

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

Jones

Mitchell

Nolan

Scurry

## Texas Cooperative Extension

### General Situation

The main topic has been how much rain totals everyone received this past weekend. The amounts have generally been between 4 to 5 inches, but places in Nolan County had rainfall amounts up to 11 inches. The weather station near Wastella recorded 5.4 inches. The rains caused Oak Creek to rise 15' 4" and Lake Sweetwater to rise 29' 8". In low lying areas of fields, crops are standing in water. In situations like these, plants will suffer from anaerobic stress (lack of soil oxygen) and can cause cotton to shed big bolls due to a lack of carbohydrate production. But, overall the benefits of the rain should outweigh any damages.

### Cotton

#### Insect Situation

Worm infestations are still a major concern across the area. Bollworm/fall armyworm larval numbers have been up to 7875 per acre and damage to bolls and squares has been substantial in some non-bt cotton fields. Several fields have been treated and the level of control has been good to marginal. The level of control has been mostly related to the size of the larvae at application and application coverage. If fields were previously treated within the last 7 to 10 days, fields should be monitored for possible re-infestation. Treatment thresholds are similar for both bollworm and fall armyworm infestations. **Treatment may be justified when counts average 5000 or more small worms per acre. Or 10 to 12 worms per 100 plants.** Control is best when larvae are less than ½ inch. If treatment is warranted the maximum labeled insecticide rate and higher volume of water should be utilized. In the August 9, newsletter (volume 10, issue 14) I reported on control options for fall armyworms and stated that "Chemicals, such as Steward (10 oz./ac), Intrepid (4 to 10 oz/ac), Tracer ( 2.14 to 2.9 oz/ac) and Diamond (8.0 to 9.0 oz/ac), should provide adequate to good control of fall armyworm in cotton. Field tests have shown Intrepid at 6 oz./ac provides effective control. However, Intrepid is not effective against cotton bollworms. The Diamond product label suggests using rates of 12.0 to 14.0 oz/ac for cotton bollworms. The recommended rate for Tracer is the same for fall armyworm and cotton bollworm, but Tracer is only effective against small worms. Also, Steward should provide adequate control of small size cotton bollworm larvae. As with any product, good coverage is critical for good control. Read and follow label directions when using any insecticide. I had stated that pyrethroids do not provide effective control, but since writing the e-mail I have learned that in the southeast individuals are recommending two applications of a pyrethroid (high labeled rate) at a 5-day interval." Refer to Texas Cooperative Extension publication E-6A "Managing Cotton Insects in the High Plains, Rolling Plains, and Trans Pecos Areas of Texas 2007" for a listing of insecticides labeled for control of cotton bollworm. This publication can be found on the internet at <http://tcebookstore.org/tmppdfs/19343383-24.pdf>. Caterpillars have been found in flowers and bloom tags of Bollgard, Bollgard II, and Widestrike cotton varieties, but, damage has been minimal.

Cotton aphids were starting to decline before the rain and the heavy rains should further reduce

aphids numbers.

**Plant Growth Regulator**

There have already been some questions about needing to apply mepiquat chloride (MC) and how much to apply. If cotton has already “cutout” an application of mepiquat chloride will be used to prevent excessive vegetative growth. Concentrations of 10 ppm of MC within the plant will slow down growth considerably while concentrations of 12 ppm will shut down cotton growth. In situations where cotton has not reached 5 nodes above white flower and some cotton growth is still wanted a concentrations of 8 ppm to 10 ppm of mepiquat is needed in the plant.

The actual amount to apply (rate/acre) will depend on how big and bushy the plant is at application. For some situations, application rates of up to 32 oz per acre of MC may be needed to obtain the desired concentration within the plant. If previous applications of mepiquat were applied then reduced rates could be utilized. Dr. Billy Warrick forwarded a program which calculates the rate (oz. per acre) of MC to apply based on row spacing in inches, number of plants per foot of row, plant height (inches), total number mainstem nodes (cotyledon=0), amount of MC 4.2% (oz. per acre) previously applied, and the level of MC concentration within the plant desired. This MC rate calculator indicated a need of 8 to 19 oz. per acre of MC for three different situations. This indicates a single rate may not be appropriate for all fields.

Since Stance is a relatively new growth regulator there is not adequate information to know what rates to use under our current situation.

**Grain Sorghum**

Sorghum midge (see photos) and headworms are still present in numbers in grain sorghum in flower to soft dough growth stages. Refer to August 9th newsletter (volume 10, no. 14) for tables listing economic injury levels and insecticide products for midge control.

A large percentage (60% - 80%) of caterpillar found in the sorghum heads are fall armyworms. See table for a list of insecticides for use to control corn earworm and fall armyworm in sorghum heads. Best control will be achieved when larvae are less than 1/2 inch long.

Table 18. Suggested insecticides for controlling corn earworm and fall armyworm in sorghum.

Insecticide	Concentrate/ unit area	Days from last application to:	
		Harvest	Graze
Carbaryl (Sevin®) (4F)	32-64 oz	21	14
(80S or 80WSP)	1.25-1.8 lb	21	14
(4XLR+)	32-64 oz	21	14
Cyfluthrin (Baythroid® 2E)	1.3-2.8 oz	See remarks	
Cyhalothrin (Karate® 1E)	2.56-3.84 oz	See remarks	
(Warrior® 1E)	2.56-3.84 oz		
Esfenvalerate (Asana® XL)	5.8-9.6 fl oz	21	—
Methomyl (Lannate®) (2.4LV)	12-24 oz.	14	14
(90WSP)	4-8 oz.	14	14
Zeta-cypermethrin (Mustang Max®)	1.75 to 4.0 fl oz	14	45

**Remarks**

**Cyfluthrin.** If one or two applications are made, green forage may be fed or grazed on the day of treatment. If three applications are made, allow at least 14 days between last application and grazing.

**Cyhalothrin.** Do not graze livestock in treated area or harvest for fodder, silage or hay.



Photo by: Alton N. Sparks, Jr., University of Georgia, Bugwood.org



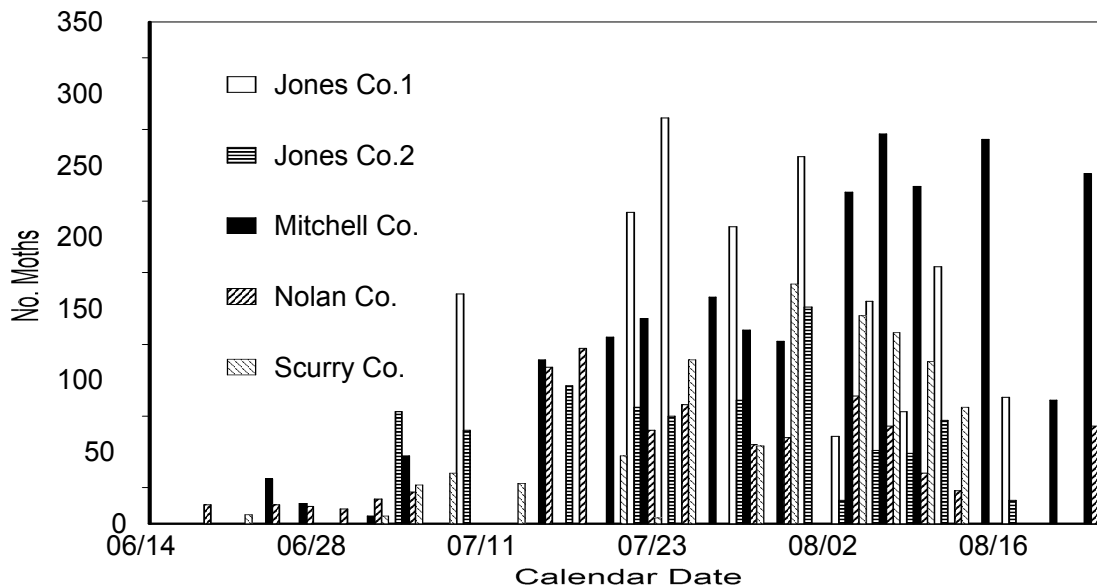
Photo: Texas Cooperative Extension

Since several grain sorghum fields are ready to be harvested. An application of glyphosate may be needed to kill the stalk and tillers, help dry down the grain, and to kill weeds. Glyphosate labels recommend making an application at 30% or less grain moisture. There is a minimum of 7 days between application and the start of harvesting. The label suggests avoiding the use of glyphosate to sorghum that is infected with charcoal rot. This is probably due to severe stalk lodging. Even without charcoal rot, harvesting should be started as soon as possible. Preferably after 7–10 days from application as dead stalks weaken and begin to lodge naturally. Follow labeled directions for the rate recommendation for the glyphosate product selected for use.

### Grower Meetings

Monday –Aug. 27	Tuesday– Aug. 28	Wednesday–Aug. 29	Thursday–Aug. 30
Scurry County  Farmers Coop Gin – E Hwy 180 8:30 a.m.	Nolan County  Central Rolling Plains Coop Gin office 8:30 a.m.	Mitchell County  Nathan Hoyle’s field - S. side of I20 and 3/4 mi. West of Lucas Rd.  8:30 a.m.	Jones County  Farmers Coop Gin—Stamford  8:30 a.m.

### Cotton Bollworm Moth Traps



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