mid-December (yes I like pumpkins a bit too much). Pumpkins should not be stored around apples as the apples emit ethylene gases that accelerate the ripening process, which could lead to premature breakdown.



Figure 1. Loss of foliage due to downy mildew



Figure 2. Healthy looking fruit, but rotting stem



Figure 3. Sunscald damage to pumpkin fruit

Agronomic Crops

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

Small Grains

As you make plans to plant wheat, be sure to review our article on aphid and barley yellow dwarf management in the Aug 3, 2012 newsletter (<http://agdev.anr.udel.edu/weeklycropupdate/?p=4595>). The following link to the May 1, 2012 Kentucky's Pest News also provides additional management information, especially as it relates

to the weather conditions in the 2012 season (http://www.ca.uky.edu/agcollege/plantpathology/extension/KPN%20Site%20Files/kpn_12/pn_120501.html).

Harvest Aids for Soybeans - *Mark VanGessel, Extension Weed Specialist; mjv@udel.edu*

A few herbicides are labeled as harvest aids for soybeans. Glyphosate and paraquat will have the broadest spectrum of control, with paraquat having quicker activity on the weeds. Aim is also labeled, but it has a very narrow spectrum of control. Be sure to read the label of the product you are considering for all the precautions and restrictions. Application of these products is after the pods begin to lose their green color. Applications made this late in the season means they will have little to no impact on reducing weed seed production.

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

Grain and Oilseeds Rally After Sharp Sell-Off
 Grain and oilseed futures contracts continued to decline sharply during Monday's session. However, commercial and non-commercial buying interest picked up in Tuesday's overnight session, with a modest rally continuing through Wednesday's day trade. The recent sell-off dropped near-by new crop corn and soybean futures prices by about \$1.00 (+ or -) per bushel since their respective life-of-contract highs were hit on August 10 and September 4. Reasons given for the sell-off are attributed to corn and soybeans being over bought resulting in short covering on the part of non-commercials; new supplies coming on due to 'harvest pressure'; and a lack of "fresh" news. The good news is that there may be reason to believe that the rally could push prices somewhat higher. Recent Fed action to invest \$40 billion a month to buy mortgage backed securities is weakening the value of the dollar which should help U.S. exports. Time will tell regarding investor preferences for either the stock (equities) or commodity markets. Nevertheless, the Fed

action was viewed as positive for both markets in the near term. Market volatility remains elevated as a result of the uncertainty in world geopolitics. There too remains uncertainty concerning the eventual impact on the overall economy from QE3.

Other price supporting factors that keep being mentioned by commodity news sources include: dry weather concerns in the Southwestern U.S. which could slow winter wheat planting; dry weather concerns for the Southern Hemisphere which could impact 2013 South American production potential; dry weather concerns in Australia and other wheat producing regions around the world; and China's appetite for importing more U.S. soybeans. These concerns are currently helping to support the soybean, wheat, and corn futures markets.

Market Strategy

Although one attempts to shed light on expected price direction computer trading seems to be the order of the day. Computer trading is most likely the reason for today's double digit gains across the board. When price algorithms are hit the computer programs tell the non-commercials (speculators) when to place buy or sell orders. The algorithms are driven by technical indicators. One might surmise then that the trick to determining whether one wants to hold or advance sell orders becomes a matter of following the money. However, it is often stated that eventually fundamentals will take precedence in determining price direction. The only thing known for sure at this point in time, fundamentally, is that the U.S. is harvesting short 2012 corn and soybean crops. The extent of the shortfall won't be fully known until this year's U.S. crop is harvested. In the meantime, the corn and wheat markets continue to depict no carry in the forward contract months with SRW wheat futures depicting only a 10 cent carry through the May '13 contract before becoming inverted. USDA's next monthly Supply/Demand report will be released on Thursday, October 11.

The U.S. 2012 corn harvest is expected to hit the 50% mark in next Monday's crop progress report with soybean harvest to be in the mid-twenties. Weekly U.S. corn and wheat export inspections were viewed as bullish. Soybean export inspections were bearish. The weekly export

sales report will be issued by USDA tomorrow (Thursday) morning, September 19. Currently, the day trade closing futures prices for Wednesday afternoon September 18 were: Dec '12 corn futures \$7.53; Nov '12 soybeans \$16.70; and July '13 SRW wheat futures \$8.60 per bushel.

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

General

Fall Can Be a Good Opportunity for Getting a Jump on Next Year's Weed Problems -

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

Fall herbicide treatments have a nice fit for many situations such as small grain weed control, assisting with cover crop management, and reducing the severity of weed infestations for no till corn or soybeans.

Let's look at each of these situations. Treating small grain fields with a late fall herbicide application has worked well in our trials. As discussed in earlier newsletters there are no herbicides labeled for applications at planting (a preemergence application). As a result we have lots of winter annuals that emerge with or shortly after the crop. Waiting until spring to control these weeds often results in poor control because the weeds are large, and often stressed from the winter weather. On the other hand, an application in the late fall is made while the weeds are relatively small and actively growing. Remember these weeds are winter annual and will continue to grow after a few hard frosts, and the soil temperatures allow for significant growth through the month of November. If there is a lot of spring emergence, then those weeds can be controlled with a herbicide applied in combination with spring nitrogen applications.

Controlling weeds in cover crops that will be used for early-season vegetables can be challenging in some springs (particularly henbit and chickweed). One way around this with a

grass cover crop is using a herbicide in the fall to “clean up the cover crop”. Using a broadleaf herbicide such as Harmony Extra or 2,4-D in the fall will control many of the broadleaf weeds and not limit crop rotation in the spring (replant intervals are 1.5 to 3 months). Then when burning down the grass cover crop in the spring, the concern is killing the cover crop, and not worrying about the winter annual broadleaves that can be tough to control that time of year.

Finally, fall treatments for fields that will be planted to no-till corn or soybeans next spring. We have looked at a number of products that could be tankmixed with glyphosate or paraquat with the idea they would provide residual control for spring emerging plants and these fields will not need a burndown herbicide. UD Weed Science Research has not found a consistent herbicide program for this approach. Furthermore, for effective weed control in corn or soybean most fields need a residual herbicide applied prior to or at planting, so a trip across the field for a herbicide application is needed in the spring. Fall herbicide applications of glyphosate or paraquat with 2,4-D are an excellent way to limit the amount of weed biomass in the spring, which in turn allows the soil to warm up faster and possibly conserve moisture. In our experiences, the addition of residual herbicides to the tankmixture of glyphosate, paraquat, and/or 2,4-D has limited utility in most situations.

UD Extension Welcomes New Nutrient Management Specialist

- Amy Shober, Extension Nutrient Management and Environmental Quality Specialist;
ashober@udel.edu

My name is Amy Shober and I am the new Nutrient Management and Environmental Quality Extension Specialist at UD. I received a B.S. degree in Environmental Science and a B.A. in Chemistry from Virginia Tech, an M.S. in Crop and Soil Science from Penn State University and a Ph.D. from UD in Environmental Soil Management. I recently returned to Delaware after working for six years with the University of Florida. In Florida, I served as State Extension Specialist in urban nutrient, soil, and water

management. I am happy to return to Delaware and to be back working with the agricultural community. Through my applied research program and Extension activities, I seek to help producers use nutrients more efficiently to enhance agricultural productivity while reducing the risk of nutrient losses to the environment. I will also be responsible for the Delaware Nutrient Management Certification Program. I am located in on main campus in Newark, but you will likely see me out and about, working with growers and other Extension personnel throughout the state. I look forward to hearing from you about your nutrient management successes and concerns. You can reach me by email at ashober@udel.edu or by phone (302) 831-2146, or if you happen to be in Newark, I welcome you to stop in and see me at 165 Townsend Hall.

USDA NRCS Announces Sign-Up for Three Conservation Programs

Sign-up before October 19 for FY 2013 financial assistance.

Applications for three extensive conservation programs are being accepted until October 19, 2012 for funding consideration in FY2013. Delaware producers are encouraged to sign up for the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP) or Agricultural Management Assistance (AMA) program, which provide financial and technical assistance to address varying conservation priorities.

Although the first application cut-off date is October 19, producers and forest landowners can apply anytime for EQIP, WHIP or AMA at their local USDA Natural Resources Conservation Service (NRCS) office. However, those with applications in before October 19 will have a higher chance of application approval as funding is limited.

The Environmental Quality Incentives Program (EQIP) places a priority on water quality, water conservation and promotes forest management practices and energy conservation. It also provides funding for conservation practices that

address air quality concerns from agricultural operations using innovative technologies. Last year, Delaware awarded 241 EQIP contracts totaling \$5 million.

The Agricultural Management Assistance Program (AMA) provides payments to agricultural producers to voluntarily address issues such as water quality, water management and erosion control by incorporating conservation practices into their farming operations. Conservation practices eligible for funding include, but are not limited to, nutrient management, cover crops, poultry windbreaks, proper manure storage, composters and conservation cover.

The Wildlife Habitat Incentives Program (WHIP) offers technical and financial assistance to private landowners to develop and improve high quality habitat that supports wildlife populations of significance. Only privately-owned agricultural land and forest land are eligible for WHIP. Eligible practices for funding consideration include conservation cover, windbreaks, filter strips, riparian forest buffers, wetlands restoration and more.

All interested landowners must have an active conservation plan so that their program applications can be considered when funding is made available. A conservation plan is a voluntary technical tool that helps landowners identify conservation measures that provide the greatest conservation benefits on the land.

Practices under AMA, WHIP, and EQIP are offered through a continuous signup, but NRCS periodically makes funding selections as program dollars allow.

To apply for financial assistance, contact your local USDA Service Center. In Sussex County, call 302-856-3990, ext 3; in Kent County, call 302-741-2600, ext. 3; and in New Castle County, call 302-832-3100, ext. 3. Additional information on NRCS programs and services is available on the Delaware NRCS Web site at www.de.nrcs.usda.gov.

Announcements

2012 Delmarva Poultry Conference

Wednesday, September 26, 2012

Ronald E. Powell Convention Center
Ocean City, MD

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

Equine Behavior Educational Series

November 5, 7 & 14, 2012 6:30-8:30 pm

Paradee Center, Kent Co Extension Office
Dover, DE

The University of Delaware Cooperative Extension is excited to offer a three-evening educational series this fall on topics related to equine behavior.

Monday, November 5

“**Foundations of Equine Behavior**” will cover topics such as anatomy and physiology, the workings of the equine brain, normal or natural equine behavior and learning terminology and how horses learn.

Wednesday, November 7

“**Handling Behavior Problems**” will cover topics such as stereotypies and dealing with common equine behavior issues. This evening will feature a special guest lecturer, Dr. Sue McDonnell from the University of Pennsylvania’s New Bolton Center who is nationally known as a researcher and speaker on equine behaviors.

Wednesday, November 14

“**Working Effectively with Equine Behavior**” will cover topics such as positive versus negative reinforcement, a review of current training approaches and common equine welfare concerns.

Advanced registration is required. *The registration fee is \$10 per session or all three for \$25. Light refreshments and take home materials will be included as part of the registration fee. You may attend just one or all three of the sessions. For more information please contact Susan Garey at (302)730-4000 or*

truehart@udel.edu or Dr. Carissa Wickens at cwickens@udel.edu.

2012 Delaware Ornamentals & Turf Workshop

Wednesday, November 14, 2012
Hockessin Memorial Hall

More information at <http://www.dnlaonline.org/>.

Mid-Atlantic Crop Management School

November 13 – 15, 2012
Princess Royale Oceanfront Hotel and Conference Center
Ocean City, Maryland

The complete program and registration brochure is available online at:

<http://www.grains.cses.vt.edu/articles/Crop%20School%20Brochure%202012%20Final.pdf>

You can register online at

https://crayola.hcs.udel.edu/conf/registration/crop_management/ or you can register by faxing in the registration form in the brochure to Gail Knapp at 302-831-2998 or by mailing in the form and payment to Conference Services Attn: Gail Knapp, 104 John M. Clayton Hall, Newark, DE 19716.

Delaware Agriculture Week

Monday, January 14 – Friday, January 18, 2013

The University of Delaware Cooperative Extension, Delaware State University Cooperative Extension and the Delaware Department of Agriculture are again cooperating to organize a week of agriculture-related events.

The following General Agenda outlines the various meetings and events that are planned and their **approximate** times. Most will take place at the Delaware State Fairgrounds. The associated trade show will take place in the Dover Building from Tuesday, January 15 to Friday, January 18. The First State Antique Tractor Club Exhibit will be set up January 15-17 in the Exhibit Hall.

The detailed session agendas will be available online at the end of November and the completed program will be mailed out in December. Delaware and Maryland Pesticide Recertification credits, Nutrient Management credits and CCA credits will be offered.

Ag Week General Agenda

Monday, January 14

Fruit & Vegetable Growers Association of Delaware Annual Meeting

State Fairgrounds

Fruit Session - 6 to 9 PM

Hay and Pasture Evening Session

State Fairgrounds - 6 to 9 PM

Tuesday, January 15

Fruit & Vegetable Growers Association of Delaware Annual Meeting

State Fairgrounds

- *General Session – 9 AM to Noon*
- *Fresh Market/Vine Crops – 1:30 to 4:30 PM*
- *FVGAD Annual Awards Banquet – 6-9 PM at Harrington Fire Hall*

Hay and Pasture Day-Time Sessions

State Fairgrounds - 9 AM to 4:30 PM

Equine & Nutrient Management Session

State Fairgrounds - 6 to 9 PM

Small Ruminant Session

State Fairgrounds - 6 to 9 PM

Wednesday, January 16

Fruit & Vegetable Growers Assn. of Delaware Annual Meeting

State Fairgrounds

- *Processing Crops Session - 9 AM to Noon*
- *Vegetable Irrigation and Crop Stress Management Session - 1:30 to 4:30 PM*
- *Direct Marketing Session - 9 AM to Noon*

Farm to School Session

State Fairgrounds - 1 PM to 4 PM

Food Literacy Session

State Fairgrounds - 6 to 9 PM

Small Flock Poultry

State Fairgrounds - 6 to 9 PM

Beef Cattle Producers Session

State Fairgrounds - 6 to 9 PM

Thursday, January 17

Agronomy/Soybean Session

State Fairgrounds - 9 AM to 4:30 PM

Grain Marketing Session

State Fairgrounds - 9 AM to 4:30 PM

Friday, January 18

Poultry Production & Nutrient Management

State Fairgrounds - 9 AM to 4:30 PM

Precision Ag Session

State Fairgrounds - 9 AM to 4:30 PM

2013 Delaware Horticulture Industry Expo and Annual Pesticide Conference

January 23-24, 2013

Modern Maturity Center, Dover, DE

More information at <http://www.dnlaonline.org/>.

2013 Annie's Project

January 30- March 6 (tentative)

More information at <http://anniesproject.umd.edu/>.

Regional Women in Ag Conference

Feb. 25-26, 2013 (tentative)

More information will be posted at
<http://ag.udel.edu/extension/kent/womeninag.htm>.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of September 13 to September 19, 2012

Readings Taken from Midnight to Midnight

Rainfall:

0.68 inch: September 18

Air Temperature:

Highs ranged from 82°F on September 18 to 71°F on September 19.

Lows ranged from 67°F on September 18 to 49°F on September 16.

Soil Temperature:

71.2°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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