AgriLIFE EXTENSION
Texas A&M System

Northwest Plains Pest Management News

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Hot dry conditions are driving crops toward maturity and taxing irrigation systems. Many area crops being grown under limited irrigation are showing drought stress and will need significant precipitation to help finish the crop. Fields with high capacity irrigated available continue to look very good. Most of the earlier planted corn has reached the dough to dent stage and is on the down hill side of moisture demand while cotton and early planted sorghum are at their peaks.

Summary reports of general pest pressures from tapping data from 4 regions and field data from the Northwest Plains area are being generated and distributed area wide via website.

http://www.cropdefender.com/tamu/

The web site has been designed to provide "real time" pest data and pest management information to anyone who may need the information. The reports will provide average pest infestation level by crop stage as well as average trap captures for southwestern corn borer, fall armyworm and western bean cutworm.

Spider mites have declined in many area corn fields this week; likely the result of good natural enemy activity. Six spotted thrips are abundant in many fields and are playing an important role in suppressing mites. Neozygites fungus can be an important natural enemy of spider mites and has been observed in some fields. Simply put, the spore of the fungus infects the mite, eventually causing the mite to die at which point many spores are released which can infect other mites.

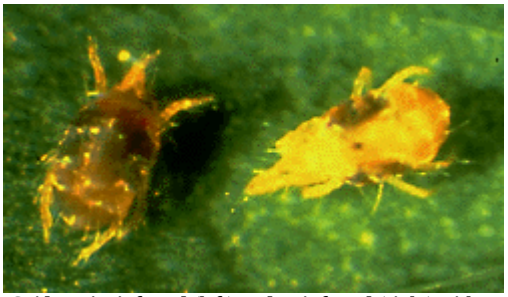
Daily Water Use

Crop	Inches per day
Corn	.30
Cotton	.30-.32
Sorghum	.25-.27
Bermuda Grass	.19
Fescue/ Bluegrass	.25

Cotton Heat Unit Accumulation[1]

Location	Current	2008	Long Term[2]
Farwell	1284	1306	
Friona	1301	1302	
Muleshoe	1391	1402	1316
Muleshoe WR	1425	1461	

[1.] *DD 60 based on May 1*
[2.] *Based on Muleshoe long term weather data 1971-2000*



Spider mite infected (left) and uninfected (right) with Neozygites , University of Nebraska.

Southwestern corn borer (SWCB) activity remains low. Trap captures of SWCB moths averaged only 6.4 moths/trap this week. A few reports of egg lay in a few fields in southeast Parmer county have been received. Do not let the current low SWCB pressure lull you to sleep, diligent monitoring should continue in non-Bt corn.

Area **cotton** is progressing very well. Monitored fields are ranging from 3.7 to 8.2 nodes above white flower (NAWF) and the average across the board is 5.6. Cotton is considered to have reached physiological cutout when NAWF=5. At this point I would like to see the NAWF reduced to around 5;

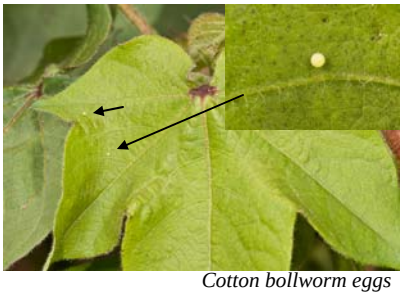
pushing cotton to maintain more NAWF may result in an immature crop. NAWF can be dramatically impacted by irrigation management; reduced irrigation can slow vegetative growth thus lowering the NAWF. Many times only minor adjustments of irrigation frequency and/or amount are all that is necessary reduce the NAWF to targeted levels. Area cotton is averaging 7.3 inches for the top 5 nodes which is very good. If this number is greater, maybe around 9-10 and NAWF are 8 or so more aggressive measures may be needed to push cotton toward maturity.

The pest situation in cotton remains nearly nonexistent. **Lygus** pressure has averaged right at 1 Lygus bug per 100 sweeps this week. To put that into perspective the current action level is 15-20 per 100 sweeps.

Significant **bollworm** activity has not been detected but is expected anytime. Typically the first generation will develop on non-crop host plants but subsequent generations may develop on suitable crop and/or non-crop hosts. It's preferred hosts are corn and cotton but has a wide host range including grain sorghum, beans, peas, peanuts, tomato, ornamental plants, and many weed species. This insect is known by many different names depending on its host; corn earworm, cotton bollworm, sorghum headworm, podworm (soybeans, beans & peas) and tomato fruitworm. Corn is the preferred host plant, and when available most bollworms, corn earworms in this case, will develop there. Adults are yellowish brown moths with a wing span of approximately 1.5 inches. Females have brown forewings while the male's forewings exhibit more of an olive tint and both may have darker brown markings on their wings.

Cotton bollworm adult.

Eggs are about the size of a pin head, white and somewhat domed shaped with ridges running from top to bottom. Eggs can be easily confused with looper eggs which are flattened on top.



Cotton bollworm eggs

Larvae range from 1/16 to 1 5/8 inches long depending on age. They are variable in color including yellowish, greenish, or brownish forms with a tan to brown head. Body colored to black bumps with a protruding spine are uniformly distributed over the body. Some may be conspicuously striped.

Treatment may be justified in conventional cotton if 10,000 small (1/4 inch or less) larvae per acre are present. If larvae are 3/8 inch or more in length then treatment will likely be justified if 5,000 or more larvae per acre are present. Treatment decisions in Bt cotton should not be made based on small larvae since some feeding must occur before larvae are controlled. Treatment of Bt cotton may be justified if 5,000 or more medium sized larvae (3/8 to ½ inch) per acre are present and square and/ or boll damage is observed.

Mark you calendar

Cotton Field Day, August 25, more details to follow.

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