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# WEEKLY CROP UPDATE

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UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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## *Vegetables*

**Vegetable Insects** - Joanne Whalen, Extension IPM Specialist; [jwhalen@udel.edu](mailto:jwhalen@udel.edu)

### **Insect Trap Catches.**

The decision to treat peppers, snap beans and sweet corn for corn borers and corn earworm is based on a combination of field scouting and trap catches. Be sure to check our website, (<http://www.udel.edu/IPM/traps/latestblt.html>) for the most recent BLT and pheromone trap catches in your area. Trap catches are updated 3 times per week on the website. You can also call the Crop Pest Hotline at 1-800-345-7544 (in-state only) or 302-831-8851. Trap catches are updated on Tuesday and Friday on the hotline.

### **Lima Beans.**

Watch for spider mites on seedling stage lima beans. Field interiors as well as field edges should be examined for mites. Look for the white stippling along the veins on the underside of the leaves. A treatment should be considered when you first notice the stippling and you find 10-20 mites per leaflet. Kelthane or Capture (6.4 oz/A) have provided the best control of spider mites in lima beans. The earliest planted fields should also be scouted for lygus bugs and stinkbugs. Treatment should be considered if you find 15 adults and/or nymphs per 50 sweeps. Lannate or Capture can be used if both species are present. A

higher rate of Capture (4 oz/A) will be needed if stinkbugs are the predominant insect present.

### **Peppers.**

Corn Borer catches have dropped to < 2 in all areas of the state. Once trap catches increase to above 2 per night and pepper fruit is ½ inch in size or larger, fields should be sprayed on a 7-10 day schedule for corn borer control.

### **Potatoes.**

As we approach harvest on the earliest planted potatoes, be sure to continue to sample for potato leafhoppers and aphids. Both potato leafhopper adults and nymphs can be found in fields. The treatment threshold is 0.5 - 1 adult per sweep or 1 nymph per 10 leaves. Provado, Furadan or a pyrethroid will provide control. Aphid populations have also started to increase. Before 2 weeks from harvest, the threshold is 4 aphids per leaf. Within 2 weeks from harvest, the treatment threshold increases to 10 aphids per leaf. In general, Colorado potato beetle populations are light to moderate in most fields. If Admire was used at planting, be sure to alternate to Agri-Mek or Spintor when threshold levels of larvae or newly emerged adults are detected.

### **Snap Beans.**

Once corn borer catches start to increase, fresh market and processing snap beans in the bud to pin stage will need to be sprayed for corn borer. Seedling beans should still be watched carefully for thrips and leafhopper activity. We continue to

see an increase in leafhopper and thrips activity. If both insects are present, the threshold for each should be reduced by 1/3. The thrips threshold is 5-6 per leaflet and the leafhopper threshold is 5 per sweep.

**Sweet Corn.**

Fresh market silking sweet corn should be sprayed on 6-day schedule in most areas of the state except in the Rising Sun areas where sprays should be applied on a 4-day schedule. Be sure to begin sampling your latest planted fields for fall armyworm larvae. We expect to see the first larvae during the next 7-10 day period. No controls will be needed until 15% of the plants are infested. The best options for whorl stage infestations will be Avaunt, Lannate, Spintor or Warrior. In general, two applications are needed to get effective fall armyworm control in whorl stage sweet corn.



**Vegetable Diseases** - - Bob Mulrooney, Extension Plant Pathologist; [bobmul@udel.edu](mailto:bobmul@udel.edu)

**Potatoes.**

**Late Blight Update**

**Disease Severity Value (DSV) Accumulations as of June 20, 2001, are as follows:**

*Location: Joe Jackewicz Farm, Magnolia, DE  
Remember that 18 DSV's is the threshold to begin a spray program*

Date	Total DSV	Spray Recommendation
5/16	0	
5/17	11	
5/20	29	
5/30	51	5-day, low rate
6/3	57	5-day, low rate
6/5	57	5-day, low rate
6/7	57	7-day, low rate
6/11	59	10-day, mid rate
6/13	60	10-day, mid rate
6/17	76	7-day mid rate
6/20	76	7-day high rate

The wet weather over the past weekend was favorable for the accumulation of 16 DSV's. Growers should be applying a fungicide for **late blight** control at this time. **Early blight** susceptible varieties will benefit from fungicide application now that 416 P-days have accumulated.

To control **pink rot** caused by *Phytophthora erythroseptica* and *P. nicotianae*, and leak caused by *Pythium* apply Ridomil Gold MZ, Ridomil Gold /Bravo, or Flouronil between the time the potatoes are nickel-sized until flowering, and repeat 14 days later.

**Note:** Late blight has not gone away! Be sure to keep up with protective fungicide applications. The following is from an email to Bob Mulrooney from a PA pathologist:

*Late blight was recently detected and confirmed on tomato transplants in a greenhouse in southwestern PA. Some plants likely were planted in some gardens before the problem was detected. When the problem was detected, all remaining plants were destroyed. PDA is working on isolation for further testing (US type, etc).*

*I suspect that potato tubers infected last season (seed potatoes, cull piles, or compost bins) are the source, but we do not have evidence at this time. I am warning growers in southwestern PA that late blight inoculum likely is lurking somewhere nearby, and that fungicide protection will be necessary whenever BLITECAST indicates conditions favor development of the disease.*

*Although we are shocked to detect late blight so early in the season, I am glad we have the early warning. Last season, fungicide programs gave us excellent control in PA, and I do not know of any commercial loss where fungicides were applied as recommended.*



**Vegetable Diseases** - *Kate Everts, Extension Vegetable Pathologist, University of Delaware and University of Maryland;* [everts@udel.edu](mailto:everts@udel.edu)

## MELCAST for Watermelons

EFI Values (Environmental Favorability Index)

Do not use MELCAST if there is a disease outbreak in your field, it is a **preventative program**. Any questions, please call David Armentrout at (410) 742-8788 or e-mail: [da88@umail.umd.edu](mailto:da88@umail.umd.edu)

Location	6/13	6/14	6/15	6/16	6/17	6/18	6/19	6/20
Bridgeville, DE	0	2	0	0	7	1	1	2
Laurel, DE (Collins Farms)	2	3	2	1	6	1	1	3
Galestown, MD	2	3	0	2	7	1	1	2
Georgetown, DE	2	2	0	1	6	2	1	1
Hebron, MD	2	4	2	1	7	3	1	3
Salisbury, MD	3	4	2	2	5	2	2	3
Laurel, DE (Vincent Farms)	0	2	0	1	7	1	0	2

Watermelon Fields should be sprayed with a fungicide when 30 EFI values have been accumulated by the weather station nearest your fields. Add 2 points for every overhead irrigation. After a fungicide spray, reset your counter to 0 and start over. If a spray has NOT been applied in 14 days, apply a fungicide and reset the counter to zero. The first and last day above can be partial days so use the larger EFI value of this report and other reports for any specific day

More detailed information concerning MELCAST and sample data sheets are available on the web at <http://www.agnr.umd.edu/users/veg/disease/veg/disease.htm>. . ❖



## Field Crops

**Field Crop Insects** - *Joanne Whalen, Extension IPM Specialist;* [jwhalen@udel.edu](mailto:jwhalen@udel.edu)

### Alfalfa.

As soon as fields are cut and regrowth begins, scout fields for leafhopper adults and nymphs. Nymphs can cause the greatest damage and often go undetected. The nymphs appear similar to adults but they do not have wings and often walk sideways on a net. The shorter the alfalfa, the greater the damage from leafhopper feeding. Alfalfa 3 inches or less in height should be treated when you find 20 leafhoppers per 100 sweeps. The threshold increases to 50 per 100 sweep in 4-6 inch tall alfalfa. Baythroid, Dimethoate, or Warrior will provide the best control.

### Soybeans.

Grasshopper activity continues to increase in barley beans and full season no-till soybeans. The treatment threshold is 1 per sweep **and** 30% defoliation. Asana, Dimethoate, Furadan, Lorsban, or Warrior will provide control. Remember that multiple applications may be needed. You should also watch seedling beans for increases in **spider mite** activity. Look for the white stippling at the base of the leaves, which indicates the presence of mites. Treatment will be needed when you find 20-30 mites per leaflet or 10% of plants with 1/3 or more leaf area damaged. Dimethoate, Lorsban and Parathion (aerial application only) are the only available options so early detection and control will be critical. If dimethoate is used, the addition of a penetrant like LI-700 or AD 100 has been shown to improve the performance.



**Reminders about Glyphosate Application With Roundup Ready Soybean Weed Control** - Mark VanGessel, Extension Weed Specialist; [mjv@udel.edu](mailto:mjv@udel.edu)



Time your postemergence sprays during the period 3 to 4 weeks after planting with conventional tillage soybeans or 3 to 5 weeks after planting with no-till soybeans. The moisture conservation with no-till allows for the wider window of application. If you foresee problems with spraying during this window, consider using a reduced rate of a preemergence herbicide at planting or spraying prior to 3 weeks after planting and including a residual herbicide.

Spraying earlier than 3 weeks after planting, often requires either a second glyphosate application or tank-mixing a residual herbicide to reduce the need for a second application. Three tank mix options we have tried include FirstRate, Classic, or Pursuit. However, our research has not shown a benefit to tankmixing another herbicide with glyphosate if sprayed 3 to 4 weeks (after planting) for conventional tillage or 3 to 5 weeks for no-till.

Morningglory control with glyphosate will be reduced if the morningglories have begun to vine. However, tankmixing with other herbicides has not consistently improved control. For maximum morningglory control, either spray glyphosate at 3 weeks after planting (when the weeds are the smallest) or apply two applications of glyphosate.

For perennial weeds (horsenettle, Canada thistle, hemp dogbane, common milkweed, johnsongrass, and bermudagrass), our research has shown applying glyphosate late as possible (4 to 6 weeks after planting) has given better control than early applications. There has been no advantage to two applications. It is difficult to achieve 100 percent control with most perennial weeds, regardless of the weed control program used. We often achieve 80 to 85 percent control with the program described here.

Finally, we have not seen differences in weed control or yield when using Touchdown IQ, Roundup Ultra, or Roundup UltraMax.

**Manganese Applications with Postemergence Glyphosate** - Mark VanGessel, Extension Weed Specialist; [mjv@udel.edu](mailto:mjv@udel.edu)

Roundup Ready soybeans may require a postemergence application of glyphosate (Roundup, Touchdown or GlyphoMax) and a manganese application about the same time. These glyphosate products can be tankmixed with manganese with some precautions. The manganese products can bind with glyphosate in the spray tank and reduce glyphosate's effectiveness. The form of manganese has an impact. Manganese chelated with EDTA did not affect the performance of glyphosate, but other forms of manganese did. The addition of ammonium sulfate overcame the problem. Thus, when tankmixing glyphosate with manganese, use an EDTA form of manganese or add ammonium sulfate to overcome the reduced weed control. When using ammonium sulfate, be sure to add the ammonium sulfate to the tank first and add the glyphosate last.



**Grain Marketing Highlights** - Carl German, Extension Crops Marketing Specialist; [clgerman@udel.edu](mailto:clgerman@udel.edu)

**Commodity Markets Enter 'Rain Makes Grain' Mode**

After weeks of cool, wet conditions making the grain markets skittish we have quickly entered into the 'rain makes grain' trading mentality at the Chicago Board of Trade. The general effect of that mentality is to hold the commodity markets in check, with corn, wheat, and soybeans currently drifting lower. As of June 21, 2001 the nation's corn crop is seen as tasseling in parts of the central corn belt, uneven in development, not likely to be a record yield, and not likely to be a failure. Both old and new crop corn futures are currently

trading at or near life of contract lows. This means that from a marketing point of view not much has changed. Most grain analysts seem to agree that the hedge or forward cash contract price objective of \$2.25 to \$2.35 per bushel for new crop corn would have to be met before advancing new crop corn sales. Therefore, corn marketers need to sit this current scenario out before advancing new crop sales.

The wheat market is currently under pressure from new crop harvest, making post harvest pricing to be the prudent course of action. In the event that storage is not available for new crop wheat, then it then becomes advisable to make the cash sale and consider purchasing the \$2.90 Dec. call, currently trading at 13.4 cents per bushel.

The soybean market is currently being driven by demand, although this market can and will follow in sympathy with corn and wheat. Due to the fact that the soybean market is a demand market, it wouldn't take much to garner a significant rally, perhaps to the \$5.00 per bushel level. However, it is possible for U.S. weather to continue improving. If that happens, a potential 3 billion bushel U.S. soybean crop will take prices lower, from current levels. In the event that one decides to accept the later scenario, then any cash sales advanced on new crop soybeans should be replaced with Sept. \$4.60 calls, currently trading slightly over 12 cents per bushel. Bottom line is that the current market situation does not leave much room for maneuvering.



## **UPCOMING MEETINGS:**

### **Weed Science Field Day**

**June 27, 2001**

**8:15 a.m.**

**University of Delaware Research and Education  
Center Grove**

The University of Delaware will hold its Annual Weed Science Field Day on Wednesday June 27, starting at 8:15 am. We will meet in the Grove at

the UD Research and Education Center on Rte. 9. Pesticide credits will be awarded. For More Information: contact Lisa Dorey at 302-856-7303.



<b>Weather Summary</b>
<b>Week of June 15 to June 21, 2001</b>
<b>Rainfall:</b> June 15: 0.06 inches June 16: 0.61 inches June 17: 1.98 inches June 21: 0.27 inches
Readings taken for the previous 24 hours at 8 a.m.
<b>Air Temperature:</b> Highs Ranged from 90°F on June 21 to 82°F on June 16. Lows Ranged from 73°F on June 16 to 60°F on June 19.
<b>Soil Temperature:</b> 81°F average for the week. (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:*

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