



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 12, Issue 25

September 10, 2004

Vegetables

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

Cabbage.

Continue to sample fields for diamondback, cabbage looper, fall armyworm and beet armyworm. A treatment should be considered if you find 5% of the plants infested and before larvae move into the hearts of the plants.

Lima Beans.

Lima beans continue to be attractive to corn earworm moths. A treatment will be needed if you find one corn earworm larvae per 6 ft of row. Consultants are also reporting higher levels of soybean loopers as well as cabbage loopers. Both insects are migratory pests. Although we usually find loopers each year, this is the first year that they are seeing significant damage to foliage and pods. Since soybean loopers are difficult to control and pyrethroid resistance has been documented in southern states, you may want to consider an application of Lannate LV at a rate of 2.5 to 3 pints/acre for looper control. At the higher rates, the REI for Lannate is 3 days to harvest.

Peppers.

Be sure to maintain a 5-7 day spray schedule for corn borer, corn earworm, beet armyworm and fall armyworm control. We are starting to see an increase in aphid populations so be sure to also sample for this insect pest. If aphids are

present and leaves are not curling, Lannate at 1.5 pt/A (3 days to harvest) should provide control. Actara (0 days to harvest), Assail (7 days to harvest), Fulfill (0 days to harvest), and Provado (0 days to harvest) will also provide aphid control. A penetrating surfactant should be used with Fulfill.

Snap Beans.

Continue to spray snap beans from the bud stage through harvest for corn borer and corn earworm control. 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>

and

<http://www.udel.edu/IPM/thresh/snapbeanecbthresh.htm>

Spinach.

The first webworms and beet armyworms can be found in recently emerged plants. As a general guideline, controls should be applied when 5% of the plants are infested with small worms 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.



Field Crops

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

Soybeans.

Continue to scout fields for soybean aphids. Although, we are starting to see an increase in predator and parasite populations, we have not seen enough activity to crash populations. Weather conditions remain favorable for aphid increases. Be sure to look at the entire plant when sampling for aphids. The fields at the highest risk are double crop fields as they are in the most susceptible stage, R1 to R3-R4.

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 R4 to R5 have not been as clearly defined - the important thing to consider is whether the populations are increasing or decreasing. **In the Midwest, spraying after R6 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. Be sure to watch for days to harvest on all products.

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. So, if you have not scouted your fields be sure to look for corn earworms until mid-September.

Small Grains.

Since corn harvest has been earlier this year, we have received questions about earlier planting of small grains. Although we have not seen widespread Hessian fly problems for a few years, we continue to see isolated fields with problems. In most cases, damage has been the result of spring infestations. Plants attacked in the spring have shortened and weakened stems that may eventually break just above the first or second node, causing plants to lodge near harvest. Since the fly survives as puparia ("flax seeds") in wheat stubble through the summer, you should still consider this pest as you make plans to plant small grains. In some cases, infested fields were planted after the fly free date. This traditional method of control is based on delaying planting until after flies have emerged. Warm fall weather conditions can extend fly emergence and egg laying beyond the fly-free dates, but these dates should still be used as a guideline for planting. Since we rarely see plants stunted in the fall, we still feel that most of the damage we see is occurring from spring infestations. Plants attacked in the fall at the one-leaf stage may be killed outright. Wheat attacked later in the fall will be severely stunted, with the first tillers killed and plant growth delayed. Plants infested in the fall can easily be recognized by their darker than normal bluish coloration and leaves with unusually broad blades. A combination of strategies should be used to reduce problems from Hessian fly:

- (1) Be sure to completely plow under infested wheat stubble to prevent flies from emerging.
- (2) Avoid planting wheat into last season's wheat stubble, especially if it was infested with Hessian fly.
- (3) Avoid planting wheat next to last season's wheat fields - the most serious infestations can occur when wheat is early planted into wheat stubble or into fields next to wheat stubble.
- (4) Eliminate volunteer wheat before planting to prevent early egg laying.

- (5) Do not use wheat as a fall cover crop near fields with infestations.
- (6) When possible, plant after the fly free date. (Oct 3 - New Castle County; Oct 8 - Kent County; Oct 10 - Sussex County)
- (7) Plant resistant varieties. You should look for varieties that have resistance to Biotype L. Although some of these varieties may not be appropriate for Delaware, the following is a list of varieties from North Carolina that have exhibited good resistance to Biotype-L: P 26R12, P 26R38, P 26R61, Roane, USG 3350, and USG 3430.

As far as chemical control, most of the recent data with seed treatments and foliar insecticides has come from North Carolina where populations have been heavier and fall infestations more widespread in recent years. These chemical strategies are designed to control infestations at planting and will not last to control spring infestations. Earlier work in Maryland did not show an economic benefit from using seed treatments for Hessian fly management since most of our infestations occur in the spring.



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

Pre-September Crop Report: Selected Comments.

USDA will release the September Crop Production Supply and Demand Report estimates tomorrow morning, Friday, September 10th. Average trade guesses for the September Crop Production report are:

U.S. Corn at 10.885 billion bushels, ranging from 10.717 to 11.270 billion bushels; U.S. Soybeans at 2.904 billion bushels, ranging from 2.846 to 3.087 billion bushels. In the August report, USDA estimated production at 10.923 billion bushels and 2.877 billion bushels, respectively.

Pre-report estimates for the '04/'05 marketing year ending stocks are: Corn average estimate at 1.141 billion bushels (1.040 to 1.242); Soybeans average estimate at 203 million bushels (175 to 253); All wheat average stocks estimate at 561

million bushels (531 to 578). In August USDA's ending stocks estimates were as follows: Corn 1.132 billion bushels; Soybeans 190 million bushels; and Wheat at 578 million bushels.

Commodity trading at the CBOT is being dominated by position squaring just ahead of the release of Friday morning's September Crop Production Estimates.

Soybean Analysis.

The '04 harvest has gotten underway in the South and the Ohio River Valley, with a small percentage of harvest progress reported for the heartland of the Corn Belt. Initial yield reports are excellent! Soybean prices fell hard on Tuesday as trading resumed after the holiday weekend. A part of the price decline in Tuesday's market can be attributed to the fact that forecasts for frost have been pushed back from the pre-holiday weekend forecast. Of equal or greater concern is the report coming out of the Federation of Oils, Seeds and Fats Association (FOSFA) that states that at least 10 or more cases are in the process of being arbitrated between Chinese oilseed buyers and exporters of South American Soybeans. Some of the cases are said to be about non-payment complaints, while others are in reference to quality. We are likely to hear more on this subject in the weeks ahead.

Corn Analysis.

Pre-report U.S. corn production estimates are placing the U.S. corn yield at a record 148.3 bushels per acre. If materialized, the new record will top the old record that was set for '03 U.S. corn production! There are some doubts as to whether the U.S. can set a new record this year. The doubt stems from the estimated 20% of the U.S. crop that is pegged at least two weeks behind. It is also noted that with the exception of last year, every other year when a new record high yield was recorded the good/excellent crop condition rating ranged from 78% to 85%. This year's most recent crop condition rating for U.S. corn was placed at 69%. The pre-report crop size estimate given above is being projected on a 3% harvested acreage increase and a 4% increase in yield.

Wheat Analysis.

U.S. weekly wheat export reports have been outpacing trader expectations for several weeks.

The spring wheat harvest remains very late in the Red River Valley, and a cut in the Australian crop production estimate all lends support to this market. Persistent wet weather and killing freezes have battered Canada's spring wheat crop. Not only is the crop being harvested in at a slow pace, the quality of the crop has been hurt significantly. Even so, commodity analysts are expecting tomorrow's supply and demand balance sheets to reflect a bearish tone.

General Comments.

If the preliminary estimates are any indication, then the September Crop Report due out tomorrow morning isn't going to change things much from the current situation. The commodities market will continue to watch the impacts that weather developments have on harvest progress. A killing frost could still impact corn and soybean yields in the Northern tier of the Corn Belt, although that would be to a much lesser extent than originally feared. Most of the frost premium that was bid into commodity prices in pre-holiday trading has now been taken out. Hurricane Ivan is now on its way. This Category 5 storm is likely to keep farmers busy attempting to get as much of the early harvest done before the exact path of the storm becomes apparent.

Commodity trading will now turn attention to demand events. Worth noting is the high level of profits being earned in the pork industry. This factor along with the demand for other red meats, and poultry is likely to keep feed demand growing in the coming months. Also of interest is the pace at which ethanol production is growing. The U.S. Energy Information Administration has announced the U.S. ethanol industry set an all-time monthly production record in June of 222,000 barrels per day, marking the ninth consecutive all-time monthly production record. The ethanol industry is expected to produce more than 3.3 billion gallons in 2004, as compared to 2.81 billion gallons in 2003. Currently, 81 ethanol plants have the capacity to produce more than 3.4 billion gallons annually. Ten additional plants are under construction.



Upcoming Meetings:

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.



The Mid-Atlantic Crop Management School

November 16-18, 2004

Ocean City, MD at the Princess Royale Hotel and Conference Center.

Programs should be mailed this week. We will again offer on-line registration. Although the site is currently under construction, it should be up and running by early next week. The website address for on-line registration and payment will be:

https://crayola.hcs.udel.edu/conf/registration/crop_management/

For further information please contact Richard Taylor at 302-831-1383 or rtaylor@udel.edu



Weather Summary

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

Week of September 2 to September 9, 2004

Rainfall:

0.08 inches: September 9

Readings taken for the previous 24 hours at 8 a.m.

Air Temperature:

Highs Ranged from 82°F on September 9 to 76°F on September 5.

Lows Ranged from 71°F on September 8 to 60°F on September 5.

Soil Temperature:

76°F average.

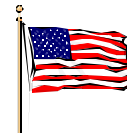
(Soil temperature taken at a 2 inch depth, under sod)

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

Compiled and Edited By:

*Tracy Wootten
Sussex County Extension Agent - Horticulture
University of Delaware*

*Emmalea Ernest
Extension Associate - Vegetable Crops
University of Delaware*



Cooperative Extension Education in Agriculture and Home Economics, University of Delaware, Delaware State University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Delaware Cooperative Extension, University of Delaware. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age or national origin.