



WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

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Soybean Rust Update

There have been no new reports of soybean rust detections this week. Soybean rust has thus far been identified on kudzu in four Florida counties (Pasco, Hernando, Marion, and Dade) and on volunteer soybean in Seminole Co., Georgia.

Emmalea Ernest

Vegetables

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

Cabbage

Continue to sample for imported cabbageworm and diamondback larvae in cabbage. A treatment is recommended if you find 5% of the plants infested. If both insect species are present, Avaunt, the Bt insecticides, Proclaim or Spintor will provide control

Melons

As soon as plants are set in the field, you should begin scouting for cucumber beetles, aphids and spider mites. Foliar products labeled for cucumber beetle control on melons include the pyrethroids, Lannate, Sevin and Thionex. Be sure to check plants for aphids as soon as they are set in the field. You should also watch for

beneficial insects as well. In recent years, they have helped to crash populations. The treatment threshold for aphids is 20 percent infested plants with at least 5 aphids per leaf. Fulfill, Lannate and Thionex are labeled on melons for melon aphid control. These materials should be applied before aphids explode. The Fulfill label states that the addition of a penetrating type spray adjuvant is recommended to provide optimum coverage and penetration. As indicated in a previous newsletter, Actara is no longer labeled on cucurbits.

We have also received reports of fields damaged by seed corn maggots. Unfortunately, once maggots are in the stems there is no rescue treatment. In addition, none of the at-planting materials labeled for melons list seed corn maggot on the label. Although the use of at-planting materials for cucumber beetle control may help to reduce maggot populations, we do not have data to support their use for seed corn maggot control.

Peas

Continue to sample for aphids. Warmer weather could result in a rapid increase in populations. On small plants, you should sample for aphids by counting the number of aphids on 10 plants in 10 locations throughout a field. On larger plants, take 10 sweeps in 10 locations. A treatment is recommended if you find 5-10 aphids per plant or 50 or more aphids per sweep. Be sure to check labels for application restrictions during bloom.

Potatoes

The first Colorado potato beetle adults have been detected in the earliest emerged fields. As soon as plants emerge, begin scouting for Colorado potato beetle adults, especially if Admire, Platinum, Cruiser or Tops MZ Gaucho were not used at planting. A treatment should not be needed for adults until you find 25 beetles per 50 plants and defoliation has reached the 10% level. If one of the above neonicotinoids was used at planting, you should not apply a foliar neonicotinoid in season (i.e. Actara, Leverage, Provado, and recently labeled Assail). The first corn borer moths were caught in BLTs this week.

Sweet Corn

Continue to sample for cutworm leaf feeding and cut plants. As a general guideline, treatments should be applied if you find 3% cut plants or 10% leaf feeding. In the past, the pyrethroids and Lorsban have provided effective control. In addition to cutworms, be sure to watch for flea beetles on your earliest planted corn. In order to get an accurate estimate of flea beetle populations, fields should be scouted midday when beetles are active. A treatment will be needed if 5% of the plants are infested with beetles. A pyrethroid or Sevin will provide control. In fields where plastic was used as a row cover, begin sampling for European corn borer larvae as soon as the plastic is removed. A treatment should be applied if 15 percent of the plants are infested.

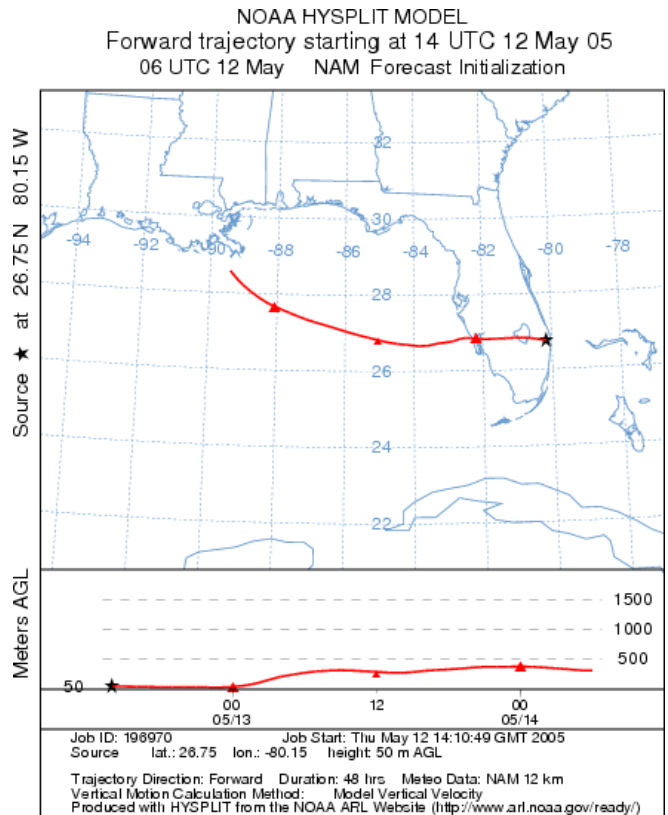


Downy Mildew on Pickling Cucumbers - Ed Kee, Extension Vegetable Specialist; kee@udel.edu

To date, the downy mildew on cucumbers has stayed in south Florida. Again, growers are encouraged to check on the status of downy mildew on the North Carolina website www.ces.ncsu.edu/depts/pp/cucurbit/ or simply google search "cucurbit downy mildew" and it will be the first link. The accompanying map comes from the May 13 version of the website. As you can see, the trajectory for spore transport for the next few days is due west into the Gulf of Mexico. The only current

sources of downy mildew are in Palm Beach Co. and Immokalee in southern Florida.

Contacts in the Florida Panhandle and South Georgia have confirmed that the disease has not surfaced in that pickling cucumber region.



Lima Bean Yields and a Good Stand - Ed Kee, Extension Vegetable Specialist; kee@udel.edu

One of the critical factors in obtaining profitable lima bean yields is getting the right population. A good stand, coupled with irrigation, will help maximize the potential yield. In irrigated 30 inch rows, 4 plants/foot (72,000 plants/acre) is the desired spacing. Three plants/foot (52,000 plants/acre) is certainly acceptable and still can produce profitable yields, but the extra population can be important in reaching higher yields consistently.



Agronomic Crops

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

Field Corn

Continue to scout for cutworms from emergence through the 5-leaf stage for damage, even if an at-planting cutworm treatment was used. We are starting to receive reports of leaf feeding and cut plants in recently emerged fields. We are also starting to get reports of bird damage - so be sure you do not confuse it with cutworm 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 where birds have pulled plants out of the ground.

Small Grains

Continue to scout fields for cereal leaf beetles, aphids, armyworms and sawflies. The first small armyworms and grass sawflies have been detected in fields throughout the state.

Soybeans

When planting no-till, full season beans, especially if manure was applied to a field, be sure to consider a treatment for seed corn maggot. Kernel Guard Supreme and KickStart VP are both labeled on soybeans for protection of seeds and seedlings against seed corn maggot. The active ingredient in both products is permethrin. Cruiser (commercial applied seed treatment) received a label in December 2004 and is also labeled to provide early season protection of seedlings against injury from seed corn maggot.



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

US & World Supply and Demand Highlights

USDA's May crop report begins to affirm ending stocks for the '04/'05 current marketing year and uses the March Planting Intentions report as the basis for establishing an initial assessment of the '05/'06 marketing year.

Corn Analysis

The U.S. outlook for '05/'06 includes decreased feed grain production but larger supplies; lower domestic use but larger exports; increased ending stocks; and lower prices. The '05/'06 U.S. corn crop is projected at 10.985 billion bushels, 7 percent below last year's record. The production estimate is based upon 74.2 million acres of corn for grain harvested from 81.4 million acres planted at 148 bushels per acre. The smaller production estimate is offset by larger carry in stocks which increases total corn supplies. Ending stocks from the '04/'05 marketing year that are carried into the '05/'06 supply total are now estimated at 2.215 billion bushels, the same as the April estimate but 1.257 billion bushels larger than carry over stocks from the '03/'04 marketing year.

Total U.S. corn use expands in the '05/'06 marketing year to a projected 10.670 billion bushels reflecting a 110 million bushel increase in use over the '04/'05 marketing year. Domestic use is projected to decline by 40 million bushels while export demand is increased by 150 million bushels. Ending stocks for the '05/'06 marketing year are now projected at 2.540 billion bushels, an increase of 325 million bushels from the '04/'05 marketing year and the largest since the '87/'88 marketing year. The projected price range for corn is \$1.55 to \$1.95 for '05/'06, as compared to \$2.00 to \$2.10 for the '04/'05 marketing year.

The world outlook for '05/'06 is for decreased production, lower use, and a slight drop in stocks. World ending stocks for corn are now projected at 122.10 million metric tons (mmt), down slightly from the April stocks estimate that was placed at 124.68 mmt.

Soybean Analysis

U.S. soybean production for the '05/'06 marketing year is estimated at 2.895 billion bushels from 72.6 million acres harvested at a yield of 39.9 bushels per acre. This crop size, if materialized, would be 246 million bushels less than last year's U.S. crop. Soybean supplies are projected at 3.253 billion bushels, just 5 million bushels less than the total U.S. supply for last year due primarily to the level of carry in stocks. At 355 million bushels they are 243 million bushels larger than the carry into the '04/'05 marketing year and 20 million bushels less than last month. Ending stocks for '05/'06 are projected at 290 million bushels, down 65 million bushels from the current marketing year as crush and exports are projected to expand. Soybean exports are projected at 1.125 billion bushels for '05/'06, a record level. The increase in the estimate for U.S. exports is attributed to large U.S. supplies and a smaller than expected Southern Hemisphere crop.

The U.S. season average soybean price for the '05/'06 marketing year is now placed at \$4.70 to \$5.60 per bushel, as compared to \$5.65 per bushel for the '04/'05 marketing year,

World oilseed production is projected at 378 mmt, down 2.3 mmt from '04/'05, the first projected reduction in world oilseed production since '95/'96. Global oilseed output is projected at 380.3 mmt, down 2.5 mmt from last month. The Southern Hemisphere crop is now projected at 92 mmt, a 1 mmt reduction from last month's estimate and 6.4 mmt less than the '03/'04 crop. The Southern Hemisphere crop was reduced by drought this year. Earlier estimates called for a combined production estimate for Brazil and Argentina of 103 mmt.

Wheat Analysis

The '05/'06 U.S. wheat outlook calls for a modest increase in production, a decrease in exports, and an increase in stocks. Total U.S. wheat production is up 1 percent from the '04/'05 marketing year to 2.185 billion bushels. Total wheat supplies are up only 2 percent, reflecting smaller beginning stocks.

Total wheat use is projected to decrease by 5 percent in the '05/'06 marketing year due to reductions in projected exports and in feed and

residual use. Ending stocks for U.S. wheat are projected to increase by 137 million bushels to 678 million bushels, the largest since '01/'02. The '05/'06 projected price range is \$2.55 to \$3.05 per bushel, compared with \$3.39 per bushel for the '04/'05 marketing year.

The '05/'06 world outlook for wheat includes larger carry in stocks, offsetting smaller crops, resulting in larger supplies. Global wheat production now projected at 615.2 mmt is down 9.7 mmt from last year. Global ending wheat stocks are projected to decline by only 2.1 mmt.

Marketing Strategy

Commodity traders are likely to view the May supply and demand estimates as a mixed bag, although a build up in projected stock estimates for U.S. corn and wheat are not price supportive. The report confirmed ample and building corn and wheat stocks. With U.S. corn and soybean planting nearing completion market attention will increasingly turn to weather and crop developments. For technical assistance on grain marketing decisions contact Carl German, Extension Specialist, Crops Marketing.



Hot Weather and Volatility With Dicamba and 2,4-D - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

Common sense is critical when spraying dicamba and 2,4-D. Both of these products are volatile and prone to move from the treated areas as vapors. Spraying postemergence herbicides in early planted corn or burndowns in no-till fields that have not been treated yet may require additional consideration because of the temperature. Furthermore, many of the vegetables and fruits have been planted and they are often very sensitive to these herbicides. It is not recommended to spray dicamba or 2,4-D when the temperature is expected to be 85 degrees or hotter; or spray late in the day when temperatures drop below 85. A number of pre-mixes have dicamba (active ingredient in Banvel and Clarity) including, Distinct, Celebrity Plus, Marksman, Yukon, and NorthStar so the temperature consideration applies to them as

well. Shotgun is a pre-package mixture of 2,4-D and atrazine.



Spray Drift Retardants Not as Effective as They Appear - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

We conducted a two-year study funded by the Delaware Soybean Board to evaluate the effectiveness of drift retardants (or drift control agents). We planted soybeans and grain sorghum in adjacent plots and sprayed the soybeans with Roundup Ultra. We used an air-blast sprayer to generate a 12 to 15 mph wind blowing towards the sorghum and evaluated the sorghum for injury. From our conclusions, the use of drift retardants cannot be justified for reducing spray drift under windy conditions. Particle drift, as measured by water sensitive papers and the resulting injury to grain sorghum planted adjacent to the sprayed area, was not lower with the addition of three different spray retardants when applied in 15 mph wind. Spray retardants did not reduce weed control with Roundup Ultra. The additional costs to prevent spray drift under these conditions with the three drift retardants could not be justified.



Conventional Soybean Herbicides - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

I have had a number of questions about herbicides for non-Roundup Ready soybeans. There is interest in growing conventional varieties for a number of reasons. Most sound herbicide programs will require a broadleaf plus a grass herbicide at planting. The Delaware/New Jersey Soybean Weed Management Guide available free at the county offices or online at http://www.rec.udel.edu/weed_sci/WeedPublicat.htm will provide useful information for selecting herbicide programs for the specific weed problems you need to handle. As always, there is not one program available that will fit all situations. Be sure to consider all factors, including effectiveness, application timing, and

rotational restrictions. Contact your county agent if you want to review your options. I believe that with 3 to 5 years of excellent weed control due to Roundup Ready soybeans and good control in rotational crops, the soil seedbank has been drastically reduced and helped make some of the non-Roundup Ready soybean weed programs look excellent. Timing of herbicide application in non-Roundup Ready soybeans is more critical for effective weed control than with glyphosate. In addition, it provides a chance to use herbicides with different modes of actions to help prevent herbicide-resistant weeds and weed species shifts.



Height Restrictions for Postemergence Corn Herbicides - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

Now that some of the corn fields are in need of a postemergence spray, I am republishing the height restrictions for postemergence herbicides. These height restrictions are due to potential crop injury.

Broadcast applications refer to an over the top application and directed refers to use of special spray equipment to direct the spray and avoid the spray coming in contact with the whorl of the corn. When corn height and collar number are given, base your decision on whichever feature is first attained.

Height Restrictions for Postemergence Corn Herbicide Application

Herbicides	Maximum corn size
Accent	broadcast: 6 collars or 20 in. directed: 10 collars or 36 in.
Aim	broadcast: up to 8 collars directed: when necessary
Atrazine	12 inches tall
Banvel Clarity	more than ½ pt/A: broadcast: 5 lvs or 8 in. directed: 36 in. ½ pt/A or less: 36 in.
Basagran	no restrictions listed

Herbicides	Maximum corn size
Beacon	broadcast: min- 4 in. max- 20 in. or 6 collars directed: pre-tassel
Buctril	pre-tassel
Callisto	30 in. or 8 collars
2,4-D Amine	broadcast: 8 in. directed: pre-tassel
2,4-D Ester	broadcast: 8 in. directed: pre-tassel
Evik	directed only: 12 in., do not apply 3 weeks before tasseling
Harmony GT	1 - 4 collars or 12 in.
Liberty	broadcast: 24 in. or 7 collars directed: 20 - 36 in.
Option	broadcast: 16 in. or V5 directed: 16 - 36 in.
Permit	broadcast: 48 in. directed: when necessary
Resource	broadcast: 2 - 10 collars directed: when necessary; when corn leaves interfere w/ spray
Roundup products	up to 30 in. or 8 collars
Stinger	24 in.
Touchdown	up to 8 collars
Premixes	
Basis	2 collars or 6 in.
Basis Gold	5 collars or 12 in.
Celebrity Plus	broadcast: 4 - 24 in.
Distinct	6 oz rate: 4 - 10 in. 4 oz rate: up to 24 in. directed: 4 oz up to 36 in.
Equip	broadcast: 12 in. or 4 collars directed: 12 - 36 in. or 4 - 8 collars
Exceed	broadcast: min- 4 in. max- 20 in. or 6 collars directed: 20 - 30 in.
Field Master	do not apply to emerged corn
Hornet WDG	broadcast: 6 collars directed: 20 - 36 in.

Herbicides	Maximum corn size
Laddok	12 in.
Liberty ATZ	12 in.
Lightning	broadcast: 12 in. directed: 20 in.
Marksman	broadcast: 5-lf stage or 8 in.
Northstar	broadcast: min- 4 in. max- 20 in. 6 collars directed: 20 - 30 in.
Ready Master ATZ	emergence until 12 in.
Shotgun	broadcast: 8 in. directed: 12 in. or if rate >2 pts
Spirit	broadcast: 20 in. or 6 collars (min of 4 in. tall) directed: 20 - 24 in. (before tassel emergence)
Steadfast	less than 20 in. or 6 collars
Steadfast	up to 12 in. or 6 collars
Yukon	spike through 36 in.

Announcements

Pesticide Container Recycling

Thursday, May 19, 2005

Sussex Conservation District Maintenance Yard
Shortly Rd in Georgetown, DE

Each container is closely inspected for cleanliness (they must be triple rinsed or equivalent), chipped and bagged for storage and transport. Container chips are combined with those collected in similar programs across the country and processed into pallets, park benches, new pesticide containers, or converted into fuel.

For more information contact Jason A. Gardner at
(302) 698-4572 Jason.Gardner@state.de.us



Spring Crops Twilight Tour

May 25, 2005 6:30 p.m.

Wye Research and Education Center

-Visit the wheat and barley plots to compare plant growth type, maturity and disease resistance.

-Update on current insect, weed and disease pressure, predictions for the near future, and management techniques for integrated pest management.

-Discussion of any current crop management issues

-CCA credits

Refreshments/dessert will be available.

Registration is not required.

Contact: Mark Sultenfuss (410) 827-7388 or
Debby Dant (410) 827-8056

Pesticide Safety Training and Testing for Pesticide Applicators Certification

June 28 & 29, 2005

Kent County Extension Office

June 28 is training – 8:30 am – 4:30 pm. Training continues the morning of June 29, from 8:30 am – noon. The exam starts at 1:00 pm on June 29.

Be sure to bring your Workbook! You don't have to register for training, but you must register for the exam. Call DDA (302-698-4500) one week in advance to register for the exam. All the exams are closed book!! Bring your calculator for the calibration questions.

2005 Wye Strawberry Twilight Meeting

May 25, 2005 6:00 - 8:00 p.m.

-2004-05 research plots

-Effect of Strawberry tip plugging date on Spring yields with and without Fall applied row covers in the field and in a high tunnel.

-Variety trial with Bish, Treasure, Festival and Gem. USDA cooperative research on "conditioned" strawberry plugs for Fall and Spring harvest.

-Greenhouse-gutter production system.

-USDA Fruit Pathologist Bill Turechek will discuss strawberry diseases and current control measures. USDA and University small fruit specialists will also be on hand.

Refreshments/dessert will be available.

Registration is not required.

Contact: Mike Newell (410) 827-7388 or
Debby Dant (410) 827-8056

Virginia Small Grains Association Field Day

May 24, 2005 9:30 a.m.

Farm of Lanier Easley, Pittsylvania County, VA

Field plots will feature ryegrass/weed control strategies, insecticide seed treatments, evaluations of hullless barley and bread wheat seeding rates and management, and variety demos from Southern States, Pioneer, Hubner, Vigoro/Royster Clark, VCIA, U of Maryland, Coker, and USG.

Spring fungicide demonstrations and strips with nitrogen and nitrogen+sulfur as a topdress are planned. Results will be shown as part of the tours. There will also be display/demonstration of the new Greenseeker technology. The Greenseeker applies a variable rate nitrogen application based on the needs of each plant.

The tentative program includes speakers from the Altria/Shared Solutions Program and Don Mennel with Mennel Milling.

Lunch will be served by Bill Ellis BBQ.

Exhibitor and sponsorship opportunities are available.

For further information, please contact:

Ellen Davis, Executive Director of Virginia Small
Grains Association, (804) 843-4455

Dr. Wade Thomason, Extension Grain Specialist, (540)
231-2988.

Directions:

*From Rt. 57 about 8.5 miles west of Chatham, VA
(Town of Rondo)*

*Turn South on Rt. 750, Strawberry Rd. Go
approximately 1.25 miles*

Turn Left onto Rt. 833, parking and field plots are on the right, approximately 0.8 miles from the turn.

Weather Summary

http://www.rec.udel.edu/TopLevel/Weather.htm
Week of May 5 to May 11, 2005
Rainfall:
0.14 inches: May 6 0.01 inches: May 7
Readings taken for the previous 24 hours at 8 a.m.
Air Temperature:
Highs Ranged from 81°F on May 11 to 53°F on May 6.
Lows Ranged from 48°F on May 8 to 35°F on May 5.
Soil Temperature:
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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