

WEST
PLAINS
IPM
UPDATE

News about
Integrated Pest
Management in
Hockley,
Cochran, and
Lamb Counties
from
Kerry Siders

May 9, 2019

Vol. 24 – No.4

Cotton & Cold Temperatures

(A portion of the following is taken from "Cotton Physiology Today" Vol. 13, No. 1, April 2007)

So, I have taken quite a few calls the past day or two about planting at this time before a cold front we will experience the next few days. Let me answer this by sharing soil temperatures from just the last 20 hours. Yesterday at 4pm the 1" soil was 80 deg F, 2" was 75 deg F, 4" was 73 deg F and 8" was 69 deg F. This morning at 7am the 1" was 47 deg F, 2" was 63 deg F, 4" was 65 deg F, and 8" was 67 deg F. You get my point of what the weather impact will be for the next few days. This data comes from a USDA weather station by the Levelland Municipal Airport. Since the optimum soil temperature for cotton germination is near 85°F, it is understandable that soil temperatures of 60°F to 65°F can lead to compromised stands. Cold weather slows cotton growth, and increasing its vulnerability to fungal pathogens which can grow well at 65°F. When planting into cold soils, it is imperative to use the highest quality seed. As seed size decreases, seed quality becomes more critical when planting in marginal conditions.



*Cotton seedlings subjected to chilling temperatures (left-A) compared to seedlings not chilled (right-B) during imbibition from a study conducted by Hopper and Burke. Note the absence of normal taproot growth of the seedlings in A. Seedlings in A and B were exposed to the same temperature (86°F) apart from the first six hours of imbibition in which seedlings in A were exposed to chilling temperatures of 40°F. **Photos:** N. Hopper and J. Burke*



This picture to the left is a close-up view of a seedling injured by chilling. The root tip meristematic tissue is dead, which results in the brown color. In many cases, the root tissue behind the dead root tip will be enlarged. Presumably, this results from a buildup of food reserves mobilized to the root meristematic tissue for growth. However, with a dead tip, these materials are not used and, therefore, accumulate.

The two seedlings in this picture to the right show normal root development.

When the two groups are compared, it may be noted that seedlings injured by chilling are often short with thickened hypocotyls and radicles, dead root tips, and show some signs of lateral root growth.



The six seedlings pictured to the left depict various morphological responses to chilling injury.

Photos: N. Hopper and J. Burke

Call me at 806-638-5635 if you have questions, Kerry.

Cotton Scout School, Levelland

Texas A&M AgriLife Extension Service in Hockley County
1212 Houston Street, Levelland, TX 79336

May 31, 2019

For crop consultant workers, farmers and their workers, County Extension agents and their interns, and any agricultural related worker - Three CEU's will be offered

8:00 am – 8:30 am Registration (free)

8:30 - 9:00 **Cotton Agronomy and Plant Mapping** – Kerry Siders

9:00 – 10:00 **Insect Pests & Beneficials, Scouting and Thresholds** – Dr. Suhas Vyavhare

9:30 – 10:00 **Weed ID and Crop Herbicide Injury** – Kerry Siders

10:00 – 10:30 **Identifying Cotton Diseases** – Kerry Siders

10:30 – 11:30 **Hands on Cotton Plant Mapping & Etc.** – Kerry Siders/Suhas Vyavhare



Educational programs by the Texas A&M AgriLife Extension Service serve people of all ages regardless of socioeconomic level, race, color, religion, sex, disability or national origin.

The Texas A&M System, U.S. Department of Agriculture and the County Commissioners Courts of Texas Cooperating.

AgriLife Extension Offers TDA-Mandated Training for Auxin Herbicides Both Dicamba & 2, 4-D -Tolerant Cotton Varieties

The Texas Department of Agriculture is requiring special training in 2019 for use of auxin herbicides applied on both dicamba-tolerant (Xtend Technology) cotton or 2,4-D – tolerant (Enlist Technology) cotton. To meet this requirement, the Texas A&M AgriLife Extension Service will host a training on:

**Friday, May 31st at the Levelland Extension Office (1212 Houston St.)
2:00 pm**

The program will be 100 minutes in length. There will be no registration fee. The class will provide 2 TDA continuing education unit in laws and regulations.

Be sure to bring your valid TDA Pesticide Applicators license number.

If you have any questions give me a call at 806 638-5635.

Private Pesticide Applicators Training Set for 2019 Hockley County

The Texas A&M AgriLife Extension Service will offer the required private Pesticide Applicators Training (PAT) in Levelland on the third Thursday of every month. This training is required by Texas Department of Agriculture before taking the exam for obtaining the license. A private pesticide applicator is a person who uses or supervises the use of a restricted-use or state limited-use pesticide or a regulated herbicide for the purpose of producing an agricultural commodity. This license is not for those receiving monetary compensation for a pesticide application.

To participate in a training individual must call 806-894-3159 by 3pm the day prior (Wednesday) to the trainings in Levelland. The trainings will begin promptly at 1pm at the Extension Office 1212 Houston Street, Levelland (4 blocks west of courthouse on Houston). There is a \$60 fee for training materials. This is only the required training. Testing will be conducted at a separate time and location. Future PAT Trainings:

- **May 16 Levelland Extension Office 1212 Houston Street**
- June 20 Levelland Extension Office 1212 Houston Street
- July 18 Levelland Extension Office 1212 Houston Street
- August 15 Levelland Extension Office 1212 Houston Street
- September 19 Levelland Extension Office 1212 Houston Street
- October 17 Levelland Extension Office 1212 Houston Street
- November 21 Levelland Extension Office 1212 Houston Street
- December 19 Levelland Extension Office 1212 Houston Street



Texas A&M AgriLife Extension seeks to provide reasonable accommodations for all persons with disabilities for any educational meetings. Please contact us to advise us of the auxiliary aid or service that you will require a week in advance of training.

See You On The Radio



Wednesdays from 7:30 am to 7:45 am.

Wednesday 10/1/14

Wednesday 10/1/14



Wednesday 10/1/14

Wednesday 10/1/14

Wednesday 10/1/14

West Plains IPM Update is a publication of the Texas A&M AgriLife Extension Service IPM Program in Hockley, Cochran, and Lamb Counties.

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Cooperating