

Northwest Plains Pest Management News

Volume 5 Issue 13

Bailey and Parmer Counties

August 11, 2006

In fear of being accused of “beating a dead horse” I’ll state that hot dry conditions continue to dominate the Northwest Plains of Texas. Local weather stations did however record .19-.37 inches of rain this past week.

Much of the early planted corn is in full dent and some has developed a starch line in the kernels approaching 1/3 way down. As a general rule once the starch line has progressed 1/2 way down the kernel and the soil moisture profile is **full**, irrigation can be terminated. Irrigation termination when the starch line is 1/2 way down the kernel and the soil profile is not at full capacity could negatively impact yield.

Southwestern corn borer (SWCB) have been extremely heavy in some area corn. Some fields have had infestations which justified two insecticide applications. Corn borers and fall armyworms are feeding in the ear shank in many fields. The Corn borers will eventually leave the ear area

Daily Water Use	
Crop	Inches per day
Corn	.28
Cotton	.29
Grain Sorghum	.25
Bermuda grass	.20
Fescue/ Bluegrass	.27

Cotton Heat Unit Accumulation¹			
Location	Current	2005	Long Term ²
Farwell	1437	1289	
Friona	1557	1305	
Muleshoe	1544	1260	1284
Muleshoe WR	1572	1365	

¹ DD 60 based on May 1

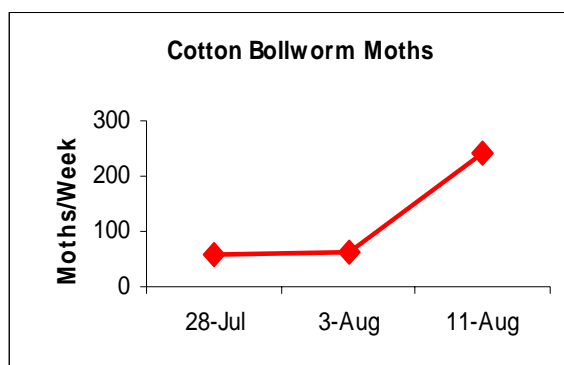
² Based on Muleshoe long term weather data 1971-2000

and migrate down the plant, tunnel into and girdle the stalk preparing to over-winter. Yield loss will occur as a result of SWCB feeding in addition to lodging. Yield losses can range from 9-11% as a result of feeding damage in addition to any yield loss due to lodging. Late planted silage corn has been observed with very high infestations. Most silage corn can be harvested prior to lodging but yield losses from direct feeding may be incurred.

The cotton pest situation continues to be quiet. A few eggs, as high as 6,000 per acre, were observed in a few fields this week but in most cases only an occasional egg was present. Moth activity has significantly increased



Bollworm eggs, Ipmimages.org

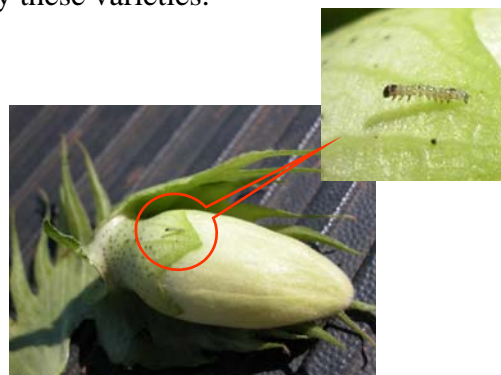


compared to last week. This increased activity will likely translate into increased egg lay. Eggs will hatch in 3-4 days and larvae will grow to 1/2 inch in approximately 5 days. Once larvae exceed 1/2 in they become very difficult to control. Fields should be scouted regularly to determine infestation levels and insect size.

The established economic threshold for bollworms is **10,000** or more small worms per acre. However, if two or more key predators are present for each small worm, control measures may not be needed or a microbial insecticide may be used. The actual treatment level will vary according to the ability of the individual scout to locate small larvae, the age structure of the infestation, maturity of the crop and crop value. Individuals who are unable to easily find small larvae should consider reducing treatment level to 5,000 per acre. Once larvae reach 3/8-1/2 inch in length the threshold should be reduced to 5,000 worms per acre.

Research trials evaluating Bt transgenic cotton, i.e. Bollgard™, Bollgard II™, and WideStrike™, have determined it to be effective against cotton bollworm. Under heavy bollworm pressure insecticide

treatment may be needed to avoid excessive damage. Bollgard II™ and WideStrike™ express two Bt genes and have shown to be more effective compared to the original Bollgard™ technology which only expresses a single Bt gene. Treatment of Bt cotton with foliar insecticides for bollworm should be considered when 5,000 larvae per acre larger than 1/4 inch are present and 5 to 15 percent of the squares or bolls are worm damaged. As in non-Bt cotton, predators and parasites are very important in reducing the numbers of eggs and larvae and they compliment the control provided by these varieties.



Small bollworm

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