



Gaines County IPM Newsletter

Volume VI, No. 5

General Situation

Portions of Gaines County have finally received some much need rainfall, but we are still a long ways from replenishing our depleted soil moisture. Rainfall reports range from 0 to 2 inches. Sadly some of this rainfall was accompanied with hail. In cotton, hail damage ranges from a few torn leaves to complete stand loss. The wind and blowing sand continue to wreck havoc in conventional tillage cotton fields and some producers are having to continuously sand fit in order to prevent complete stand losses. However, some fields have succumbed to the blowing sand and we have received reports of complete stand loss due to blowing sand. On the bright side of things, we are very thankful for the rainfall and some producers where able to rest their wells for a little while. Cotton stages range from 3-10 true leaves, with a majority of the cotton in the 4-6 true leaf stage.

Peanuts continue to look good. I have not received any reports of damaged peanut fields. Blowing sand and hail tends not to have as traumatic of an effect on peanuts. I would encourage all peanut producers to read the latest edition of [Peanut Progress Newsletter](#). In this edition, Dr. Jason Woodward, Extension Plant Pathologist & State Peanut Specialist, discusses the current peanut situation, weather conditions and stand establishment issues. Dr. Peter Dotray, Weed Scientist, and James Grichar, Research Scientist, discuss mid-season weed control, including peanut herbicides and weed resistance considerations.

Depleted soil conditions, wind, blowing sand, and weeds continue to be our biggest pests. As we move into the squaring stage of cotton we need to be more vigilant of square feeding insects & the amount of damage they may be causing. We are picking up bollworms and beet armyworms in non-Bt cotton in western Gaines County.

Bollworms in Non-Bt Cotton

Bollworm numbers range from 0 to 34,000 per acre. Bollworm ages range from 1—5 days old. A majority of the worms are 1/16 to 1/4 inch, therefore it is very hard to determine whether they are bollworms or fall

armyworms. In previous years, we have seen a mixed population. Therefore, I would presume that this is likely a mixed population as well. We will know more as the worms get larger and it is easier to see the distinguishing features of a fall armyworm.

Fall armyworm larval color can vary from light tan to shade of green. The head is brown or black with a prominent white line between the eyes which forms an inverted “Y”. The larva also has four large spots that form a square on the upper surface of the last segment of its body.



The decision to apply broad-spectrum insecticides for bollworm control during the pre-blooming period should be made very carefully. Broad spectrum insecticides often kill beneficial insects and spiders, thus allowing a rapid increase in bollworm numbers. Avoid making insecticide applications on the basis of egg numbers or first signs of crop damage. Consider using a insecticide that will preserve beneficial insects and spiders. Below are the results from bollworm & fall armyworm insecticide trials that were conducted in Gaines County in 2010 & 2011.

As you can see from the results the pyrethroid insecticides are effect in controlling the bollworms, however the pyrethroid provided limited control of fall armyworms. Either a mixture of Belt + Mustang Max (pyrethroid) or Prevathon alone was most effective in controlling a mixed population of bollworms and fall armyworms.

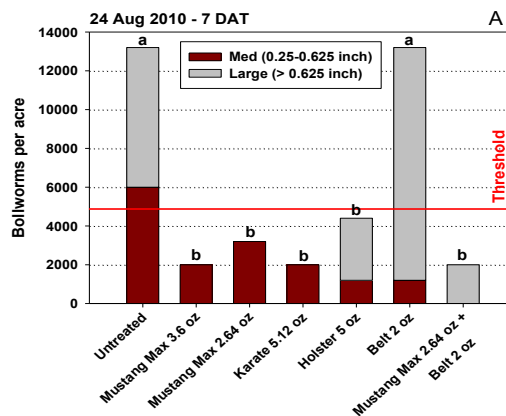


Figure 1. Number of bollworms per acre at 7-DAT. Loop, TX 2010. Bars capped the same letter are not significantly different.

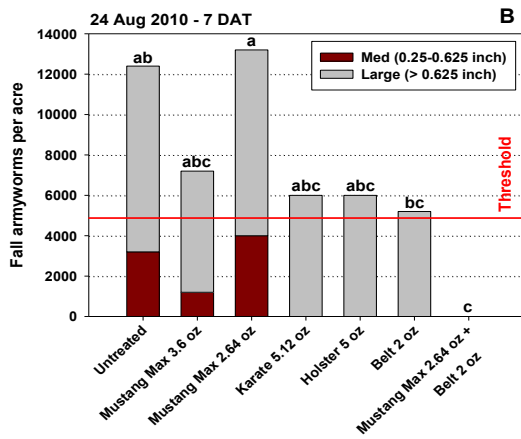


Figure 2. Number of fall armyworms per acre at 7-DAT. Loop, TX 2010. Bars capped the same letter are not significantly different.

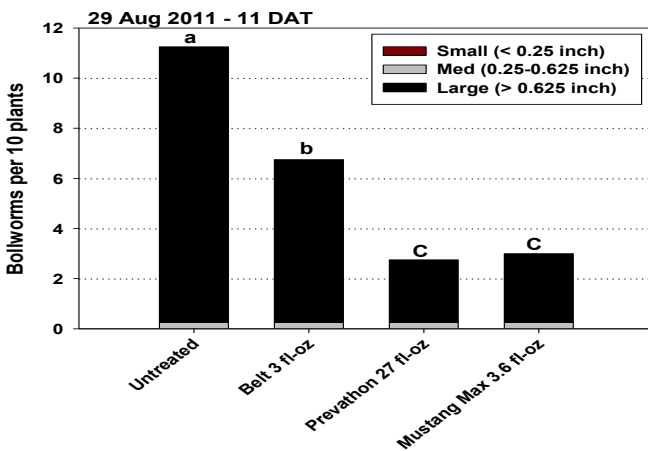


Figure 3. Number of bollworms per 10 plants at 7-DAT, Hobbs, NM 2011. Bars capped the same letter are not significantly different.

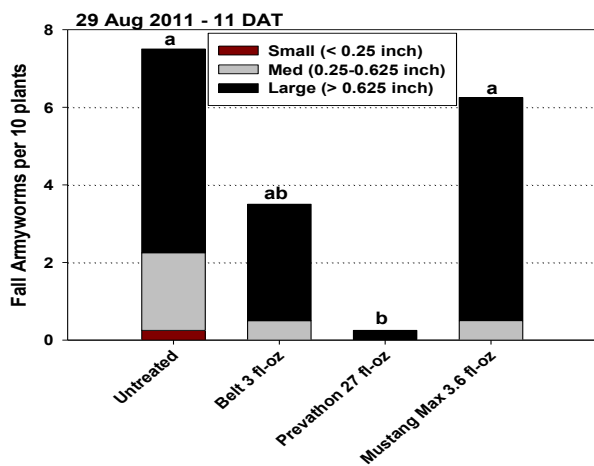


Figure 4. Number of fall armyworms per 10 plants at 7-DAT, Hobbs, NM 2011. Bars capped the same letter are not significantly different.

Click on the following link to see complete results of the [Control Populations of Bollworms and Fall Armyworms in Non-Bt Cotton](#) publication. Trade names of commercial products are included only for better understanding and clarity. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M University System is implied.

Assessing Stand Loss & Replant Decisions

The blowing sand and hail damage has brought several dilemmas to the table. First, is the stand adequate or would it be more profitable to focus resources on another field. Secondly, if the stand is not adequate, should the field be tilled up and plant another crop and if so, which crop will be suitable? Before making any of these decisions, please visit with your insurance adjusters. I would caution growers in making any hasty decisions when it comes to the stand loss. Research has shown that it may be appropriate to retain surviving cotton stands with as low as 1.5 healthy plants per foot of row, particularly if the remaining stand is uniformly spaced.

After visiting with your insurance adjuster, I would recommend that you read through the following publications. [Making Replant Decisions in Cotton](#) and [2012 Alternative Crop Options after Failed Cotton and Late-Season Crop Planting for the Texas South Plains](#). Also, make note of which herbicides you have applied in your cotton field this year and whether or not these herbicides will have an impact on another crop. Lastly, we must have enough heat units over the next couple of months to mature a crop.

A short season Valencia or short season true Spanish would be your best bet if you are considering coming back in with peanuts. Valencia varieties average about 125 to 135 days to reach maturity, Spanish require 140 days or more, were as Virginia and runner market types typically need the most days to mature.

Some producers have planted or are considering planting grain sorghum (milo). The recommended last planting date for a medium maturity hybrid in Gaines County is July 5. July 15 is the recommended last planting date for an early maturity hybrid. For more information on seeding rates and late planted sorghum, refer to the [Recommended Last Planting Date for Grain Sorghum Hybrids in the Texas South Plains](#).

Examine Peanut Roots for Nodulation

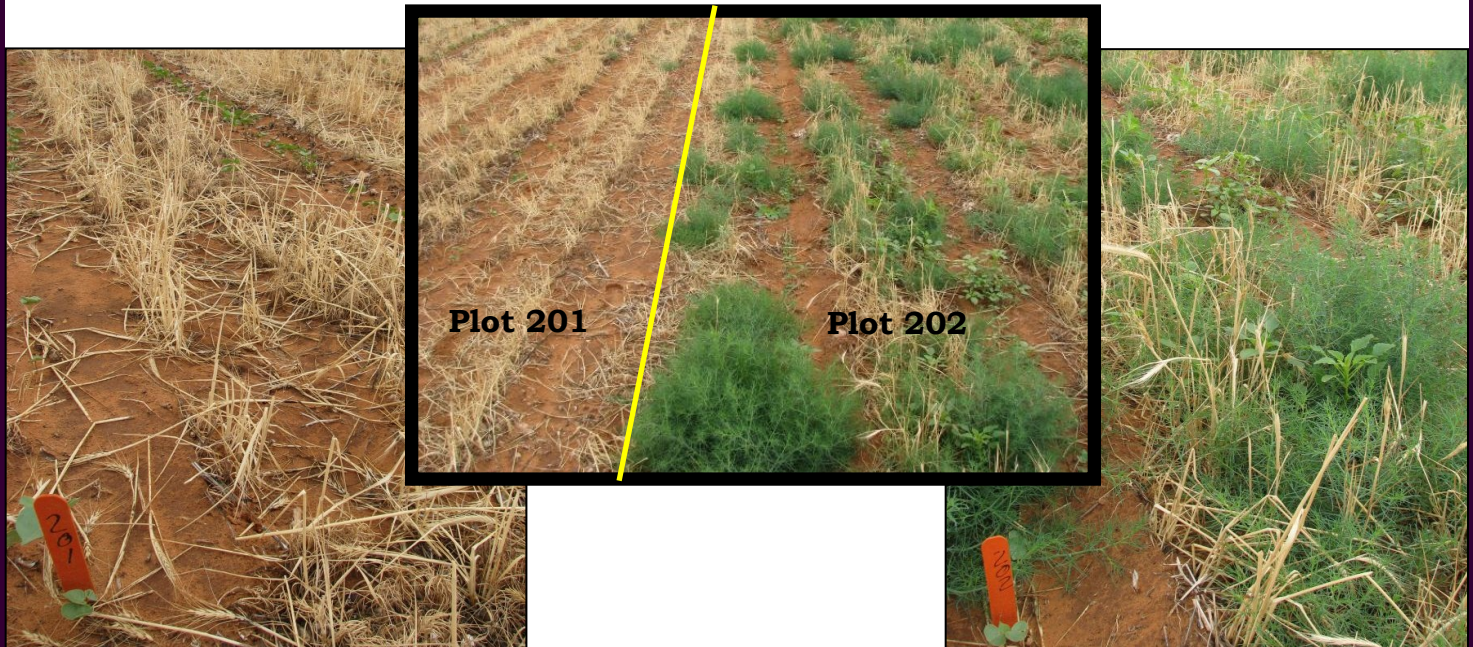
Its that time of year again, time to determine whether or not inoculation was successful. Early season nodulation is advised for two reasons: 1) assess early nodulation in advance of decisions about whether to apply mid-season N (and if so, how much); 2) early identification of any field that might not have nodulated adequately so that supplemental N may be applied to help achieve yield potential. An average of 15 nodules is adequate. 6-10 nodules per plant is considered fair & will likely benefit from mid-season nitrogen program. 1-5 nodules per plant is considered poor and nitrogen fertility program is mostly likely essential. For more information on assessment of nodulation please refer to the [Texas Peanut Production Guide](#).

Weed Management

As I mentioned in my previous newsletter, Rand Merchant, Texas A&M AgriLife Extension Service Weed Management Research Assistant, is working with Gaines County producers to evaluate the effectiveness of preplant incorporated herbicides applied in conjunction with and without at-planting herbicides. Below are pictures from one of these trials.

Plot 201 & 202 had a preplant treatment of Trifluralin incorporated with water.

Additionally, **Plot 201** also had an at-planting application of Caparol & a burn down application of Gramoxone.



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TEXAS A&M AGRI LIFE EXTENSION

Manda Anderson
101 S. Main Rm 111
Seminole, TX 79360
Phone: 432-788-0800
mganderson@ag.tamu.edu

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