



Cotton Comments

OSU Southwest Oklahoma Research and Extension
Center Altus, OK



June 4, 2020

Volume 10 No. 5

Current Situation

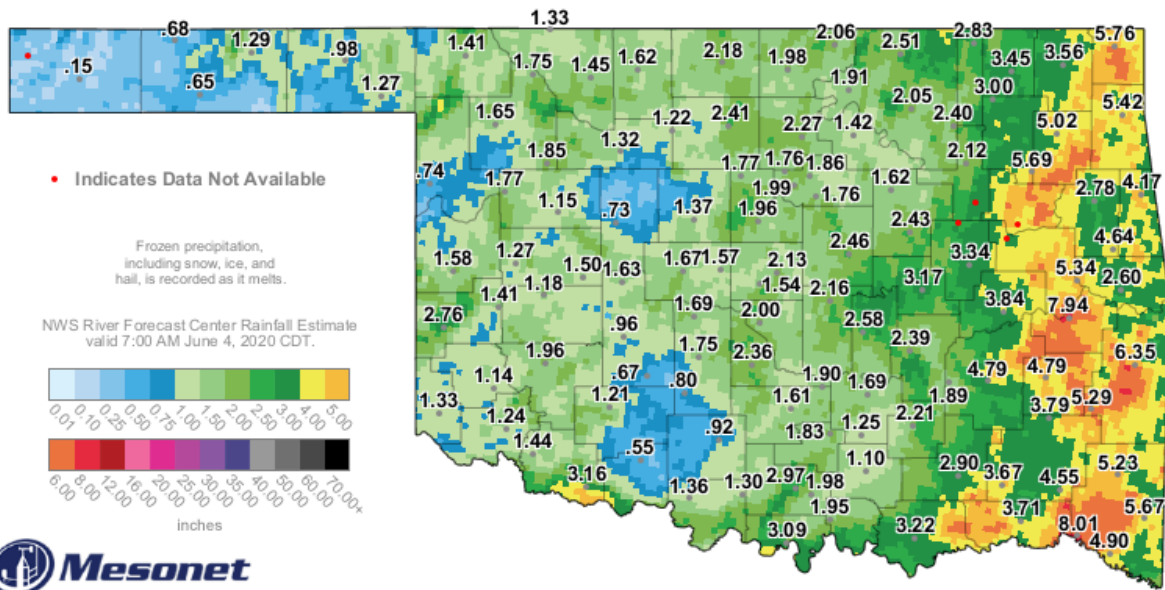
Hot dry weather has settled in across the state. Where adequate moisture is available growing conditions are excellent. The downside is where limited rainfall has occurred planting has to be postponed to wait for better conditions. Marginal moisture has also added stress to already emerged cotton.

Thrips control sprays continue across the state with also reports of grasshoppers damaging populations in Harmon and Tillman counties. No other pest have been reported.

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



Cotton emerging in Seth Byrd's residue study Caddo Research Station - Ft. Cobb.



14-Day Rainfall Accumulation (inches)

8:05 AM June 4, 2020 CDT
Created 8:11:05 AM June 4, 2020 CDT. © Copyright 2020

Next Seven Days

Weather Forecast Office
Norman, OK
Issued Jun 4, 2020 4:43 AM CDT

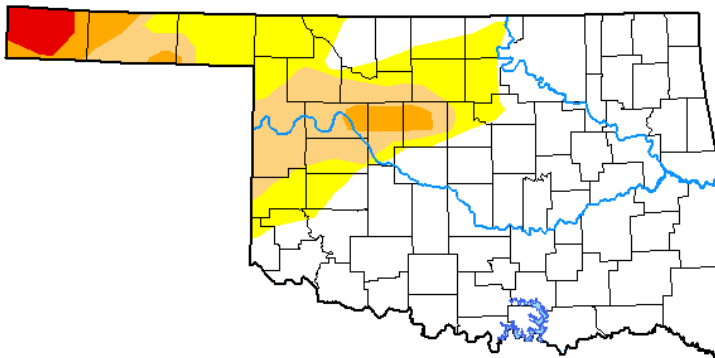
	Thu	Fri	Sat	Sun	Mon	Tue	Wed
Forecast	 up to 60% ELEVATED	 LOW	 LOW	 LOW	 20% LOW	 LOW	 LOW
Impacts	Severe Storms Possible		Chances Southeast				
PM Highs	99 WWR, 96 PNC, 96 OKC 99 SPS, 93 DUA	100 WWR, 98 PNC, 97 OKC 100 SPS, 95 DUA	98 WWR, 95 PNC, 95 OKC 98 SPS, 94 DUA	97 WWR, 94 PNC, 94 OKC 98 SPS, 94 DUA	97 WWR, 92 PNC, 92 OKC 97 SPS, 91 DUA	88 WWR, 88 PNC, 89 OKC 96 SPS, 93 DUA	89 WWR, 88 PNC, 88 OKC 94 SPS, 90 DUA
AM Lows	68 WWR, 72 PNC, 71 OKC 72 SPS, 71 DUA	68 WWR, 71 PNC, 71 OKC 74 SPS, 73 DUA	71 WWR, 73 PNC, 72 OKC 73 SPS, 72 DUA	71 WWR, 73 PNC, 72 OKC 73 SPS, 72 DUA	70 WWR, 72 PNC, 71 OKC 72 SPS, 72 DUA	66 WWR, 69 PNC, 69 OKC 72 SPS, 71 DUA	57 WWR, 60 PNC, 61 OKC 64 SPS, 66 DUA

U.S. Drought Monitor Oklahoma

June 2, 2020
(Released Thursday, Jun. 4, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	70.07	29.93	15.16	5.08	1.72	0.00
Last Week 05-26-2020	73.67	26.33	14.44	3.46	0.00	0.00
3 Months Ago 03-03-2020	85.63	14.37	4.66	0.84	0.00	0.00
Start of Calendar Year 12-31-2019	76.45	23.55	10.47	3.64	0.00	0.00
Start of Water Year 10-01-2019	71.94	28.06	11.08	1.01	0.00	0.00
One Year Ago 06-04-2019	100.00	0.00	0.00	0.00	0.00	0.00



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>

Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

Early Season Pest – Fleahopper

As the crop reaches the squaring stage, the next pest to be concerned about is the cotton fleahopper.



Cotton Fleahopper

Since the introduction of Bt cotton and boll weevil eradication the cotton fleahopper has become the number one pest in Oklahoma. The cotton fleahopper usually feeds on young succulent weeds such as croton, goatweed, and horsenettle in early spring. These weeds also provide an overwintering site for eggs. As the weeds mature, adults migrate to cotton which is beginning to develop pinhead squares. Fleahoppers insert their sucking mouthparts into the small squares. These damaged squares later turn brown and are shed from the plant.



Photos courtesy Dr. David Kerns, Agriculture and Life Science Texas A&M

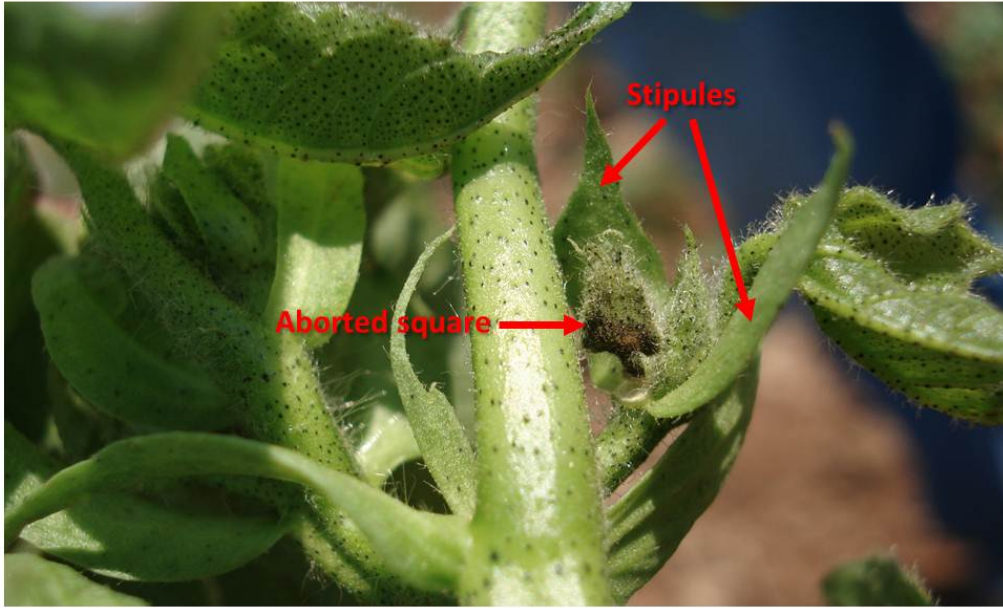


Photo courtesy of Shane Osborne

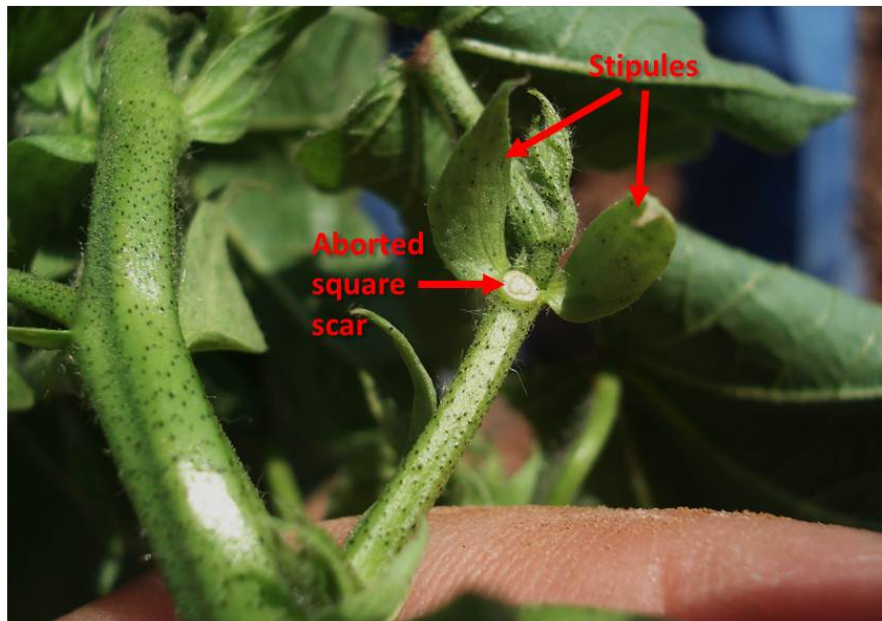


Photo courtesy of Shane Osborne



In addition to squares, the cotton fleahopper will also feed on other parts of the plant. If heavy infestations exist, new growth will be abnormal and whip-like in appearance. All stages of the life cycle will feed on the plant as long as it remains succulent. As cotton matures, these insects migrate to weeds or other host crops. In southwest Oklahoma, the highest population typically occurs in cotton in early August, although this is not generally a problem that late in the season.

The life cycle begins with the female placing her eggs into the plant tissue by means of an ovipositor. The eggs hatch in approximately 1 week, and small nymphs (which are similar to the adults, except for being wingless) undergo five molts before reaching the adult stage. Egg to adult takes approximately 3 weeks with six to eight generations per year. The cotton fleahopper adults are approximately one-eighth inch long, winged, and pale green in color. They are covered with small black spots and have four characteristic black spots near the wing tip. The nymphs are about one-twenty-fifth of an inch long, wingless, and pale green in color.

Numerous chemicals are registered for control of fleahoppers. In an ideal situation, fleahoppers should be controlled only when thresholds are exceeded in order to preserve beneficial insects since these will help control later occurring pests. Unless the cotton is extremely late, after July 25, control of cotton fleahoppers generally is not economical.

Spray decisions should be based on the squaring rate and level of cotton fleahopper infestation. Usually when cotton fleahoppers (adults and nymphs) reach or exceed 30 per 100 terminals and squaring rates begin to decline, treatment is justified. However, if cotton fleahopper numbers build slowly, fields can tolerate higher numbers before a reduction in squaring rate will occur. In most cases, fields will no longer be vulnerable to cotton fleahoppers once they begin to bloom.

Chemical control of cotton fleahoppers is a fairly easy to accomplish and several products provide good control. However certain chemicals may not be advantageous. Care must be taken to preserve beneficial arthropods that will help in controlling cotton aphids and spider mites. Flaring of these pests can be avoided by using products that are “softer” on beneficials.

The list of chemicals that control cotton fleahoppers includes Orthene (acephate), Bidrin, Intruder, Centric, Carbine, Lorsban, Steward, Lannate, Dimethoate, and various pyrethroids. Vydate is now back as an option for control measure. Historically this product has been found to be easy on beneficials. Bidrin has a label allowing its use in cotton from emergence to prebloom, but you can't apply more than 3.2 oz/ac during this period. According to research conducted by Texas A&M AgriLife Extension at Lubbock, products least likely to flare secondary pests include Carbine, Bidrin, Steward and low rates of Orthene (acephate). Other insecticides such as Intruder and Centric won't flare aphids and are probably fine to use as well, but these have been implicated in flaring mites. Pyrethroids are NOT recommended for fleahopper control because they tend to be very disruptive to beneficials and may flare aphids. Pyrethroids can also exacerbate bollworm challenges in non-Bt cotton

Training for Paraquat Applicators

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“In accordance with EPA’s 2016 Paraquat Dichloride Human Health Mitigation Decision, applicators are required to take an EPA-approved paraquat training program every 3 years in order to mix, load, apply, or handle paraquat.”

What Does this Mean?

All certified applicators who intend to apply paraquat (as mandated by the U.S. Environmental Protection Agency – EPA) must complete the paraquat training requirement.

Where and How Do I Take the Training?

Every certified applicator needs to go the eXtension link:
How To Safely Use and Handle Paraquat-Containing Products
<https://campus.extension.org/enrol/index.php?id=1660>

You will need to log in by clicking on the ‘Log in’ button
<https://campus.extension.org/login/index.php> at the top, right side of the page. An email will then be sent to your Google or Microsoft account. Confirm the account by clicking on the link in the email.

You can log in under your Google or Microsoft account.

What if I do not have a Google or Microsoft account?

You will need to create an account by clicking on the ‘Create New Account’ button at the bottom of the page <https://campus.extension.org/login/signup.php>
You will then need to create a self-selected username and password and fill out the other required information.

After your registration has been confirmed, click on the ‘My Courses’ button and select ‘Paraquat’.

You will then be able to participate in the ‘How To Safely Use and Handle Paraquat-Containing Products’ course <https://campus.extension.org/enrol/index.php?id=1660>.

What's Next?

You can complete the online course by clicking on the 'Click to Take the Online Course'. This will then take you to the online course where you will click the 'Enter' button.

Finally, this will open a new window with the actual course. After watching each of the modules of the training course, you will click on the 'Course Homepage' button. This will return you to the 'How To Safely Use and Handle Paraquat-Containing Products' page. At the bottom, left side of the page, you will see 'Take The Final Assessment'. Click on the 'Final Assessment' link. The link will take you to the final quiz page. You must complete the 15-question quiz and make a 100% on the quiz before you will receive your Certificate of Completion. Click on the 'Certificate of Completion' link at the bottom of the page and then select 'Get Certificate'. You now can print a copy of your certificate for your records.

How Long is the Certificate/Training Good For?

The certificate expires 3 years from the date of completion.

Can Anyone Purchase Paraquat?

No, paraquat is a restricted use pesticide (RUP) and can only be purchased by certified or private applicators.

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 **thirty seven million** dollars to eradicate and provide a maintenance program.

Cotton acres for the past five years

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

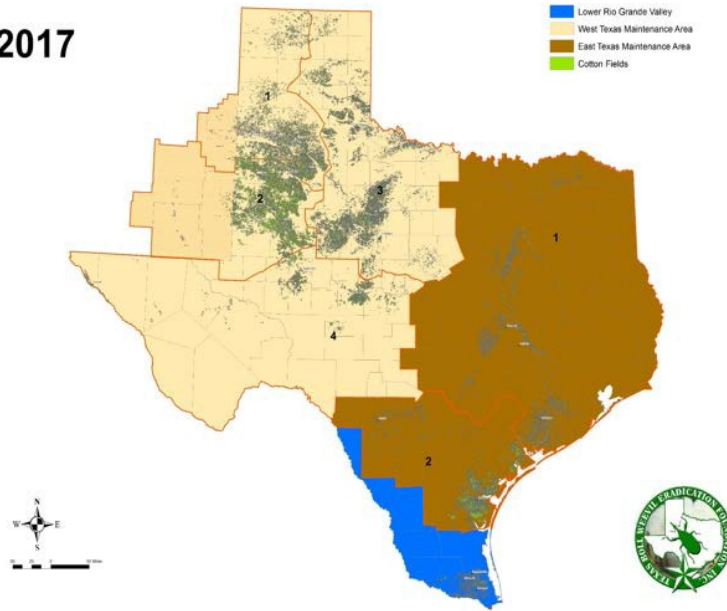
¹ Oklahoma Boll Weevil Eradication Organization

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.

2017



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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