

# *Lower Rolling Plains* **Pest Management News**

Jones

Mitchell

Nolan

Scurry

## Texas Cooperative Extension

### Wheat

Rainfall from the showers and thunderstorms since April have made for a very wet spring. We have had some severe weather, but for the most part, we escaped major damage. Since the Easter weekend freeze, the wheat, which was not badly damaged, is progressing well. We have a potential for high yields across the region.

With the cool wet conditions, **rust** is present in many fields and may become a problem in late maturing fields. The following table indicates possible yield losses from leaf rust at different severity levels on the flag leaf.

Rough Estimate of Percent Yield Loss for Different Leaf Rust Severities

Growth Stage	Rust severity on Flag Leaf				
	10%	25%	40%	65%	100%
Flowering	10	15	20	30	35
Milk	2	5	8	14	20
Soft Dough	1	3	4	7	10
Hard Dough	1	1	2	3	5

Table taken from Kansas State University

This table illustrates that yield loss is minimal during the grain filling growth stages, except when the flag leaf has extensive infection (>65% infection). However, fungicides are only labeled for use prior to the grain filling growth stages and only protect against possible yield losses. Also, a yield potential of 30 bu/ac or more is needed to justify the use of a fungicide.

Dr. Billy Warrick has received reports of fields with **loose smut** in both wheat and oats. The kernels within the heads are a mass of black spores. This becomes important to producers that are keeping seed for planting purposes next year. Even at low infection levels, harvested seed will need to be cleaned and treated with a fungicide to prevent problems in next year's crop.

Nolan County has the dubious honor of joining other counties that have **Hessian fly**. On

April 26, a field near Nolan was confirmed to be infested with Hessian fly. This may only be a localized problem within the county at this time, but will be a pest we have to learn to manage. There are no insecticides available for control this late in the season. If you are noticing spots within the field where tillers are severely stunted or lodged, check plants for larvae or bring samples to the county extension office at the Nolan County Courthouse, room 305. The white larvae (maggots) and the dark brown puparium, known as the "flaxseed seed stage", are found under the leaf sheaths on stems in the plant crown or just above a node. To sample plants, dig up the root crown and peel back the lower leaf sheaths of lodged tillers.



"Flaxseed" puparium



"Flaxseed" puparium

Wheat is the preferred host, but barley, rye, spelt, and emmer may be infested. However, **oats are not a host of the Hessian fly**. If you find Hessian fly in your fields the following techniques will help reduce spreading this pest to non-infested areas and reduce future economic losses.

- **Do not move infested straw (bales) to non-infested areas.**
- **Clean harvester before moving to other fields.**
- **Turn stubble under at least 6" to 9" to bury fly larvae, puparium, and pupae. This reduces adult emergence from buried plant residue.**
- **Burning wheat stubble does not kill the Hessian fly pupae at or below the soil surface.**
- **Rotate to crops other than wheat or barley.**
- **Grow wheat varieties that have genetic resistance. Resistance is not immunity, and there are different levels of resistance among varieties, because some races, called biotypes, of Hessian fly have developed and can survive on certain resistant varieties.**
- **Plant wheat later in the fall to reduce the number of fall infestations. Ideally for managing Hessian fly, wait until October 1 to plant wheat for grazing and plant after October 31 for grain production.**
- **Guacho® or Cruiser® are labeled for use as seed treatments and can be used with delayed planting and resistant wheat varieties.**

## Grain Sorghum

Grain sorghum is getting off to a good start and with the soil moisture, we have potential for good yields. The grain potential is set by the eight leaf stage, so any fertilizer applications need to be applied prior to this growth stage. Also, between the 7 to 8 leaf stage is when the head or growing point differentiation takes place. To prevent yield reductions from herbicide treatments, any broadcast applications of 2,4-D or Banvel<sup>®</sup> should be made prior to these growth stages. The labels state that these products can be applied until plants are 12 to 15 inches tall for 2,4-D or 15 inches for Banvel<sup>®</sup>. But, when sorghum is under stressed conditions, plants may not reach these heights until the growth stage is past the 8 leaf stage. The label for Atrazine, also, states that post-emergent applications must be made before the crop reaches 12 inches in height. With this in mind, make herbicide applications based on growth stages and not on crop height.

Now that cotton is starting to be planted, applications of Banvel<sup>®</sup> may be safer to use than 2,4-D. Other post-emergent herbicide options for broadleaf weed control are Atrazine + Banvel<sup>®</sup>, Atrazine @ 3 pts/A + 1 qt. Emulsifiable oil/A, propazine, Ally<sup>®</sup> @ 1/20 oz./A + 8 oz. of 2,4-D/A, and Peak<sup>®</sup>. Be sure to read and follow label recommendations. A quick reference for herbicide rates and restrictions for grain sorghum is on the Texas A&M Research and Extension Center, Lubbock website at <http://Lubbock.tamu.edu/sorghum>. We have a copy of this guide in our office.

## Cotton

Planting will be in full swing as soon as conditions dry up. For the past two (2) weeks soil temperatures (10-day averages) have been at 65° F ( $\pm$  2° F). The weather forecast is predicting more chances of rain and cooler temperatures at least until next week. This means soil temperatures will not be increasing very much until we have an extended period of 80° F plus temperatures. Seed quality may be important this year to insure a good healthy uniform stand. Check with the seed company or dealer to obtain the Cool-Warm Vigor Index rating for the seed you are buying. A value of 160 or greater indicates excellent vigor, a value of 140-159 represents good vigor, 120-139 is fair, and anything less than 120 indicates poor vigor.

If cool wet rainy weather spells should continue, conditions could become favorable for seed or seedling diseases. Hopefully, we will not have a problem. But, if a field has a history of having seedling diseases, the use of seed treatments or waiting to plant until soil temperatures are closer to 70° F may be in order. The following Web site link for the National Cotton Council newsletter, Cotton Physiology Today vol13.no.1, provides good information about Planting and Replanting Decisions, Photographs of Chilling Injury, and Cotton Stand Establishment, <http://lubbock.tamu.edu/cotton/pdf/cptvol13no12007.pdf>.

## **INSECT SCOUT SCHOOL**

The annual cotton insect scout school will be held on June 4, 2007 at the Texas A&M Agricultural Research and Extension Center located north of San Angelo. Since most producers scout their own fields, you may want to attend this meeting. Anyone wanting to attend should contact Mr. Richard Minzenmayer at 325-365-5212 by May 30. This will ensure we will have enough informational books to go around.

### **AGENDA**

- 8:30 a.m. Registration
- 9:00 a.m. Welcome & Introduction - Dr. Tom Fuchs
- 9:05 a.m. Growth & Development of the Cotton Plant - Dr. Billy Warrick
- 9:40 a.m. Early Season Cotton Insect Pests; Thrips, and Cotton Fleahoppers - Mr. Richard Minzenmayer
- 10:00 a.m. The Identification, Biology and Damage Characteristics of the Cotton Bollworm, Tobacco Budworm and Pink Bollworm - Dr. Chris Sansone
- 10:20 a.m. Break
- 10:40 a.m. The Identification, Biology and Damage Characteristics of the Cotton Boll Weevil and Cotton Aphid - Mr. Warren Multer
- 11:00 a.m. Identification and Importance of Natural Enemies - Dr. Ed Bynum
- 11:20 a.m. The Identification of Secondary Insect Pests and Their Damage Characteristics -Dr. Mark Muegge
- 11:40 a.m. Discussion and Exam
- 12:00 p.m. Adjourn

## **LOWER ROLLING PLAINS NEWSLETTER**

The 2007 edition of the newsletter will be written weekly from June 15 through September, and as needed the rest of the year. The newsletter provides information about insects, weeds, diseases, and crop management suggestions for cotton and other major crops in Jones, Mitchell, Nolan, and Scurry counties. The newsletter is available for free, if sent by e-mail, but due to postage rates increasing the newsletter by mail will cost \$10.00 per year. Newsletters are also available at web sites for the Lower Rolling Plains IPM (<http://lrpipm.tamu.edu>), Texas Pest Management Association (<http://www.tpma.org>), and the Nolan County Extension office (<http://nolan-co.tamu.edu>). Please complete the enclosed subscription card and return to Ed Bynum, 100 E. Third St., Ste 305, Sweetwater, TX 79556.

## **IPM SCOUTING PROGRAM**

I am beginning to organize the survey program for Jones, Mitchell, Nolan and Scurry Counties, which will include representative fields within each county. Scouting of these survey fields will be at no cost to the producer. If you would like to have one of your fields considered for this program, please call me at the office (325-236-9011), my mobile (325-660-1772), or fill out the section in the attached newsletter subscription form.

Subscription Form  
2007 Lower Rolling Plains IPM Newsletter

US Postal Mail Copy: \$10.00

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Zipcode \_\_\_\_\_

Please make check payable to: TCE Account # 233100

E-mail Copy: Free

Name: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

IPM SCOUTING PROGRAM

If you are interested in having a field scouted this year, please provide a telephone number where I can call and visit with you: \_\_\_\_\_

**Please place this form and check (if applicable) in a stamped envelope and return to:**

**Ed Bynum**  
**100 E. Third St., Suite 305**  
**Sweetwater, TX 79556**