WEEKLY CROP UPDATE
UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 16, Issue 24 **August 29, 2008**

Vegetables

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

Cabbage
Continue to sample for cabbage looper, diamondback larvae and harlequin bug. Be sure to scout and select control options based on the complex of insects present in the field.

Cucumbers
Be sure to watch for an increase in cucumber beetle and aphid populations. 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.

Lima Beans
Continue to scout for stinkbugs, lygus bugs and corn eaworm. Economic levels of stinkbugs and earworms can be found. Since trap catches remain high, multiple applications may be needed for earworm control. At this time of year, we have also found soybean loopers in lima bean fields. If soybean loopers become a problem again this year, remember that they are a migratory pest, difficult to control and pyrethroid resistance has been documented in states to our south. Therefore, you will need to consider an application of Lannate LV at the higher rate for soybean looper control. The following is the link to the Lannate label (http://www.cdms.net/LDat/ld183010.pdf). Be sure check the label for rates and days from last application to harvest.

Peppers
With the high corn earworm and corn borer moth catches in blacklight traps throughout the state, be sure to maintain a 5 to 7-day schedule on all peppers for worm control. Also, be sure to select materials that control both earworms and corn borers.

Snap Beans
With the high corn borer and corn earworm moth catches, you will need to consider a treatment for both insect pests. Sprays are needed at the bud and pin stages on processing beans for corn borer and corn earworm control at this time. As a reminder, if you are using Orthene (acephate) for corn borer control in processing snap beans, it will not provide effective corn earworm control. You will need to combine Orthene with a corn earworm material (e.g. a pyrethroid) or use a material that will control both insect pests. Check our website for the most recent trap catches in your area to help decide on the spray interval between the pin stage and harvest for processing snap beans (http://ag.udel.edu/extension/IPM/traps/latestblt.html and http://ag.udel.edu/extension/IPM/thresh/snapbeanecbthresh.html).

Spinach
Be sure to watch for webworms and beet armyworms. Both moths are active at this time and controls need to be applied when worms are small and before they have moved deep into the hearts of the plants. Also, remember that both insects can produce webbing on the plants. Generally, at least 2 applications are needed to

achieve control of webworms and beet armyworm. It should also be noted that the rates listed in the Vegetable Recommendation Guide for Avaunt on spinach are not correct. The maximum use rate on spinach is 3.5 oz/acre. The rates listed in the book are for other leafy greens. As always, be sure to check the label for use rates and restrictions. Here is the link to the label (http://www.cdms.net/LDat/ld4BD004.pdf).

Sweet Corn
With the high corn earworm catches throughout the state, all fresh market silking sweet corn should be sprayed on a 2-day schedule.

Late Summer Vegetable Notes

–Gordon Johnson, Extension Ag Agent, Kent Co.; gcjohn@udel.edu

Early processing baby lima beans have been harvested over the last two weeks. Dry-land lima yields are ranging in the 900-1100 lbs/acre range. Cooler weather in August has contributed to decent pod set but drought conditions have reduced seed fill and increased pod abortion in later planted dry-land baby limas. In August there were only 3 days in the high 80s or low 90s and nighttime temperatures have dropped to the 50s or 60s. As a result, irrigated mid to late season lima beans should have excellent yields. Pigweed escapes continue to be a major issue in lima beans and wiper bars were used in many fields this year for control once pigweeds were over top of the beans.

Nematodes can be an issue in heavy vegetable rotations. It would be wise to take soil and root samples while there are still live roots in fields if you are seeing reduction in growth, extra stress, or reduced yields in vegetable fields. Sampling instructions and sample bags can be obtained at any Delaware Extension Office.

It is common to find low pH to be a problem in vegetable fields where there is poor growth. Mark any areas that are showing poor vegetable performance and once summer vegetables are finished, plan to take soil samples in these areas and field wide. Low pH spots will need additional lime this fall.

I encourage more vegetable growers to try some acreage using cover crops that can be no-tilled into next spring. In particular, hairy vetch has proven to be an excellent cover crop for late spring, direct-seeded and transplanted vegetables. The key is to plant as early in September as practical and make sure there is irrigation to get the hairy vetch out of the ground and growing this fall if there is no rain. Pumpkins no-tilled into hairy vetch are becoming the standard in much of the region, but we have limited acreage in Delaware.

A common question is when to stop spraying pumpkins for disease and insect control. Unless pumpkins will be harvested in the next two weeks, plan on additional sprays. The best place for a pumpkin is on a healthy vine. Late season powdery mildew will greatly reduce handle (stem) quality and reduce marketability. We have several growers that plant pumpkins into rye cover crops. The rye mulch has greatly improved quality by eliminating fruit rots and greatly reducing dirt where the pumpkin sits on the ground.

Pumpkins Ready for Harvest?

– *Andy Wyenandt, Assistant Extension Specialist in Vegetable Pathology, Rutgers University*; wyenandt@aesop.rutgers.edu and *Art Brown, Senior Associate Dean – Agriculture & Natural Resources, Rutgers University*

The fall is almost upon us and because of the hot, dry summer many pumpkin fields will be ready for harvest much sooner than expected. For most roadside markets pumpkin season begins shortly after Labor Day and extends through the end of October. For those keeping track, that's roughly an eight-week market. The question for many is what to do with marketable fruit in the field until it's time for sale. As long as there is good, healthy foliage present, the best place for a pumpkin is on the vine. Foliage helps protect fruit from potential sunscald injury and will help any late setting fruit to size. However, keeping foliage around will also require additional fungicide applications. If the foliage cannot be maintained, move the mature fruit to a dry, well ventilated area. Many growers will let powdery mildew take the foliage

out a few weeks before pumpkins are ready to be harvested. Why? Pumpkins are a lot easier to harvest without dense foliage in the field. Growers should be aware that the major drawback to this method is that powdery mildew can reduce stem quality by causing stems to turn brown and become brittle prematurely.

Once foliage is gone, pumpkins can easily be stored and 'cured' in the field by lopping them off the vine and placing them in un-stacked windrows as long as the weather cooperates. Temperatures of 80 - 85°F with relative humidity of 80 - 85% for 10 days after lopping are ideal. After this, temperatures between 50 - 60°F with 50 - 70% relative humidity will keep respiration and potential weight loss down. Cool, wet and 'frosty' weather will do most of the damage to ripe fruit in the field by slowing down the curing process, exposing fruit to potential fruit rot pathogens and, in the case of frosts, cause fruit to melt if temperatures get too low. Knowing your market, your crop and keeping an eye on the weather will go a long way in having a successful pumpkin harvest season.

Agronomic Crops

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

Soybeans

Economic levels of corn earworm can be found in double crop fields in Kent and Sussex counties. We have not heard of reports of economic levels from New Castle County but there were a few larvae in fields last week so fields should be carefully checked throughout the state. Fields in Sussex County that had low levels at the end of last week are above threshold this week. *As indicated in past newsletters, the combination of drought stressed corn, early dry-down of corn and high moth catches has resulted in a high potential for damage this year. Be sure to check all labels for the days from last application to harvest, as well as other restrictions.*

I have received numerous calls this week regarding chemical selection for earworm control in soybeans. In Delaware, the pyrethroids are still providing effective earworm control as of this date. Although we do not know what will happen in the future, we do know that fields that have been sprayed over the last 7-day period are reporting good control. When treating for earworms, it is important that you make applications to fields that are at threshold levels, apply treatments when the worms are small and use the highest labeled rate of a pyrethroid. Failures in past years (including a few in 2007) were a result of treating too late (above threshold levels), using too low of a rate, and treating when a mixed population size (too many medium and large larvae) was present. Other labeled options for earworm control include Steward, Larvin and Lorsban. With the sustained moth catches, it will also be important to continue to check fields after treatment because we could see a re-infestation (i.e. new hatch of small larvae). After talking this week to my colleague Ames Herbert from Virginia, he indicated that they are just getting reports of a few fields with pyrethroid failures. The higher rate was used however these applications were made to a mixed worm population – that is medium and large worms were present at application time – and it is occurring in areas where corn was extremely drought stressed. He also indicated that this is only occurring in spotty locations throughout the state.

So – once again the only way to know if you have an economic level will be to scout. *Although in the past we have used the treatment threshold of 3 corn earworms per 25 sweeps in narrow fields and 5 corn earworms per 25 sweeps in wide row fields, these are static thresholds based on old soybean prices.* With higher soybean prices, the best approach to determining a threshold is to access the Corn Earworm Calculator (http://www.ipm.vt.edu/cew/) which estimates a threshold based on the actual treatment cost and bushel value you enter.

Small Grains

With the increase in no-till wheat acreage, as well as our typical rotation of wheat following corn, it will be important to consider a number of insect pests that can present problems. A recent news article from Kentucky titled "Insect

Pest Management Decisions in Preparation for Planting Wheat" does a nice job of addressing the potential pests that pose a threat to wheat in the fall (http://www.uky.edu/Ag/kpn/kpn_08/pn080825.htm#wheins). In addition to the pests listed in this article, we have also seen high true armyworm moth catches in our traps throughout the summer and those dreaded slugs have been known to attack small grains if we have a wet fall.

I have also been asked about seed treatments for aphid control. The main concern in the fall is vectoring of barley yellow dwarf virus (BYDV) by all species and direct damage by greenbug aphids. In talking to the plant pathologists in our area, they still do not feel that we are seeing a significant increase in the incidence of BYDV. However, in areas where you have seen BYDV in the past, where you are planting early, or you have seen damage by greenbug aphids, a seed treatment that controls aphids (i.e. Cruiser and Gaucho) would be a good control option. We have also seen high levels of bird cherry oat aphid in irrigated corn fields in Sussex County. Although we have not seen this in past years, it could mean that we will see higher levels in early planted wheat.

Soybean Rust Update

– *Bob Mulrooney, Extension Plant Pathologist*; bobmul@udel.edu

On August 24th, soybean rust was confirmed in a commercial field at the R8 growth stage in Willacy County, Texas in the far southern tip of the state. On August 22nd, soybean rust was detected on soybean leaves in a research plot in Decatur, Georgia. Tropical Storm Fay dropped a lot of rain in the Gulf Coast states but it will take some time to determine its effects on the spread of soybean rust. There were several new reports of soybean rust on kudzu in LA but none on soybean so far. The risk of rust is increasing in FL, LA, and southern GA, MS, and AL but there is very little infected kudzu or soybeans to produce spores in sufficient number to threaten the northern soybean production areas at this time — even if Gustav turns out to be a serious threat to the Gulf Coast. It looks as if soybean rust will not be an issue for DE growers again this year. Sentinel plots in all three counties are continuing to be monitored for soybean rust and other diseases. The only diseases that are being reported are low levels of Septoria brown spot and downy mildew. Neither disease should impact yields. Some late-planted double crop soybeans are beginning to die from drought.

Grain Marketing Highlights

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

Hurricane Watch

As we head into the Labor Day weekend there are conflicting signals impacting commodity markets. First, hurricane Gustav is forecast to head into the Gulf Coast sometime over the weekend/first of next week. With something like 135 oil rigs off the U.S. Gulf coastline the crude oil market has traded higher this week with the nearby contract now trading close to $120.00 per barrel. The oil price rally has had a positive effect upon corn and soybean prices for a part of this week's trading; with prices now backing off due to needed rainfall coming into Iowa and other parts of the parched Corn Belt. It won't be until sometime next week before the extent of any damage that might occur is known. The hurricane watch is likely to hold trader interest for some time because another possible hurricane is forming in the Atlantic that may or may not make it to the U.S. mainland. Two things could happen as a result of a Category 3 or better hurricane hitting the mainland at this point in the growing season. First, some of the U.S. crop in the outlying regions of the row crop producing area could receive too much rain, thereby resulting in crop damage. Second, wind damage to standing crops could become a problem, causing some field loss due to downed corn stalks. As a reminder, this year's crop is likely to be more susceptible to potential wind damage due to the shallow root system of much of the U.S. corn crop.

Marketing Strategy

Needed rains occurring in parts of the Corn Belt are said to be responsible for the lower overnight trade in the corn, soybean, and wheat pits. The markets are likely to trade sideways to lower as we go into the weekend. Once Gustav

makes its way through, crop damage will be assessed and the markets will trade accordingly. Simultaneously, the status the oil rigs off the Gulf Coast will be assessed and reported. The U.S. dollar index, trading stronger earlier in the week, has also backed off slightly. The weakening dollar is likely attributed to the higher crude oil price and the rate at which the Fed is printing money to stave off a credit crisis and inflation. Considering the unknowns, typically referred to as uncertainty, row crop prices are likely to remain extremely volatile. Only catch up sales should be considered at this time. Harvest pressure is expected to take corn and soybean prices lower from their current levels. World production for all wheat is expected to increase and thereby increase beginning stocks for the next marketing year. Currently, Dec '08 corn futures are trading at $5.85; Nov '08 soybean futures are trading at $13.26; and Dec '08 wheat futures are trading at $8.07 per bushel.

Fall Crop Insurance Required for Disaster Eligibility in 2008
No coverage on wheat and barley now means no disaster aid next year.

OVERLAND PARK, KS — Any producer who wants to be eligible for disaster assistance on 2009 summer crops must have crop insurance coverage on all insurable fall planted crops before the sales closing deadline (September 30, 2008 for winter wheat, barley, and forage production.) The new Farm Bill requires crop insurance, on all acres of any insurable crop, or Noninsured Assistance Program (NAP) coverage on all acres of uninsurable crops, in order to be eligible for the Supplemental Revenue Assistance Program (SURE). If you fail to sign up for crop insurance on your fall planted crops you will not be protected under SURE for your corn and soybeans next summer, even if you buy crop insurance for those crops. The more crop insurance coverage you have, the more your SURE guarantee will be. Authorized in the Farm Bill, SURE is effective for the 2008 crop year and runs through the 2011 crop year. SURE will be based on whole farm revenue. It will be triggered by a USDA Secretarial disaster declaration for a county. Contiguous counties are automatically eligible. It will also be available to any farm where, during the calendar year, the total loss of production on the farm, because of weather, is greater than 50 percent of the normal production on the farm. For insured crops, the SURE guarantee is 115 percent times the crop insurance price election times the crop insurance coverage level times the adjusted crop insurance yield. Crop insurance coverage levels will determine the size of the guarantee.

Some of the more common fall planted crops with the September 30 deadline include: winter wheat, oats, barley, rye, and forage production.

Assure Your Eligibility
If you want to maintain your eligibility for disaster aid in 2009 you must sign up for crop insurance coverage on every acre of every insurable fall planted crop before the September 30, 2008 deadline.

If you have any questions, contact a crop insurance agent well before the deadline. For more information contact Jan Eliassen at (410) 778-0120 or Laurie Langstraat at (913) 685-2767.

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

General

Plant Management Network Publishes Latest Plant Disease Management Reports – *Bob Mulrooney, Extension Plant Pathologist*; bobmul@udel.edu

The following article is a news release about the Plant Management Network and specifically about the Plant Disease Management Reports. This resource is valuable to all those who use fungicides and those that recommend them to growers.

The 2008 volume of Plant Disease Management Reports (PDMR), an online resource developed to give growers, consultants, pesticide applicators, and extension specialists the latest in disease management information, is now published.

This latest volume contains more than 560 searchable reports on the effectiveness of fungicides/nematicides, resistant varieties, and other biological controls that defend against diseases of agricultural and horticultural crops.

All volumes of PDMR and its preceding publications, F&N Tests and B&C Tests, contain 5,000-plus reports, covering more than 1,500 chemical and biological controls.

"Many professionals in agriculture and horticulture depend on PDMR to develop disease management recommendations or make better pest management decisions," said Dan Egel, Ph.D., Extension Plant Pathologist at Purdue University and Editor-in-Chief of Plant Disease Management Reports.

Each one to two-page report consists of a summary outlining trial conditions and results. Test plot trial data, also in the report, includes treatment rates, application timings, and pertinent efficacy data for each product tested.

Users can search the reports by keyword or section. Keyword searches can include product names, active ingredients, host crops, and authors. Sections include cereals and forage crops; citrus, tropical, and vegetable crops; field crops; ornamentals and trees; pome fruits; seed treatments (for all crops); small fruits; stone fruits and nuts; and turfgrass.

PDMR's efficacy reports were first published in 1946 as a section in the USDA publication, Plant Disease Reporter. In 1960, the American Phytopathological Society (APS) published these reports independently under the title Fungicide and Nematicide (F&N) Tests. In 1986, APS developed a new publication, Biological and Cultural Tests for the Control of Plant Disease, or B&C Tests. By 2001, both resources became electronically accessible. In 2007, they were merged into Plant Disease Management Reports. A full history is discussed in this volume of PDMR.

Users can have continuous access to all volumes of Plant Disease Management Reports, F&N Tests, and B&C Tests online for $45 yearly. This subscription also includes access to other Plant Management Network resources, which include Arthropod Management Tests, a similar publication covering the effectiveness of insecticides; applied crop science journals, webcasts, targeted extension searches, image collections, proceedings, and more. To subscribe or learn more, visit http://www.plantmanagementnetwork.org/pub/trial/pdmr/.

PDMR is distributed online through the Plant Management Network (http//www.plantmanagementnetwork.org), a nonprofit publisher of applied plant science resources. The Plant Management Network is jointly managed by the American Phytopathological Society, the Crop Science Society of America, and the American Society of Agronomy. The Plant Management Network's nonprofit publishing mission is to enhance the health, management, and production of agricultural and horticultural crops.

Announcements

For Current Agricultural Information from the UD Kent Co. Extension Office Visit
www.kentagextension.blogspot.com

Recent Topics:

- Consider the "Green Bridge" in Managing Small Grain Insects
- Reducing Grain Drying Costs II - Bin Drying
- Corn Harvest Begins
- Reducing Grain Drying Costs I - Batch or Continuous Flow Driers
- Drought and Stalk Strength in Corn
- New Disaster Program Now Tied to Crop Insurance–Deadline Approaches
- Crop Insurance Changes
- Pricing Standing Corn for Silage
- Plant Protection Act, Patented Seed, and Saving Small Grain Seed
- Equine - Electrolytes in Hot Weather for Horses
- Mid Shore Equine Pasture Walks in Neighboring Maryland
- Full Drought
- Corn Earworm (Podworm) Moth Trap Counts Have Increased
- Dry Corn and Silage
- Current Grain Market Information
- Grain Price Up Across the Board

Beef and Sheep Pasture Walk

Wednesday, September 3 5:00 – 7:30 p.m.
University of Delaware Webb Livestock Farm
South Chapel Street, Newark, DE

Learn about pasture management and rotation for beef cattle and sheep production. Experts will be on hand from the University of Delaware and the Natural Resource Conservation Service (NRCS) to answer your questions. Nutrient Management and Pesticide credits will be available.

Please bring a folding chair.

This meeting is free and everyone interested in attending is welcome. To register, request more information or if you require special needs assistance for this meeting, please call our office in advance at (302) 831-2506.

Please register by August 29, by calling (302) 831-2506.

Farm Planning 101

Thursday, September 11, 2008 6:00 p.m.
DSU Smyrna Outreach and Research Center
884 Smyrna-Leipsic Rd, Smyrna, DE

Create a business plan for your farming enterprise. Includes record-keeping and tax information

Light refreshments served.

Please call (302) 857-6462 to register.

This workshop is part of the 2008 Small/ Beginning Farm Workshop Series held by Delaware State University. For complete information on the workshops planned, see the brochure at http://www.rec.udel.edu/update08/announcements/smallfarmbrochure2008.pdf

Classes for Initial Nutrient Management Certification Begin in September

If you apply nutrients to 10 or more acres of land or have 8 or more animal units (an animal unit is equal to 1000 lbs of live weight) you need to be certified through the Nutrient Management Program. Sessions for initial nutrient management certification (not continuing education credits) begin on September 3.

Visit the Nutrient Management Website: http://ag.udel.edu/extension/NutriManage/sessionschedule.htm
or call Sydney Riggi at (302) 856-2585 x571 for more information.

Beef Pasture Walk

Saturday, September 6 9:30a.m. – 12:30 p.m.
Carlton Jones Farm (C and J Farms, Inc.)
3174 Woodland Ferry Rd., Seaford, DE

The cattle on this farm are 100% grass fed; free from hormones, antibiotics, pesticides and chemicals. The Jones direct market the USDA inspected meat produced on this farm.

Learn about pasture management and rotational grazing for beef cattle. Fertility and weed management without pesticides will be discussed. Cooperative Extension specialists from the University of Delaware and the Natural Resource Conservation Service (NRCS) will be available to answer your questions!

Delaware Nutrient Management Credits will be available.

This meeting is free and everyone interested in attending is welcome. To register, request more information or if you require special needs assistance for this meeting please call our office in advance at (302) 678-4198.

Please register by August 29, by calling (302) 678-4198.

See you there!
John Timmons
USDA, NRCS, Cropland Agronomist

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of August 21 to August 27, 2008

Readings Taken from Midnight to Midnight

Rainfall:

no rainfall recorded

Air Temperature:

Highs ranged from 90°F on August 25 to 78°F on August 26.

Lows ranged from 67°F on August 25 to 52°F on August 21 and August 27.

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