

# Northwest Plains Pest Management News

Volume 6 Issue 17

Bailey and Parmer Counties

August 30, 2007

Cooler temperatures and chances of precipitation have moved into the area. A good general soaking rain would be a great benefit with the exception of those producers harvesting silage.

Preliminary corn silage yields are ranging from 22 to 33 tons per acre. Corn damaged by hail and/or produced with marginal irrigation capacity are, as expected, those at the lower end of the yield range, 22 to 25 tons per acre while fully irrigated corn yields have been in the 28 to 33 ton per acre range. Generally it appears that the early planted corn may out yield the later planted corn. The early planted corn was able to take advantage of the cool wet conditions early in the growing season while the later planted corn has been subjected to hot, dry and windy conditions during the critical pollination period. When looking at the growing seasons of early and late corn, a greater percent of the late corn's season will be exposed to the harsh environmental conditions. Corn that was "double cropped"

<b>Daily Water Use</b>	
Crop	Inches per day
Corn	.16-.27
Cotton	.26
Grain Sorghum	.22
Bermuda grass	.12
Fescue/ Bluegrass	.17

<b>Cotton Heat Unit Accumulation<sup>1</sup></b>			
Location	Current	2006	Long Term <sup>2</sup>
Farwell	1367	1702	
Friona	1381	1830	
Muleshoe	1416	1832	1565
Muleshoe WR	1431	1886	

<sup>1</sup> DD 60 based on May 1

<sup>2</sup> Based on Muleshoe long term weather data 1971-2000

behind wheat appears to be particularly impacted.

**Stalk rot** has been observed in several fields and it appears to be worse in white corn. Infested fields have been produced in a wide range of production environments such as marginal irrigation, full irrigation, moderate mite pressure, no mite pressure. I have been unable to correlate any of these conditions with the presence of stalk rot. It is likely that fields exposed to heavier mite pressure and drought stress will be impacted more than fields produced under more ideal conditions. First symptoms appeared as drought stress followed by premature desiccation. The



*Stalk rot in corn.*



*Premature death due to stalk rot.*

infection appeared to begin in the roots and/or crown of the plants and is moving up the stalk. Infested corn now looks mite infested but without the mites, ie curled and broken tops. Light infestations may be limited to occasional plants but heavier infestations may infect large areas or whole fields.

Stalk rot may be caused by fungi and/or bacteria, symptoms vary depending on the organism involved, but they all result in stalk decay and lodging which causes difficulty in harvesting. Yields are reduced by poor ear development and by loss of ears on lodged plants at harvest time.

Samples have been sent to the diagnostic lab in Amarillo to identify the causal agent. There are no remedial treatments but if we can figure out the disease, resistant or tolerant hybrids can be selected to plant next year. Infested fields should be harvested as soon as possible to minimize lodging related losses.

**Cotton bollworm** infestations have been sporadic. Some fields have exceeded economic threshold while others have only minimal infestations. Most heavier infestations have been in the 10,000 to 15,000 worms per acre range which just meets the established economic threshold of 10,000 small worms per acre. It's very difficult for an economic infestation to

become established in drought stressed fields which have shed most tender squares and small bolls. Don't let your guard down, moths are active and more eggs have been observed. A few medium sized larvae have been observed in Bollgard cotton but damage has been minimal. Bollgard II and Widestrike bollworm management systems are more effective compared to the older Bollgard technology.

**Spider mites** continue to infest much of the area sorghum. Populations range from 30% to 90% of leaves with mites present. Colony size has ranged from a single mite to 50% of the leaf surface area.



*Yellow sugarcane aphid and greenbug mummy*

Drought stressed sorghum is particularly susceptible to mite infestation. Parasitic wasps and predators are holding most **greenbug** infestation in check. Yellow sugarcane aphids are present in most fields but beneficials appear, in general, to be preventing population

*Monti Vandiver*

**Northwest Plains**  
  
**IPM**  
*Partners With Nature*

Monti Vandiver  
 Extension Agent-Integrated Pest Management  
 Texas Cooperative Extension  
 401 3rd Street  
 Farwell, Texas  
 806-481-3300

<http://txipmnet.tamu.edu>  
<http://parmer-tx.tamu.edu>

*Educational programs conducted by Texas Cooperative Extension serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin. The information given herein is for educational purposes only. References to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas Cooperative Extension is implied.*