WEEKLY CROP UPDATE
UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetable Crops

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

Cucumbers
As expected, cucumber beetle activity increased significantly this past week so be sure to scout for beetles as well as aphids. Fresh market cucumbers are susceptible to bacterial wilt, so treatments should be applied before beetles feed extensively on cotyledons and the first true leaves. Although pickling cucumbers have a tolerance to wilt, a treatment may still be needed for machine-harvested pickling cucumbers when 5% of plants are infested with beetles and/or plants are showing fresh feeding injury. A treatment should be applied for aphids if 10 to 20 percent of the plants are infested with aphids with 5 or more aphids per leaf.

Melons
Continue to scout all melons for aphids, cucumber beetles, and spider mites. We are finding fields with economic levels of cucumber beetles and spider mites. The threshold for mites is 20-30% infested crowns with 1-2 mites per leaf. Since beetles can continue to re-infest fields as well as hide under the plastic, be sure to check carefully for beetles as well as their feeding damage. Multiple applications are often needed to achieve effective control. Now that fields are blooming, it is important to consider pollinators when making an insecticide application (http://extension.oregonstate.edu/catalog/pdf/pnw/pnw591.pdf).

Peppers
Continue to sample for corn borers and watch carefully for egg masses. Before fruit is present these young corn borer larvae can infest stems and petioles. As soon as the first flowers can be found, be sure to consider a corn borer treatment. Depending on local corn borer trap catches, sprays should be applied on a 7 to 10-day schedule once pepper fruit is ¼ – ½ inch in diameter. Be sure to check local moth catches in your area by calling the Crop Pest Hotline (instate: 800-345-7544; out of state: 302-831-8851) or visiting our website at http://ag.udel.edu/extension/IPM/traps/latestblt.html. You should also watch for an increase in aphid populations. A treatment may be needed prior to fruit set if you find 1-2 aphids per leaf for at least 2 consecutive weeks and beneficial activity is low.

Potatoes
Continue to scout fields for Colorado potato beetle (CPB), corn borers (ECB) and leafhoppers. Adult CPB as well as the small and large larvae can now be found. A treatment should be considered for adults when you find 25 beetles per 50 plants and defoliation has reached the 10% level. Once larvae are detected, the threshold is 4 small larvae per plant or 1.5 large larvae per plant. As a general guideline, controls should be applied for leafhoppers if you find ½ to one adult per sweep and/or one nymph per every 10 leaves.

Snap Beans
Continue to sample all seedling stage fields for leafhopper and thrips activity. The thrips threshold is 5-6 per leaflet and the leafhopper threshold is 5 per sweep. If both insects are present, the threshold for each should be reduced by $^{1}/_{3}$. As a general guideline, once corn borer catches reach 2 per night, fresh market and processing snap beans in the bud to pin stages should be sprayed for corn borer. Sprays will be needed at the bud and pin stages on processing beans. Once pins are present on fresh market snap beans and corn borer trap catches are above 2 per night, a 7 to 10-day schedule should be maintained for corn borer control. http://ag.udel.edu/extension/IPM/traps/latestblt.html
http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html

We recently learned that succulent beans will be removed from the acephate label – this applies to all labeled formulations. At this point, we have been told that existing stocks that include the green/succulent bean usage can be sold and/or distributed under the previously approved labeling until March 14, 2013, unless EPA imposes further restrictions. We will be sure to update you as we receive more information.

Sweet Corn
Continue to sample seedling stage fields for cutworms and flea beetles. You should also sample whorl through pre-tassel stage corn for corn borers and corn earworms. A treatment should be applied if 15% of the plants are infested with larvae. We have also seen an increase in corn earworm catches, especially in pheromone traps, so be sure to watch carefully for small larvae being found in tassels. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check both blacklight and pheromone trap catches 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/silkspraythresh.html). You can also call the Crop Pest Hotline for the most recent trap catches (in state: 800-345-7544; out of state: 302-831-8851.)

Potassium and Nitrogen Fertilization of Fruiting Vegetables

– *Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

Many fruiting vegetable crops are receiving additional nitrogen and potassium applications as sidedressings or as fertigation through drip irrigation systems at this time. Specific nitrogen and potassium recommendations can be found in the commercial vegetable production recommendations for Delaware which are online at http://ag.udel.edu/extension/vegprogram/publications.htm.

Balancing nitrogen and potassium properly is critical for high yields and good quality in fruiting vegetables. Growers understand the critical role of nitrogen for plant growth. Potassium is equally important for many vegetable crops such as tomatoes, cantaloupes, and watermelons which benefit from additional applications of potassium, even if soil potassium levels are high. High rates of nitrogen can be utilized by the plant and transformed into high yield only in the presence of high potassium levels.

Although potassium does not form part of the structure of vegetable plant, it is important for regulating sugar production, translocation of proteins and sugars, water balance, cell turgor, and stomatal activity. Potassium improves the quality of fruits by maintaining desirable sugar to acid ratio and improving the ripening of fruits.

The "take home" message is that nitrogen should be balanced with potassium during the cropping season with sidedressing or fertigation in fruiting vegetable crops. A 1:1 or 1:2 ratio of nitrogen to potassium should be used depending on the crop.

Managing Diseases of High Tunnel Tomatoes

– *Kate Everts, Vegetable Pathologist, University of Delaware and University of Maryland*; keverts@umd.edu

I have received several questions about timber rot caused by *Sclerotinia sclerotiorum*, leaf mold caused by *Fulvia fulva*, and gray mold caused by *Botrytis cinerea* over the past week for greenhouse and high tunnel tomatoes in Maryland and Delaware.

Timber rot is common where tomatoes (or another susceptible host) have been planted in ground beds in the past. The fungus *Sclerotinia sclerotiorum* causes disease on hundreds of plant species. Therefore rotation is difficult. Even when a high tunnel is moved between seasons, the disease can be severe because the fungus overwinters both in and around the tunnels. Usually the **primary** source of inoculum is outside of a high tunnel. In the spring when the soil is moist, the fungal fruiting bodies emerge and spores (ascospores) are released. These ascospores will be released continually throughout the spring and are carried on wind into the doors or raised sides of nearby high tunnels. Ascospores are usually carried or dispersed less than 330 feet. Therefore it is important to use sanitation within 330 feet of a high tunnel. No plants, leaf clippings, potting mix, or soil from the tunnels should be discarded within this area.

There are some practices that will help reduce timber rot pressure, such as minimizing the length of time that the soil stays wet. The biocontrol, Contans has been effective in managing Sclerotinia diseases in the field. Contans, which is a formulation of the fungus *Coniothyrium minitans*, parasitizes the survival structures of *S. sclerotiorum*. If it is sprayed on the area around the high tunnel and watered into the soil, it may help reduce ascospore formation in future years. Because the product is a live organism, it must be handled carefully to preserve its effectiveness. Contans would be a good choice for fields or areas around high tunnels, which are used repeatedly for a susceptible crop. See the Contans label for additional information. Other products labeled for Sclerotinia timber rot are Endura, which is labeled for field use, and Botran, which is labeled for greenhouse use.

Leaf mold and gray mold are both favored by high humidity and therefore improving air flow can reduce the extent of disease spread. There are several fungicides that are labeled for greenhouse use that will help reduce disease. These include Scala for leaf mold, Mycostop and Decree for suppressing gray mold, mancozeb products such as Dithane F-45, and copper. In addition to timber rot, Botran has activity on gray mold.

Cucurbit Downy Mildew Found in New Jersey

– *Kate Everts, Vegetable Pathologist, University of Delaware and University of Maryland*; keverts@umd.edu

Cucumber downy mildew was confirmed in Gloucester County, NJ on May 30 and reports of CDM from North Carolina are increasing. Cucumber growers are encouraged to apply preventative fungicides immediately and scout their crop for symptoms of disease. The progress of the disease can be monitored online at North Carolina State University's Cucurbit Downy Mildew Forecasting Center at http://cdm.ipmpipe.org/index.php.

Options for Postemergence Weed Control in Sweet Corn

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

Two broad-spectrum herbicides that have exhibited good crop safety to sweet corn are Impact and Laudis. Both products perform better with 0.25 to 0.5 lbs of atrazine. Both will control a broad range of weeds and grasses. It is important to consider crop rotation prior to treating sweet corn fields with a postemergence herbicide. Double-cropped vegetables are very problematic since few products allow such short rotations. Products that will allow double-cropping include Aim, Basagran, and Cadet. But these products only control small (less than 2 to 3 inches tall) plants. Most other herbicides are either not labeled for short rotations, or they have precautions about potential crop injury. Be sure to read and follow herbicide labels.

Potato Disease Advisory #8 – May 31, 2012 - *Phillip Sylvester, Kent Co., Ag Agent*; phillip@udel.edu and *Nancy Gregory, Plant Diagnostician*; ngregory@udel.edu

Late Blight Advisory
Location: Art and Keith Wicks Farm, Rt 9, Leipsic, Kent County, Delaware
Greenrow: April 20

Date	DSV	Total DSV	Accumulated P-Days	Spray Interval Recommendation
4/20-4/30	12	12		None
4/30-5/1	8	20		7-days
5/1-5/8	15	35		5-days
5/8-5/10	4	39		5-days
5/10-5/13	0	39	149	10-days
5/13-5/16	5	44	177	7-days
5/17-5/20	0	44	209	7-days
5/20-5/22	11	55	229	5-days
5/22-5/23	2	57	238	5-days
5/24-5/28	8	65	279	5-days
5/28-5/30	3	68	294	5-days

The threshold of 18 DSV's has been exceeded. Sixty-eight (68) DSVs have accumulated as of Wednesday, May 30. This includes any potatoes that established green row (approximately 50% emergence) prior to and on April 20. An additional **three (3)** DSVs accumulated from Monday, May 28 to Wednesday, May 30. The spray interval recommendation is **5 days**.

Continue to scout for Late blight symptoms in local potato fields. Please notify and submit samples with symptoms to your local county extension office (Kent: 302-730-4000, Sussex: 302-856-7303) or contact the UD Plant Diagnostic clinic (302-831-1390) to have the sample confirmed. You may also email Nancy Gregory at ngreogry@udel.edu or Phillip Sylvester at phillip@udel.edu if you have a sample to submit.

Good coverage with preventative fungicides application is very important for Late blight control. Commercial fungicide recommendations can be found in the 2012 Delaware Commercial Vegetable Recommendations Guide at http://ag.udel.edu/extension/vegprogram/pdf/potatoes.pdf

Early Blight
We are using the predictive model WISDOM to determine the first fungicide application for prevention of early blight. The model predicts the first seasonal rise in the number of spores of the early blight fungus based on the accumulation of 300 physiological days (a type of degree-day unit, referred to as P-days) from green row. A total of **294 P-days** have accumulated at this site as of Wednesday, May 30. Airborne Early blight inoculum should rise 5-10 days after accumulating 300 P-days. Judging by the forecast, the 300-P day threshold will probably be exceeded in a day or two. A protectant fungicide application should be made once we exceed that threshold. Commercial fungicide recommendations can be found in the 2012 Delaware Commercial Vegetable Recommendations Guide at http://ag.udel.edu/extension/vegprogram/pdf/potatoes.pdf

Fruit Crops

Day Neutral Strawberry Production – *Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

Strawberry season started early this year and is now winding down. The heat over the holiday weekend has essentially shut down additional flowering and fruiting in our spring bearing varieties so expect limited production into June. The critical high temperature for strawberries varies but any temperatures in the high 80s or 90s will reduce or stop flowering altogether.

There has been significant interest in the use of repeat blooming strawberries for extended production. These "day neutral" varieties can provide good spring production with continued production into the summer and fall, depending on the planting date. Day neutral strawberries are different from spring bearing types because they are not triggered to flower by daylength and can flower and fruit repeatedly as long as temperatures are suitable. Day neutrals vary in their ability to flower during the summer, and have been classified as either weak or strong. Strong day neutrals produce flowers and runner sparsely during the summer, flowers form on runners, and plants tend to be small with a moderate number of crowns. Intermediate and weak day neutrals, have more of the spring bearing characteristics, such as a stronger tendency to runner in summer. We recommend strong day neutrals for summer and fall production in our area.

In the past, the day neutral varieties Tribute and Tristar were used in this region; however, berry size is small. Certain day neutral varieties bred for use in other regions (California and Northern Europe) have been successfully used in this region and have larger berry size and higher yields, Seascape, Evie 2 and Evie 3 for example. Unfortunately these varieties have soft berries. Albion has shown good promise as a day neutral with large firm berries, small plants, and long term, even production and low disease pressure. It is lower yielding than others but works well in our region. Other California bred day neutral varieties such as Monterey and Portola have shown promise for our area. The USDA breeding program in Beltsville, MD is currently selecting day neutral varieties that would be better adapted to our region.

Day neutrals can be planted in the spring for summer, fall and carryover spring production; planted in summer for fall and carry over spring production; and planted in fall for spring, summer and fall production the next year.

For summer production with day neutral varieties, the use of aluminized reflective plastic mulch with drip irrigation is recommended. Additional provision for heat abatement will be necessary. This may include low volume misters for evaporative cooling during hot daytime temperatures or the use of white or reflective shade cloth. Drip irrigation should be run during the day to further limit bed heating.

Remove runners from all plants throughout the season. Runnering decreases markedly after fruiting begins, so while this task is somewhat intensive early in the season, it becomes insignificant later.

Flowers should be removed for 6 weeks following planting to allow the plants to achieve sufficient size for fruiting. Failure to remove flowers will result in small plants and low yields. Extending the period of flower removal beyond 6 weeks will result in larger plants, berries and second-year yield, but less production in the first year. Varying the flower removal period will not affect the timing of production peaks.

Day neutrals benefit from a continuous supply of nitrogen and potassium. Additional phosphorus is not necessary provided an adequate supply has been incorporated before planting. Apply 5 to 6 lbs/A of nitrogen through the drip irrigation system every week. Calcium nitrate is the preferred source of nitrogen early in the season, UAN solution can be substituted when temperatures warm. Supplement preplant potassium with 10 lb/A of K_2O at monthly intervals, or 2 lb/A at weekly intervals through the drip irrigation system during the growing season. Day neutrals tend to be heavy consumers of boron because of their large commitment to reproduction. Monitor leaves occasionally to ensure that boron levels do not fall below 30

ppm. An application of 2 lb/A Solubor may be required in midsummer if boron levels are too low.

Gray mold is the biggest disease problem of day neutral strawberries. Because berries are continuously present, mold inoculum tends to increase during the season. Remove moldy berries from the planting, and protect flowers every 10 days to 2 weeks with an application of fungicide, especially after rainy periods.

To extend production in the fall floating row covers, clear row covers, or a combination can be used to conserve heat. If fall production is to be targeted, mid-summer plantings on black plastic mulch would be recommended but overhead irrigation is essential for establishment.

Day neutral plantings can be carried over to a second year. Plants should be cut back and crown thinning may be necessary in some varieties.

Some information in this article was taken from this factsheet: http://www.omafra.gov.on.ca/english/crops/facts/89-099.htm

Agronomic Crops

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

Alfalfa
Continue to sample for potato leafhoppers on a weekly basis. Although adults are the main life stage present, we are starting to see the first nymphs. Both life stages can damage alfalfa but the nymphs can cause damage very quickly. Once plants are yellow, yield loss has already occurred. The treatment thresholds are 20 per 100 sweeps on alfalfa 3 inches or less in height, 50 per 100 sweeps in 4-6 inch tall alfalfa and 100 per 100 sweeps in 7-11 inch tall alfalfa.

If you have planted a glandular haired variety, we do not have any local data but here is some information from Ohio State regarding treatment thresholds on these varieties:

"If the alfalfa is one of the glandular-haired, leafhopper-resistant varieties of alfalfa, the economic threshold is three leafhoppers per inch of growth (24 leafhoppers for 8" tall alfalfa, for example). However, if the resistant alfalfa is a new planting this spring, growers should use thresholds meant for regular alfalfa during the first growth from seeding. Because resistance improves as the seedling stand develops, research suggests that the threshold for a resistant variety can be increased after the first cutting."

This past week we received a few reports of high thrips populations in alfalfa. In past years, we have seen increases in thrips during hot, dry weather conditions. Reports from other areas of the country indicate that thrips feeding on developing leaf tissue can cause the leaves to distort as they emerge. Leaves may also be curled, with a cupped or puckered appearance. Since there are no thresholds for thrips in alfalfa, the following information from other areas of the country may be helpful when considering the need for thrips management: (a) high populations of bean or onion thrips may cause damage, especially in dryland conditions and (b) if a thrips treatment is contemplated, it is best to cut as soon as possible and treat the regrowth if the infestation persists. Thrips are very difficult to control in alfalfa, so excellent coverage is important and two applications may be required for satisfactory results

Field Corn
Since last week, we have had a number of reports of true armyworm moving from barley into adjacent corn fields. In many cases, larvae are large and control will be difficult once larvae move deep in whorls. Remember, worms must be less than 1 inch long – some labels indicate that larvae need to be even smaller - to achieve effective control. The treatment threshold for true armyworms in corn is 25% infested plants with larvae less than 1 inch long.

There have also been a number of reports of thrips feeding on field edges. As small grains dry down, it is not unusual to see thrips populations increase along the edge of a field. In the past, no controls have been needed but it always warrants watching fields to be sure populations

and leaf damage does not increase. No thresholds are available.

Although most fields are past the seedling stage, there have been a number of questions this spring about damage caused by seedling stage insect pests. The following posting by Dominic Reisig, North Carolina State University Extension Entomologist, does an excellent job of describing seedling insect pests and their damage: http://www.nccrops.com/2012/05/23/distinguishing-among-insect-injury-types-in-seedling-corn/. One of the insects he describes is the sugar cane beetle. Although I have never encountered sugar can beetle attacking field corn in Delaware, we did receive one question about this insect from a field in southern Maryland. It continues to be a very different year so be on the lookout for unusual insect problems this year.

Soybeans

Be sure to sample fields starting at emergence for bean leaf beetles and grasshoppers. In the earliest planted and emerged fields, we have started to see an increase in activity for both insects. As barley is harvested and soybeans are planted, these fields will be especially susceptible to attack from grasshoppers and feeding can often cause stand loss. If stand reductions are occurring from plant emergence to the second trifoliate, a treatment should be applied. Although no precise thresholds are available, a treatment may be needed if you find one grasshopper per sweep and 30% defoliation from plant emergence through the pre-bloom stage. As a general guideline, a treatment may be needed for bean leaf beetle if you observe a 20 – 25% stand reduction and/or 2 beetles per plant from cotyledon to the second trifoliate stages.

Small Grain Harvest Began Early

- *Richard Taylor, Extension Agronomist;* rtaylor@udel.edu

Believe it or not, a number of growers have begun to harvest barley around the state and our winter wheat crop is advancing in maturity very rapidly. This is the earliest that I can remember growers beginning barley harvest and if wheat comes on as early as I think it will we also will have a record early harvest season for wheat. Although the very much shortened growing season for the small grains could signal lower yields for barley and wheat, I think we will find that double-cropped soybeans will have at least the potential for excellent yields. Weather and/or irrigation availability will determine the final yield potential for the double-crop soybean crop but with as much as a two week longer growing season, the soybeans could help make up for any shortage in the small grain yield.

So the message here is to not feel that you don't need to plant soybeans as soon as possible after the small grain crop is harvested. Although the extra time may seem as if it gives you the opportunity to not be as pressured to plant soybean quickly, there is the possibility of a substantial reward for remaining aggressive in planting the soybean crop as soon as possible after removing the small grains. With the current price of soybeans, that reward could mean a significant return to you come this fall.

Fertilizer Management on Hay Fields

- *Richard Taylor, Extension Agronomist;* rtaylor@udel.edu

For those producers very worried about the impact of the shortage of rainfall so far this year, I suggest a two-pronged approach. First, soil test your fields to determine if any phosphorus (P), potassium (K), or limestone (to adjust soil pH) will be needed this year. If P is required, all of it can be applied at this time as well as limestone to both correct soil pH and to make nutrients such as P more available to the forage plants. If K is also required, it should be applied either all at this time, if less than 100 lb/acre is recommended, or should be applied in two equal applications when the recommendation is for more than 100 lbs/acre. For K, the second application should occur in late August or early September and is designed to help the forage grasses and legumes better tolerate winter weather.

Unless you are using manure or compost on your hay fields, you will not be using a soil test to check on nitrogen (N) recommendation rates. In

general, the suggested rates for nitrogen range from 40 to 60 lbs of N per acre for each expected ton per acre of hay produced. Especially in drier years when drought may be a serious concern, the lower suggested rate should be used to avoid the possibility that high levels of nitrates will accumulate in the grass. My suggestion for N fertilization is to apply it very sparingly between each hay harvest or to evaluate the soil moisture levels and if they are adequate for a good period of growth the N can be applied at that time. A number of folks have recently completed their first hay harvest and in the fields I've check the soil moisture level is severely limited. The rain earlier this week was insufficient to refill the soil moisture holding capacity and I would suggest waiting a bit longer to see if more rain will come out way before applying N to stimulate grass growth. In the past few years, we've seen damage to grass hay fields when N was applied during hot, dry weather. Finally, don't forget to consider fertilizing with N in a fashion similar to the turf industry and by that I mean applying N in early and mid-fall to encourage fall root growth to help the grass be in better shape for growth during the following spring and summer.

Sulfur Deficiency in Corn - *Richard Taylor, Extension Agronomist;* rtaylor@udel.edu

After visiting a great many fields over the past few days, I came to the conclusion that our efforts in controlling air pollution and especially sulfur (S) emissions have been very successful, perhaps too successful. The number of corn fields that are showing areas that of yellowing plants likely due to S deficiency is as great as or greater than I can ever remember seeing. I'm seeing plants with both the traditional S deficiency we all learned about in school where the plant shows a general chlorosis and stunting (Photo 1) and interveinal chlorosis that has been the hallmark of S deficiency in the past few years (Photo 2). Although many agronomists in the area were unsure of the interveinal chlorosis symptomology when it first appeared, Dr. Greg Binford did a few fertilization studies that seemed to confirm that S was responsible for the symptoms or at least could eliminate the symptoms.

Photo 1. More traditional sulfur deficiency symptom on corn with general chlorosis of the leaves and stunting of the plant which was about half the size of less affected plants.

Photo 2. Less traditional sulfur deficiency symptom on corn with severe interveinal chlorosis of the leaves along with stunting of the plant.

Many growers are already taking steps to reduce the impact of the 'cleaner air' by adding some ammonium sulfate to the corn starter fertilizer or to their sidedressed nitrogen (N). In Dr. Binford's field trials, he did get a yield increase when S fertilizer was added; although in studies a number of years ago, I didn't find a yield response to added broadcast S fertilizer. In many cases as the corn root system continues development, it is able to pick up S from the deeper soil layers and the deficiency symptoms disappear on their own accord. Another

complication in the story is that we have changed from using the old superphosphate fertilizer (rock phosphate treated with sulfuric acid to make a 0-20-0 fertilizer) to new formulations, MAP, DAP and ammonium polyphosphates. This change has reduced the amount of S we were adding to our soils without consciously realizing it. I think as we go forward more and more growers will be using ammonium sulfate at some point in their cropping rotations to add needed sulfur to the topsoil.

You should keep in mind that S is either in an anion (negatively charged ion) form (SO_4^{2-}) or is rapidly converted in warm, moist soil to the anion sulfate form. Anions such as sulfate and nitrate are subject to leaching loss from the topsoil. Dr. Tom Sims did find large quantities of sulfate in the deep subsoil layers of even the sandy soils in Sussex County, Delaware but the corn and other crops are not able to obtain S from these layers until much later in the growing season when the root system is nearly fully established. Early in the season, we are likely to find more and more fields showing S deficiency unless S fertilizer is regularly applied to the crops.

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

Weather and Outside Market Forces Impacting Commodity Prices

Recent rain may not be enough to alleviate declining crop conditions in the Eastern Corn Belt from now until the weekend according to crop observers. The U.S. corn crop declined by 5 points in the good to excellent categories from the week of May 20 to May 27. The conditions for crop development are important because it would take a nearly ideal growing season to achieve USDA's projection of a 2012 U.S. average corn yield of 166 bushels per acre. For that to have a chance of happening U.S. crop conditions would have to take a significant leap forward when this week's conditions are reported, week ending June 3. More rain is in the forecast between now and the weekend, however observers are suggesting it might not be enough to bring on the ideal conditions that are necessary to achieve the initial yield projection. Crop conditions begin being reported for U.S. soybeans on June 3. The Black Sea region and Russian grain producing areas are also reporting dry conditions that are likely impeding crop development.

Status of the Euro Remains Up in the Air

The equity and commodity markets have taken a pounding this week due to the uncertainty coming out of the European Union. The Dow has seen a significant drop (now at 12,419) while the dollar has increased in value (nearby at 82.925). The increasing value of the dollar is making U.S. commodities more expensive overseas. The weekly export report released this morning (May 31) was bearish for corn, bearish for wheat, and bullish for soybeans. As of this writing it would not be prudent to suggest what the outcome might be for the euro and the European Union. An analyst suggested this week that the impact wouldn't necessarily be all that bad to world markets as long as the process of either mending and/or amending the European Union is orderly, key word being 'orderly'.

Market Strategy

To some degree the diametrically opposed signals that we are getting concerning the grain markets signal different courses of action. Non-commercial longs have been exiting commodities positions for several weeks due to the uncertainty concerning potential crop size in the U.S./world and to a general slowdown in U.S. and world economies. A U.S. corn crop projected at the 166 bushel per acre variety would take new crop corn prices lower than they are now. On the other hand, tight old crop U.S. corn and soybean supplies suggest that it wouldn't take much of a weather scare to rally prices from their current levels. Providing initial sales for intended 2012 corn and soybean production are booked, a gut feeling is to go with the weather uncertainty placing additional sales on hold. The next USDA monthly supply and demand report will be issued on Tuesday, June 12. Currently, in e-trade Dec '12 corn futures are at $5.12; Nov '12 soybeans at $12.89; and July '12 SRW wheat at $6.50 per bushel.

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

General

Nutsedge and Horsenettle Control – *Mark VanGessel, Extension Weed Specialist*; mjv@udel.edu

This appears to be the year for yellow nutsedge and horsenettle. Only a few products will provide yellow nutsedge control in corn. Glyphosate products are rated as suppressing yellow nutsedge if applied up to 6 inch tall plants. A recently registered product for our region, Permit Plus at 0.75 oz wt/A, is the best product available. Permit Plus contains halosulfuron and thifensulfuron (active ingredients in Sandea and Harmony). Permit Plus can be tankmixed with glyphosate. Basagran will control emerged tissue of yellow nutsedge, but the plants often regrow from the nutlets. Other products list nutsedge suppression but need to be applied to very small nutsedge plants. For soybeans, Basagran and glyphosate are also available, but so is Classic, for nutsedge plants up to 4 inches tall. Classic can be tankmixed with glyphosate.

Nutsedge control in vegetables includes Basagran or Sandea. Later planted vegetables can be treated at planting with Dual and/or Pursuit for control/suppression of yellow nutsedge. Pre-plant incorporated applications of Dual generally provide better yellow nutsedge control than applications to the soil surface.

Horsenettle is a perennial that emerges from creeping rhizomes and is hard to control. Glyphosate is rated as fair for control of horsenettle, but no other soybean herbicide provides control or appears to enhance glyphosate activity. In corn, Callisto provides good horsenettle control. Banvel, or dicamba containing herbicides, provide fair control of horsenettle. Postemergence options in vegetables are very limited; most products will provide some leaf burn but poor control.

Both yellow nutsedge and horsenettle should be treated after harvest with glyphosate. In late summer or fall, these plants are moving sugars to their root systems where the glyphosate can kill the perennial tissue of the plants.

Problems With Corn Seedlings This Year – *Nancy Gregory, Plant Diagnostician*; ngregory@udel.edu

Uneven stands have been seen this spring in corn fields. Corn seedling issues have been attributed mostly to environmental conditions, including dry soil at planting, resulting in variable depth of seeds and uneven emergence. Our early May weather resulted in wet, cool soil conditions conducive for fungi that invade young seedling roots and mesocotyls. Stress brought on by recent hot weather has exacerbated stress on seedlings. A recent article from Purdue University highlighted some issues also seen in the Midwest that apply to corn in Delaware: http://extension.entm.purdue.edu/pestcrop/2012/issue8/index.html#seedling

Announcements

University of Delaware Pea Twilight

Wednesday June 6, 2012 6:00-8:00 p.m.
Carvel Research and Education Center
16483 County Seat Highway
Georgetown, DE 19947

Tour the late pea variety trial and discuss preliminary results from the early pea trial.

Preliminary results from tillage and cover crop studies on peas will be presented.

UD Extension personnel will be on hand to answer questions.

There will be refreshments following the tour.

To register, contact Karen Adams at (302) 856-2585 ext. 540 or adams@udel.edu by Monday, June 4.

For additional program information, contact Emmalea Ernest at (302) 856-2585 ext. 587 or emmmalea@udel.edu.

LEADelaware Program Applications Due June 15

LEADelaware is an agricultural and natural resource leadership program designed to help build the next generation of leaders within the food and fiber industries that influences our food system, our economy, and our environment.

Leadership is a critical component for any industry to respond to the political social and economic issues it faces on a day-to-day basis. Agriculture and related industries need experienced and trained advocates to provide a voice and a direction for the future. The business of agriculture has grown in new areas with new technology and production strategies. The need to translate the needs of this industry to the public and policy makers is critical

The need for leadership within the agricultural sector is essential. The philosophy of LEADelaware is to build leadership capacity in agriculture and natural resources in Delaware by investing in a class of emerging leaders. In our framework, leaders are not born nor can we simply make someone a leader by teaching them a set of skills. However, we can invest in emerging leaders by imparting knowledge, skills, and opportunities to lead.

The LEADelaware Program will seek to recruit a class of 10 – 15 leaders in Delaware and take them through a two-year program that will:

Provide an atmosphere of individual and group learning and growth

Build leadership capacity of the participants

Build leadership skills of the participants

Provide opportunities for participants to practice these skills within the program

Facilitate this learning in the context of current issues and problems facing the state, agriculture, and natural resource issues.

For more information on the LEADelaware program, or to apply, go to http://sites.udel.edu/leadelaware/.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of May 24 to May 30, 2012

Readings Taken from Midnight to Midnight

Rainfall:
0.58 inch: May 30
Air Temperature:
Highs ranged from 88°F on May 28 to 74°F on May 30.
Lows ranged from 73°F on May 29 to 60°F on May 24.
Soil Temperature:
76.1°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