

# **Cotton Comments**

OSU Southwest Oklahoma Research and Extension Center Altus, OK



August 5, 2020

### Volume 10 No. 10

#### **Current Situation**

The crop where moisture is adequate or abundant excellent growth is occurring, where moisture is limited or poor the crop is suffering with several fields already "bloomed at the top". If rain occurs within this week and adequate moisture continues for the rest of season these fields may recover **however** the rain must occur soon.

Cotton bollworms are being reported in several fields where the varieties containing the Bt 2 gene is being grown. These fields are located in areas where corn is produced. I feel these are local moths that infested these fields because of low moth counts in another areas of the state and the weather pattern prohibiting moth movements from Texas. This would explain why certain areas are experienced higher moth activity. Please refer to <u>Cotton Comments Volume 10 edition 8 July 9, 2020</u> for further information about this pest. Also stink bugs are being reported in fields adjacent to corn fields.

Some suggestions for scouting irrigated and lush dryland fields that contain the Bt 2 gene.

- 1) Scout *twice* a week until first week of September then continue once a week.
- 2) Do whole plant inspections, moths tend to lay lower in the plant this time of year.
- 3) Start monitoring eggs counts so timing of the next hatch can be anticipated.
  - a. White eggs will hatch in 5 days
  - b. Brown eggs will hatch in 3 days

The higher rates of Prevathon is also suggested. This comes from the experiences from the 2018 crop year when this infestation occurred. Cotton aphids are also being reported but beneficial insects were holding the numbers down and no control sprays are needed as of yet.

Please contact your local county extension office or this office for any questions.

After emergence scouting of the field must start and continue on a weekly basis until termination of the crop.

#### Sesame

Although this is a cotton newsletter it would be negligence on my part not to report a new pest in sesame that will effect certain areas of this state. Sesame leafroller population has been found in several fields recently where control measures had to be used. This is the first pest that occurred in sesame in this state. If you have sesame fields these fields need to scouted immediately.

Holly Davis Assistant Professor & Extension Specialist – Entomology Texas A&M AgriLife Extension has created an excellent video about this pest.

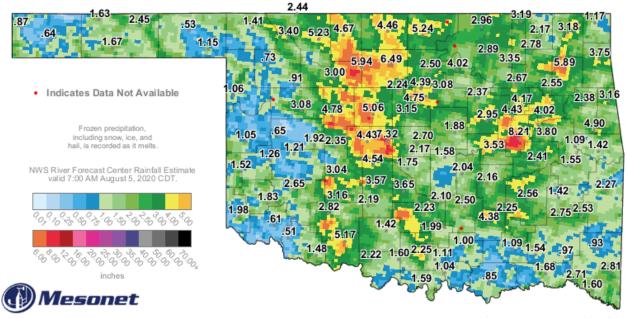
Please click here: <u>Sesame leafroller</u>.

I want to thank her for all the information and advice she has given us.



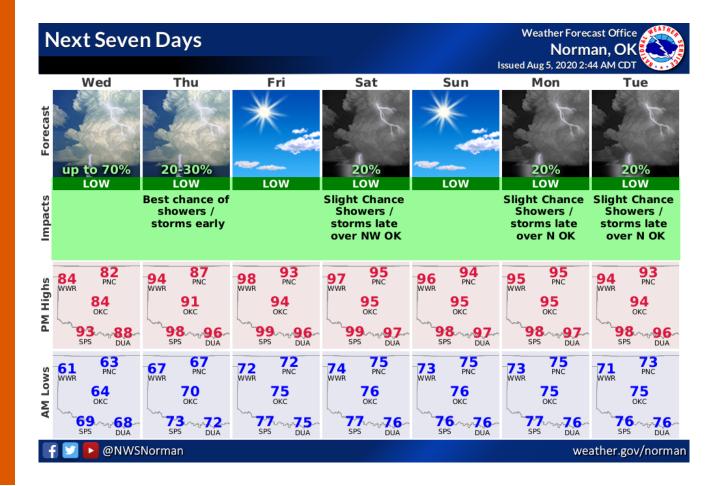
Courtesy of BugGuide.net

Please contact your local county extension office or this office for any questions



14-Day Rainfall Accumulation (inches)

7:45 AM August 5, 2020 CDT Created 7:50:56 AM August 5, 2020 CDT. © Copyright 2020



## U.S. Drought Monitor Oklahoma

#### July 28, 2020

(Released Thursday, Jul. 30, 2020) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

None D0-D4 D1-D4 D2-D4 D3-D4 D4 39.83 60.17 25.96 10.26 2.79 0.00 Current Last Week 35.40 64.60 41.40 11.42 2.98 0.00 07-21-2020 3 Months Ago 85.96 14.04 3.94 2.27 0.00 0.00 04-28-2020 Start of 76.45 23.55 10.47 3.64 0.00 0.00 Calendar Year 12-31-2019 Start of 71.94 28.06 11.08 0.00 0.00 1.01 Water Year 10-01-2019 One Year Ago 81.30 18.70 5.67 0.00 0.00 0.00 07-30-2019

#### Intensity:

None
D0 Abnormally Dry
D1 Moderate Drought

D2 Severe Drought D3 Extreme Drought D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

<u>Author:</u> Richard Heim NCEI/NOAA



droughtmonitor.unl.edu

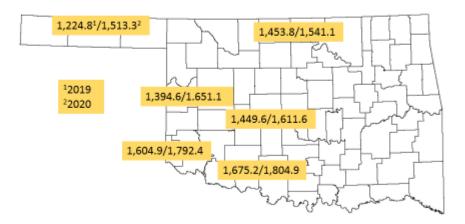
#### Growing degree days

Cotton Growth Timetable

Stage of Growth	<u>GDD</u>	Days
Emergence	50 - 60	3 - 4
Pinhead Square	425 - 500	25 - 45
First Bloom	725 - 825	41 - 67
Open Boll	1575 - 1925	102 - 127
Defoliation	2150 - 2300	120 - 140

#### 2020 Growing Degree days for select locations May 1 to August 5

State wide average 185.25 more degrees units 2020 compared to 2019



To calculate growing degree days for specific fields and planting dates please click here: <u>Oklahoma Mesonet Degree Heat Unit Calculator-Cotton</u>

The standard calculation for cotton DD60 heat units is:

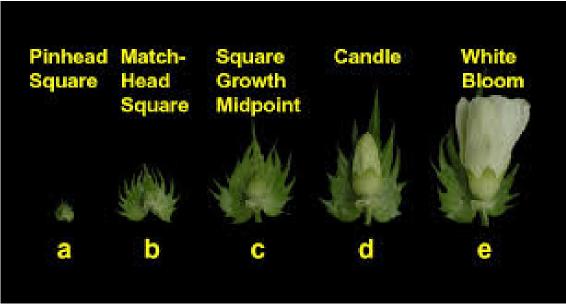
((maximum air temperature, F° + minimum air temperature, F°) / 2) - 60 = DD60 heat units

Essentially, the average air temperature for the day is determined and the 60 degree F° developmental threshold for cotton is subtracted. The DD60s for each day are then totaled.

#### **Oklahoma State University Field Surveys**

This office conducts field surveys is six counties (Jackson, Caddo, Greer, Harmon, Tillman and Washita) on a weekly bases these include producer fields, Extension trials, official variety test sites in southwestern Oklahoma. These fields have different planting dates and varieties with various traits. The plant stage varies as July 23, 2020 from 6<sup>th</sup> truleaf to Blooming.

The most dominate plant stage as of August 5 for these trials: White Bloom



Courtesy of Texas A&M AgriLife

The cotton pest of most concern as of August 5 for these trials: **Bollworm complex and** Cotton Aphids

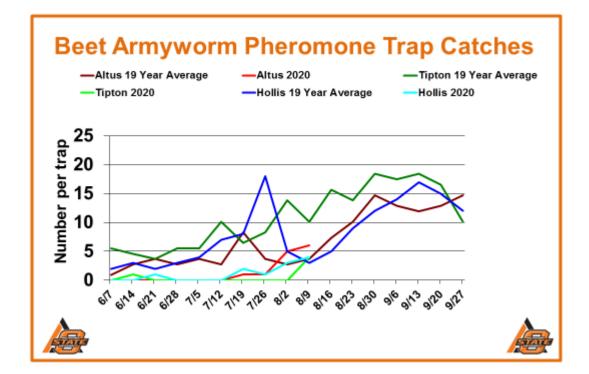


Courtesy of UT Crop News



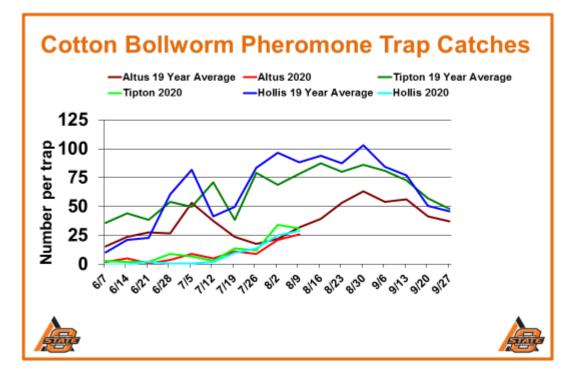
#### Moth Trap Counts 2020

The August flight is occurring now but lower than historical numbers are being recorded. Most of the state is reporting very few months being observed except in corn areas.



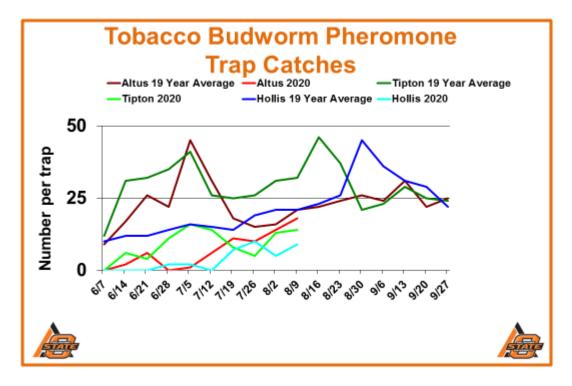


Beet armyworm moth Photo courtesy of University of Georgia





Cotton bollworm moth Photo courtesy of University of Georgia





Tobacco budworm moth Photo courtesy of University of Georgia

## Fall Armyworm Trap Results 2020

Date	Jackson	Tillman	Harmon	Caddo
Week ending				
6/7	0	2	0	1
6/14	0	5	0	2
6/21	3	0	0	2
6/28	1	2	0	4
7/4	2	3	2	2
7/11	0	0	0	8
7/18	1	0	2	0
7/26	1	0	1	0
8/2	6	0	3	11
8/9	4	2	0	7

Jackson OSU Southwest Research and Extension Center Tillman OSU Southwest Agronomy Research Station Harmon Harmon Near Gould Caddo Caddo Research Station



Photos courtesy Oklahoma State University

#### **Oklahoma Boll Weevil Eradication Organization**

#### New web page address click here: OBWEO

Brenda Osborne, Director of the Oklahoma Boll Weevil Organization, based at Altus, provided the information below. Eradication of the boll weevil across most of the U.S. Cotton Belt, and in the state has been very successful and is a major contributing factor to the continued profitability of cotton production. It has been a long, difficult, and expensive task to rid our state and most of the Cotton Belt of this invasive species that for such a long time negatively impacted our production. Since 1998 the producers of Oklahoma has spent over <u>thirty seven million</u> dollars to eradicate and provide a maintenance program.

Cotton acres for the past five years

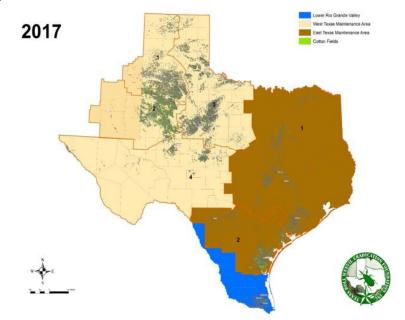
Year	Acres <sup>1</sup>
2015	216,678
2016	299,302
2017	568,434
2018	756,397
2019	603,014

<sup>1</sup> Oklahoma Boll Weevil Eradication Organization

OBWEO is preparing for the upcoming 2020 cotton season. It is our responsibility to ensure the continued success of this program. If you have been growing cotton for the past 3-5 years, we know where those fields are located. *However, if you are a new producer or have not grown cotton in several years, we need you to provide the legal descriptions of these new cotton fields*.

There is a Boll Weevil Assessment for harvested cotton acres. The current assessment is \$2.50 per harvested acre. This assessment is reviewed annually. The trapping density this year is one trap per 640 acres. In areas where planted cotton acreage density is high, not all fields will actually have a trap near it. In other areas that are more isolated, each field will need a trap.

There is still a difficult fight with this insect pest in south Texas, and we all need to do our part in keeping this pest from resurfacing in our state. Cotton harvesting equipment entering Oklahoma from two eradication areas in Texas has to be certified as boll weevil free prior to movement into our state. Please contact TBWEF before departure from these two areas. This will allow TBWEF to inspect the equipment. A USDA-APHIS phytosanitary certificate is issued and is required before equipment can be transported from these areas. These ONLY include the Lower Rio Grande Valley Eradication Zone (blue area on the map below) or the East Texas Maintenance Area (brown area on the map below). This is critical to meet USDA- APHIS requirements and prevent the re-infestation of boll weevils into eradicated areas. It is illegal to move non-certified cotton harvesting equipment from these areas into the state of Oklahoma.



Texas Boll Weevil Eradication Foundation: 325-672-2800 After Hours and Weekends: 325-668-7361

Contact John Lamb at the Frederick office at 580-335-7760 or cell 580-305-1930 for the following counties: Tillman, Cotton, Comanche, Atoka, Bryan, and Stephens.

Contact Brenda Osborne at the Altus office at 580-477-4287 or cell 580-471-79632 for all other counties.

The Cotton Comments Newsletter is maintained by Jerry Goodson, Extension Assistant. If you would like to receive this newsletter via email, send a request to:

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www.cotton.okstate.edu

#### www.ntokcotton.org

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