



# WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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## Vegetables

### Planting Progress and Transplanting Hints for Melons - Ed Kee, Extension Vegetable Crops Specialist; [kee@udel.edu](mailto:kee@udel.edu)

Pea planting has reached the 60-70% level at this time. Warm, sunny weather has promoted growth after the week of cool, wet weather.

Sweet corn planting began in late March with plastic covered rows; conventional plantings began in early April. Processing sweet corn plantings began last week and have moved along well.

Potato planting is nearing completion in most cases.

After the extended period of rain last spring, we all feel fortunate for the decent planting season we've experienced to date.

Soon watermelon and cantaloupe transplants will be set out (there are some out there now) in full force. No doubt some of the plantings will experience stress from one factor or another, or some combination of factors. Hardening off the transplants before transplanting will help the plants withstand some of the stress, especially weather-related stress. Reducing the amount of water used, lowering temperatures, and limiting fertilizers will cause a "check" in growth, known as hardening. When hardening the vine crops, do not lower the temperature more than 5°F

below the recommended minimum temperatures for growth, which is 65°F. Lower temperatures causes chilling that can injure plants and delay re-growth after transplanting.

Many times we pull transplants out of the greenhouse and put them on a wagon. It may be important some nights to pull the wagon in the barn or shed to avoid excessively low temperatures.

The quicker the transplants "grab hold" and grow, the better chances for an earlier maturing, high yielding crop.



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

#### Asparagus.

Asparagus beetle adults are now active, so be sure to watch for egg laying as spears emerge. A treatment is recommended if 2% of the spears are infested with eggs. Since adults will also feed on the spears, a treatment is recommended if 5% of the plants are infested with adults. Sevin, Lannate, Ambush, or Pounce will provide control.

#### Cabbage.

Continue to sample for imported cabbageworm and diamondback larvae in cole crops. A

treatment is recommended if you find 5% of the plants infested. If both species are present, Avaunt, the Bt insecticides, Proclaim and Spintor will provide control.

#### Melons.

Seed corn maggot flies can be found laying eggs in fields, especially where chicken manure or green manures have been recently plowed under. A seed corn maggot control should be considered if you are planting into fields with these conditions. A broadcast application of diazinon before planting has provided control, if the application is applied close to planting. The use of Admire or Platinum through the drip or Furadan applied immediately before transplanting may help to provide suppression of seed corn maggot.

#### Peas.

As soon as fields start to bloom, it is important to sample fields on a weekly basis for pea aphids. You should sample for pea aphids by taking 10 sweeps in 10 locations and counting the number of aphids per sweep. A treatment is recommended if you find 50 or more aphids per sweep. Dimethoate or Lannate will provide aphid control. Be sure to check the labels for application restrictions during bloom.



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

#### Article on Phytophthora Blight on Cucurbits.

There is an excellent feature article this month on Phytophthora blight on cucurbits at the American Phytopathological Societies' website. It makes for good plant pathology reading.

<http://www.apsnet.org/online/feature/cucurbit/>



## Field Crops

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

#### Alfalfa.

If you have not checked your fields for alfalfa weevil larvae, it will be important to sample during the next week (5-7 day period). We can easily find second instar larvae in fields throughout the state. Using Penn State's Insect Prediction maps, we can expect to see third instar larvae by April 26. Once third instar larvae are found, the rate of feeding and crop injury significantly increases, so control should be targeted for this period. Be sure to check the following website for the most current insect prediction data:

[http://www.ento.psu.edu/extension/field\\_crops/predictionmaps.htm](http://www.ento.psu.edu/extension/field_crops/predictionmaps.htm)

<http://maps.zedxinc.com/cgi-bin/site.cgi?location=2&user=testuni#>

Once larvae are detected, the following thresholds should be used: up to 11 inches tall - 0.7 per stem; 12 inches - 1.0 per stem; 13 - 15 inch - 1.5 per stem; 16 inches tall - 2.0 per stem and 17-18 inches tall - 2.5 per stem. Numerous pyrethroids are now labeled for alfalfa weevil including Ambush, Baythroid, Mustang MAX, Pounce and Warrior. Furadan, Imidan, Lorsban, Lannate and Steward will also provide control.

#### Field Corn.

Black cutworm traps catches are generally still low ( 2-3/trap/week) in most locations except in the Little Creek area where catches have increase to 10 per week (see trap catch table on the last page or look at our web-page at <http://www.udel.edu/IPM/traps/currentbcwtrap.html>). Moth catches of 9 to 15 moths per 7-day period can indicate a moderate to high potential for outbreaks. You can expect to see cutting activity around 300 degree-days, base of 50 degree F from peak moth activity.

As soon as corn emerges, watch for early signs of cutworm leaf feeding which could appear as small pinholes when larvae are small. This damage often provides an indication of where you will see cut plants in the next week. No treatment will be needed until you find 10 % leaf

feeding or 3% cut plants on 1-2 leaf stage corn. On 3-4 leaf stage corn, the treatment threshold is 5% cut plants. A pyrethroid or Lorsban will provide cost-effective control. Since cutworms are nocturnal, applications applied later in the day or in the evening will provide the best control.

As corn emerges, you should also watch for bird damage. You can distinguish bird damage from cutworm damage by the pattern in the field: generally longer strips of damaged plants, plants pulled out of the ground, and/or plants cut high that are compressed at the base of the stems. Although birds can cut plants off at the soil surface, they tend to pull plants out of the ground. In addition, if you look closely you will see "bird prints" near the missing plants or holes were birds have pulled plants out of the ground so do not confuse it with cutworm damage.

#### Small Grains.

We are starting to find low levels of cereal leaf beetle eggs in wheat and barley in Sussex and Kent counties. No treatment is needed until you find 25 eggs and/or larvae per 100 tillers and 50% of the eggs have hatched. Once the heads have emerged, you should also begin sampling small grains for sawfly and armyworm larvae. Remember, armyworm larvae are nocturnal so look for larvae at the base of the plants during the day. The threshold is one per foot of row for barley and 2 per foot of row for wheat. Once sawfly larvae are detected, sample for larvae in 5 foot of row innerspace in 5-10 locations in a field to make a treatment decision. You will need to shake the plants to dislodge sawfly larvae that feed on the plants during the day. No treatment will be needed until you find 2 larvae per 5 foot of row innerspace or 0.4 larvae per foot of row. If both "worm pests" are present, the threshold for each should be reduced by one-half.

If cereal leaf beetle is the predominant pest, Furadan, Lannate or Malathion can be used on barley. Furadan can not be applied once the heads emerge. In addition to the previous products, Mustang and Warrior can also be used on wheat for cereal leaf beetle control. If armyworm is the predominant species, Sevin, Lannate and PennCap-M can be used on barley.

Sevin and PennCap-M should be used on smaller larvae. In wheat, all the previous products as well as Mustang and Warrior can be used for armyworm control. If sawflies are the predominant pest, your only option is Lannate in barley. In wheat, you can use Lannate, Mustang or Warrior for grass sawfly. In barley, your only control option if all 3 insect pests are present is Lannate. In wheat, your options for control of all 3 insect pests include Lannate, Mustang or Warrior. *Remember, all uses of ethyl parathion ended on October 31, 2003*



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

#### Wheat.

The stunted wheat that was submitted several weeks ago for a diagnosis turned out to be a combination of **wheat soilborne mosaic virus** and **wheat spindle streak mosaic virus**. Barley yellow dwarf was not detected. The wheat is already growing out of the symptoms. Once warmer weather arrives this is what usually occurs.

Both viruses need wet soil in the fall for transmission of the virus by the fungus *Polymixa graminis*. The leaves were mottled, some had a reddish purple coloration, most were chlorotic and stunted.



**Should You Leave Princep Out With Later No-Till Corn Planting?** - Mark VanGessel,  
Extension Weed Specialist; [mjv@udel.edu](mailto:mjv@udel.edu)

In the past, it was recommended to use Princep when the cornfields were sprayed early, then switch to Bladex after mid-April. I have been asked whether it is worth it to include Princep as

a component of no-till spray mixes since Bladex is no longer available. Princep will not control emerged grasses, but it will provide residual control. But be sure to include paraquat or glyphosate to control the grasses that have already emerged, then Princep will be there to control late emerging grasses. In fields with a history of crabgrass and fall panicum problems, it is a good idea to include Princep even with later plantings.



**Effectiveness is the First Consideration for Weed Control** - Mark VanGessel, *Extension Weed Specialist*; [mjv@udel.edu](mailto:mjv@udel.edu)

When deciding which weed control option to use, the first question should not be what does it cost. What is your approach to weed management in the field? Is it achieving excellent weed control because rotational crops have limited herbicide selection, or is it achieving the level of weed control that will not reduce yield or something in between. Either way, selecting the herbicide program based on effectiveness is more critical than selecting it on cost. An in-expensive option that does not control key weed species is going to be more costly in the end.

In planning your weed management for a given field, consider what happened last year in that field. A number of fields throughout the state had excessive rain last year and the soil-applied herbicides could not handle all the weeds. Those fields that had a large number of weeds go to seed last year, so plan accordingly. Remember, many of our hard to control weeds require a postemergence herbicide for effective control. Knowing that you are going to be spraying a postemergence herbicide may allow you to lower your soil-applied herbicide rates. The result can be less money in a preemergence program knowing you will need a postemergence spray. For assistance in selecting the most effective herbicides, refer to the 2004 Weed Management Guides for Delaware. There is one

for corn and one for soybeans available free from the county offices, on the internet at [www.rec.udel.edu](http://www.rec.udel.edu) (under publications) or calling 302/856-7303 and asking for Lisa Dorey.



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

### Theories Abound on Where Commodity Prices are Headed?

Commodity futures contracts have a tendency to retrace themselves over the life of the contract. This may be the 'saving grace' for anyone that chose not to forward price any of their new crop corn, wheat, and/or soybean crops as recent opportunities were presented, prior to April 15th. April 15th marked the first time that the 50 cent limit was achieved in soybean futures, giving rise to alarm in the minds of many as new crop soybean prices fell 50 cents per bushel that day. That 50 cent drop in soybean futures amounted to \$20.00 per acre assuming a 40 bushel per acre yield.

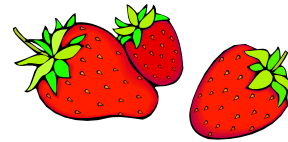
New crop plantings are off to a record start in the corn belt while weather continues to be somewhat of a mixed bag. Early planted U.S. corn crops have the potential of producing very large to record yields, with average or better weather conditions. We will all ponder the question, "Will commodity futures make a comeback?" "Will they retrace themselves prior to contract expiration?" In the case of new crop soybeans and corn we have until the months of November and December to find out. It all boils down to the weather, less than ideal growing conditions will see these markets retracing the life of contract highs achieved the spring of '04 for new crop corn and soybeans. During March for corn and March and April for soybeans, Dec '04 corn futures hit \$3.42 per bushel, and Nov '04 soybean futures reached \$7.99 per bushel. The only certainty in these markets at the present time is that weather conditions in the corn belt will play a large role in determining whether we

get back to those recent highs established in March and April? For the moment, we have to assume that we will.

## 2004 Wye Research Center's Spring Strawberry Twilight Meeting



### UPCOMING MEETINGS:



**Delaware Agri-tourism Association**  
invites you to attend the  
**1st Annual**  
**Delaware Agri-tourism Membership**  
**Meeting!**



**WHO:** Open to all people interested or involved with on-farm entertainment activities

**WHERE:** Delaware Department of Agriculture, 2320 S. Dupont Highway, Dover DE 19901

**WHEN:** April 27, 2004 6:30 pm—9 pm

**AGENDA:** Dinner, Special Guest Speakers, DDA & Extension Updates

**COST:** \$8.00 per person for Dinner and Program

**RVSP by April 23, 2004 to** Amanda Brown at 302 698-4523 or by email: [amanda.brown@state.de.us](mailto:amanda.brown@state.de.us)

**What:** The 2004 Wye Research Center's Spring Strawberry Twilight Meeting

**Where:** University of Maryland Wye Research and Education Center Queenstown MD

**When:** Thursday, May 20, 2004  
6:00 PM

**Who:** University and USDA Small Fruit Specialist

#### What will I see?

- 1) 2003/04 Annual plasticulture system: evaluation of Fall deployment date of floating row covers, planting date and varieties.
- 2) High tunnel production for Fall and Spring harvest
- 3) Greenhouse production system for early Spring harvest, utilizing, dormant, multi-crowned plants.

Pre-registration not required.

For more information and directions:  
Contact: Debby Dant at 410-827-8056, [ddant@umd.edu](mailto:ddant@umd.edu) or Michael Newell at 410-827-7388, [mnewell@umd.edu](mailto:mnewell@umd.edu)

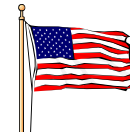
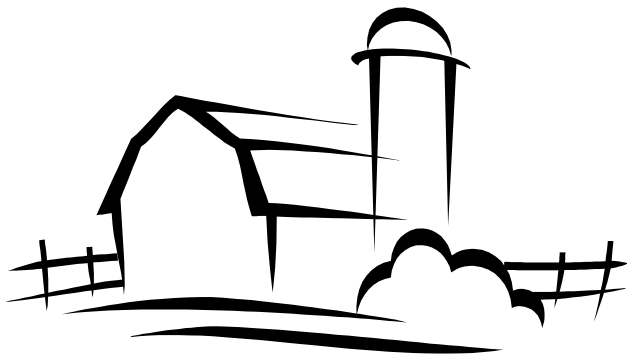


**Date Change for  
University of Maryland  
Wye Research & Education Center  
Spring Crops Tour**

**May 19, 2004  
6:30 p.m.**

The Wye Research and Education Center's Spring Crops Twilight tour, originally scheduled for May 20, has been rescheduled to May 19th at 6:30. Topics of interest will be small grain varieties, current weed, disease or insect issues and any topic of immediate agronomic concern.

Refreshments will be supplied. Event will be held rain or shine. Call Mark Sultenfuss at 410-827-7388 with any questions or topic suggestions.



Weather Summary
<a href="http://www.rec.udel.edu/TopLevel/Weather.htm">http://www.rec.udel.edu/TopLevel/Weather.htm</a>
Week of April 15 to April 22, 2004
<b>Rainfall:</b>
0.18 inches: April 15
Readings taken for the previous 24 hours at 8 a.m.
<b>Air Temperature:</b>
Highs Ranged from 86°F on April 18 to 60°F on April 15.
Lows Ranged from 65°F on April 19 to 34°F on April 16.
<b>Soil Temperature:</b>
62°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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## 2004 Black Cutworm Pheromone Trap Counts

Trapping date: **April 13 – April 19, 2004**

<b>Bridgeville</b>	<b>2</b>	<b>Little Creek</b>	<b>10</b>
<b>Delmar</b>	<b>3</b>	<b>Magnolia</b>	<b>1</b>
<b>Ellendale</b>	<b>0</b>	<b>Milford</b>	<b>0</b>
<b>Felton</b>	<b>1</b>	<b>Millsboro</b>	<b>0</b>
<b>Frederica</b>	<b>2</b>	<b>Milton</b>	<b>0</b>
<b>Georgetown (UD REC)</b>	<b>3</b>	<b>Sandtown</b>	<b>1</b>
<b>Greenwood</b>	<b>1</b>	<b>Seaford</b>	<b>0</b>
<b>Harrington</b>	<b>0</b>	<b>Selbyville</b>	<b>0</b>
<b>Kenton</b>	<b>1</b>	<b>Smyrna</b>	<b>2</b>
<b>Laurel</b>	<b>2</b>	<b>Wyoming</b>	<b>1</b>
<b>Leipsic</b>	<b>0</b>		
<b>Lewes</b>	<b>4</b>		
<b>Lincoln</b>	<b>0</b>		