Pumpkin Harvest - Ed Kee, Extension Vegetable Crops Specialist; kee@udel.edu

The Pumpkin Production Guide points out that to ensure high-quality pumpkins, it begins with maintaining healthy vines. This has been a challenge this year, but there are productive pumpkins fields ready for harvest. Pumpkins will reach full size about 20 days after fruit set, begin to show color at 30 days, and should be fully colored 45 days after fruit set. Maintaining healthy vines through disease control programs is the first step to also having good, solid stems (or handles) at harvest. Stem hardening peaks 20-35 days after fruit set and doesn’t change significantly beyond 35 days from fruit set. If a stem is shriveled after harvest, it is an indication of plant stress of some sort, either disease, plant nutrient deficiency, or too little vegetative growth to support the fruit load.

When harvesting, only harvest mature, sound, disease-free fruit. Handle carefully. Picking them by the stem maybe a good way of “grading out” the fruit, but ideally the pumpkins should be harvested by picking them up from the bottom.

The best long-term storage temperature for pumpkins is between 50 and 60 degrees. However, healthy, disease-free pumpkins that are exposed to daily fluctuating temperatures between 35 and 70 degrees will store quite well.

This is often the scenario for most growers and marketers. If temperatures go over 80, the respiration rate increases and weight loss occurs. Pumpkins should be dry when stored, whether in a shed, market, or on a wagon.

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

Cabbage.
Continue to sample fields for diamondback (DBM) and cabbage looper (CL) larvae. We can also find fall armyworm and beet armyworms feeding on plants. A treatment should be considered if you find 5% of the plants infested and before larvae move into the hearts of the plants. If DBM and CL are both present, Avaunt, a Bt, Proclaim or Spintor will provide control. If cabbage looper is the predominant species, a pyrethroid, Intrepid, or Confirm will also provide control.

Lima Beans.
Lima beans will continue to be extremely attractive to corn earworm moths. Since moth catches are generally high in black light and pheromone traps, you may need to spray the latest planted fields at least 2 times for earworms. A treatment will be needed if you find one corn earworm larvae per 6 ft of row. Capture, Lannate, Mustang or Warrior will provide earworm control. The higher labeled
rates will be needed if population levels are high and worms are large at the time of treatment.

**Peppers.**
Be sure to maintain a 5-7 day spray schedule for corn borer, corn earworm, beet armyworm and fall armyworm control. Be sure to watch carefully for corn borers and beet armyworm since we are seeing an increase in egg laying activity from both insects. In addition, small beet armyworms can be found feeding on the leaves.

**Snap Beans.**
At this time, all fresh market and processing snap beans will need to be sprayed for corn borer and corn earworm control from the bud stage through harvest. On processing beans, Orthene should be applied at the bud and pin stages for corn borer control. However, since Orthene provides poor corn earworm control, a pyrethroid plus Orthene should be used at the pin spray to achieve corn borer and corn earworm control. Remember, Orthene has a 14 day pre-harvest interval. After the pin spray, be sure to check local trap catches to determine the spray interval for your area. You can check our website for the most recent trap catches and information on how to use this information to make a treatment decision in processing snap beans. [http://www.udel.edu/IPM/traps/latestblt.html](http://www.udel.edu/IPM/traps/latestblt.html) and [http://www.udel.edu/IPM/thresh/snapbeanecbt.htm](http://www.udel.edu/IPM/thresh/snapbeanecbt.htm).

**Spinach.**
The first webworms and beet armyworms can be found in recently emerged plants. 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. Since beet armyworms are more difficult to control, chemical selection is important. Confirm, Intrepid or Spintor will be needed for beet armyworm control. If webworms are the predominant species, permethrin, Confirm (8 oz/acre), or Intrepid (8-10 oz) should be used. Generally, at least 2 applications are needed to achieve control of webworms and beet armyworm.

**Sweet Corn.**
All fresh market, silking sweet corn should be sprayed on a 2-3 day schedule.

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**Field Crops**

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

**Soybeans.**
We have had our first report of economic levels of soybean aphids in double crop soybeans in Kent County. We have also received reports of economic levels of soybeans aphids in double crop fields in Virginia. Since we continue to find aphids in fields in all 3 counties in Delaware, be sure to watch for increases in populations. The fall-like weather conditions (cool temperatures) are favorable for population increases. You will need to look at the entire plant when sampling for aphids. The fields at the highest risk are the late-planted, double crop fields as they are in the most susceptible stage, R1 to R3-R4. Full season fields are much further along in development and can tolerate a lot more aphids. **Thresholds are 250/plant if plants are in the R1 to R3-4 stages.** After that, the number goes to 1000-2000/plant. It is important to note that the thresholds from R-4 to R-5 have not been as clearly defined - the important thing to consider is whether the populations are increasing or decreasing. In the Midwest, spraying from R-4 to R-5 has been documented to protect yields. Some entomologists caution that if you contracted soybeans at a good price and aphid populations are actively increasing then even a 1 to 2 bushel advantage could provide a positive economic benefit in the R5 growth stage that in different economic times may not be realized. **In the Midwest, spraying after R-6 has not been documented to protect yields.** Numerous products are now labeled for soybean aphid including Asana, Baythroid (suppression only), Mustang MAX, Warrior, and Lorsban. Dimethoate has not provided adequate
control and Furadan 4F only has a 2ee label for the Midwestern states.

Corn earworm levels remain low throughout the region. We can still find a few larvae but numbers are well below threshold. The latest planted fields with blossoms and open canopies will be attractive to egg laying moths. In addition, we are still catching high numbers of corn earworm moths in black light and pheromone traps. So, if you have not scouted your fields be sure to look at them during the next week to 10 day period since there are always hot spots of activity that can take us by surprise. A treatment should be considered if you find 3 corn earworms per 25 sweeps in narrow fields and 5 per 25 sweeps in wide row fields (20-inches or greater).

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

Late Maturing Crops Driving Commodity Bidding

General Comments
Time is running out for late maturing corn and soybean crops in the Northern tier of the U.S. Corn Belt. The August crop production report slated Wisconsin, Minnesota, South Dakota, and North Dakota to grow a combined total of 2.0 billion bushels of corn for grain. However, commodity traders are now speculating that the amount of production may be cut due to prevailing cool temperatures that are continuing to slow crop development. It is being suggested that even a normal frost and/or freeze date is likely to cut production from the August estimate. A 10% reduction in production for that region of the country alone would cut U.S. production by 200 million bushels, enough to place the ’04/’05 marketing year supply and demand balance sheet at even.

The weekly export report totals were slightly better than the top end of trade guesses for wheat at 20.5 million bushels. Corn totals (combined old and new crop) were at 23 million bushels, well within the expected range. Weaker-than-expected soybean totals at 7.1 million bushels may be somewhat offset by strong new crop meal and oil sales.

Corn Analysis
Corn crop weekly condition ratings have deteriorated in nearly every state since August 1. This has traders taking note and exiting short positions, at least until more is known. Dec ’04 corn futures have rallied significantly over the past two weeks and are now trading at $2.43 per bushel, about 16 cents better than the August low. Even though crop ratings have declined it is important to note that the overall rating in the excellent/good category is well above last year and online for a very large to record crop.

Soybean Analysis
If early frost does not occur, and we see normal frost dates, the soybean market is likely to undergo a correction back below $6.00. The primary risk at this juncture is simply that Mother Nature could turn a cold shoulder on the Northern tier of the U.S. Corn Belt and take some of the crop size away. Note: forecasts for a hard frost coming early are still rather ‘iffy’. Nevertheless, the market may well hold onto some frost premium going into the holiday weekend. November futures have bounced back over 50 cents this week and are now near $1.00 per bushel above the August low.

Wheat Analysis
Harvest of spring wheat continues to be plagued by wet weather in the Northern Plains and the Canadian Prairie. Freeze and sprout damage has already occurred to some extent, with more frost forecast for Canada. This is reducing the quality of a portion of the spring wheat crop to feed grade. In the long run the shortage of milling quality wheat will likely push prices higher, but not until the feed quality wheat has found a home.

Market Strategy
We all hear much talk about ‘turning points’ in the news concerning most any topic e.g., turning point in the war, turning point in the election, turning point in the trial, etc. To some degree, weather developments over the next seven to ten days will serve as a turning point in determining the price level that farmers will have to contend with at harvest. An early frost
would result in price rewards from current levels for '04 corn and soybeans that remain unpriced and are sold at harvest. An early frost would also give farmers a chance to look ahead to next year’s pricing decisions and consider locking in a profitable price on a percentage of '05 intended production for corn, soybeans, and wheat ($2.63; $6.13; and $3.46, respectively). However, if the threat of an early frost comes out of the picture then pricing opportunities and pricing decisions are likely to change considerably, along with desirable harvest time pricing opportunities.

Upcoming Meetings:

UD Corn Hybrid Twilight Field Day

Date: Thursday, September 9, 2004
Time: 4:30 PM - 7:00 PM
Place: UD Corn Research Plots, Scuse Farms, Smyrna.
Directions: From Rt. 13, head east on the Smyrna-Leipsic Rd., cross over the Rt. 1 bridge and look for the signs on the left (about ½ mile).
Dinner: A light dinner will be provided

All corn producers are invited to attend our Corn Hybrid Field Day at the University of Delaware Corn Research Plots near Smyrna. The Scuse’s are our cooperating farmers for these trials. You will get to see a large number of varieties from many companies side by side. In addition, UD Corn Breeders and Extension Crop, Pest, Nutrient Management and Marketing specialists will be on hand to talk about the research they do and critical considerations with growing and marketing corn in DE as well as the effects of the growing season on corn production in 2004. Pesticide and CCA credits will be given. Phone 302-730-4000 to register by 9/7. Anyone interested is welcome to attend. For more information or special needs to attend this meeting, phone ahead of time.

Gordon Johnson, Extension Agriculture Agent, Kent County

Pole Bean Open House & SARE Farmer Grant Workshop

When: September 16, 2004
(Raindate: September 23, 2004)
Time: 5:00 p.m.
Where: Delaware State University
Blendt Farm, Smyrna-Leipsic Road, Smyrna, Delaware

Featured Topics:
- Farmer Grant Application & Project Demonstration
- Pole Bean Diseases
- Heirloom Varieties Displayed

For more information, call 302-857-6424.

Broiler Risk Management Workshops

Maryland Cooperative Extension, Maryland Department of Agriculture, University of Delaware Cooperative Extension, Delaware Department of Agriculture, and U.S. Department of Agriculture are co-sponsoring a broiler risk management workshop from 9:00 a.m. to 3:30 p.m. on Thursday, September 9, 2004 at the Delmar Convention Center in Delmar, MD.

The DELMARVA broiler industry had a real scare last winter with the AI outbreak. Fortunately, the damage was limited as the outbreak was controlled. Growers have a lot of questions about how this outbreak was managed. More information on these actions are crucial so growers are better prepared if another outbreak of
AI or other contagious diseases occur. A main topic in this workshop is how this crisis was managed. Dr. Edwin Odor of the Delaware Department of Agriculture and Dr. John Brooks of the Maryland Department of Agriculture will review government actions during the crisis. Dr. Nate Tablante and Dr. Lew Carr will discuss the depopulation and decontamination procedures on the farms with the outbreaks.

Another major topic is the possibility of insurance for broiler production. Dr. Barry Barnett, a crop insurance expert from the University of Georgia, will outline the requirements for insurance products for farm production and relate these to broilers. Dr. Wesley Musser of the University of Maryland will outline AGR-Lite, which is a crop insurance product currently available to cover broilers. Mark Powell of MDA and Don Clifton of DDA will then outline current prospects for new insurance products.

Other speakers will discuss broiler bio-security scores, preventing electrical outages, use of computers, calculating profitability, and managing debt, which concern other major risks faced by broiler producers.

The workshops are targeted to poultry growers. Individuals involved in businesses serving farmers, and state and local governments would also find this workshop helpful. The public are also welcome.

Because of USDA support, the workshops have no registration fee. Lunch is also provided. Registration is required to provide head counts for lunch and handouts.

For a registration sheet or more information contact your local county extension office. You can also get registration information and register with Jane Doyle at Department of Agricultural and Resource Economics, University of Maryland 2200 Symons Hall College Park, MD 20742-5535 Telephone: (301) 405-1293 Email: jdoyle@arec.umd.edu Fax: (301) 314-9091

The registration deadline is Tuesday, September 7, 2004. Please use only one registration method.

Weather Summary

<table>
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<tr>
<th>Rainfall:</th>
<th>August 30</th>
<th>August 31</th>
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<tbody>
<tr>
<td>1.79 inches</td>
<td>0.23 inches</td>
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Readings taken for the previous 24 hours at 8 a.m.

<table>
<thead>
<tr>
<th>Air Temperature:</th>
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<tr>
<td>Highs Ranged from 87°F on August 28 to 82°F on September 1.</td>
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<tr>
<td>Lows Ranged from 70°F on August 30 to 61°F on September 1.</td>
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<th>Soil Temperature:</th>
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<tr>
<td>81°F average.</td>
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<td>(Soil temperature taken at a 2 inch depth, under sod)</td>
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Web Address for the U of D Research & Education Center: [http://www.rec.udel.edu](http://www.rec.udel.edu)

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