



Northwest Plains Pest Management News

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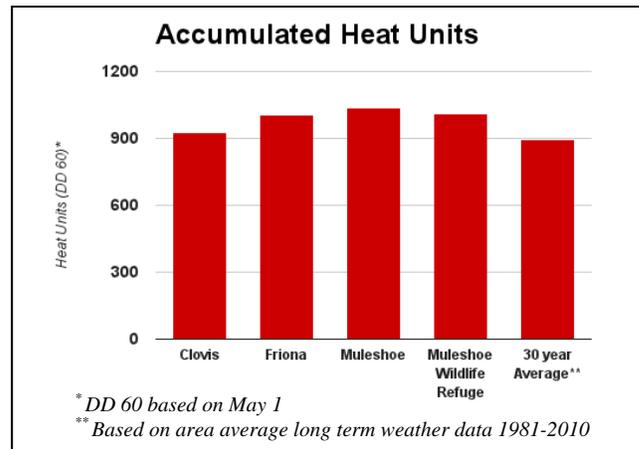
Bailey and Parmer Counties

July 18, 2013

The area has been blessed with a wide spread slow soaking rain! The moisture will provide a much needed boost to crop production and has already provided a significant boost in producer optimism. Local NOAA weather stations recorded from near 1 inch to over 2.5 inches over the last several days; individual reports in excess of 3 inches were also received.



Recent precipitation and cooler weather could not have come at a better time for corn which is pollinating. Stress occurring a few days prior to tasseling can cause ear development to slow resulting in a lag between pollen shed and silking which can lead to poor pollination. Moisture demand has decreased from over .40 inch/day to .13 inch/day during the recent cool humid conditions. Moisture demand will rapidly rebound to previous levels as temperature increases and humidity decreases. Hopefully current soil moisture along with irrigation will



get the early corn past peak moisture demand. A good soil moisture profile will also be a good base for later planted corn as moisture demands increase.

Spider mites have continued to progress in many corn fields, cool wet conditions may slow them down but many infestations are well established and will likely require treatment shortly to avoid excessive yield loss. The action threshold for spider mites in corn is based on crop value, percent infested leaves, and leaf area damaged by mites. The following table was developed based on fast acting miticides and may need to be amended slightly for slower acting miticides.

Potential Dailey Water Use*	
Crop	Inches/Day
Corn	.13-.28
Cotton	.10-.21
Sorghum	.10-.20

*Daily estimated crop water demands (inches of water per day) based on PET data from Halfway.

Control cost per acre	Market Value (\$) per acre				
	500	550	600	650	700
15	18/9	16/9	15/8	14/7	13/7
20	24/13	21/11	20/10	18/10	17/9
25	29/16	27/14	25/13	23/12	21/11

% infested leaves per plant / % total leaf damage



<http://nwpipm.blogspot.com/>



IPM radio show on Fox
Talk 950 AM Wednesdays
from 1:00-2:30

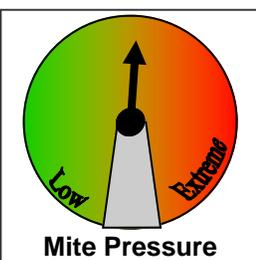


<https://twitter.com/NWPIPM>

Population dynamics are extremely important in accessing spider mites, regular scouting should be conducted to document population trends and natural enemy activity. A rapidly increasing mite population should be dealt with more aggressively while a slower developing population may allow some flexibility to determine if natural enemies will keep them in check. I've said it before but it's worth repeating the conservation of natural enemies is the corner stone in spider mite management. Key natural enemies include six spotted thrips, spider mite destroyers, minute pirate bugs, and predatory mites. Management of other pest such as corn borer and fall armyworm can significantly impact mite populations.



Six spotted thrips



The use of broad spectrum insecticides can flair mites by removing natural enemies which are suppressing mite populations. Miticides may not provide adequate suppression in the absence of natural enemies which could necessitate multiple

applications to get a raging spider mite population under control.

Southwestern corn borer (SWCB) trap captures remain low but I expect the second generation moth flight to pick up shortly. Moths are $\frac{3}{4}$ inch long, white, with no distinct markings. Eggs are flattened, approximately $\frac{1}{8}$ inch in diameter and can be laid singly or in groups of 2 to 3 or more. When in groups, eggs are laid in an overlapping pattern resembling fish scales. Freshly laid eggs are creamy white but develop three parallel red lines in about 24 hours. Small larvae will feed on leaves, ear shoots, husks, and silk for about 5 to 10 days before tunneling into the stalk or ear shank and continuing to



SWCB eggs

feed. Second generation SWCB will lay 75% of their eggs on the upper surface of the middle 7 leaves; the ear leaf, two above and four below. Inspection should be concentrated in this zone. The established economic threshold for second generation SWCB is when 20 to 25% of plants are infested with eggs or small larvae. Bt corn hybrids are extremely effective in suppressing SWCB making insecticide treatments unnecessary.

Fall armyworm (FAW) infestations have increased in area sorghum, some fields have as high as 30% of plants infested. Dr. Pat Porter has been monitoring FAW moth activity and has noted that this years population is tracking very similar to 2011. If this trend continues moth activity will begin to increase the latter part of July and peak the second week of August. FAW is a non discriminatory pest which will infest many area crops including corn, cotton, sorghum, blackeyed peas, green beans just to name a few.

Insect pest pressure remains very quiet in the cotton field. square sets are outstanding as we near bloom ranging from 90-98% with most fields 95% or better. Weeds continue to be troublesome in many fields. Remember there are several good residual herbicide products to consider when "laying by" cotton. These layby options are another tool to prevent or manage weed resistance to glyphosate. Some products can be applied over the top while some will need to be directed or applied under a hood. The benefits of a good layby program will far out weigh costs and inconvenience of application especially in light of documented pigweed resistance to glyphosate.

Monti Vandiver
Extension Agent-Integrated Pest Management
Texas A&M AgriLife Extension Service
118 West Avenue C
Muleshoe, Texas 79347
806-272-4583

mrvandiver@ag.tamu.edu

<http://bailey.agrilife.org/>
<http://www.tpma.org/>



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