



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetables

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

Crop Pest Hotline.

During the month of May, trap catches will be updated by noon on Wednesday. You can access the Crop Pest hotline by calling 1-800-345-7544 (in-state only), 302-831-8851 or checking our website at <http://www.udel.edu/IPM/traps/latestblt.html>. Corn borer moth activity remains light at this time. Trap catches range from 1-2 per night in most areas.

Cabbage.

Diamondback moth larvae continue to be found at economic levels. A treatment is needed if 5% of the plants are infested. Spintor, Avaunt, Proclaim or a Bt insecticide will provide control. Thrips populations have started to increase. On susceptible varieties, a treatment should be applied as soon as you see thrips populations increasing. On all other varieties, the treatment threshold is 20% infested plants. Spintor, Provado or Warrior will provide good thrips control.

Melons.

We have started to see economic levels of spider mites in watermelons. When sampling for mites, be sure to check the entire plant when plants are small or the crown area on larger plants for signs

of stippling and the presence of mites. The threshold is 20- 30% infested crowns with 1-2 mites per leaf. If populations of mites have exploded and adult mites are the predominant life stage, Capture or Danitol should be used. A second miticide application may be needed in 3-7 days depending on the population level at treatment time. Agri-Mek should be used for the second application if the predominant life stage is immature mites. In general, dimethoate has provided very poor mite control. In recent trials, Kelthane continues to provide good mite control and should be rotated with Capture, Danitol and Agri-Mek to avoid resistance.

Potatoes.

We are starting to see a significant increase in Colorado potato beetle adult populations, egg laying and egg hatch. The treatment threshold for Colorado potato beetle is 4 small larvae per plant or 1.5 large larvae per plant. If both small and large larvae are present, the threshold of each should be reduced by 1/2 for each. Spintor, Actara, or Provado will provide good control of adults and larvae. Although corn borer moths can be found flying in the earliest planted fields, trap catches are still below 5 per night in all areas. Be sure to check our website (<http://www.udel.edu/IPM/traps/latestblt.html>) for the most recent moth catches in your area. As of this date, no potato leafhoppers have been found in potatoes.

Snap Beans.

Begin to check your earliest planted fields for thrips and leafhoppers. At this time, populations are still light. The treatment thresholds are 5-6 thrips per leaflet or 5 leafhoppers per sweep. If both insects are present, the best control option would be Lannate, Mustang or Capture in fresh market beans and Lannate, Mustang, Capture, or Orthene in processing beans.

Sweet Corn.

If you have planted into a burned down small grain cover, be sure to watch for true armyworm activity. The treatment threshold in sweet corn is 15% infested plants. A pyrethroid will provide control but should be applied at the higher labeled rates when larvae are small.



Pursuit Resistant Pigweed in Delaware – Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

There have been confirmed cases of pigweed plants resistant to Pursuit from Delaware. So far this is not a wide spread problem, but we need to be aware of it and manage it to avoid resistance. The problem has occurred in fields with frequent vegetable production and heavy reliance on Pursuit for weed control. The best management to avoid resistance is rotate herbicides, use tank-mix partners that effectively control suspected weeds, and/or use cultivation. If you have a field with suspected resistant-pigweed, be sure you plant a crop that you can use herbicides other than Pursuit for pigweed control.



Market News on the Web - Ed Kee, Extension Vegetable Crops Specialist; kee@udel.edu

The USDA Market News Service provides daily price reports from terminal markets and shipping points across the country. The address is www.ams.usda.gov/fv/mktnews.html.

Information is provided for fruits, vegetables, and ornamental crops. Watermelons and other melons are listed under the fruit sections.

For example, red flesh seedless in south Florida as of May 7, were selling for \$20-\$22 for 15-18 pound melons; \$19-\$20 for 19-24 pound melons.

The site provides a wide range of shipping information, truck rates, and other price information related to the fresh fruit and vegetable industry.



Field Crops

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

Alfalfa.

Since potato leafhoppers have migrated to the area, all fields should be sampled within a week of cutting for leafhoppers. Damage can occur quickly and small plants are more susceptible to damage. A treatment is needed when you find 20 leafhoppers per 100 sweeps in alfalfa 3 inches or less in size. The threshold increases to 50 per 100 sweeps in alfalfa 4-6 inches tall. Ambush, Baythroid, Mustang, Pounce, Warrior or dimethoate will provide control.

Field Corn.

True armyworm damage is starting to show up in fields' no-tilled into burned down small grain covers. Last year we saw significant damage, so be sure to watch fields for damage and treat when the worms are small. In some cases, significant damage can already be found. The treatment threshold for armyworms in field corn is 25% infested plants with larvae less than one-inch long. If Bt corn is planted in a field with a burned down small grain cover, you should see good control of small armyworms present in the field at the time of planting. However, **if worms are large** at the time of plant emergence or they are moving

from adjacent small grain fields, **you should not expect effective control.** Continue to watch for black cutworm and slug feeding above and below ground in no-till corn. We are seeing leaf-feeding, cut plants and below ground feeding. Fields should be sampled through the 5-leaf stage for cutworms. Slugs are also active on 1-2 leaf stage corn. Be sure that you do not confuse cutworm and slug damage. In most cases, you will be able to see "slime trails" on the leaves if slugs are the main pest problem.

Small Grains.

We are starting to see an increase in armyworm and sawfly activity in barley and wheat. In general, sawfly populations are more widespread in barley compared to last season. Since sawflies can quickly clip heads, a treatment should be applied soon after a threshold is reached and larvae are at least 1/2 inch long. The treatment threshold is 2 per 5 foot of row innerspace or 0.4 per foot of row. We expect to see sawfly populations peak by the week of May 20. Armyworms can also be found ranging in size from 1/4 to one inch long. Controls should not be needed until you find one per foot of row in barley or two per foot of row in wheat. Lannate and Parathion can be used in barley. Lannate, Mustang, Parathion or Warrior can be used in wheat. Since sawflies are harder to control, you will need to use the higher labeled rates. There have also been reports of aphids moving to the heads of wheat. No control is needed for aphids until you find 20-25 per head.

Soybeans.

During the month of May, you should consider a seed treatment in no-till fields for seed corn maggots. Seed corn maggot will remain a potential problem through early June. Flies continue to lay eggs and maggots will be present at the time of seed germination. The only hopper box treatment available with a soybean label is Kernel Guard Supreme. The active ingredient is permethrin and it should be used at a rate of 1.5 oz per 50 lbs. of seed.



Field Crop Diseases - - *Bob Mulrooney, Extension Plant Pathologist; bobmul@udel.edu*

Barley.

Barley rust caused by the fungus, *Puccinia hordei*, can be seen at this time on susceptible varieties of barley. Look for the numerous small, orange pustules on the infected leaves. Fortunately this showed up late enough that it should not effect yield. Powdery mildew is also present on the old variety Barsoy.

Wheat.

Powdery mildew on wheat continues to be the most prevalent disease that I have seen. Once wheat has flowered, there are no fungicides that can be applied for effective powdery mildew control after flowering Feekes Growth Stage 10.5.

Alfalfa.

Spring black stem can be a problem for Delaware growers. Look for dark brown to black lesions on the stem that can be several inches long, and coalesce to cover most of the stem when severe. Infections can also occur on leaflets. Typically these appear as small dark brown to black spots; just a few of these can cause the leaflets to turn yellow and fall off. If the disease continues to develop, cut and bale the growth early if possible. Even if you normally wait until early flowering, a severe outbreak of spring black stem can justify cutting during the bud stage. By leaving the crop in place, it will continue to defoliate (costing a producer loss in yield and in forage quality). By cutting early, producers will capture whatever yield is available, and it will allow sunlight and wind movement to penetrate to the new crown buds that will break dormancy when the disease gets severe enough.

The recommendation is to cut alfalfa when it is ready, not to wait for a forecast of 3-4 days of sunny, dry conditions. Advancing maturity causes substantial loss of forage quality anyway, and this would only be made worse if spring black stem is active. Thus, waiting for dry weather can cost as much or more than rain damage to the hay.

Adapted from an article by Paul Vincelli, Univ. of Kentucky. Pest News.



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

A Weather Market in May?

Corn, soybeans, and wheat have recovered slightly from recent lows this past week due primarily to concerns about wet weather in the Eastern Corn Belt and strong export demand, particularly for soybeans. With 42% of the nation's corn crop planted, it now appears that U.S. farmers are going to have to hurry to get the rest of the crop in the ground. Wet, cool weather is holding up planting progress on the remainder of planting and doesn't bode well for that portion of the crop that is already planted. Weather developments and export demand will determine eventual price direction. December '02 corn futures closed at \$2.21, Nov soybeans at \$4.63, and July wheat at \$2.72 per bushel on May 8th.

Farm Bill Nears Completion

No one wants to say for sure just what to expect from the 2002 Farm Bill this year until President Bush signs it into law. Preliminary indications are that 2002 farm bill provisions will now apply to this year's crop, therefore the loan rates and target prices are all subject to change. The "LDP game" will remain essentially the same, with loan rates adjusted to make soybeans a less attractive crop. Delaware loan rates for this year will not be announced until the Farm Bill becomes law. An expectation is that the loan rates will be raised slightly for corn and wheat, and lowered slightly for soybeans.

Marketing Strategy

Considering current price levels and the weather problems that we are experiencing in the corn belt, advancing crop sales for 2002 harvest are not recommended at this time. Nervousness in the markets, associated with planting delays, may well

add 15 to 20 cents per bushel to Dec corn futures, another 20 cents to November soybean futures and another 20 to 25 cents per bushel to July wheat.



First Hay Harvesting Tips - Richard W. Taylor,
Extension Agronomist, rtaylor@udel.edu

If not already begun, our first-cut hay harvest will soon begin. Alfalfa is rapidly approaching the bud stage of development when it is safe to take the first cut for those trying for 5-cuts per year. Those growers looking to use a 4-cut system have more time to plan for the first harvest. Growers with grass or grass-legume mixtures will also soon be busy as our orchardgrass and tall fescue plots are beginning to head out now.

Timing a harvest with the plants growth stage is quite easy to do. Actually being able to cut at that "perfect time" or "perfect growth stage" is quite hard to do. Historically, the driest five day period in May is around May 10 to 15 which also happens to correspond to when first harvest often can be taken. The current weather forecast does not look favorable through early next week.

In general, first harvest yields more dry matter than any other harvest, has the thickest stem size for alfalfa, has the flowering stem for our cool-season grasses, is taken during cooler weather and shorter days, and so is the hardest to cure. For harvests in the middle of the summer with dry weather, warm to hot temperatures, and strong winds, hay can be cured for baling in as little as two days, but at this time of year you should be planning on at least a 5 day prediction of dry conditions and preferably sunny conditions with good drying winds. Although the official weather forecasts can help, you should take the time to check out information and weather trends yourself since my impression is that most of you can predict the weather just as well as the current computer models (quite often even more reliably than the models).

If you have the equipment available to crimp stems, you'll find that crimping will reduce the time the hay must be in the field. Windrow inverters and other equipment also can help reduce drying time although little will help as much as that perfect hay making weather.

Once you harvest, dry, bale, and remove the hay, you need to consider adding any necessary fertility your soil test results call for. For fields with little legume, about 50 lbs nitrogen per acre per cutting should be applied. For all hay crops, a split application of one-half of your potassium and your phosphorous requirements should be added around the first harvest and the remainder in August after a cutting. The first half helps your hay species through the heat and possible drought times during the summer and the second half helps the grass or legume prepare for winter conditions. If legumes are present, use the first fertilizer application to apply needed boron and other nutrients.

One last precaution, if your hay is not quite perfectly dry when it gets baled take extra precautions to allow good air movement through the stacked hay bales to help prevent overheating and barn fires. Whenever hay is baled and then stacked, it is a good idea to keep an extra close watch over it to be certain spontaneous combustion does not occur.



Early Postemergence Options for Corn - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

Some of the earliest planted corn needs to be scouted for decisions on weed management. Delaying a decision often means less options or a more expensive option later. Be careful about use of 2,4-D or Banvel (or premixes with either of these herbicides), if the afternoon temperatures get above 80° to 85°F, because of increase volatility. Basis can be used if the corn is 2 collars (4 leaves) or less. It is excellent for lambsquarters and will

control many small grasses. Option, Steadfast and Basis Gold are also labeled for postemergence and will control grasses. Callisto can also be used on small corn and will control many broadleaf weeds, but the only grass weed it will control is large crabgrass. Callisto will not control fall panicum, giant foxtail or other grasses.

I have seen more yellow nutsedge this year than I have in the past. Permit has the best postemergence activity on yellow nutsedge.

When considering the postemergence herbicide, remember that organophosphate insecticides can interact with the ALS-inhibiting herbicides (i.e. Basis, Basis Gold, Accent, Beacon, Permit, etc.) and can cause corn stunting and injury. If you use an organophosphate insecticide at planting, review the herbicide and insecticide labels for options.



Control of Perennial Weed Seedlings - Mark VanGessel, *Extension Weed Specialist*; mjv@udel.edu

Soil-applied herbicides do not control established perennial weeds emerging from roots or rhizomes. However, soil-applied herbicides can control those plants that emerge from seeds. In fact, what you are doing is controlling the weeds as if they are annuals. Perennial plants emerging from seeds can produce perennial root structures very rapidly, as little as three weeks after emergence. A study funded by the Delaware Soybean Board was designed to determine if soil-applied herbicides could control perennials emerging from seeds. The following is a list of weeds and herbicides that provided the greatest level of control:

Hemp dogbane. Authority, Command, Sencor/Lexone, and Canopy.

Common milkweed. Sencor/Lexone and Canopy.

Canada thistle. Command, Lorox, Sencor/Lexone, Python, Scepter, and Canopy.

Common pokeweed. Command, Authority, Sencor/Lexone, Python, and Canopy.

Horsenettle. Sencor/Lexone and Canopy.

Where you are concerned about seeds being deposited into a field or part of the field previously not infested, there are some herbicide options for controlling the seedlings before they become established.



Canada Thistle Control In Corn - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

Options to consider for Canada thistle control in corn are Stinger, Hornet, Distinct, Callisto, Exceed, or NorthStar. Stinger is the superior product, but it is expensive. Stinger rate is 5 to 8 oz/A depending on the level of infestation. Hornet contains Stinger, and 4 oz of Hornet WDG contains 5.3 oz of Stinger (6 oz of Hornet WDG contain 8 oz of Stinger). Distinct does better on Canada thistle than Banvel, although they are similar products. Callisto should be sprayed with ¼ to ½ lbs of atrazine. Exceed should be tankmixed with 4 oz/A of Distinct or Banvel. NorthStar already contains Banvel. None of these treatments will eliminate Canada thistle for the next year, rather they fit into a 2 to 3 year program to deplete and kill the thistle root systems.



UPCOMING MEETINGS:

TWILIGHT SMALL GRAIN TOUR - Wye Research & Ed. Center

The Annual Small Grain Tour will be held on Wednesday, May 15, 2002 - from 6:30 p.m. - 8:30 p.m. This years program speakers will include Dr. Jose Costa - Variety Trials, Dr. Robert Kratochvil - Nitrogen Studies on small grains. Wayne Kneer from Helena Chemical - Marketing Hard Red Winter Wheat and It's Potential for the Eastern Shore, plus updates on Small Grain insects and weed control!

Plan to attend to learn more about growing Hard Red Wheat on your farm. For More Information

contact Mark Sultenfuss at 410-827-7388 or Paul L. Gunther, Extension Educator, Ag. & Natural Resources



Ag Fact



Agricultural exports from the U.S. represent 25-30% of the total agricultural product sales in the United States.



Weather Summary

Week of May 2 to May 8, 2002

Rainfall:

May 2: 1.15 inches
May 4: 0.20 inches
May 5: 0.03 inches
May 7: 0.02 inches

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

Air Temperature:

Highs Ranged from 81°F on May 2 to 62°F on May 4.
Lows Ranged from 60°F on May 7 to 39°F on May 4.

Soil Temperature:

65°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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