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COTTON INSECTS

Recent bouts of severe weather have been both a blessing and a curse. The primary early season pest of cotton has virtually been “beaten to death” or washed away by heavy rains, high winds and hail stones approaching baseball size. This is the good news. The bad side of this story is that this weather will slow cotton development with lower temperatures and plant health issues, which will delay crop maturity, resulting in a larger insect damage vulnerability window. Also, where weather events have destroyed cotton outright, there will be similar problems with a late replanted cotton crop. Hopefully the much needed moisture will more than offset the negative aspects of damage and crop delays.

Many farmers have again opted to reduce planting costs by cutting out their use of insecticides for thrips control at planting time. This looks good on the surface because it would allow growers to differentially treat only those fields that develop damaging infestations of thrips. And we all know that every field in west Texas does not have problems with thrips every year. But----this strategy requires careful scouting and counting of thrips adults and immatures, a task that most producers and some consultants cannot do adequately. As a

result, fields needing insecticide applications for thrips are often treated too late to reap most of the treatment benefit.

And the 2003 season has produced high numbers of thrips in several areas. Plants in my untreated plots near Lariat were averaging 14 adults per plant on cotyledon cotton, 14 days after planting.

My considerable research continues to show that the use of Temik or the Cruiser seed treatment will reap considerable monetary benefits for irrigated cotton in areas where thrips are historically a problem. An average of a 21% yield increase over untreated plots has been the rule. Additionally, there are earliness benefits. Last year's test plots, where thrips damage was prevented, were ready for termination 9-10 days earlier than untreated plots. So---if you are trying to push the yield envelope and didn't use Temik or a Cruiser seed treatment, you've probably already missed the earliness boat.



How do you know if cotton needs a foliar treatment for thrips? Well, you can wait for the damage to appear and spray after the fact, or you can get down on your hands and knees and count thrips. In cotton that has never been treated, an average of 1 thrips per mainstem true leaf present is the current suggested threshold. These can be winged adults or wingless immatures. If the cotton has already been treated at planting or with a post plant foliar insecticide then in addition to the total thrips count threshold you will need to have at least 30% of the thrips you count as wingless immatures. This would indicate that



your previous treatment has failed and adult thrips are living long enough to provide reproductive recruitment. Several foliar insecticides will work including Orthene or Acephate, and Bidrin. Others will work, such as one of the pyrethroids, but I tend to stick with these two unless the situation dictates otherwise.

Now, for you folks that had heavy, soaking rains, there is an excellent chance that your Temik has been leached down below the root zone, especially in the sandier soils. Otherwise, expect about three or so weeks of residual control from this insecticide and from the Cruiser seed treatment. If your situation warrants a replant decision or a first planting in previously dry dryland fields, then I would not use an insecticide at planting this late in the season. Instead, evaluate each field individually and treat according to the thresholds provided earlier. Late planted cotton frequently escapes the thrips problem because they have already moved from other hosts such as maturing wheat and are no longer flying between fields and hence no longer an infestation threat.

If the thrips problem persists past the 5th true leaf stage, I would recommend a foliar insecticide application. This advice is contrary to earlier recommendations. But my research from last year indicated that a late, appropriate foliar application netted between \$17 to \$30 dollars extra an acre.

Other early season pest problems reported have been grasshoppers, wireworms and white grubs. Much of the reported hopper problems have been east and southeast of Lubbock thus far but I am sure other areas are involved as well. Most of what I have seen have been wingless immatures.

If this is your case and you decide to treat, Dimilin would be a good choice. Also consider using one of the OP insecticides like Bidrin, methyl parathion or Penncap-M. These are toxic materials and must be carefully used

in accordance to the label. Otherwise, one of the synthetic pyrethroids would probably be appropriate for the longest residual.

The problem with grasshopper control is the field to be treated is seldom the source of the hoppers. Unless the hoppers are controlled at the source, then multiple applications will need to be made to protect existing cotton. Damage evaluations can also be quite subjective and applications due to overestimating pest impact could be made. Fields can stand a little stand loss around the edges without justifying treatments.

While the hopper invasion may appear to be due to multiple generations, this is not the case. What you are observing are waves of movement into your fields and extended egg hatch from hopper sources. Once cotton is squaring, grasshopper problems appear to diminish significantly in most but not all cases.

Soil insect problems have been a little more numerous this year and have mainly been associated with fields planted following sorghum and other grain crops to a lesser degree. Excessive seed depth has also been implicated in many cases. Wireworms and white grubs are the immature stages of two different beetles. They mostly feed on the plant's hypocotyl as it pushes through the soil to the surface. The result is a poor stand. A replant of the whole or parts of fields is often required. A hopper box treatment with Acephate or Orthene has provided some suppression of wireworms I am told. I have also heard that Thimet somehow suppresses wireworm injury. I have not personally observed this. And no, neither Temik or the Cruiser seed treatment is effective against wireworms or white grubs. In fact, there isn't much you can do about a white grub problem. A later planting at a shallower seed depth and



under warmer conditions can improve the situation.

Some surviving, earlier planted cotton is just now beginning to square with a few cotton fleahoppers reported. Late planted or replanted cotton will be especially vulnerable to this tiny square thief because of the shorter growing season and the reduced capacity to compensate for earlier damage. Producers and consultants will need to plant map to determine square retention as well as count fleahoppers and Lygus bugs. A beat bucket sampling method may be the best way to go with these smaller plants. For information on how to use the beat bucket method, go to the [cotton insect management guide](#) and refer to the section on scouting decisions and predators on page 7.

The threshold we currently use would be 25-30 fleahoppers per 100 plants sampled or 8-9 Lygus per 100 plants sampled. In addition to the presence of the appropriate number of pests, square retention would need to have

fallen below 90% the 1st week of squaring, 85% the 2nd week and 75% the 3rd week. Insecticides to use would include Acephate or Orthene, Bidrin,

Vydate, Centric, Trimax or Provado. A pyrethroid could also be used with the recognized risk for flaring an existing aphid infestation and the elimination of most natural enemies for an extended period of time. Higher insecticide rates are often needed for Lygus bugs than fleahoppers

We continue to use a tool called [COTMAN](#) for monitoring cotton growth and progress. It was initially developed by the University of Arkansas, mainly from funding provided by

Cotton Incorporated. Its validation and evolution continues as we to look at compensation capacity (3rd year study), thrips control (2nd year study), irrigation scheduling and the effect of PGRs (both 1st year studies). This is a computer-based tool which tracks square retention and plant stress during the early part of the season. Later it is used to determine when the crop is safe from damage from several insect pests and when the crop is ready for a harvest aid treatment. We will be talking about this tool as the season progresses, how we are using it and what it is telling us in the various tests we are conducting across the area.

Fleahoppers damage only pinhead-sized squares while Lygus bugs can damage all sizes



of squares, blooms and small bolls. Evidence of damage can be a “blasted”, or “dried up” square, a tiny scar where the square has been shed after

damage, or no obvious visible damage if the square was attacked only 1-3 days prior to inspection. These squares are damaged when these bugs inset their mouthparts into the square and remove plant juices.



Bollworm traps have been monitored by Lubbock Experiment Station entomologist Dr. Megha Parajulee at sites in Gaines, Lubbock and Hale counties, even during the off season.

His captures have been quite high for this time of year. What this means down the road is anybody’s guess. Beet armyworm moth activity in traps run across the state by the Texas Boll Weevil Eradication Foundation has been quite low this year for most areas. The Rolling Plains Central and Northwest Plains zones have recorded the highest number. This might indicate that the armyworm threat potential is low this year. One can only hope.

Average number of moths caught per trap the week ending May 29. (Dr. Parajulee study.)

County	Pest	2003	2002
Gaines	Bollworm	215	70
	Beet armyworm	82	233
Lubbock	Bollworm	691	10
	Beet armyworm	29	169
Hale	Bollworm	191	50
	Beet armyworm	96	196



Boll weevil activity based on trapping data is extremely low in west Texas. Only a combined total of 96 weevils have been caught thus far this year in 396,647 trap inspections across the five High Plains zones and the El Paso/Trans Pecos zone! Of these weevils, 86 were captured in the Permian Basin (PB) zone. This is a zone that had some problems last year when boll weevils apparently moved out of the northern Glasscock County area and into the

Permian Basin zone and went virtually undetected until after they had completed another generation in the cotton. Much of the cotton in the southern end of the Permian Basin zone was failed because of lack of moisture. These were planted back to sorghum or haygrazer. Unfortunately, when later rains allowed the sorghum seed to germinate in these dryland fields, a lot of cotton seed also sprouted. At the time, the Texas Boll Weevil Eradication Foundation operational procedures dictated that traps be reduced around failed fields to one per field. This was not sufficient to detect the developing problem early enough to prevent considerable spread to adjacent fields and across to the Rolling Plains Central (RPC) zone. Once the problem was discovered the Foundation aggressively addressed the problem and did succeed in minimizing the damage to the program. It appears so far that little reproduction occurred in the RPC but did occur in the PB zone. The weevils in the PB zone are being caught in the vicinity of the population increases that occurred last year. The Coahoma area is catching the highest numbers of weevils. That area had weevils last year and has some of the best overwintering habitat in the PB zone. The trapping protocol has been changed for this year so we should avoid this problem.

Average accumulative number of boll weevils caught per trap through the week ending June 1.

Zone	2003	2002	2001	2000
Northwest Plains	0	0.0002	0.0657	0.3768
Western High Plains	0.00002	0.001	0.0474	0.698
Permian Basin	0.0009	0.0002	0.0348	0.193
Northern High Plains	0.00004	0.0082	-----	-----
Southern High Plains	0.00004	0.0021	-----	-----

Severe weather has impacted the eradication program in this area by destroying many traps and damaging several vehicles. Trap catches are probably being affected by these weather systems. The good news is that the spray program is not underway and therefore has not been compromised by the severe weather yet.

Except for a minor setback in the PB zone, the eradication zones in the High Plains are doing very well so far this year. **JFL**

COTTON AGRONOMY

Overview of the 2003 crop season. What a roller-coaster start. First, we had very little rainfall after the December, 2002 events at least until April, 2003. Rainfall during the months of March (0.25 inches at Lubbock) and April (1.12 inches at Lubbock) really helped. However, May rainfall was very limited during the first three weeks across most of the area. Unfortunately, high winds were very notable. Lubbock completed the month of May with 1.31 inches of rainfall. For the first 5 months of 2003, Lubbock was about 50% of normal rainfall (2.78 vs. 5.57 inches for the long-term average). This posed a significant problem for stand establishment for many irrigated fields, as producers had to turn on the pivots after planting to insure a stand. Some marginally moist fields had difficulty producing uniform stands. Planting of dryland fields across the region was generally held up until after mid-May rainfall occurred, however, some producers who were nearing [insurance deadlines](#) did dry-plant some fields.

Most counties were able to get the irrigated crop planted in a reasonably timely manner, but planting progress in 2003 was about 10-15% behind 2002 on May 30. By the 20th of May, with insurance deadlines closing in, substantial dryland acres were severely lacking for planting moisture. However, major dryland producing counties such as Dawson began receiving badly needed rainfall around May 20. By June 1, many dryland areas had received

some rainfall to alleviate the dry soil conditions, and planters were beginning to roll.

The cotton planted in early May moved along at a snail's pace due to [poor heat unit distribution](#). Although we completed the month of May with above "normal" heat units, the distribution was very poor. The long term average for May is about 295, and the 2003 total was 347. The poor distribution problem was noted with the 14 days with less than 10 heat units/day, and only 9 days with 15 or greater. In mid-May, we were still encountering some days with low temperatures in the 50s in the central portions of the region and mid-40s in some of the northern areas. Cotton fields planted during the good warm-up period of May 5-11 were subjected to the extremely cool temperatures. Many producers were forced by dry conditions at planting to crank up the pivots and apply irrigation water, which cooled soil temperatures even more. A record low HIGH temperature was set around the 20th, which was only 60° F degrees. This came immediately after a record high set on the 18th, which was 103° F degrees. Poor growing conditions have resulted in substantial chilling injury and seedling disease in fields planted in late April and early May, particularly north of Lubbock (see Cotton Seedling Disease Update). Early June cool temperatures and cloudy conditions are not helping these sick fields.

Recently, widespread rainfall and hail events have occurred across the region. Major meteorological events were encountered on May 31st, and June 3rd and 4th. On May 31st Dawson County was hit hard, losing about 15,000-20,000 acres to a serious storm, which also turned over at least 12 center pivot systems. The great value of a terminated small grains cover can be seen in [these photographs](#). The

cotton in the small grains cover will likely survive with an acceptable stand whereas the conventional tillage cotton will have to be replanted. High winds, localized flooding, and hail destroyed many cotton fields in Hockley, Cochran, Bailey, Parmer, Lubbock, Hale, Crosby, Floyd, Swisher, Terry, Yoakum, Gaines, and Dawson counties. Initial estimates of damage from the storms were as high as 50,000 acres destroyed, but that number does not include any estimates of the June 4th storm events. It is getting ugly out there. We suspect that easily 100,000 acres or more may have been affected across the region, but as of this writing, it is too early to tell. We will work on obtaining this information for next week's newsletter. Producers will still be assessing stand damage over the next few days as the fields dry. The good news was that some reasonable rainfall did occur to help the moisture situation in the region.

Many glyphosate herbicide brands are available today including Roundup

WeatherMax, Touchdown IQ, Glyphos, etc. Be careful to check the label to make sure they contain the same active ingredient. Generally, only the salt formulation and surfactants are different. The differences in the efficacy of these materials for weed control are generally very minimal according to various weed scientists. For very good comments from Dr. Bob Hartzler (Iowa State University) concerning this go to:

<http://www.weeds.iastate.edu/mgmt/2001/glyphosateformulations.htm>



Of course when you do not use an approved Monsanto brand Roundup formulation for burndown or in-crop applications, the Roundup Rewards Value Package is voided. However, Syngenta has established the Touchdown Assurance Plan for eligible Roundup Ready cotton varieties.

Roundup Ready variety Replant/Crop Destruct Programs. Cotton producers are again supported by various programs from Monsanto (Roundup Rewards) and Syngenta (Touchdown Assurance Plan). Of course the respective program is based on which herbicide has been used on Roundup Ready cotton varieties for burndown or in-crop applications (Roundup WeatherMax or Touchdown IQ).

Monsanto's Replant Relief program includes a Crop Loss/Replant Refund which can be implemented when a producer plants an eligible cotton variety and it is lost or destroyed on all or part of planted acres by July 15, 2003 or 60 days after planting, whichever comes first, and the producer replants with the same brand of eligible cotton variety. Eligible varieties with Bollgard and/or Roundup Ready genes will receive 100% of technology fees plus 85-100% of suggested retail seed prices, depending upon brands. Deltapine, FiberMax, Paymaster, Stoneville, and Sure-Grow varieties will refund 85% of retail seed prices, whereas AFD, All-Tex, and Beltwide Cotton Genetics will refund 100%. If a different brand is replanted, 100% of the technology fee is provided. The Replant Relief/Crop Destruct Refund is implemented when a producer loses the crop by August 31, 2003 and does not replant. For Bollgard varieties, 100% of Monsanto's published technology fees plus \$13/bag is refunded. The Bollgard with Roundup Ready "stacked" varieties will be eligible for 100% technology fee refund plus \$15/bag. For Roundup Ready varieties, 100% of the technology fee plus \$9/bag will be refunded. Most cotton varieties with Monsanto transgenic traits planted in the High Plains region are eligible for this program. Contact your Monsanto representative or seed provider for a complete list.

The Syngenta Crop Loss Protection Refund program covers eligible Roundup Ready varieties and Bollgard/Roundup Ready "stacked" varieties. Touchdown herbicide must have been used on the crop for burndown or in-crop applications. The Crop

Loss/Destruct Refund will provide 100% of technology fees for Roundup Ready and Bollgard/Roundup Ready "stacked" varieties, plus \$9/bag for Roundup Ready and \$15/bag for Bollgard/Roundup Ready types. This is for all or part of your planted acres and covers through August 31, 2003 if you do not replant. The Crop Loss/Replant Refund program covers 100% of the technology fees for Roundup Ready and Bollgard/Roundup Ready stacked varieties. Syngenta will provide an additional 85% of the respective transgenic seed cost. The crop must be replanted to the same or another qualifying technology crop, and the loss must occur within 60 days of planting or July 15, 2003, whichever comes first. If you replant to a different brand of eligible cotton variety, you qualify for 100% technology refund only. Most cotton varieties with Monsanto Roundup Ready or Bollgard/Roundup Ready traits planted in the High Plains region are eligible for this program. Contact your Syngenta representative for a complete list.

Considerable "fine print" exists on sales materials covering these programs. Please refer to the respective documents and contact your local Monsanto or Syngenta representatives for clarification.

Roundup WeatherMax label issues.

Monsanto's brand of glyphosate has been changed to Roundup WeatherMax for 2003. This is a new formulation of the old familiar glyphosate. Roundup Ultra and UltraMax will be disappearing from the warehouses across the region, but there may be some volumes of these materials out there. The Roundup WeatherMax is formulated as a potassium salt, and has quicker rainfastness (only 30 minutes required as per the sales literature). The label for Roundup Ready cotton is now contained in the WeatherMax label, so producers are not now required to have a copy of the supplemental label for Roundup UltraMAX herbicide in their possession, as long as they are spraying WeatherMax. Read and follow the label, as it has much critical information. Remember that

the Roundup WeatherMax has a higher acid equivalent (a.e.) / gallon (at 4.5 lb per gallon) than the old Roundup UltraMax. Best control is generally obtained from Roundup WeatherMax when most weeds are small (less than 3 inches). Up to two 22 oz/acre applications of Roundup WeatherMax over-the-top (OT) can be made to Roundup Ready varieties. At least 10 days between applications and two additional mainstem nodes of growth are required. No single application may exceed 22 oz/acre.

Once past the four-leaf stage, two post-directed or shielded sprayer applications can also be made, at a maximum 22 oz/acre per application. Ten days and two additional mainstem nodes of growth are also required between these applications. Post-directed equipment should be adjusted to direct the spray to the bottom of the plants and spray contact onto leaves should be minimized. Use less than 30 psi spray pressure. Salvage treatments of Roundup UltraMax may be applied OT after the 5th leaf reaches 1 inch in diameter at 22 oz/acre when weed competition may threaten to cause crop loss. These treatments can result significant boll loss, delayed maturity and/or yield loss. No more than one salvage treatment should be made during the growing season. Follow up applications of up to 44 oz/acre can be made OT again once 20% boll crack has occurred to control late season or perennial weeds. The maximum amount of Roundup WeatherMax that can be used OT (ground cracking) through layby is 2.5 quarts/acre, while the seasonal maximum for all applications is 5.3 quarts/acre. Ammonium sulfate is generally necessary when preparing Roundup WeatherMax spray mixtures in West Texas due to “hard” water and “tough” weeds. The general recommendation for Roundup UltraMax spray mixtures is to add 17 lb of spray grade ammonium sulfate/100 gallons of spray.

Watch for Roundup Ready over-the-top window closure. Some earlier planted Roundup Ready fields are nearing the end of

the over the top window for Roundup applications. Cotton that was planted around May 1 that has had no environmental damage is nearing the cutoff stage. The considerable thrips and wind/sand damage has “ragged up the plants” and has resulted in severe stress, stacked nodes and has made staging the seedling plants more difficult. Where leaves have been lost or badly damaged, it is imperative that mainstem nodes be counted in order to properly [stage the cotton](#).

If late applications are made, then significant yield losses can be encountered. Field research conducted at the Lubbock Center during the last three years indicated that when Roundup was applied OT after the window closure, lint yields were decreased in 2 of 3 years from 5 to 19%. Plant condition, as affected by environmental factors, appeared to influence potential yield loss.

Tank Mixes for Roundup Ready and BXN varieties. The addition of a half-rate (0.6-0.8 oz/acre) of Staple herbicide to the first OT application of glyphosate may enhance control of several weed species and also provide some residual control. Improved control of some morning glory species and palmer amaranth is stated. Rainfall or sprinkler irrigation (0.5 to 1") after application is required for residual control. According to the DuPont Staple label, Staple can be tank mixed with Buctril 4EC for use on transgenic BXN cotton varieties. The Staple rate should be 0.8 oz/acre plus 1 pint/acre of Buctril 4EC. Improved control of various pigweed species can be obtained. Rainfall or sprinkler irrigation amounts of 0.5 to 1 inch are required to obtain residual control. The DuPont Staple label should be consulted for specifics.

Dual Magnum has a supplemental label for Touchdown IQ or Roundup Ultra or Roundup UltraMax/Dual Magnum tank mixes for use on Roundup Ready cotton. Dual Magnum should be tank mixed with the supported glyphosate material for residual control of grasses and yellow nutsedge at 1 to 1.33 pt/acre.

According to Syngenta personnel, the cotton should be at least 3 inches tall, but not larger than 4 leaf stage (where the 5th leaf is quarter-sized). Also, it is suggested that ammonium sulfate, spray adjuvants, surfactants fertilizer additives, or other pesticides NOT be included in the spray mix as phytotoxicity/crop injury may occur with the Dual formulation. The supplemental label states that “postemergence OT applications of this tank mixture may cause temporary injury in the form of necrotic spotting to exposed cotton leaves which will not affect normal plant development. Do not apply Touchdown or Roundup postemergence OT to cotton past the growth stage limit specified on their respective labels. Do not use on sand or loamy sand soils in Gaines County, TX.”

Potential for reduced weed control from supported glyphosate materials could exist in extremely hard water areas due to the exclusion of ammonium sulfate. Best results are obtained when the Dual is incorporated 24 hours after application using 0.5 to 1 inch of irrigation water. Other glyphosate brand tank mix partners such as Roundup WeatherMax, and generics are not supported by Syngenta on this supplemental label. The supplemental label states that Roundup Ultra, Roundup UltraMax, and Touchdown are supported. For specific questions concerning this application contact your Syngenta representative.

Roundup/insecticide tank mixes. Some questions have been asked concerning the use of Roundup/insecticide tank mixes. Generally Acephate or Orthene, dimethoate, and Bidrin have been the tank-mix partners mentioned for thrips control. No problems with cotton phytotoxicity or product efficacy have been noted.

Replanting and late planting considerations. Dr. John Gannaway has evaluated conventional variety performance under late-planted (mid-June) conditions at the Texas Agricultural Experiment Stations at Halfway and Lubbock. In general, short-season varieties have lower

fiber quality (shorter, weaker), but produce higher lint yields than longer season types produced under short-season conditions. In short-season environments varieties such as Paymaster 183, AFD Rocket, All-Tex Express and All-Tex Quickie are generally expected to produce higher yields than other longer season types. However, a 3-year study (1997-1999) from Halfway and Lubbock indicates that Paymaster 2200RR yielded similarly to Paymaster 183. Fall heat unit accumulation in those seasons was certainly above average in those years, and benefited the longer season variety. All-Tex Xpress RR is a short-season Roundup Ready variety that has recently been released, and growers should probably consider Paymaster 2167RR, and perhaps Paymaster 2379RR. There is a high likelihood that picker varieties, even the “early” picker varieties, will produce low micronaire fiber if planted at this time.

Seed availability of various varieties may be an issue, so growers should contact seed companies to determine other potential options. Closely monitoring fruit retention will be key to the success of any late planted cotton crop in the High Plains. It is critical that outstanding square retention be the goal going into early bloom. For more detailed information, visit the Lubbock Center Web site at: <http://lubbock.tamu.edu/cotton/> and retrieve the following documents: Making Replant Decisions, Effects of Stand Loss and Skips on Cotton Yields, and the 1999, 2000, 2001, and 2002 Cotton Performance Tests in the Texas High Plains and Trans Pecos Areas of Texas. The Cotton Performance Test publications have data from late-planted trials conducted at Lubbock and Halfway and would be of great value to producers considering late-planted variety selection.

Yield potential significantly decreases once the insurance cutoff dates are encountered. Some estimates of yield loss potential for delayed planting across High Plains region were generated several years ago. [This information](#) indicates that in Lamb County on

June 10, we would normally anticipate about 65% of the yield potential that would be possible compared to a May 10 planting date. For Lubbock County, the value is about 75%, and for Dawson County, about 80%.

A new guide to cotton root disorders has been published by Cotton Incorporated. This publication was generated by several workers across the Cotton Belt and was funded by the Texas and Arkansas State Support Committees. Cotton root disorders detailed in the publication include: herbicide injury from amino acid synthesis inhibitors, photosynthetic inhibitors, and seedling growth inhibitors; pathogens including fungi and nematodes; fertilizer injury; chilling injury; and soil compaction. The guide is available on the Web at: <http://pestdata.ncsu.edu/cottonpickin/disorders/>
RB

COTTON SEEDLING DISEASE UPDATE

While there has been an abundance of cotton seedling problems, very little can be attributed to seedling disease this year, at least prior to all these rain events. There were a few cases of seedling disease early on in the southern counties (Dawson and Gaines), where lesions occurred on the area of the stem right at the soil line. In some cases it was the fungus *Rhizoctonia*, and in others it was *Pythium*. In all cases, the seed was treated with fungicides against both of these fungi, so the field must have had a lot of fungal pressure. Fields where cotton followed peanuts appeared to have a higher incidence of these lesions. It may have been a result of having peanuts left on the ground from last year, which served as a food source for these fungi.



I expect the seedling disease problems caused by *Rhizoctonia* and *Pythium* to intensify because of the wet weather we are currently experiencing, especially in the northern areas of the High Plains. If a field is going to be replanted with caught seed, it is important that a fungicide be added. Hopper box treatments which may help keep the seed from rotting are: System 3, Delta-Coat AD, Nu-Coat, and Prevail. Fungicide seed treatments which protect against *Rhizoctonia* are: Baytan 30 FL, Ascend 30, Nusan 30 EC, Nu-Flow T, Nu-Flow D, PCNB FL, RTU-PCNB, Maxim 4 FS, Nuflow-M, Vitavax, and Vitavax-PCNB. Fungicide seed treatments that protect against *Pythium* are: Allegiance, Apron TL, and Apron XL. Remember *Rhizoctonia* and *Pythium* are most dangerous when soil conditions are wet.
TW

CORN AND ALFALFA INSECTS

It is pretty quiet for now in the corn fields I checked in Parmer and Bailey counties. The good news is that thrips, which are not a pest of corn, are eating many of the spider mites trying to establish in the young crop. Thrips can be a corn grower's friend. In fact, we had trouble starting our mite insecticide trial last year because the thrips were eating all of our mites. We finally had to spray the thrips with insecticide in order to let the mites become established. Earlier corn problems included a severe infestation of flea beetles in some areas.

We had some major problems with alfalfa weevils and cowpea aphids in alfalfa in March and April, and many fields required treatment. Because of the increase in the number of dairies, many growers are experimenting with alfalfa. If you are new to the crop, or just want a refresher, read our 2002 publication '[Managing Insect and Mite Pests of Texas Forage Crops](#)'. Early-season insect control in alfalfa is very important, and early

damage can affect tonnage and quality in established alfalfa through the second and sometimes third cutting. New plantings are at even more risk. **PP**

INSECTICIDE UPDATE

Organic growers have a new option for caterpillar, leafminer, and thrips control. Dow AgroSciences has received a label for Entrust, a formulation of spinosad that is approved for use in organic production. Listed crops include corn (field corn, sweet corn, popcorn, and corn grown for seed), cotton, dry beans and peas, asparagus, cereal grains, cole crops, fruiting vegetables, leafy vegetables, potatoes, and many others. The [label is attached](#). Spinosad is also sold as Tracer and Spintor for use in the “non-organic” world. (According to Dr. Leser, [Spinosad is a good caterpillar material in cotton but he has not seen any data on thrips control efficacy. Therefore, he would not recommend Tracer or Entrust for thrips control in cotton.](#))

Dow AgroSciences has also sent us a revised label for the use of [Intrepid 2F](#) in field corn, seed corn, and sweet corn for control of European and southwestern corn borer, true armyworm, and western bean cutworm. The pre-harvest interval is 21 days EXCEPT for sweet corn, which carries a 3-day pre-harvest interval. The rotational crop restrictions have been revised this year and they now state, “crops with registered uses may be replanted at any time. All other crops grown for food or feed may be replanted after 7 days.” **PP**

CROP WATER ISSUES

Recent thunderstorms have delivered highly variable rainfall amounts over the South Plains. While there has been localized hail damage and field flooding problems, most of the precipitation has been well received and beneficial so far.

Crop water use. Evapotranspiration (ET, crop water demand) estimates for the South Plains are accessible on the South Plains ET Network website at:

<http://lubbock.tamu.edu/irrigate/weatherdata.html>. Texas Panhandle and South Plains ET estimates are accessible on the North Plains ET Network website at:

<http://amarillo2.tamu.edu/nppet/station.htm>.

Some of these estimates are summarized below; crop water demand estimates for additional crops are available from the networks. These crop water demand estimates reflect expected maximum water use for well-watered crops.

Average Daily Estimated Crop Water Demand for Week of May 29 to June 5, 2003 (Inches Per Day)							
Location	Reference ET	Corn		Cotton	Peanuts	Sorghum	
		4 Leaf	10 Leaf	Emerged	Emerged	Emerged	4 Leaf
Halfway	0.28	0.14	0.28	0.14	0.10 – 0.14	0.11	0.16
Lamesa	0.30	0.12	0.32	0.15	0.07 – 0.17	0.12	0.18
Lubbock	0.30	0.12	0.34	0.15	0.11 – 0.15	0.12	0.18

Irrigation management decisions are affected by several factors, including economics, crop water demands, and system limitations. In the South Plains, irrigation well capacity is often a major limiting factor, making managed deficit irrigation (supplemental irrigation) a common practice. Since many of our systems cannot meet peak crop water demands later in the season, growers may rely on stored moisture in the soil profile to help meet these demands. Because pre-season irrigation losses can be very high, early season is generally the best time to build reserves of stored soil moisture. Keep in mind that water applied in excess of soil water holding capacity will likely be lost to deep percolation or runoff. Crop root zone depths and soil water storage capacities were discussed in the [April 11, 2003 FOCUS on](#)

PEANUT NEWS BRIEFS

Shelley Nutt is now the Executive Director of the Texas Peanut Producers Board (TPPB) and she just got a telephone in her new, temporary Lubbock office. Shelley can be reached at 806-687-6363. We would like to welcome TPPB to their new Lubbock home.

The Western Peanut Growers Association invites area peanut producers to attend a Peanut Marketing Seminar to be held at 2 dates and in 3 locations. Seminars will be held June 16, 2003 at 12:00 noon in Brownfield, TX - (BBQ lunch begins 11:30 a.m.), June 16 at 7:00 p.m. in the American Legion Hall in Seagraves (BBQ dinner begins 6:30 p.m.) K&S Steak Place, 2224 Hobbs Hwy, and on June 17 at 8:30 a.m. in Lamesa, TX at the Dawson Co. Community Center (breakfast burritos & doughnuts available).

Seminar topics include:

- The "A to Z" of FSA peanut forms, requirements, payments and timing
- The Marketing Loan process and calculations. (Covering 1007s, warehouse receipts and redemption)
- The Cooperative Marketing Association
- Contracts
- Explore additional options

Guest Speakers include:

Marshall Lamb - Economist, USDA/ARS
National Peanut Lab, Dawson, GA

Kathy Sayers - State FSA Program Specialist
Kirk Goodman - State FSA Program Specialist
Dan Hunter- Manager, Southwestern Peanut Growers - CMA

Area shellers have been invited to this seminar to answer contract-specific questions on an individual basis. Shellers include Birdsong Peanuts, Clint Williams Company, Golden Peanut Company, Sunland, Inc., and Wilco Peanut Company.

A series of peanut IPM videos are being developed by Scott Russell and I with funding from the Texas Peanut Producers Board. The series is primarily intended to address pest management issues, but it will include units on irrigation and nematodes. **PP**

QUESTIONABLE MOSQUITO CONTROL PRODUCTS

With the advent of West Nile Virus many people are paying increased attention to mosquito control. We are pleased to provide a link to a Texas A&M news article that describes how to protect your pocketbook from bogus mosquito controls. This article describes devices that don't work, and these include sonic repellents, propane-fueled devices, and mist sprayers. The article also describes what does work. Here is a sample quotation; "The best thing about sonic repellants is they are generally inexpensive so buyers aren't throwing that much money away ... " It is worth your time to read the [article](#). **PP**

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