



Tennessee Agricultural Production Association Spring – 2011

President's Message, Fred Allen

As we come out of a winter that had extraordinary weather and natural disaster effects around the world, we enter into a spring and planting season in which heavy rains, hail, tornadoes, cold snaps and flooding have already left their mark. Combine that with a turbulent economy and ever increasing inputs costs, agriculture once again faces many uphill battles for the 2011 growing season. However, none of those challenges are new to our producers, it's a matter of when they occur and which ones are on the table now. Delayed planting, shifting acres to other crops, replanting planted acres that have been flooded, cold wet soils and seed rot/seedling diseases, leaching of N applied, loss of herbicides applied, and the list goes on just to get the season started. Every year brings its own unique set of challenges and 2011 will be no different.



The bright spot in all of this turmoil is the unprecedented high prices for crop and animal commodities across the board and the Ag sector being the strongest part of our economy. At this writing, last week's prices (Memphis) were: corn, \$7.37/bu; cotton, \$1.72/lb; soybeans, \$13.60/bu; and wheat, \$7.28/bu. On the animal side, feeder cattle averaged \$1.30/lb and market hogs averaged \$0.96/lb. I did not check poultry, fish and others. Obviously higher prices are great news for our producers and present many opportunities for higher profits.

The bad news is that the flip side is true as well. The opportunities to lose more money are greater as well. For example, when soybeans are selling for \$6 per bushel and a soybean producer has an average loss of 1 bu/a then the direct loss is \$6 per acre. On the other hand, when soybeans are selling for \$13/bu and the

average loss is 1 bu/a then the direct loss is more than double. All of us know that 1⁺bu/a loss is not uncommon in soybeans, corn and wheat due to diseases, inadequate fertilizer, shortage of water during growing season, harvest inefficiency, and many others. For illustration purposes, assume that a producer raises 1000 acres each of corn, cotton and soybeans and 500 acres of wheat, and that he averaged losing 1 bu/a on the corn, soybean and wheat acres as well as 10 lbs/a of cotton during 2011. If the producer could sell his 2011 crops for last week's prices, then the combined losses for the 1bu + 10 lb on the 3500 acres scenario would be \$45,450! That is enough money to pay cash for a new pickup truck and a new four wheeler, or make a sizeable payment on a mortgage. During many years, the crop losses are higher than the projection above.

TAPA members to the rescue! Here is where all of us fit in. Our members work across the spectrum of issues that affect Tennessee production agriculture. From seed and genetics, fertilizers, crop protection, machinery (planting, spraying, harvesting), irrigation, education, regulatory compliance, grain storage, to marketing -- all of us have important roles to play in helping our producers increase production and reduce losses. We share a common goal of helping our farmers and agribusinesses remain economically viable and environmentally sound. Sounds like sustainable agriculture. Thanks to each of you and the company or organization that you represent for the positive effects that you have on Tennessee agriculture, and for the good things that you do for TAPA.

It has been an honor and privilege for me to serve as your President. I am pleased to be part of an organization whose membership makes a positive difference in Tennessee agriculture. We all know that a healthy and viable agricultural industry is vital for state and national security.

New Business: I would like to strongly encourage you to make plans now to attend the 2011 annual meeting which is going to be held in Gatlinburg, Tennessee, July 26-28, 2011. We will be meeting at the Edgewater Hotel, and, for those of you who have attended past summer meetings know, the Edgewater is a great location! To avoid conflicts, be sure to add this event to your calendar. [Gerald Simmons](#) is putting together another fine program, so don't miss out. If you have suggestions for topics or speakers, please let him know, and he will consider adding them to the program. Hope to see you in Gatlinburg in July!

TAPA's 2011 Summer Meeting

The Tennessee Agricultural Production Association will be hosting its summer meeting on July 26th – 28th at The Edgewater in Gatlinburg, Tennessee. The room rate is \$74 plus tax per night and will include a complimentary breakfast. Reservations can be made at 800-423-9582 or at the hotel website at www.edgewater-hotel.com. The cut-off date to make reservations is Sunday June 26, 2011.

Reservation requests received after the cut-off date are subject to the standard room rates and space availability.

We have added an afternoon of recreation and fellowship to this year's summer meeting. You will have the choice of a golf tournament or trap shooting or leisure time in the mountains. Hope to see you there.



Web Sites That May be of Interest

Tennessee Farmers Cooperative
<http://www.ourcoop.com/ourcoop08/main/default.aspx>

University of Tennessee
<http://www.utk.edu>

University of Tennessee Extension Service
<https://utextension.tennessee.edu/Pages/default.aspx>

University of Tennessee Institute of Agriculture
<http://www.agriculture.utk.edu/>

Fruit Pest News
<http://web.utk.edu/~extepp/fpn/fpn.htm>

Tennessee Crop and Pest Management Newsletter
http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/ipmnewsletters.htm

USDA Soybean Rust Web Site
<http://www.sbrusa.net>

"What's Happening" issues can be found at
<http://eppserver.ag.utk.edu/Whats/whatshap.htm>

Pesticide Recertification Deadline

Provided by Gene Burgess

October 21, 2011 is the deadline for Private and Commercial Applicators to be recertified in Tennessee. Commercial Applicators must accumulate a certain number of points over a period of three years to become recertified or retake their respective category exam. Points may be earned by attending any meeting related to certification topics. These may be external and up to 50% internal meetings including on-line programs. One may earn four points per year in any category by attending the annual UT Extension Commercial Applicator Recertification Program, which is offered in March and again in July in Knoxville each year. The county Extension offices have a number of Pesticide Safety Education Programs, PSEP, where Commercial Applicator may earn points. The number of points required varies with the different categories. The point requirement is prorated if you are certified the second or third year of the three year program. The point requirement for each category is as follows:

30 Points

C7, Industrial, Institutional, Structural & Health Related Pest Control

18 Points

C1, Agriculture Pest Control
C3, Ornamental and Turf
C6, Right-Of-Way
C8, Public Health Control
C10, Demonstration, Research & Regulatory Pest

Control

C12, Pesticide Dealer

10 Points

C2, Forest Pest Control
C4, Seed Treatment
C5, Aquatic Pest Control

9 Points

C11, Wood Preservatives
C13, Anti-Fouling Marine Paint
C14, Microbial
C16, Sewer Line Treatment

For more information, you may contact Dr. Gene Burgess @ 865-974-7138 or "gburgess1@utk.edu."

Glyphosate Under Attack

Herbicides containing the active ingredient glyphosate (Roundup) have been hailed as safe and beneficial in most agricultural and urban weed control programs since 1974. However, since the late 1990's, environmentalists have raised health concerns of infertility and cancer over the use of this product. Earthjustice (<http://earthjustice.org/>) recently sued the US Department of Agriculture over concerns of heavy glyphosate usage. The Environmental Protection Agency (<http://www.epa.gov/oppsrrd1/reregistration/glyphosate/>) is examining the human and environmental health risks and has set a deadline of 2015 for determining if glyphosate should continue to be sold or limited in some way. The [Institute of Science in Society](#) has called for a global ban, citing research showing the chemical has extreme toxicity,

including indications it can cause birth defects. However, other research has shown this material is extremely safe and is less of a risk to humans and/or the environment than other commonly used alternatives.

Source: <http://news.agropages.com/Feature/FeatureDetail---945.htm>

2010 Award Winners



Fred Allen presents Curtis Yates the 2010 Person of the Year Award, Gene Burgess and Russ Patrick Honorary Memberships and Ron Akin with a Leadership award at the 2010 Summer Meeting.

Cleston Parris, retired Executive Secretary for both TAPA and CCA, was presented with a plaque and a monetary gift from both TAPA and Certified Crop Advisors. These were tokens of appreciation for all that he has done throughout the many years of dedicated service to these organizations. Both Boards of Directors were sincerely thankful to have had someone as capable as Cleston Parris for as long as he had served. We hope he will stay in touch with our groups. We have invited Cleston and his wife Helen to the July meeting in Gatlinburg so we may honor him in person.



Soybean Pathogen Found to be Resistant to Fungicides

Frogeye Leaf Spot (FLS) caused by the fungus *Cercospora sojina* has shown resistance to strobilurin fungicides in a commercial field in Lauderdale County, Tennessee this year. Strobilurin fungicides belong to a group of fungicides known as the quinone outside inhibitors (QoI), which is the most widely-used group of foliar fungicides applied to field crops. In petri dish tests conducted by Plant Pathologists at the University of Illinois, spores from isolates

of *C. sojina* were found to germinate in the presence of high concentrations of azoxystrobin, pyraclostrobin, and trifloxystrobin, which are active ingredients found in fungicide products known as Headline (BASF Corporation), Quadris (Syngenta Crop Protection), and Stratego (Bayer CropScience). Many times these one-active ingredient products are mixed with a different chemistry class known as the demethylation inhibitors, sometimes referred to as triazoles. In general, triazoles have not been as effective as the strobilurins in controlling most of the soybean foliar diseases; however some are better than others.

The Lauderdale County producer was disappointed in the control of FLS this season after two applications of a strobilurin fungicide and began to suspect fungicide resistance. FLS leaf samples obtained from this field were sent to Dr. Carl Bradley for resistance testing and were found to be resistant to strobilurin fungicides. Currently, this is the only known report of strobilurin resistant *C. sojina* in the state or soybean growing area of the US. Research is ongoing in Dr. Bradley's lab at the University of Illinois, in which *C. sojina* isolates from Illinois and other states are being evaluated for fungicide resistance. Strobilurin fungicides have been deemed high risk for pathogens developing resistance to them. This high risk status has been determined by the Fungicide Resistance Action Committee (FRAC), an international committee that evaluates fungicide likelihood of developing resistance. FLS has been the number one soybean foliar disease in Tennessee, causing an average annual yield loss of 7.8% state wide for the last five years. Lack of crop rotation and planting susceptible varieties have been responsible for much of the increase in yield loss. An increase in the number of reported races of *C. sojina* may also play a role in the heavy yield loss. Dr. Newman of the University of Tennessee Institute of Agriculture continues a soybean variety testing program for disease susceptibility and resistance to FLS and other diseases at the Research and Education Center at Milan, TN. This testing is supported by The Tennessee Soybean Promotion Board. Results for several years can be found at this web site: (www.utcrops.com). Strobilurin resistance to other common foliar diseases such as Septoria Brown Spot and Anthracnose has not been noticed in any commercial fields. To limit the spread and development of strobilurin fungicide resistant *C. sojina* isolates, growers are urged to manage FLS thru the use of resistant and tolerant soybean varieties, crop rotation and use of effective triazole or triazole-strobilurin fungicide products for controlling FLS in susceptible varieties when appropriate. For additional information on FLS contact your local Extension county agent. Source:

- Melvin A. Newman, Ph.D., Professor, Extension Plant Pathologist, Entomology and Plant Pathology Dept., Univ. of Tennessee Extension, Jackson, TN.
- Carl A. Bradley, Ph.D., Assistant Professor of Plant Pathology, Extension Specialist, Dept. of Crop Sciences, Univ. of Illinois, Urbana, IL.

Travelers Avoid Bringing Bed Bugs Home

Provided by Karen M. Vail

Unless you've had your head buried in the sand for the past decade, you are aware that bed bugs have made a resounding resurgence. This small insect, which ranges in size from the 1 mm long first instar nymph up to the 8mm fed adult, is a parasite that sucks blood from people and other animals. While no disease-causing organisms have been documented to be biologically transmitted by bed bugs to people, this insect still causes allergic reactions to their bite and major emotional stress! Most folks just don't like the idea of a bug feeding on them as they sleep.

How to Avoid Infestations

Because bed bugs hide very well and are mobile, it is difficult to prevent them from moving from place to place. The following guidelines will help you avoid bringing bed bugs to your home.

When traveling.....

1. Be able to recognize all the fed and unfed stages (eggs, nymphs and adults) of a bed bug (as well as their feces and shed skins).
2. When traveling, store luggage away from the beds. Some people will store luggage in the bathroom or place it in a sealable plastic bag or on the luggage rack away from the bed. Laptops give off heat and will attract bed bugs. When not in use, store a cool laptop in a sealable plastic bag.
3. Inspect the hotel room before you unpack. Add a flashlight, hand lens and gloves to your list of items to pack. Use these to check behind the headboard, along the mattress seams or other accessible cracks and crevices. Ask for another room if bed bugs are found.
4. Inspect luggage for bed bugs before leaving the hotel.
5. Upon your return home, wash and dry clothes immediately.
6. Leave luggage sealed in a plastic bag until you have time to inspect and clean the luggage.

At home or work

1. When acquiring used or rented beds, bedding, furniture, appliances, clothing and other items that may harbor bed bugs, inspect them before purchasing or bringing them into the structure.
2. Inspect your clothing, purses and backpacks before entering the structure. You could even leave purses, backpacks and briefcases in sealed plastic bags during the day to prevent bed bugs from hitching a ride home with you.
3. Use bed bug mattress encasements on boxsprings and mattresses. This denies the bed bugs access to two preferred harborage and the encasement's light color makes bed bugs easier to detect. Encasements must be intact to be effective, so check them regularly for tears and ensure the zipper remains closed.
4. Reduce bed bug hiding places by sealing cracks and crevices and around pipe and wire penetrations, and by reducing clutter, especially under the bed.
5. Exclude vertebrate pests which may serve as a host.
6. Place a CLIMBUP Insect Interceptor or similar items under beds or furniture and around the room to detect bed bugs
7. Inspect your bed when changing sheets to detect bed bugs when the populations are still low.



First instar bed bug nymphs (1mm) aggregating with adult bed bugs (5-8 mm).



Bed bug fecal spots left on hard surfaces will appear 3-dimensional. Note 1 mm long bed bug egg in top left.



Bed bug fecal spots look similar to ink stains or mildew when they appear on porous surfaces such as fabric.



2011 Schedule of Events

TOPIC	Location	Date	Time
Twilight Forage Tour	Spring Hill, TN - MTREC	5/24	5:30pm
Cotton Scout School	Jackson, TN - WTREC	5/25	
Twilight Forage Tour	Springfield, TN – HR-REC	5/26	5:30pm
Beef & Forage Field Day	Knoxville, TN - ETREC	6/9	7:00am
Fruits of the Backyard	Spring Hill, TN - MTERC	6/14	8:30am
Twilight Forage Tour	Grand Junction, TN – Ames Plantation	6/21	5:30pm
Tobacco, Beef and More	Spring Field, TN – HREC	6/23	7:00am
Twilight Forage Tour	Greeneville, TN - RECGRN	6/30	5:30pm
Invasive Plant Ecology Short Course	North Platte, NE	7/6 – 7/8	
Summer Celebration	Jackson, TN – WTREC	7/14	10:00am
TAPA –Summer Meeting	Gatlinburg, TN - Edgewater	7/26-7/28	
Weed Olympics	Knoxville, TN	7/26 – 7/27	
Steak and Potatoes Field Day	Crossville, TN – PREC	8/2	8:00am
American Phytopathological Society (APS)	Honolulu, Hawaii	8/6 -8/10	
Cotton Tour Field Day	Jackson, TN - WTREC	9/7	8:00am
Turfgrass Field Day	Knoxville, TN - ETREC	9/15	7:30am
Forest Resources Field Day	Oak Ridge, TN - FRREC	9/27	8:00am
Tennessee Entomological Society	Nashville, TN -	9/29 – 9/30	
Pumpkin Field Day	Jackson, TN - WTREC	9/29	1:00pm
Northeast Tennessee Beef Expo	Greeneville, TN - RECGRN	10/13	7:30am
Entomological Society of America	Reno, Nevada -	11/13 – 11/16	

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