



# Pest Management News

News About integrated pest management for  
producers in Runnels-Tom Green Counties

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## GENERAL SITUATION

Rainfall amounts varied from 2-inches in the Hatchel area to over 10-inches in the Wingate Community. Tom Green county received 4 to 7 inches of rainfall last Friday and Saturday as well. This rain will help finish out our dryland cotton crop. Most areas of the Concho Valley are in very good shape with a full profile of water. So watch for re-growth. Our primary emphasis should be on protecting and maturing out the fruit which is currently set. Fruit which set after the 15<sup>th</sup> of August has little chance of producing a harvestable boll. PGR's can help reduce the potential re-growth which is likely to occur after such a rainfall event. Most of the cotton varieties planted today are mid-full season types and have the ability to continue vegetative growth throughout the growing season.

Cotton aphids seem to be declining over the area as a general rule. Heavy rainfall, hotter temperatures and high numbers of natural enemies have all contributed to the decline. The heavy boll load and the fact that much of the cotton is in physiological cut-out may also impact aphid populations since nitrogen has shifted from vegetative growth toward filling the bolls. This essentially denies the aphids the amino acids they thrive on.

Bollworm larval counts ranged from 0-24 treatable worms per 100 plants and egg counts ranged from 0-5 eggs per 100 plants. Egg counts are way down this week. We have been monitoring larval infestations for the past two weeks in Bollgard, Widestrike and Bollgard II cotton varieties and have yet to find any significant damage. It's puzzling to me and scary to ride the infestations but, if damage is not being found, why treat and open yourself up to other potential problems? We will continue to monitor these fields closely and keep you updated.

Stinkbug egg masses and stinkbug nymphs were found in several cotton fields this week. Monitor fields closely for the presence of stinkbugs. Conchuela stinkbugs and other seed-feeding bugs feed by inserting their syringe like mouthparts into various parts of the plant and sucking up the juices. Their feeding activity usually causes small bolls to abort and results in wart like growths on the carpal wall and stained cotton lint in older bolls. This feeding activity also provides an entrance for bacteria which can cause boll rotting.

**Management and decision making.** Examine 6 row feet of cotton in several locations in the field. When there is an average of one or more stinkbugs per 6 feet of row, feeding can cause excessive loss of squares and small bolls and may stain lint. Additionally, at least 50 small bolls (the diameter of a quarter) should be examined. If 20 percent of the small bolls have internal injury from stinkbugs and stinkbugs are present, then treatment should be considered. Stinkbugs often are clumped near field margins.

Some insecticides recommended for stinkbug control would include Bidrin® at 8oz./acre or Acephate (Orthene® 90S) at 0.8 lbs./acre. The pyrethroids also do a good job but could cause an aphid flareup.

## WHEAT

Fall armyworms (FAW) have been a problem in several different crops across the state this year. We have had FAW infestations in both grain sorghum and cotton and therefore it is a strong possibility of seeing them in small grains planted early. The following information was taken from Dr. Gaylon Morgan's newsletter written on August 20, 2007:

“We throw the term integrated pest management around a lot but many times the tactics chosen are usually designed around one pest whether the pest is a disease, insect or weed. Rarely is there an opportunity to manage all three pests with one relatively simple tactic. However, now that small grain planting season is near, producers have the opportunity to manage three diseases and four insects just by managing weeds and volunteer small grain prior to planting.

Producers should consider proper management practices as a method to manage risk. Taking the time and effort to manage weeds and volunteer small grain may not keep you out of early season problems, but the lack of weeds and volunteer grain certainly improve the odds in the producer's favor.

Fall armyworms have been present throughout most of the state this year. The above average rainfall and mild temperatures have greatly increased populations in 2007. Destroying the weeds and volunteer small grain will go a long way in keeping the moths from laying eggs in the fields prior to planting. This tactic is also effective in managing wheat curl mite, which is primarily responsible for spreading wheat streak mosaic virus (WSMV) and High Plains virus (HPV). By reducing the early season population of the mite, producers can delay the onset of the virus until later in the season when its impact will not be as great. A survey conducted by Dr. Carl Patrick, Extension Entomologist in Amarillo, showed that 85% of the volunteer wheat had the mite and symptoms of WSMV. These early fields not only have problems with the disease but also serve as a reservoir to infest other fields.

The destruction of weeds and volunteer wheat will also help in managing Hessian fly populations. This insect has become a continuing problem in the southern part of the Rolling Plains in the past ten years and had a devastating impact on wheat in the northern Blacklands for the first time in fifteen years. The idea is to limit the first generation of the Hessian fly so populations do not build up to high numbers in the fall.

Finally destruction of the weeds and volunteer small grain can help with managing greenbugs. The increase in acreage of grain sorghum has helped increase the numbers of greenbugs present in the system. Destroying the weeds and volunteer wheat will take away the bridge the greenbugs need to transition from grain sorghum to small grains. Destroying the weeds will also help in managing other aphids that are responsible for Barley Yellow Dwarf virus (BYDV). Again, the later the aphids, which transmit the virus, enter the small grain fields, the less impact the disease will have on the wheat.

Wheat yields were extremely variable across the state this year. Because of this yield variability, producers need to take a hard look at their fertility programs this season.

There is one concept that everyone should be reminded of before planting the 2008-09 wheat crop. The most limiting nutrient creates the ceiling on the yield potential. Typically, this is nitrogen; however, other nutrients can also limit the yield potential, if they are not readily available. This is why it is critically important to have a balanced fertility program. For example, if only enough phosphorous is available for a 20 bu/a yield, then any nitrogen fertilizer applied beyond a 20 bu/a yield is more-or-less wasted. Another example would be the Concho Valley, where yields were extremely low this year because of the late-freeze. In this situation, there may be residual nitrogen still available in the soil for this year's crop; however, without a soil test there is no way to determine how much.

Remember..... Additional nitrogen fertilizer can be applied prior to the jointing growth stage; however, other nutrients should be applied prior to planting the wheat crop.”

**UPCOMING MEETINGS**

Due to a training, there will be no Wall Coop meeting on Tuesday, August 28, 2007. I will have a turnrow meeting at Ballinger Coop on Wednesday, August 29, 2007 at 8:30 a.m.

**Tom Green Bollworm Moth Traps**

Date	Trap-1 Zea-Total moths trapped	Average daily # trapped	Trap-2 Zea-Total moths trapped	Average daily # trapped	Trap-3 Zea-Total moths trapped	Average daily # trapped
8/17	n/a		n/a		n/a	
8/20	126	31.5	204	51	272	68
8/22	35	17.5	97	48.5	63	31.5

**Runnels Bollworm Moth Traps**

Date	Trap-1 Zea-Total moths trapped	Average daily # trapped	Trap-2 Zea-Total moths trapped	Average daily # trapped
8/17	n/a		n/a	
8/20	192	64	16	4
8/22	84	42	0	0

**Tom Green Budworm Moth Traps**

Date	Trap-1 Wilde Total moths trapped	Average daily # trapped
8/17	n/a	n/a
8/20	0	0
8/22	4	2

## Rowena

Heat Accumulations	2006	2007	2006	2007	Rainfall	
Planting Date	Aug 17	Aug 17	Aug 25	Aug 21	March	5.98
May 01	2235.5	1812.1	2451.0	1894.3	April	2.95
May 15	2065.4	1655.7	2280.9	1747.9	May	7.36
June 01	1766.2	1470.9	1981.7	1553.1	June	6.74
June 10	1577.6	1300.5	1793.1	1382.7	July	1.29
June 15	1449.2	1199.9	1664.7	1282.1	August 21	3.13

## Wall

Heat Accumulations	2006	2007	2006	2007	Rainfall	
Planting Date	Aug 17	Aug 17	Aug 25	Aug 21	March	3.85
May 01	2303.4	1777.2	2508.0	1857.9	April	.84
May 15	2030.7	1633.0	2235.3	1713.7	May	2.74
June 01	1769.0	1440.5	1973.6	1521.2	June	4.58
June 10	1574.3	1276.8	1778.9	1357.5	July	2.56
June 15	1448.1	1173.8	1652.7	1254.3	August 21	5.03

The world is a book and those who do not travel read only one page"

St. Augustine