Vegetables

Downy Mildew on Pickling Cucumbers - Ed Kee, Extension Vegetable Crops Specialist; kee@udel.edu

I visited North Carolina this week and their pickle acreage has gone through the same Downy Mildew problems that we have experienced. Hand-pick and machine pick yields are extremely low, with a high percentage of crooks and nubs. Machine harvest yields may be 100 to 125 bushels per acre at best, with a 50-60% pickout percentage, leaving a 50-60 bushel paid yield.

As one North Carolina extension specialist put it, “The disease started and just kept hitting and hitting and hitting the acreage.” They too had the right environment for the disease organism to keep reproducing all summer long. With that type of pressure, fungicides have allowed yields to reach the level described above, which is perhaps the most to be expected.

On-going trials in Delaware, North Carolina, and possible future cooperative work in Florida this winter should be helpful in developing the plan for next year. However, that is no prediction that the disease will be with us next year at these levels. It does not over-winter and comes to us in air currents from the south.

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 larvae 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 continue to be 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. Note - Be sure to always check the label before spraying to determine the pre-harvest interval (number of days between last application and harvest). The pre-harvest interval (PHI) for Warrior on beans is listed incorrectly in the Vegetable Recommendation Guide as a 0 day PHI. The correct PHI is 7 days.
Peppers.
Be sure to maintain a 5-7 day spray schedule for corn borers, 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.

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. Remember, Orthene provides poor corn earworm control. Since trap catches change quickly and corn earworm catches remain high, be sure to 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
and

Note - Be sure to always check the label before spraying to determine the pre-harvest interval (number of days between last application and harvest). The pre-harvest interval (PHI) for Warrior on beans is listed incorrectly in the Vegetable Recommendation Guide as a 0 day PHI. The correct PHI is 7 days.

Spinach.
Be sure to scout for webworm and beet armyworm as soon as plants emerge. 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.
With the continued high corn earworm catches and heavy fall armyworm pressure, all fresh market silking sweet corn should be sprayed on a 2 day schedule. A combination of a pyrethroid and Lannate, Larvin, or Lorsban may be needed if pressure from both insects remains heavy until the end of the season. Be sure to check trap catches frequently. You can check trap catches and treatment decision guidelines on our website (http://www.udel.edu/IPM/traps/latestblt.html and http://www.udel.edu/IPM/thresh/silkspraythresh.html).

Field Crops

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

Alfalfa.
With the recent increase in corn earworm trap catches and the presence of webworms, be sure to check fields for signs of defoliators. If a field is 2 or more weeks from cutting and 25-30 percent of the terminals show signs of defoliation or webbing, a treatment is suggested. Baythroid and Warrior are labeled for control of both insects in alfalfa.

Soybeans.
In most cases, corn earworm numbers are still low. We can still find a few larvae but numbers are well below threshold. At this point, 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 2 week 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 are greater). We are still finding a few beet armyworms and just today a field was found with economic levels of defoliation. We also hear reports of a few fields being sprayed in Virginia for beet armyworm. Remember they are
primarily defoliators unless populations are high. Therefore, you should use the defoliation thresholds when making a treatment decision for beet armyworm. Once fields are in the bloom to pod-fill stage, the threshold is 15% defoliation. **Remember - the pyrethroids will not provide effective beet armyworm control.** If Steward is used, the recommended rate is 7.2-8 oz/A. Although we can still find cloverworms, the recent weather has been favorable for fungal pathogens that are helping to crash populations.

**Weekly Crop Update 3**

**Weed Control in Seedling Alfalfa** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

Getting seedling alfalfa off to a good start is critical for a long-term quality stand. The following herbicide suggestions are for pure alfalfa stands. Gramoxone or Roundup can be used prior to planting to kill emerged weeds. Balan or Eptam can be used pre-plant incorporated for control of small-seeded broadleaves such as pigweed or lambquarters and most annual grasses. Residual control of either Balan or Eptam is only a few weeks. Butyrac, Buctril, Pursuit, Raptor, and others can only be used after the alfalfa has emerged and developed trifoliate leaves. Fall postemergence treatments include Butyrac 200 (2 to 4 alfalfa trifoliates), Buctril (at least 4 trifoliates), Kerb, Poast Plus, Select, or Pursuit or Raptor (at least 2 trifoliates). Pursuit or Raptor provides the broadest spectrum of control, and can be tank-mixed with Buctril or Butyrac to improve control. The addition of Buctril to Pursuit will improve German moss, lambquarters, and henbit control. Kerb will provide the best common chickweed control, but it must be applied when soil temperatures are 50 degrees or less and requires rainfall for activation. Applications to small weeds are critical for effective control. Poast Plus and Select are effective only on grasses, and cannot be used on alfalfa plus grass stands. Most of the labeled herbicides can cause some crop injury to the alfalfa.

**Weed Control for Grass or Mixed Pasture Plantings** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

Weed control options are very limited for establishing a grass or mixed stand pasture. There are no products to use pre-plant incorporated or preemergence that will provide residual control and not injure the crop. Early postemergence options are also very limited. Ally, Banvel, Overdrive, Crossbow, or 2,4-D can be used for pure grass seedlings (they will kill clovers and alfalfa), but grasses need to be well established at time of application. Ally can injure fescue and ryegrass. Fescue injury can be reduced if Ally is tankmixed with 2,4-D.

**Options for Harvest Aid Treatments** - Mark VanGessel, Extension Weed Specialist, mjv@udel.edu

A harvest-aid may be a consideration to dry down vegetation prior to harvesting and to reduce foreign matter in the harvested grain. For corn, Defol (sodium chlorate) is labeled for applications 14 days prior to harvest and it can be applied by air. Defol will dry down plants but it does not have herbicide activity. Dry down is slow; expect at least 14 days for dry down. Also, 2,4-D amine is labeled but it must be applied by ground rig, which provides challenges for getting it where it is needed. Apply after the hard dough or dent stage. Air temperatures over 85 can increase the risk of volatility. Glyphosate (Roundup, Touchdown, Glyphomax) is labeled, but must be used with care do to potential injury to desirable vegetation. Apply glyphosate when grain moisture is 35% or less and black layer has formed. Allow 7 days between application and harvest. Gramoxone Max recently received a label for a broadcast treatment. Application rates are 0.8 to 1.5 pts/A and must be applied at least 7 days prior to harvest. Be sure to read the label for all precautions.
Commodity Markets; A Moving Target

The corn, soybean, and wheat markets have recently turned slightly bullish from their bearish trends reflected in price bidding at the Chicago Board of Trade (CBOT) just a couple of weeks ago. Why the change? Markets are a moving target. As time passes, price direction and outlook change, reshaping the fundamentals and technical picture. The following reasons are offered by a reliable source as reasons for the somewhat bullish tone to these markets, at the present time:

1. The corn, soybean, and wheat markets have all reacted positively to the mostly negative news contained in the August Crop Report. Each of these markets is trading near or higher than they were going into the report. This is somewhat good news. However, the extent of any continued rally depends in large part to what happens to weather developments prior to mid to the latter part of September.

2. An assumption is that the grain and oilseed markets have discounted a 10.9 billion bushel corn crop and a 2.9 billion bushel soybean crop. Both crops will have to get bigger from here to push prices lower. The uncertainty lies within whether that will happen or not? The answer is not likely to be known fully until we get these crops into the bin. It will be interesting to see how prices are bid in the corn and soybean pits today. Parts of the Corn Belt, some of that considered to be the heartland of the belt, have been receiving adequate ‘bin bursting’ rainfall. Simultaneously, the Northern tier of the Corn Belt is in jeopardy of an early frost that may reduce yields substantially. Several states in the Northern tier and parts of Canada have already experienced varying degrees of frost damage, anywhere from zero effect to severe. Much cooler temperatures are forecast for the Northern tier of the Corn Belt over the weekend.

3. All of these markets are showing technical signs of being in the early stages of a turnaround. Consider the following:

   a. Corn, soybeans, and wheat have broken through major downtrend lines.

   b. CBOT wheat and corn futures charted key reversals up on Monday (8/16).

   c. All of these markets are extremely oversold from a technical perspective.

4. These markets have undergone major moves since late spring. Big bull markets turn into big bear markets and big bear markets, at some point in time, run out of steam. With these markets reacting positively to overall negative news it is time to stay on the sidelines for a while longer. Remember, if an early frost does materialize then that will present an opportunity for those needing to get additional pre-harvest sales booked. The ‘window’ on that opportunity may be short lived considering that the heart of the Corn Belt is likely to carry the US through with large corn and soybean crops. A frost premium will come only in the event that ending stocks are projected to be knocked down from their current levels. These factors are likely to lend the markets support going into the September 10th Crop Report.

*Selected excerpts taken from “The Brock Report”.

Delaware Corn Hybrid Test - Derby Walker, Sussex County Extension Ag Agent, derby@udel.edu

The Delaware Corn Hybrid test is located at the Georgetown Research and Education Center Farm, near the Chestnut Grove. Use Experiment Station Road (right across from the office), turning left on the third dirt road on the left. The corn was mowed off in front of the plots. Signs are located in the plots. If you would like a plot plan to identify the varieties, copies of the plans are in the rack in the hallway of our office. Feel free to stop by and pick up a copy to review the commercial varieties.
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

Weather Summary

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

Week of August 19 to August 26, 2004

Rainfall:
0.66 inches: August 21
Readings taken for the previous 24 hours at 8 a.m.

Air Temperature:
Highs Ranged from 89°F on August 20 to 77°F on August 22.
Lows Ranged from 73°F on August 20 to 55°F on August 23.

Soil Temperature:
79°F average.
(Soil temperature taken at a 2 inch depth, under sod)

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

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