Soybean Rust Update

Everything seems to be pretty quiet on the soybean rust front. It has been hot and dry again in the South so there has not been weather conducive for spread and new infections to occur.

Scouting has intensified in soybean sentinel plots especially in the South. Most of the soybean sentinel plots have been planted throughout the country with plants in some early planted plots starting to reach maturity. Scouting continues on kudzu patches from Florida to the north as far away as Nebraska.

A recent limited survey of kudzu in Florida found no evidence of abundant infection or sporulation. Currently, there are no known reports of rust on commercially planted soybean in 2006.

Growers and fieldmen are encouraged to follow soybean rust development down South by checking the National Soybean Rust website now known as PIPE (Legume Pest Information Platform for Extension and Education) http://www.sbrusa.net.

Bob Mulrooney

Vegetables

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

Cucumbers

All fields should be scouted for cucumber beetles and aphids. Fresh market cucumbers are susceptible to bacterial wilt, so treatments should be applied before beetles feed extensively on cotyledons and first true leaves. Although pickling cucumbers have a tolerance to wilt, a treatment may still be needed for machine-harvested pickling cucumbers when 5% of plants are infested with beetles and/or plants are showing fresh feeding injury. A treatment should be applied for aphids if 10 to 20 percent of the plants are infested with aphids with 5 or more aphids per leaf. Fulfill, Thionex or Lannate are labeled for aphid control. Be sure to watch for bees foraging in the area. A pyrethroid (Asana, Capture, permethrin), Lannate, Sevin or Thionex are labeled for cucumber beetle control in cucumbers.

Melons

Continue to scout all fields for aphids, cucumber beetles and spider mites. The treatment threshold for aphids is 20% infested plants with at least 5 aphids per leaf. Be sure to also watch for beneficials. The threshold for mites is 20-30% infested crowns with 1-2 mites per leaf. Acramite, Agri-Mek, Capture (bifenthrin), Danitol, Oberon and Kelthane are labeled on melons for mite control. The manufacturer of
Acramite (Chemtura) recommends against mixing Acramite with any sticker or products containing stickers. LI700 has been used with Acramite on apples and they have not experienced any problems. They have also had good success using silicone based wetting agents, such as Silwet and Kinetic, with Acramite. It is also important to maintain a tank-mix at or below pH 7.0. In actual field use, they have seen that a pH of 6.5 or lower is better. Cucumber beetle populations have exploded in many fields. Since beetles continue to re-infest fields as well as hide under the plastic, multiple applications are often needed. Be sure to watch for bees foraging in the area. A pyrethroid (Asana, Capture, permethrin), Lannate, Sevin or Thionex are labeled for cucumber beetle control in melons.

Peppers
Continue to sample for corn borers and watch carefully for egg masses. Before fruit is present these young corn borer larvae can infest stems and petioles. Be sure to also check local moth catches in your area by call the Crop Pest Hotline (instate - (800) 345-7544; out of state- (302) 831-8851). You should also watch for an increase in aphid populations. A treatment may be needed prior to fruit set, if you find 1-2 aphids per leaf for at least 2 consecutive weeks and beneficial activity is low.

Potatoes
Continue to scout fields for Colorado potato beetle (CPB), corn borers (ECB) and leafhoppers. Adult as well as small and large CPB larvae can now be found. A treatment should be considered for adults when you find 25 beetles per 50 plants and defoliation has reached the 10% level. Once larvae are detected, the threshold is 4 small larvae per plant or 1.5 large larvae per plant. We are starting to see the first corn borer egg masses in the earliest planted fields. A corn borer spray may be needed 3-5 days after an increase in trap catches or when we reach 700-degree days (base 50). If you are scouting for infested terminals, the first treatment should be applied when 10% (fresh market) or 20-25 % (processing) of the terminals are infested. As a general guideline, controls should be applied for leafhoppers if you find ½ to one adult per sweep and/or one nymph per every 10 leaves.

Sweet Corn
Continue to sample seedling stage fields for cutworms and flea beetles. You should also sample all whorl stage corn for corn borers. A treatment should be applied if 15% of the plants are infested. The first silk sprays will be needed for corn earworm as soon as ear shanks are visible. Be sure to check trap catches since the spray schedules can quickly change. Trap catches are generally updated on Monday and Thursday nights (Crop Pest Hotline - instate: (800) 345-7544; out of state: (302) 831-8851).

Fusarium Wilt of Watermelon - Kate Everts; Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu

I have had several samples of watermelon plants with Fusarium wilt in the past week. Symptoms in young plants are wilting, usually without necrosis, and a distinct vascular discoloration. Infected fields may appear to recover; however symptoms often reappear later in the season when the vines produce runners. Wilting then becomes more severe as fruit increase in size and plants appear water-stressed even under conditions when soil moisture is adequate. Wilt occurs on crown leaves first, then on runners and eventually on the whole plant. Infected stems may have a red, brown or black gummy exudate and the vascular system of the plant is discolored.

Management of Fusarium wilt has been accomplished in the past through long rotation (5 to 6 years), planting resistant cultivars, and fumigation. However, fumigation may fail to control disease because Fusarium can quickly rein invade fumigated ground. The presence of a new race (race 2) on Delmarva and an increase in acreage of seedless watermelon has led to an increase in Fusarium wilt (few seedless cultivars have resistance to this disease). Dr. Xin-Gen Zhou tested several seedless watermelon cultivars in 2005 to identify tolerance or resistance to Fusarium wilt. The field was very highly infested with race 2 of the pathogen, however you can see how the cultivars compare to each other.
Tolerance of Seedless Watermelon Varieties to Fusarium Wilt Race 2

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Source</th>
<th>Wilt incidence (%)</th>
<th>Vine length (in.)</th>
<th>Yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple Crown</td>
<td>Seedway</td>
<td>100 a</td>
<td>28 ab</td>
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</tr>
<tr>
<td>Tri-X Brand Carousel</td>
<td>American Sunmelon</td>
<td>97 ab</td>
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<tr>
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<tr>
<td>Gem-Dandy</td>
<td>Willhite</td>
<td>95 ab</td>
<td>27 ab</td>
<td>0 a</td>
</tr>
<tr>
<td>Imagination</td>
<td>Seedway</td>
<td>95 ab</td>
<td>32 ab</td>
<td>0.4 a</td>
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<tr>
<td>Buttercup</td>
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<td>91 abc</td>
<td>34 bc</td>
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<tr>
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<td>Siegers</td>
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<td>32 ab</td>
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</tr>
<tr>
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<td>Willhite</td>
<td>88 abc</td>
<td>29 ab</td>
<td>2.1 ab</td>
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<tr>
<td>Crisp N Sweet</td>
<td>Siegers</td>
<td>86 abc</td>
<td>30 ab</td>
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<tr>
<td>RWM8096-VP</td>
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<td>31 ab</td>
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<tr>
<td>Revolution</td>
<td>Sunseeds</td>
<td>58 d</td>
<td>34 bc</td>
<td>6.7 c</td>
</tr>
<tr>
<td>Seedless Sangria</td>
<td>Seedway</td>
<td>37 e</td>
<td>41 c</td>
<td>6.3 c</td>
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</tbody>
</table>

*Values in each column followed by the same letter are not significantly different at \( P = 0.05 \) based on Fisher’s LSD test.

Are You and Your Fields Prepared for Phytophthora Blight? - Andy Wyenandt; Extension Plant Pathologist, Rutgers University

Last summer the first reports of Phytophthora blight in pepper came during the first week in June. Fortunately, up through this week, the month of May has been relatively dry, making conditions mostly unfavorable for the development and spread of many vegetable diseases. That has changed slightly over the past few days with the arrival of much needed showers.

Do you have areas in fields which favor Phytophthora blight development, such as low, poorly or slowly drained areas? Has water pooled in rows after the first extensive rainfall of the summer season? Were tomatoes, eggplant, or cucurbit crops grown in the same field last year? Now is the time to answer some of these questions. Poorly drained soil or soils that pool water for extended periods after rainfall are extremely conducive for Phytophthora blight development. These areas should be avoided at all costs, especially if Phytophthora has been a problem in the same field in the past or a susceptible crop was planted in the field last year.

Take adequate measures to make sure any excess rainfall does not pool, especially at the ends of rows either on bare ground or between black plastic mulch. Dig diversion ditches to allow excess water to run off and away from the field. Along with appropriate fungicide applications at planting (i.e. mefenoxam, etc.) fields should be scouted regularly and poorly drained areas should be noted. Any infected plants should be removed from the field. Removing infected plants early, although time consuming, may help to remove an early-season source of inoculum, thus helping reduce the chances for further crown, stem and/or fruit rot development later in the growing season. Besides avoiding poorly drained areas and removing sources of inoculum, cultural practices such as removing plastic mulch in low and poorly drained soils before symptoms of Phytophthora appear may help to keep the soil dry and keep water from pooling. Taking preventative precautions is extremely important when it
comes to controlling a disease such as Phytophthora blight; any measures which can be done to reduce the chances of it developing should be taken.

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**Bacterial Spot and Speck of Tomato**  
*Andy Wyenandt; Extension Plant Pathologist, Rutgers University*

Both bacterial diseases can cause serious problems in the field if infections begin in the greenhouse prior to transplanting. Symptoms of spot and speck look very similar on infected leaves. Lesions are small, circular, blackish-brown and, with time, develop a halo or yellowing of tissue surrounding the lesion. As lesions develop they can coalesce (join together) and can cause premature death. Infections can occur on all parts of the tomato plant and can easily be spread during transplant trimming with contaminated equipment and by workers' hands. Tomato plants with suspected symptoms can be treated with streptomycin (Agri-Mycin 17, Agri-Strep, 25) at 1 lb/100 gallons, or 1.25 teaspoon per gallon prior to transplanting every 4 to 5 days. After transplanting apply Actigard (P) at 0.33 oz/A, or fixed copper (M1) at 1 lb/A plus a mancozeb (Dithane, Manex II, Manzate, Penncozeb, M3) at 1.5 lb/A, or ManKocide (M1 + M3) at 2.5 to 5.0 lb/A, or Cuprofix MZ (M1 + M3) at 1.75 to 7.25 lb/A on a 7-day schedule.

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**MELCAST and TOMCAST**  
*Kate Everts; Vegetable Pathologist, University of Delaware and University of Maryland; keverts@umd.edu*

**MELCAST for Watermelon**

The weather based forecasting program MELCAST has begun for 2006. MELCAST is a weather-based spray scheduling program for anthracnose and gummy stem blight of watermelon. If you received a report in 2005, you should have received the first 2006 report last week. If you are not receiving reports and would like to, please call Lisa Collins at (302) 856-2585 ext. 544 and give us your name and fax number or e-mail address. In addition, this information is available on the web at [http://www.agnr.umd.edu/users/vegdisease/vegdisease.htm](http://www.agnr.umd.edu/users/vegdisease/vegdisease.htm).

To use MELCAST for watermelons, apply the first fungicide spray when the watermelon vines meet within the row. Additional sprays should be applied using MELCAST. Accumulate EFI (environmental favorability index) values beginning the day after your first fungicide spray. Apply a fungicide spray when 30 EFI values have accumulated by the weather station nearest your fields. Add 2 points for every overhead irrigation. After a fungicide is applied, reset your counter to 0 and start over. If a spray has not been applied in 14 days, apply a fungicide, reset the counter to 0 and start over. Please call if you have any questions on how to use MELCAST on your crop (Kate Everts at (410) 742-8789).

Because of widespread resistance to Quadris in our area, chlorothalonil (Bravo, etc.) or Pristine plus chlorothalonil alternated with chlorothalonil is recommended when spraying according to MELCAST. If a serious disease outbreak occurs in your field, return to a weekly spray schedule.

**MELCAST for Cantaloupes and TOMCAST for Tomatoes**

In addition to MELCAST for Watermelon, we have two models that are designed to help you make spray-timing decisions on diseases of cantaloupe and tomato. MELCAST for cantaloupes is a fungicide application program for Alternaria leaf blight. It can be used by anyone growing a powdery mildew resistant variety such as Athena. To use MELCAST for cantaloupe, apply the first fungicide spray when the cantaloupe vines meet within the row. Additional sprays should be applied using MELCAST. Accumulate EFI (environmental favorability index) values beginning the day after your first fungicide spray. Apply a fungicide spray when 20 EFI values have 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 0 and start over.
TOMCAST is a spray forecaster for leaf blights and fruit diseases of processing tomato. However, it does not work for bacterial diseases or for late blight. In fields that were not rotated away from tomatoes and in late-planted fields begin sprays shortly after transplanting. In all other areas begin sprays when crown fruit are one-third their final size. Additional sprays can be scheduled using TOMCAST. Sprays should be applied after accumulating 18 DSV’s (disease severity values) since the last fungicide application. Scout fields for bacterial diseases

and late blight. If bacterial speck or spot or late blight occurs additional sprays are warranted (see Delaware Extension Bulletin 137 or Maryland Extension Bulletin 236: Commercial Vegetable Production Recommendations).

These disease models are available at http://www.agnr.umd.edu/users/vegdisease/vegdisease.htm. In addition you can receive the models by e-mail or fax. To sign up please call Lisa Collins (302) 856-2585 ext. 544.

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**Potato Disease Advisory #7 - June 1, 2006,** Bob Mulrooney, Extension Plant Pathologist

Disease Severity Value (DSV) Accumulation as of May 31, 2006 is as follows:

**Location:** Byfield Farms field east of Magnolia, DE. Greenrow: April 23, flower buds present May 24.

Remember that 18 DSV’s is the threshold to begin a spray program

<table>
<thead>
<tr>
<th>Date</th>
<th>LATE BLIGHT</th>
<th>EARLY BLIGHT</th>
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<tbody>
<tr>
<td></td>
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<td>Total DSV</td>
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<tr>
<td>4/23-4/30</td>
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<td>1</td>
</tr>
<tr>
<td>4/30-5/10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5/11-12</td>
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<td>5</td>
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<td>5/15-16</td>
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<td>6</td>
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<td>5/16-2417</td>
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<td>6</td>
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<tr>
<td>5/25-26</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>5/28-29</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>5/30-31</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

* P days - We use the predictive model WISDOM to determine the first fungicide application for prevention of early blight as well. The model predicts the first seasonal rise in the number of spores of the early blight fungus based on the accumulation of 300 physiological days (a type of degree-day unit, referred to as P-days) from green row. To date, 279 P-days have accumulated at the site near Magnolia. Once 300 P-days have accumulated, the first fungicide for early blight control should be applied. This should happen this week.

The return of hot humid weather has provided conditions for accumulating a few more DSVs.

If **pink rot or leak** is a concern and no pink rot fungicide was applied at planting consider applying one of the following when potatoes are nickel-sized and repeating 14 days later. Apply in as much water as possible (20-30 gal/A): Mefanoxam/chlorothalonil (Ridomil/Bravo or Flouranil) 2 lb/A, or Ridomil Gold/Copper 2 lb/A, or Ridomil Gold/MZ 2.5 lb/A. **Early blight and black dot.** Many fields are flowering or approaching flowering and this is a good time to consider switching to an application or two of Gem, Headline or Quadris (Amistar) for early blight susceptible varieties. This can also be helpful for late season varieties including russets if stress makes plants susceptible to black dot. Make one or two applications at the end of flowering and repeat 14 days later. Apply mancozeb or chlorothalonil 7-days later between the two applications.
Field Corn
Economic levels of true armyworms continue to be found damaging corn planted into no-till small grain covers. In addition, we can find worms moving from small grain fields into near by corn fields. Remember, worms must be less than 1 inch long to achieve effective control. The treatment threshold for armyworms in corn is 25% infested plants with larvae less than one-inch long. Large larvae feeding deep in the whorls will be difficult to control.

Small Grains
We continue to receive reports this week of economic levels of armyworms in both wheat and barley so be sure to sample fields to avoid significant head clipping. Grass sawfly are also present in some fields. In some cases, old head clipping can be found from grass sawfly larvae. The armyworm threshold is one per foot of row in barley and two per foot of row in wheat. As a guideline, a treatment should be applied for sawflies when you find 2 larvae per 5 foot of row innerspace or 0.4 larvae per foot of row. However, remember if the number of clipped heads is twice the worm count for sawflies then it is generally too late to treat for them. If armyworms and sawflies are present in the same field, the threshold for each should be reduced by one-half.

Agronomic Crop Diseases - Bob Mulrooney; Extension Plant Pathologist; bobmul@udel.edu

Dry weather early, combined with high overwintering soybean cyst nematode (SCN) numbers and SCN susceptible soybeans can result in early season stunting of soybeans. This is particularly true for sandy knolls or other places that are more drought prone. Of course other causes can result in soybean stunting so soil testing, herbicide carry-over and other issues should not be ignored when trying to diagnose situations like this. It usually takes about 28-32 days from planting to see the white and yellow cysts on the roots to aide in a diagnosis. Soil testing to check for SCN if other causes can be ruled out will help in making a diagnosis.

Spraying Post-Emergence Herbicides and Dry Weather - Mark VanGessel, Extension Weed Specialist; mjv@udel.edu

The severely dry weather we have been having comes at a time when many fields need a postemergence herbicide application. For irrigated fields, be sure the field is well watered before spraying, so that weeds are not under stress and the herbicides have a chance to work well. For dryland fields the situation is not so easy. The best advice is to wait for rain then spray as soon after the rain as possible. Spraying during the dry weather reduces the herbicides’ effectiveness because the weeds are not undergoing normal metabolism and the leaf surfaces have thicker layers of waxy cuticle to prevent water loss. The thicker cuticles make it more difficult for herbicides to penetrate into the leaf. Some weeds may not look stressed in the field, but chances are they are not going to be effectively controlled. I have not had very good luck with adding a lot of different surfactants, oils, or nitrogen solutions and having a significant amount of improvement in weed control over normal adjuvant use. Based on greenhouse research, drought affects contact herbicides (i.e. Reflex, Aim, Liberty) similarly to translocated herbicides (i.e. Roundup, dicamba, Callisto). Also there were no generalities that we could make based on weed susceptibility to a given herbicide (highly effective herbicide on a given weed species). We hypothesized, for instance, that herbicides that are expected to have good to excellent control of a given species would perform better under drought than herbicides that typically are rated as fair. But the research showed this was not the case. So my advice is wait for rain if the field is dryland. If you feel you must spray, at least spay in the early evenings as the plants begin to unroll so that there is more leaf area exposed, and the humidity is higher so that the droplets do not evaporate as quickly.
To continue the description of soybean growth stages, we now move on to the ‘Third’, ‘Fourth,’ and ‘Fifth Node’ growth stages. Again, you should refresh your memory of the definitions covered in the first of this series so you will understand what a fully developed leaf is. V3 begins when the leaflets of the third trifoliate leaf to emerge have unrolled sufficiently that the leaflet edges do not touch (Photo 1 below). The stage continues until V4 or the ‘Fourth Node’ stage when the newly emerged third trifoliate leaf becomes a fully developed leaf (the fourth trifoliate leaf has emerged enough for the leaflet edges to no longer touch). The ‘Fifth Node’ stage occurs when counting from the soil level you have a set of unifoliate leaves (or leaf scars if these leaves have dropped off), and four fully developed trifoliate leaves (Photo 2).

Photo 1. Soybean plants in the V3 or Third Node stage at which time the leaflets on the third trifoliate leaf to emerge have unfurled enough so the leaflet edges no longer touch. This means that the fully developed leaves include the unifoliate leaves and the first and second trifoliate leaves.

Usually by the V3 to V5 stage, you can easily identify nitrogen fixing nodules on the soybean roots. Beans planted from mid-May on will be either at or approaching this stage at the time you should be scouting fields (30 to 40 days after planting) to determine if soybean cyst nematodes are of concern and are reproducing on your soybean variety. Leaf area is usually sufficient by the V5 growth stage so that foliar manganese (Mn) applications can provide enough Mn to the plant to sustain growth until near the time the plant begins the reproductive phase. Yield reductions with Mn deficiency can be significant so scout fields carefully at this stage to allow time to treat early with Mn if a deficiency is present. Weeds should be controlled at least by the end of this growth period since competition for moisture, sunlight, and nutrients is becoming strong and weeds can significantly reduced yield potential.

In late-planted, double crop beans, flowering can begin once the plant reaches the V4 stage of growth although in single-crop plantings flowering will not occur until the days shorten to the appropriate day length (actually the nights lengthen to the point at which the variety is triggered to turn reproductive) following the longest day of the year (June 21).

Photo 2. Soybean plant in the V5 or Fifth Node stage -- at this stage a set of unifoliate leaves and four trifoliate leaves are fully developed. The plant is entering a period of rapid growth if adequate moisture, nutrients, and sunlight are available. Note that at low populations the plant is beginning to produce branches and additional trifoliate leaves on the branches. The branch leaves are not counted in the staging of soybeans. Only those leaves that occur on the main stem are counted for staging soybeans.
Drought Heightens Concern for Nitrate Toxicity in Hay and Pasture - Richard Taylor, Extension Agronomist; rtaylor@udel.edu

Practically all plants contain detectable amounts of nitrates and sometimes nitrites. Excessive nitrate accumulation occurs when the uptake of nitrate from the soil exceeds the plant’s ability to use it for protein synthesis. This can result from a number of environmental factors as well as human factors. Typically, nitrates can accumulate in most forages when high rates of nitrogen (especially nitrate forms of nitrogen) are applied to hay or pasture grasses. New research from The Pennsylvania State University has led us to propose changes in the nitrogen (N) recommendations from a set amount per acre to an amount per ton of expected yield. At the time the fertilizer is applied, the producer will not always know if drought or other factors will reduce yield significantly below the expected target. Therefore, there may be times when too much N is applied and the risk of nitrate poisoning will increase.

Let’s look at some of the factors involved in nitrate accumulation other than just rate of N applied and also examine some of the possible management options open to the producer.

1. Plant species differ in their ability to accumulate nitrate, so species selection at planting is important or, in a season when nitrate toxicity is of concern, pastures or hay fields containing certain species should be closely monitored. Some of the species high in nitrate potential include the fescues (probably festuloliums as well), ryegrasses, small grains, millets, and sorghums (sudangrass, sorghums, johnsongrass, etc.). Forbs that can also accumulate nitrates include horseradish, lambsquarter, morningglory, and the pigweeds. Note that this is not meant to be an exhaustive list.

2. Plant parts differ in the level of nitrate that is accumulated. Seed stalks generally contain the most nitrates with higher levels in the lower stalks (closer to the soil level). If grazing or haying, graze or mow at a higher stubble height than normal if nitrate toxicity problems are thought to be a concern. Leaves accumulate the next highest level of nitrate with seeds or gain having the least.

3. Stage of growth matters since younger growth contains more nitrates than mature forage. If turning livestock out on immature grass, hungry livestock are less likely to selectively graze leaves rather than stems that contain more nitrates. Feed hay to livestock before turning them out onto fresh pasture so they will be more likely to be selective for leaves. Also, always test fields of concern prior to releasing livestock on them. The Delaware Department of Agriculture can test samples for you but be sure to contact them ahead of time for instructions and to be sure the testing lab has time to run the samples.

4. This year the drought conditions make nitrate accumulation likely in many pasture and hay fields that have been fertilized with N fertilizer. In any season following fertilization, nitrate accumulation can sometimes occur during periods of cool, cloudy weather when the plants are accumulating nitrates but do not have enough sunlight to convert them to proteins and amino acids. The quantity of nitrate in a plant which is dangerous to ruminant animals is sufficient for only 2 to 4 days of active plant growth. Problems created by weather can usually disappear after a half week of sunshine, adequate moisture, and proper temperatures.

5. Other management options include dilution by feeding forages known to be low in nitrates. Ensiling forage is another way to reduce nitrate levels although very high nitrate levels (10,000 to 20,000 parts per million) will not be reduced to levels that are not of concern. Always have questionable forage tested before feeding to ruminants.

6. Acid soil and phosphorus deficient soils can increase the amount of nitrate plants accumulate. Maintain your soil pH at 5.5 or greater and be certain adequate phosphorus is available by testing your soil on a regular schedule.

7. Lastly, you can save money at the same time as you reduce your risk of nitrate
poisoning by reducing or eliminating N fertilization during extreme droughts such as we are experiencing this year. We’ve shown in the past that N fertilization of some crops during severe droughts can actually reduce yields and stands. If an adequate stand of legume is present in a pasture or was present at the beginning of the year, the legume or the residual from the legume should be enough to maintain a pasture’s productivity should we get adequate rainfall at some point.

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

**Market News Brief**
It is now official, “the highs for new crop wheat are likely to be behind us”. The U.S. wheat harvest is getting underway and with that comes ‘harvest’ pressure. Early reports on the condition of the ’06 U.S. new crop soft red winter wheat crop are of high quality with very good to excellent test weight. The weather throughout the U.S. for new crop corn and soybean planting is termed non-threatening at the present time. U.S. corn and soybean plantings as well as emergence are in good to excellent shape throughout the Corn Belt. Some say that the beginning of the ’06 row crop growing season in the U.S. Corn Belt is possibly the “best we’ve seen in twenty years”. End of the month position squaring coupled with outside markets turning from a positive to negative influence on commodity prices sums up commodity market activity this past week.

New crop Nov ’06 soybeans are now trading at $6.00 per bushel; new crop corn at $2.78 per bushel; and new crop wheat at $3.95 per bushel. The next U.S. and World Crop Production and Supply/Demand Revisions will be issued on June 9th. U.S. Acreage and Quarterly Grain Stocks will be reported on June 30th.

**Pea Twilight Meeting**
Tuesday June 13, 2006  5:00 p.m. – 7:30 p.m.
Carvel Research and Education Center
Georgetown, DE

Meeting will include a tour of the late pea variety trial and updates on current pea research projects followed by refreshments (including Chesapeake Bay Crabs and bratwurst).

**Pesticide Safety Training and Testing for Pesticide Applicators Certification**
June 6 & 7, 2006
Del Tech Terry Campus, Dover, DE
Room 427 Corporate Training Center

June 6th is training – 8:30 a.m. – 4:30 p.m. Training continues the morning of June 7th, from 8:30 a.m. – noon. The exam starts at 1:00 p.m. on June 7th.

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.

For more information go to: http://ag.udel.edu/extension/pesticide/certappinfo.htm
**Weather Summary**

**http://www.rec.udel.edu/TopLevel/Weather.htm**

**Week of May 25 to May 31, 2006**

**Readings Taken from Midnight to Midnight**

**Rainfall:**
no rainfall was recorded

**Air Temperature:**
Highs Ranged from 92°F on May 30 to 75°F on May 25.
Lows Ranged from 67°F on May 30 to 55°F on May 25.

**Soil Temperature:**
75°F average.
(Soil temperature taken at a 2 inch depth, under sod)

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*The Weekly Crop Update is available online at http://www.rec.udel.edu/TopLevel/Publicat.htm*

*Weekly Crop Update is compiled and edited by Emmalea Ernest, Extension Associate - Vegetable Crops*

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