



Cotton Comments

OSU Southwest Oklahoma Research and Extension
Center Altus, OK



May 21, 2020

Volume 10 No. 4

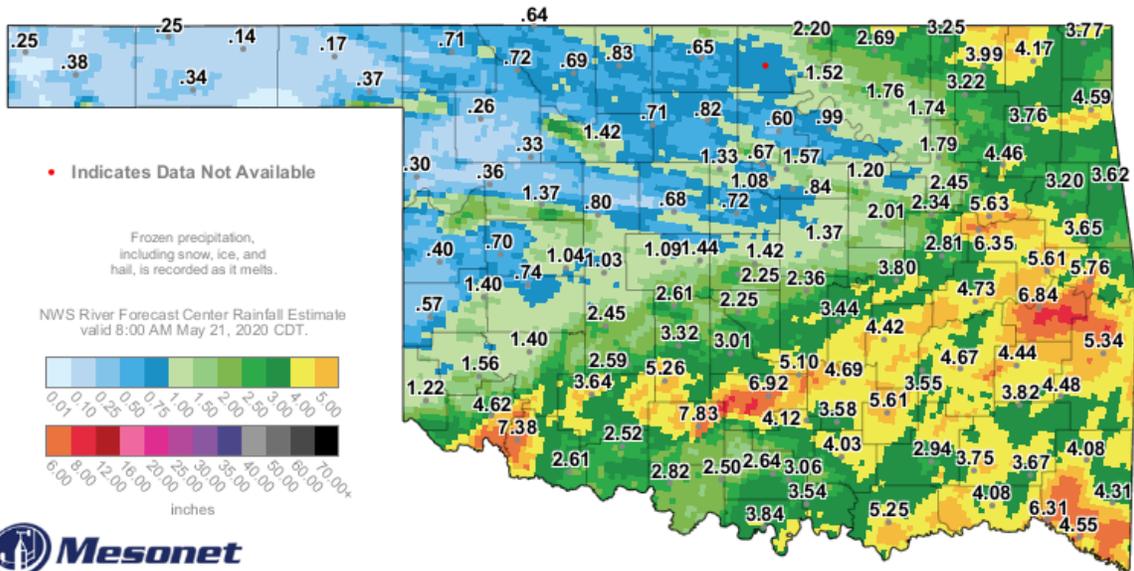
Current Situation

Cotton planting continues across the state with various planting challenges. This ranges from too dry soil conditions to too wet conditions. Soil temperature is no longer a concern.

The delayed emergence of some fields concerns are growing on whether to replant or allow more time for emergence. Fields that have emerge, thrips control spray have been applied. The growing conditions have delayed plant growth and thrips pressure will make the situation worse.



Greg Chavez planting an entomology trial at the OSU Research and Extension Center Altus, Oklahoma.



14-Day Rainfall Accumulation (inches)

8:50 AM May 21, 2020 CDT
Created 8:55:59 AM May 21, 2020 CDT. © Copyright 2020

Next Seven Days

Weather Forecast Office
Norman, OK
Issued May 21, 2020 8:29 AM CDT

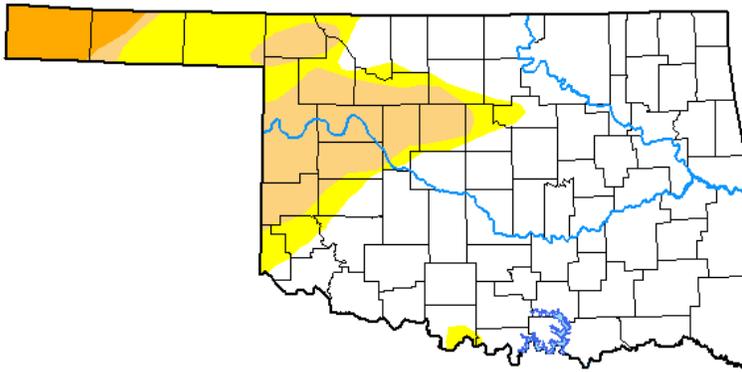
	Thu	Fri	Sat	Sun	Mon	Tue	Wed
Forecast	 up to 70% ELEVATED	 up to 60% ELEVATED	 20-40% ELEVATED	 30-70% LOW	 30-70% LOW	 20-50% LOW	 20-30% LOW
Impacts	Severe Storms Possible	Severe Storms Possible	Severe Storms Possible West	Strong to Severe Storms Possible	Strong to Severe Storms Possible		
PM Highs	WWR: 82, PNC: 73, OKC: 76, SPS: 86, DUA: 79	WWR: 84, PNC: 82, OKC: 84, SPS: 91, DUA: 84	WWR: 91, PNC: 87, OKC: 85, SPS: 88, DUA: 84	WWR: 85, PNC: 82, OKC: 81, SPS: 84, DUA: 82	WWR: 73, PNC: 77, OKC: 76, SPS: 80, DUA: 79	WWR: 77, PNC: 77, OKC: 77, SPS: 80, DUA: 79	WWR: 82, PNC: 80, OKC: 80, SPS: 83, DUA: 81
AM Lows	WWR: 61, PNC: 61, OKC: 63, SPS: 66, DUA: 64	WWR: 60, PNC: 64, OKC: 65, SPS: 66, DUA: 66	WWR: 62, PNC: 65, OKC: 67, SPS: 68, DUA: 67	WWR: 65, PNC: 70, OKC: 68, SPS: 68, DUA: 68	WWR: 58, PNC: 63, OKC: 63, SPS: 65, DUA: 66	WWR: 55, PNC: 59, OKC: 61, SPS: 62, DUA: 64	WWR: 56, PNC: 59, OKC: 60, SPS: 61, DUA: 63

U.S. Drought Monitor Oklahoma

May 19, 2020
(Released Thursday, May. 21, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	72.34	27.66	16.66	3.46	0.00	0.00
Last Week 05-12-2020	74.20	25.80	6.49	3.37	0.00	0.00
3 Months Ago 02-19-2020	85.83	14.17	4.66	0.85	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 05-21-2019	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:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

Thrips Update



Thrips will be one of the first pests to scout for in cotton during the growing season. Each field needs to be scouted on a scheduled weekly basis to be sure no pests are present.

Thrips generally are not considered a serious pest of cotton, except in years when favorable growing conditions permit early planting. Heavy thrips infestations will occur if plants have emerged before wheat or other small

grains mature. Mature thrips often move into stands of succulent cotton seedlings, causing curled and misshapen leaves. Thrips infestations vary from field to field and from year to year and should be dealt with accordingly. Thrips are small, approximately one-sixteenth inch in length. The color varies according to species. It may be similar to the color of wheat straw, yellow or light brown.



The adults have two pairs of long, narrow, fringed wings which enable them to fly from one crop to another. The life cycle contains several stages: egg, larva, pupa, and adult. Larvae and adults will over winter in debris and trash near the field. In the spring, the adult females lay eggs by inserting them into the plant tissue. The creamy white eggs hatch into small larvae which begin to feed on the plant. After a short time, they burrow into the soil and

transform into a non-feeding stage called the pupae. They emerge as adults and continue to feed on the plant. Thrips damage cotton by using their rasping-sucking mouthparts to feed on the plant epidermis. Ruptured cells release plant fluids which are sucked up by the insects. Injury first appears as dark brown spots which assume a silvery appearance several days later. Feeding occurs on the lower side of the leaf and may injure the terminal bud so that new leaves fail to develop and growth is retarded. Leaves will be crinkled and cupped.

Weekly scouting is the only way to monitor a seed treatment performance. Expect damaging populations of thrips to materialize first in fields where no seed treatment insecticide was used. Windy conditions will impact your ability to accurately assess thrips numbers. In-field detection becomes nearly impossible as the wind picks up. Take a composite sample pulling at least 30 plants across the field placing them in a plastic bag or bucket. Waiting to examine plants until you return to your vehicle will take a little longer, but will be a lot more accurate.

Besides looking on the undersides of cotyledons and true leaves, be sure to examine the terminal bud. Both adults and immature thrips feed and lounge around there and are easily overlooked unless you carefully inspect this region. Also don't forget to count and record the numbers of dislodged thrips running around on the inside of the baggie.

Crop demographics play a large role in thrips pressure. Wheat is widely known as an early season habitat for thrips. However, alfalfa is another thrips nursery that can produce large numbers. With each cutting thrips migrate from the field in search of a food source. Cotton fields in close proximity to alfalfa meadows may experience huge influx of thrips overnight that might even rival the exodus from adjacent wheat fields. Also, with the amount of spring rainfall we have encountered in some areas, other alternate hosts have provided considerable habitat for thrips populations to buildup. Finding adult thrips in protected fields is normal and is expected as long as the thrips migration continues. Remember that thrips blown in from adjacent areas may not feed immediately and feeding is required for the insect to pick up a lethal dose of a systemic insecticide.

Various foliar products are available and have also been recently evaluated in Texas. Orthene/acephate is the standard foliar thrips control product, and when used properly can provide good thrips control. At the 4 oz/ac rate, acephate will generally provide about 5 days control.

Bidrin (dicrotophos) has long been used for aphid and stinkbug control, and in the past used more frequently for thrips. At 3.2 oz/acre it performs comparably to acephate, but based on limited data appears to provide slightly less residual control.

Things to consider when using foliar applications for thrips control:

1. Timing is critical. Controlling thrips during the first 2 weeks post crop emergence appears to be the most important period; especially under cool conditions. You need to be “Johnny on the spot” with these applications when thrips are numerous; even a few days delay can be detrimental.
2. Avoid automatic treatments. Automatically adding a foliar thrips material in a Roundup application may not be necessary or may be poorly timed. Often either the weeds aren’t present when the thrips are or vice versa.
3. Scout for thrips. Go out and visually assess if thrips are present. Pull up plants and thoroughly search for them or beat the plants inside a plastic cup.
4. Don’t spray based on damage. The damage you see today happened 3 to 5 days earlier and the field may have already suffered yield loss. Spraying based on damage is essentially a revenge treatment.
5. Spray based on thresholds. Use an accepted action threshold to help you determine whether or not you should treat.

Thresholds for foliar Thrips control sprays ¹	
Cotton stage	Threshold
Cotyledon to 1 true leaf	0.5-1 thrips/plant
2 true leaves	2 thrips/plant
3 true leaves	3 thrips/plant
4 true leaves	4 thrips/plant
5-6 true leaves	Rarely justified

¹Dr. David Kerns (Texas A&M AgriLife Extension) April 6, 2011 Focus on South Plains Agriculture Newsletter.

It is easy to spot when the insecticide performance begins to fade by keeping track of the plant's physical condition related to thrips numbers. As protection fizzles, visual leaf damage should increase along with a rise in thrips numbers. Cool temperatures will result in lack of vigorous early cotton growth, and will in turn increase susceptibility to thrips damage. Quick action will prevent maturity delays associated with infestations that reach or exceed three thrips per plant. Over-the-top sprays can be used in fields planted to glyphosate-tolerant (Roundup Ready Flex and GlyTol) varieties. This strategy of tank mixing an insecticide with glyphosate is cost effective.

Acephate (Orthene) has been a standard foliar thrips treatment for many years. For the application rate, refer to the specific label for your product of choice, as several products containing acephate are now available.

Training for Paraquat Applicators

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Coordinator

“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

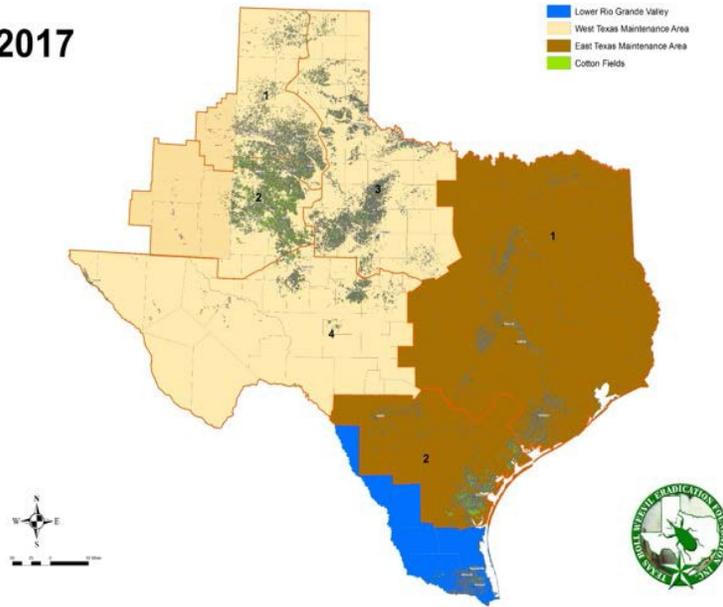
¹ Oklahoma Boll Weevil Eradication Organization

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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