



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*

Asparagus

With the recent warm temperatures the first asparagus beetle adults can be found laying eggs on spears. As a general guideline, a treatment is recommended if 2% of the spears are infested with eggs. Since adults also feed on the spears, a treatment is recommended if 5% of the plants are infested with adults.

Cabbage

Continue to scout fields for imported cabbage worm and diamondback larvae. The first larvae can be found and sprays will be needed before they move deep into the heads. As a general guideline, a treatment is recommended if you find 5% of the plants infested with larvae. If both insect species are present, Avaunt, the Bt insecticides, Proclaim, Rimon, Spintor or Radiant have provided control. Newly labeled products including Coragen and Synapse will also provide control.

Melons

As soon as plants are set in the field begin scouting for aphids, cucumber beetles and spider mites. Low levels of aphids can be found in the earliest transplanted fields. When sampling for aphids be sure to watch for beneficial insects as well since they can help to crash aphid populations. As a general guideline, a treatment should be applied for aphids when 20% of the

plants are infested, with at least 5 aphids per leaf. Foliar treatments labeled for melon aphid control on melons include Actara, Beleaf, Fulfill, Lannate and Thionex. These materials should be applied before aphid populations explode. The Fulfill label states that the addition of a penetrating type spray adjuvant is recommended to provide optimum coverage and penetration. Admire and Platinum are also labeled at-planting for aphid control.

Peas

We are starting to see an increase in aphid populations. On small plants, you should sample for aphids by counting the number of aphids on 10 plants in 10 locations throughout a field. On larger plants, take 10 sweeps in 10 locations. As a general guideline, a treatment is recommended if you find 5-10 aphids per plant or 50 or more aphids per sweep. When sampling dryland peas you may want to reduce the threshold, especially if they are drought stressed. Be sure to check labels for application restrictions during bloom.

Potatoes

Begin sampling the earliest planted and emerged fields for Colorado potato beetle adults, especially if an at-planting material was not used. Low levels of the first emerged adults can now be found. A treatment should not be needed for adults until you find 25 beetles per 50 plants and defoliation has reached the 10% level. If a neonicotinoid insecticide was used at planting (i.e. Admire, Belay, Platinum, Venom, Cruiser or Gaucho), you should not apply a foliar

neonicotinoid in season (i.e. Actara, Assail, Belay, Endigo, Leverage, Provado, or Venom).

Sweet Corn

Be sure to scout the first emerged fields for cutworms and flea beetles. As a general guideline, treatments should be applied for cutworms if you find 3% cut plants or 10% leaf feeding. In order to get an accurate estimate of flea beetle populations, fields should be scouted midday when beetles are active. A treatment will be needed if 5% of the plants are infested with beetles.

Mother Stalk Asparagus Production System

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

There is a potential for extended production of asparagus using the mother stalk production system. With this system, it is possible to harvest from spring through fall. This would be of benefit to direct marketers providing sales out of the normal harvest season.

In a normal asparagus production system, all spears are harvested for the first 6-8 weeks (in a mature stand) and then the field is allowed to go to the fern stage. The harvest period is from late April to early June. In the mother stalk production system, three shoots are allowed to reach full maturity (go to fern stage) from the start and all subsequent spears are harvested throughout the season from late April until October. The mature mother plants produce enough food reserves to replenish the crown and provide for spear production. Originally developed in Asia, the system has shown to have no effect on the long-term health of asparagus crowns. Researchers at Rutgers have tested the mother stalk system and have also found it to work in our area. The key is to start with a mature stand (4 or more years old) and to maintain the mother stalks in good health. More than 3 mother stalks will reduce spear production, fewer than 3 will not produce enough reserves to maintain the crowns.

Peak production period is April-June with another peak in September and October. In July and August, production is low. However, you still

need to check daily for spear emergence and harvest during this period. Growers will have to decide if they have the labor to manage such a system throughout a 6-7 month growing season.

Fruit Crops

Cold Temperature Damage in Fruit Crops - Gordon Johnson, Extension Ag Agent, Kent Co.; gcjohn@udel.edu

We have seen considerable cold temperature damage to fruit crops in parts of Delaware and the Eastern Shore of Maryland. In particular, certain mid-season peach varieties have severely reduced crops; some varieties will not have enough fruit to warrant harvest, and other varieties will have a reduced crop. Early peaches and those up to the Red Haven season have better sets and will need to be thinned. Later peaches also have better sets.

Matted row strawberries that were uncovered have suffered anywhere from a 15% to over 50 % loss of flowers due freeze damage in some areas. Brambles (raspberries and blackberries), have also had significant winter damage to canes resulting in the need for additional pruning back of dead material.

These losses can be attributed to three cold weather events. On March 3 and 4, low temperatures were near 0°F in some areas. The second damaging event was on March 25 where temperatures dropped to 22°F and the third event was on April 13 where low temperatures reached 26°F in some areas.

Agronomic Crops

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

Alfalfa

If economic levels of alfalfa weevil are present before harvest and you decide to cut instead of spray, be sure to check fields within one week of cutting for damage to the regrowth. If

temperatures remain cool after cutting, there is often not enough “stubble heat” to control populations with early cutting. In some cases, damage to re-growth can be significant. A stubble treatment will be needed if you find 2 or more weevils per stem and the population levels remain steady.

Small Grains

With the recent warmer temperatures, we saw an increase in true armyworm catches in the Harrington, Little Creek, Rising Sun and Greenwood areas. In general, these numbers are lower compared to this time last year. Many factors, particularly disease, predation and parasitism can impact how well the eggs and caterpillars survive. Although true armyworms overwinter in our area, we can also get migrant moths from the South. Therefore, be sure to scout all small grains for armyworms. Although the combination sprays of fungicides and insecticides have worked in the past to control armyworms, it will still be important to re-check fields after application to be sure you have gotten control.

In addition to armyworms, do not forget to watch for sawflies, cereal leaf beetles and aphids. We have seen an increase in cereal leaf beetle egg laying. We have also heard reports of increased levels of aphids in barley fields; however, in many cases the aphids are still in the lower plant canopy. Since aphids feeding in the heads of small grains can result in a loss in test weight, be sure to watch for movement of aphids into the grain heads. As a general guideline, a treatment should be considered if you find 20 aphids per head and beneficial insect activity is low. You need at least one beneficial insect per every 50-100 aphids to help crash populations. Be sure to check the days between last application and harvest when selecting a spray material.

Wheat Disease Scouting - Bob Mulrooney,
Extension Plant Pathologist; bobmul@udel.edu

Be on the lookout for several wheat diseases now. **Powdery mildew** is appearing in very dense stands and in headrows and on susceptible cultivars. The small white-to-tan spots of fungal

growth are getting easy to spot when present. Most of what I have seen has been in the lower canopy and does not require treatment. Keep scouting. The second disease worth looking for is **stripe rust** (Figure 1). I am seeing some reports of it in the South and there might be low levels in our area that go undetected until some yellowing of the leaves appears. Stripe rust is getting more aggressive so it is important to identify it early and apply a triazole fungicide, such as Tilt or Caramba; a strobilurin, such as Quadris or Headline; or a combination product like Quit or Stratego. If these products are applied from flag leaf fully expanded until head emergence very good to excellent control should be achieved. *None of these products labeled for powdery mildew or rust control, except Caramba, will aid in scab control.*



Figure 1. Stripe rust pustules on the underside of the leaf

Scab or Fusarium head blight suppression is achieved with well-timed applications of Provaro (Proline + Folicur) 6.5 fl oz/A, Caramba 14 fl oz/A, or Proline (alone) 5.7 fl oz/A. None of the other fungicides labeled for wheat will give the same level of suppression as the above three, according to work done by Arv Grybauskas at the

University of Maryland. No fungicide provides the level of control that most growers would like to see, but they are the best that we have and can provide suppression of the disease, especially if conditions are favorable. Suppression of scab depends on very precise timing of the application. For the fungicides to work to the best of their ability they need to be applied when the anthers first appear (Figure 2). The fungus infects through the flower parts of the wheat so it is the newly flowering wheat heads that need to be protected. Once pollination takes place the fungus is only susceptible to the fungicides for a very short time.

Wheat is at risk when temperatures are warm and wet during flowering, the risk increases when the wheat crop is planted in no-till corn stubble and there is no rotation. The new risk management tool is located at the Fusarium head blight website <http://www.wheatscab.psu.edu>. It can be useful once heading begins and the risk of scab increases as flowering approaches. The new version that is running now has the ability to give a 24-72 hour forecast looking at the previous several days as well as the weather forecast for the next several days. Those buttons are at the top left side of the forecast page.

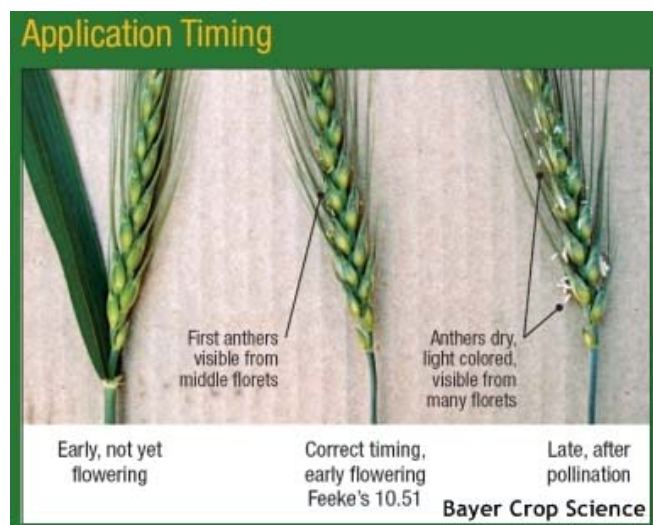


Figure 2. Correct timing for fungicide application for scab suppression

Soybean Rust Update - *Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu*

Soybean rust is reappearing in some of the old locations on kudzu in Florida. The severity and occurrence are low on kudzu wherever it is found at the present time. The only unsettling piece of news is that it is present on kudzu in Mobile County, AL and in several parishes in LA. This is the earliest that it has been present in those locations to date. If they continue to get plenty of rain, there is the possibility of soybean rust occurring on soybeans earlier than we have seen in the past. Since frost is out of the question now, we will just have to wait and see how the season progresses. You can keep track of soybean rust by visiting the website <http://www.sbrusa.net> or <http://sbr.ipmpipe.org/cgi-bin/sbr/public.cgi>.

Still Time to Test for Soybean Cyst Nematode - *Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu*

It is still not too late to check for soybean cyst nematode, especially if susceptible soybeans are going to be planted. Soil test bags with the submission form can be purchased at the Extension offices. If you have a fax machine and need results quickly, test results can be sent via FAX if you provide the number on the Nematode Assay Information Sheet. This information sheet can be found on the web at the Plant Clinic Website <http://ag.udel.edu/extension/pdc/index.htm>.

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

Impact of Swine Flu Outbreak on Commodity Markets

Financial markets opened this week with a bad case of "swine flu jitters". The jitters should be alleviated with the idea that those fears are likely to be overblown. The initial reaction in the grain and oilseed markets to the swine flu outbreak was bearish. That bearish reaction took commodity prices down the first few days of this

week. The longer term impact of negative implications are said to lack merit. Financial and commodity markets were bidding up in Wednesday morning's trade.

Planting Progress

U.S. corn plantings have surged ahead this past week, now placed at 22% planted for the week ending April 26. This is well ahead of the 5% pace recorded last week, 9% reported last year and slightly behind the five year average progress of 28%.

U.S. soybean plantings, reported last week for the first time this year, stood at 3% as compared to 2% last year and the five year average of 5%. Unless a significant change for the worse occurs in the weather, information from reliable sources indicates that overall conditions in the Corn Belt are not as wet this year as they were at this time last year. Nevertheless, planting progress will be watched closely each week between now and the first of June as commodity traders weigh any possible acreage shifts that may occur.

Marketing Strategy

Weather forecasts continue to call for wet and cool conditions in the eastern Corn Belt where planting progress is well behind the 5-year average in Ohio, Illinois, and Indiana. We could see noncommercial speculative traders add to their net-long futures position in the corn market if planting delays in these key states continues to persist in the weeks ahead. Rumors are circulating that China may be stepping out of the soybean market for awhile, leading to a possible decrease in U.S. exports.

Noncommercial traders continue to hold a net-short position in the wheat market thereby keeping seasonal downward pressure on wheat prices. Currently, Dec '09 new crop corn futures are trading at \$4.09 per bushel; Nov '09 soybeans at \$9.13; and July '09 SRW wheat is at \$5.28 per bushel. Nearby May '09 old crop corn, soybean and SRW wheat futures are trading at \$3.80; \$10.08; and \$5.16 per bushel respectively.

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

Announcements

New Castle County Weed ID Workshop

Tuesday, May 12, 2009 5:00-7:00 p.m.

University of Delaware Webb Farm
508 S. Chapel Street, Newark, DE

What is that weed!? Learning to identify weed species can help with controlling the weed, crop production and your bottom line. Learn to identify a number of weed species that are found locally. Experts will be on hand to answer your questions and help with weed management issues.

Please bring a folding chair.

Pesticide (2) and CCA credits will be available.

This meeting is free and everyone interested in attending is welcome. Please call (302) 831-2506 to register by May 8.

Equine Pasture Walk

Tuesday, May 19, 2009 5:00-7:00 p.m.

Two Eagles Farm
1311 McQuail Road
Smyrna, DE

Learn about Natural Resource Conservation Services Cost Share Programs and EQIP Eligibility. See on-farm manure storage facility and storm water management projects. Learn about pasture management and managing the diet to avoid injuries and illness. Experts will be on hand from the University of Delaware and the Natural Resource Conservation Service (NRCS) to answer your questions!

Please bring a folding chair.

Nutrient Management (1.75), Pesticide (1) and CCA credits will be available.

This meeting is free and everyone interested in attending is welcome. Please call (302) 831-2506 to register by May 15.

Wye Strawberry Twilight Meeting

Thursday, May 21 6:00 p.m.
Wye Research and Education Center
Queenstown, MD

Meet at the farm operations complex, 211 Farm Lane - signs will be posted.

Come See:

- High Tunnel Fall/Spring Fruit Production
- Annual Plasticulture System
- 2nd year carry-over plot using bare-rooted dormant plants in a plasticulture system

University and USDA personnel will speak and be on hand to discuss research and cultural aspects of strawberry production.

The meeting will be held rain or shine (bring rain gear).

Registration is not required. For more information contact Mike Newell (410) 827-7388.

For directions go to the Wye Research and Education Center's website at <http://www.wrec.umd.edu/>.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of April 23 to April 29, 2009

Readings Taken from Midnight to Midnight

Rainfall:

no rainfall recorded

Air Temperature:

Highs ranged from 93°F on April 26 to 61°F on April 23.

Lows ranged from 67°F on April 26 to 37°F on April 24.

Soil Temperature:

87.7°F average

Additional Delaware weather data is available at http://www.deos.udel.edu/agirrigation_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. For subscription information, contact her at emmalea@udel.edu or (302) 856-2585 x 587.

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