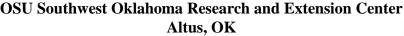


## **Cotton Comments**





June 20, 2019

Volume 9 No. 6

## Oklahoma now has a 24C label for Engenia and Xtendimax in dicamba-tolerant cotton and soybean.

To view the 24C labels please click on **Engenia** or **Xtendimax**.

### The following was contributed by:

Todd A. Baughman Professor of Weed Science Oklahoma State University

#### Highlights for 24C for Engenia and Xtendimax in dicamba-tolerant cotton and soybean:

Applications may be made up to 90 days after planting on dicamba-tolerant cotton.

Applications may be made up to 60 days after planting and/or the R1 growth stage, whichever occurs first on dicamba-tolerant soybean.

Applications are permitted any time of the day (sunrise to sunset) as long as there are no temperature inversions at the field level.

DO NOT apply more than two postemergence applications per year.

Restricted Use Pesticide: For sale to and use ONLY by Certified Applicators. Noncertified applicators are prohibited from applying these products.

Training Requirement: Prior to the use of these products, certified applicators must complete mandatory dicamba training approved by the Oklahoma Department of Agriculture, Food & Forestry (ODAFF). For more information on training, contact ODAFF at: <a href="mailto:pesticide@ag.ok.gov">pesticide@ag.ok.gov</a>.

# Applicators need to have a copy of the full federal label along with a copy of the 24C label in their possession if applications are made under the conditions of the 24C label (24C labels for both attached).

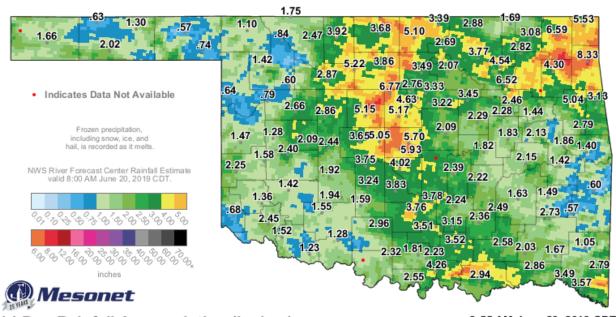
For further questions Todd can be reached at Institute for Agricultural Biosciences 3210 Sam Noble Parkway Ardmore, OK 73401

Cell: 940.613.1275 Phone: 580.224.0623

E-Mail: todd.baughman@okstate.edu

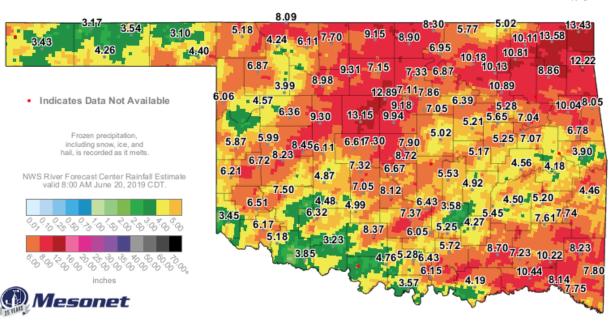
#### 2019 Current Situation

As of today June 20<sup>th</sup> the 2019 cotton crop has to be planted for Crop Insurance Purposes. A West Texas farmer told me once "it's the longest day of the year can run two three days long". An estimate of the cotton acres is a third to half the acres intended to be planted was <u>not</u> planted due to the poor planting conditions with the North Central and North East areas getting hit the hardest.



#### 14-Day Rainfall Accumulation (inches)

8:55 AM June 20, 2019 CDT Seated 9:00:57 AM June 20, 2019 CDT, © Copyright 2019



30-Day Rainfall Accumulation (inches)

8:55 AM June 20, 2019 CDT reated 9:00:57 AM June 20, 2019 CDT. © Copyright 2019

#### **Crop Conditions**

This year cotton crop ranges from pinhead squaring to just planted. The plant stage determines what pest to concentrate on. The critical time for Thrips control is from emergence to 4<sup>th</sup> truleaf, please refer back to Cotton Comments Volume 9 edition 2 April 25, 2019 for Thrips control issues. If squaring is occurring Fleahopper Control is warranted. No additional pest have been reported.

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

#### **Early Season Pest – Fleahopper**

This year's crop development in some areas is exceedingly "slow" but development is occurring. Hopefully with the return of more seasonal temperatures will enhance cotton growth. As the crop reaches the squaring stage, the next pest to be concerned about is the cotton fleahopper.



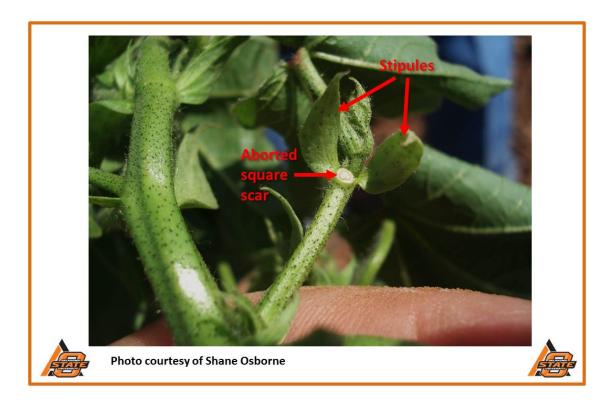
**Cotton Fleahopper** 

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





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 <a href="MOT">MOT</a> 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

#### 2019 Dicamba Training

Applicators planning to use specific dicamba herbicides labelled for the Roundup Ready Xtend Crop SystemTM for soybeans and cotton must complete U.S. Department of Agriculture-approved dicamba training before spraying these products this year.

"Whether you're a certified applicator or driving the application equipment you have to be trained," said Todd Baughman, Oklahoma State University Cooperative Extension summer crop weed specialist. "Even if you went through training last year, you're still required to go through the Oklahoma Department of Agriculture, Food and Forestry approved training this year."

Only the ODAFF, Extension and the three major manufacturers – Monsanto, DuPont and BASF – are authorized to provide the training. To be certified please contact your local extension office.

#### Oklahoma Boll Weevil Eradication Organization

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 **\$37,218,599** to eradicate and provide a maintenance program.

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.

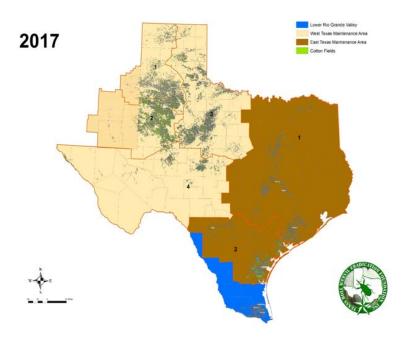
#### Cotton acres for past five years

Year	Acres <sup>1</sup>
2014	237,523
2015	216,678
2016	299,302
2017	568,434
2018	756,397

<sup>&</sup>lt;sup>1</sup> Oklahoma Boll Weevil Eradication Organization

OBWEO is preparing for the upcoming 2019 cotton season. It is our responsibility to ensure the continued success of this program. With all the talk of a significant increase in cotton acres, there are some important issues with respect to OBWEO that you need to be aware of. 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.

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 t equipment 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.

## Harvey Schroeder Executive Director Oklahoma Cotton Council cotton quote of the week.

"As I grow older, I pay less attention to what men say. I just watch what they do."

- Andrew Carnegie

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:

#### jerry.goodson@okstate.edu

Jerry Goodson Extension Assistant 16721 US Hwy. 283 Altus, Oklahoma (580) 482-8880 office (580) 482-0208 fax

www.cotton.okstate.edu

www.ntokcotton.org

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