



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetables

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

Lima Beans.

Continue to scout fields 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. You should also watch for an increase in green cloverworm populations. A treatment will be needed if defoliation exceeds 20% prebloom or 10% during podding. Lannate or Capture will provide control.

Melons.

Although spider mites can still be found in most fields, economic levels are not widespread. As the temperatures increase, be sure to watch for increases in populations. A treatment will be needed if you find 20-30% of the plants infested with 1-2 mites per leaf. Agri-Mek and Capture have both provided effective control this season. Aphid populations continue to be at economic levels in many fields. A treatment is needed if 20% of the plants are infested with 5 or more aphids per leaf. Actara (3 oz/A) Fulfill (2.75 oz/A) or Lannate LV (1.5 pt/A) will provide control.

Peppers.

Since corn borer catches remain low, corn borer controls will not be needed until trap catches increase to above 2 per night and pepper fruit is ½ inch in size or larger. However, pepper maggot sprays are still needed. Dimethoate will provide control.

Potatoes.

Continue to sample for potato leafhoppers and aphids. The treatment threshold for leafhoppers is 0.5 - 1 adult per sweep or 1 nymph per 10 leaves. Provado, Furadan or a pyrethroid will provide control. The treatment threshold for aphids is 4 per leaf before 2 weeks from harvest and 10 per leaf within 2 weeks of harvest. Colorado potato beetle populations are 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. If Admire was not used, then Provado, Leverage or Actara can be used.

Snap Beans.

Once corn borer catches start to increase again, 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. There have also be reports from

consultants of increases in green cloverworm activity. In addition to feeding on the leaves, they are also feeding on the pin pods. A treatment will be needed if defoliation exceeds 20% prebloom, 10% during podding or if pin pod damage is observed. If populations are high, a pyrethroid or Lannate should be used.

Sweet Corn.

Although corn earworm catches have dropped significantly, fresh market silking sweet corn should still be sprayed on a 5-6-day schedule throughout the state except in the Seaford area where sprays are needed on a 3-4 day schedule. Check the Crop Pest Hotline on Tuesdays and Fridays for the most recent trap catches in your areas (in-state: 1-800-345-7544; out-of state: 1-302-831-8851) or the IPM website which is updated three times per week at <http://www.udel.edu/IPM/traps/latestblt.html>.

True Armyworms Still Active.

We are still finding economic levels of true armyworms present in a number of unusual situations: peas, lawns, later planted field and sweet corn and grass hay mixtures. Although true armyworm activity is usually over by now, the higher and longer than normal flight period of the first generation has resulted in extended feeding activity. Be sure to watch fields and treat if economic damage is occurring.



Vegetable Diseases - - Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu

Potatoes.

Late Blight Update

Disease Severity Value (DSV) Accumulations as of June 27, 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
6/24	88	7-day high rate
6/27	88	7-day high rate

Growers should be applying a fungicide for foliar diseases. The current weather pattern will not be favorable for late blight, but early blight will continue to be favored.

There have been no reports of late blight on potatoes from our region.

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.



Vegetable Diseases - *Kate Everts, Extension Vegetable Pathologist, University of Delaware and University of Maryland; 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

Location	6/20	6/21	6/22	6/23	6/24	6/25	6/26	6/27
Bridgeville, DE	2	1	2	2	2	2	2	1
Laurel, DE (Collins Farms)	3	2	3	1	5	2	3	2
Galestown, MD	2	2	3	2	3	1	2	1
Georgetown, DE	2	2	4		7	1	2	1
Hebron, MD	3	2	3	1	4	2	3	2
Salisbury, MD	3	3	4	2	5	3	3	3
Laurel, DE (Vincent Farms)	2	2	2	0	6	1	2	1

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/vegdisese/vegdisese.htm>. . ❖



Field Crops

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

Alfalfa.

Continue to scout for leafhoppers. In alfalfa 3 inches or less in height, the threshold is 20 leafhoppers per 100 sweeps. The threshold increases to 50 per 100 sweep in 4-6 inch tall alfalfa and 100 per 100 sweeps in 7-11 inch alfalfa. If high levels are present before cutting, a stubble spray may be needed. All fields should be sampled within a week of cutting since damage is most severe on small plants. Baythroid, Dimethoate or Warrior will provide control.

Field Corn.

Grasshopper populations have started to increase, especially along field edges. In corn, a treatment is

justified if you find 5-8 grasshoppers per square yard. Asana, dimethoate, Furadan, Lorsban or Warrior will provide control. As corn begins to silk, watch for Japanese beetles and corn rootworm adult beetles feeding on silking corn. The decision to treat should be based on the number of beetles per silk as well as how far you are in the pollination period. In recent years, large numbers of rootworm beetles feeding on silks before 50% pollination have resulted in yield losses, especially along field edges. A treatment is recommended on silking corn if you can find 4-5 beetles per plant and they are clipping silks to less than ½ inch long before 50% pollination.

Soybeans.

Continue to scout for grasshoppers and spider mites in seedling stage beans. Grasshoppers can be controlled with Asana, Dimethoate, Furadan, Lorsban or Warrior. Spider mites can be managed with Dimethoate, Lorsban or Parathion. With both

pests, multiple applications may be needed. In addition to grasshoppers and spider mites, green cloverworm populations are starting to increase in soybeans. Small larvae produce "window-pane" feeding holes in the leaves. As larvae increase in size, the damage will appear as large holes between the veins. In general, no controls are needed prebloom unless you find 15 larvae per foot of row and 30 % defoliation. A pyrethroid will provide effective control. We have also been seeing an increase in silver spotted skipper populations. Although this insect has not reached economic levels in a number of years, it is also a defoliator like green cloverworm. A combination of both insect pests could result in economic levels of defoliation (30% prebloom), so be sure to watch for this pest as well. As a general guideline, a treatment for skippers could be needed if you find 5 per foot of row and 30% defoliation prebloom. A pyrethroid should provide control of both insects.

True Armyworms Still Active.

We are still finding economic levels of true armyworms present in a number of unusual situations: peas, lawns, later planted field and sweet corn and grass hay mixtures. Although true armyworm activity is usually over by now, the higher and longer than normal flight period of the first generation has resulted in extended feeding activity. Be sure to watch fields and treat if economic damage is occurring.



Freeze Damage Observed on Wheat – Derby Walker, Extension Agricultural Agent; derby@udel.edu

Freeze damage was observed on wheat this week. Areas of green wheat was mixed in with wheat ready for harvest. One of the late Spring freezes or frost occurred during flowering of this particular field, and killed the reproductive parts of the flower. Since the plant is unable to produce seed, the plant remains green. The green heads will not produce wheat seed, making the field hard

to cut with all the green material. Harvest should be done when the dry wheat is ready. Delaying harvest will only lower test weight and increase harvest losses.



Weather Summary	
Week of June 22 to June 27, 2001	
Rainfall:	June 23: 0.25 inches
Readings taken for the previous 24 hours at 8 a.m.	
Air Temperature:	Highs Ranged from 89°F on June 27 to 78°F on June 24.
	Lows Ranged from 69°F on June 23 to 61°F on June 25.
Soil Temperature:	80°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>

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