



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Vegetables

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

Cabbage.

Continue to scout for diamondback (DBM), cabbage looper (CL) and beet armyworm (BAW). DBM and CL populations have significantly increased this past week. If DBM and CL are both present, Avaunt (3.5 oz/acre), a Bt, Proclaim (3 oz/acre), or Spintor (4-5 oz per acre) will provide control. If cabbage looper is the predominant species, a pyrethroid or Confirm (8 oz/acre) will also provide control. If beet armyworm is the predominant, Avaunt, Confirm or Spintor should be used.

Lima Beans.

Be sure to continue to sample fields carefully for corn earworm. A treatment should be applied if you find one corn earworm per 6 foot of row. Since lima beans are still blooming, we continue to find small larvae at threshold levels. If possible, you should wait to treat when 1/3 of the population is 3/8-inch long. If Lannate is used, be sure to use the high rate of 2 -3 pts/acre if mixed larval sizes are present at treatment time.

Peppers.

At the present time, all peppers should be sprayed on a 5 to 7-day schedule for corn borer, corn earworm, and beet armyworm control. We can

still find newly hatched beet armyworm larvae in fields. In addition, aphid populations are starting to increase in peppers. If populations increase, Lannate, Actara, Fulfill, or Provado will provide aphid control. Actara and Provado have a 0-day wait until harvest, Lannate a 3-day wait until harvest, and Fulfill a 14-day wait until harvest.

Snap Beans.

Processing snap beans in all areas of the state should be treated at the bud and pin stages for corn borer control. At the pin stage, a corn earworm spray will also be needed. After the pin stage, sprays will be needed on a 5-6 day schedule from the pin spray until harvest. You should treat fresh market snap beans for corn borers, corn earworm and beet armyworm on a 5-7 day schedule from the pin stage until harvest.

Spinach.

Continue to sample recently emerged spinach for beet armyworm and webworms. Both insects can be found at this time. Controls should be applied when worms are small and before they have moved deep into the hearts of the plants. Confirm or Spintor will be needed for beet armyworm control. If webworms are the predominant species, Ambush, Pounce, Confirm (6-8 oz/acre) or Spintor (4-8 oz/acre) should be used.

Sweet Corn.

Fresh market silking sweet corn should be sprayed on a 2-3-day schedule in all areas of the state.



Field Crops

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

Soybeans.

We are finally starting to see a decrease in corn earworm egg laying; however, we have seen very few diseased "worms". In general, most larvae are medium to large in size. However, we have had a few reports of economic levels of small corn earworms in soybeans planted behind sweet corn. In most cases, you should be able to make a final treatment decision by the end of this week or early next week. On the other hand, we can easily find beet armyworm egg masses and small larvae. Although we have not seen significant increases in defoliation, you will need to watch double crop beans for potential defoliation from beet armyworm until frost. In an aerial trial last week, Lorsban did give excellent control of beet armyworm when applied at 2 pts/acre of product and 5 gallons of water/acre. So at least we have another option if economic levels are still encountered. However, we are still not clear on how it works on corn earworm.

Soybean aphid can now be found in full season and double crop soybeans in all 3 counties. As of this date, it has been detected in low levels in 12 fields. Although populations are light, we can find individual plants within fields with up to 100 aphids per plant. Since late season controls have not shown an economic return and the populations are light, no controls should be needed for aphids this season. After speaking with a soybean aphid expert from the Mid-West, we are still convinced that these populations are migratory. Although the data indicates that soybean aphids need common buckthorn to overwinter, studies are being conducted with ornamental species to see if they can overwinter and reproduce on alternative hosts. We will keep you posted on the progress of this research.

Forages and Small Grains.

Corn earworm (CEW), beet armyworm (BAW), fall armyworm (FAW) and true armyworm (AW) continue to be found in alfalfa and forages grasses. In addition, we have also found garden webworms mixed in the population. Be sure to sample all forages for these insects. Although we have no specific thresholds for defoliators in these crops, a treatment should be considered when larvae are small and before significant defoliation occurs.

Wheat.

Although we have not seen Hessian fly problems for a few years, you should still consider this pest as you make plans to plant wheat. Be sure to use a combination of the following cultural practices because there are no cost-effective chemical controls for Hessian fly: (1) Complete plowing of infested wheat stubble, (2) Crop rotation (do not plant wheat in the same field 2 years in a row), (3) Eliminate volunteer wheat before planting to prevent early egg laying, (4) Do not use wheat as a fall cover crop near fields with infestations, (5) Plant after the fly free date (Oct 3 – New Castle County; Oct 8 – Kent County; Oct 10 – Sussex County) and, (6) Plant resistant varieties – You should consider using varieties that have resistance to Biotype L.



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

USDA's September Crop Report Called Neutral

This month's crop report is being called neutral to commodity prices due primarily to the recent run up in corn, soybean, and wheat prices at the Chicago Board of Trade. Commodity traders are now likely to turn their attention to anticipating how close the September forecast comes to estimating the actual size of this year's corn and soybean crops, whether there are any crop quality

problems, and whether exports keep pace with expectations.

U.S. corn production for the 2002/03 marketing year is now forecast at 8.849 billion bushels, 37 million bushels less than the August estimate and about mid-range for pre-report industry estimates of 8.709 to 8.913 billion bushels. Ending stocks were reduced an equal amount to 729 million bushels, with the average farm price increased by 5 cents per bushel ranging from \$2.30 to \$2.75 per bushel.

World coarse grain ending stocks were reduced slightly from the August report. World corn ending stocks were also reduced slightly, with about a 2 million metric ton reduction indicated.

U.S. soybean production is now forecast at 2.656 billion bushels, 28 million bushels greater than the August estimate and 16 million bushels less than the pre-report average trade estimate. Ending stocks were increased by only 5 million bushels, now estimated at 160 million bushels. Although the total supply indicated for U.S. soybeans in the September report is 27 million bushels greater than the August report, the total use is estimated to increase by 22 million bushels. The estimate for the average farm price was unchanged at \$5.15 to \$6.05 per bushel.

U. S. wheat ending stocks were reduced 60 million bushels from the August estimate and are now placed at 407 million bushels. Wheat continues to shrink in supply with ending stocks globally now just 135.45 million tons, down 3 million tons from the August forecast.

Marketing Strategy

The basis for new crop corn in Southern Delaware has strengthened to 45 over the Dec., making new crop spot corn sales a favorable alternative. New crop soybean basis offerings are currently ranging from 10 under to 5 over depending on the delivery point. Although new crop corn and soybean prices are currently bidding lower, the trend is up.



Forage Stand Evaluations Following Severe Stress Conditions – Part II

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As discussed in last week's articles, most grass fields and especially pastures had to tolerate a prolonged hot, extremely dry summer. I suspect that all of us have been amazed at how grasses that we thought were dead have begun to recover since the rain we received around Labor Day. The most severely injured fields will be pastures that were overgrazed during the drought and often grazed right down to the soil level. It is these severely injured fields where the following guidelines may be useful in deciding whether to do a partial renovation before the end of this month.

Partial renovation will consist of no-till seeding a reduced rate of grass seed into the pasture to aid in stand recovery. In addition to adding seed of the dominant grass, you should also add a minimal amount of nitrogen (20 to 30 lbs N per acre) and some phosphorus and potash if soil test levels are not at optimum. The phosphorus will encourage strong root growth and the potash will help the plant prepare for the stress of winter weather and regulate water use if the dry weather continues.

Last week I suggested you take some stand counts across the pasture or hay fields in question. In just walking over the fields, you probably came away with a feel for whether the field will need help from partial renovation or not. But for those of you who prefer numerical values, I will offer some guidelines for minimal stands below. Please keep in mind that these are guesstimates on my part and are not based on research since little if any has been done on this topic.

With that limitation in mind, obtain an average count of the number of new tillers per square foot for grasses that are coming back from underground rhizomes such as Kentucky bluegrass, reed canarygrass, smooth brome grass, and perhaps tall fescue. For the other species such as ryegrass, timothy, and orchardgrass, obtain an

average count of the number of plants (a single plant will hopefully have a number of new tiller buds developing) per square foot and compare them with the guidelines below.

Kentucky bluegrass: 15 to 20 tillers or new shoots per square foot

Smooth bromegrass and reed canarygrass: 8 to 10 new shoots per square foot or, if you can distinguish plants or plant crowns, 3 to 5 crowns showing renewed tiller growth

Tall fescue: For fields established within the past two years, 5 to 8 plants showing new growth per square foot. For old established pastures, 2 to 3 plants per square foot. In each case, I would want to see a minimum of about 15 green tillers or shoots per square foot.

Orchardgrass: 5 to 8 plants showing new or greening tillers per square foot.

Timothy: 8 to 10 plants per square foot showing new tiller growth.

Ryegrasses: 8 to 10 plants per square foot showing new tiller growth.

In summary, I want to again emphasize that these are my best guess of the counts you need for your stand to recover. They can not replace your experience or that of someone who has worked in pastures for many years. If you're not comfortable with the stand you see when you walk the field to take stand counts, then it is highly likely the pasture will respond to overseeding or partial renovation. Another possible guideline to use is the amount of ground coverage the desirable species provide. If you can see bare soil on 50 percent of the pasture area, then adding seed of the dominant desirable grass is likely to help improve the stand.



Weather Summary

Week of September 5 to September 12, 2002

Rainfall:

None.

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

Air Temperature:

Highs Ranged from 85°F on September 9 to 77°F on September 6.

Lows Ranged from 70°F on September 10 to 52°F on September 7.

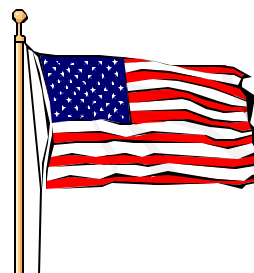
Soil Temperature:

75°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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