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TEXAS IPM

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The Newsletter About Integrated Pest Management for the El Paso Valley

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******ANNOUNCEMENT******

2005 CR0P TOUR
October 4, 2005

9:00-10:00 **Cotton Variety Trials**

Short-Mid Season Upland Variety Trials - Tirres Farms
(just west of Bos Dairy & North Loop, Fabens, Texas)

- Stacked upland varieties
- Contributors include: Delta & Pineland, and Phytogen

Pima Variety Trial

- Pima varieties including a round-up ready pima; hazera hybrid
- Contributors include; Delta & Pineland, Phytogen, and Hazera

Discussion of Full Season Variety Trial in Hudspeth County

10:00-11:30 **Alfalfa Variety Trials - Guadalupe Island Road, Fabens**

Ten varieties of alfalfa tested for salt resistance and
yield potential

11:30 **Lunch**

Three CEUs will be offered to participants (1 PIM, 2 General)

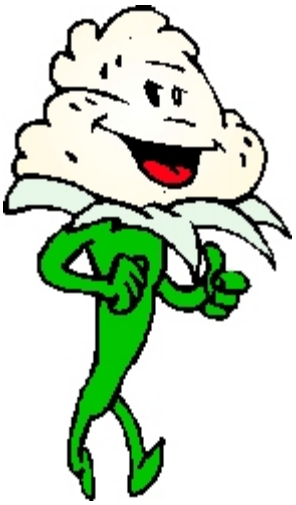
COTTON

Timely termination of irrigated fields will greatly reduce the leaf area necessary for aphids and whiteflies to feed and produce honeydew, thus reducing the potential for sticky cotton. *Harvest-aid chemicals are generally applied to hasten harvest of a mature crop, and to reduce potential preharvest losses of lint yield and fiber quality. Proper use of harvest aids will result in earlier harvest, preservation of fiber quality, and fewer seed quality reductions due to field exposure.* Proper harvest-aid material selection, tank mix partners and rates vary with environmental and crop conditions. What works best in one year is not necessarily the best for the next season. Efficacy of harvest-aid chemicals is always a concern. There are several factors that affect the performance or lack of performance of harvest-aid chemicals. Some factors that increase the performance of harvest-aid chemicals include the following:

- ★ Warm, calm, sunny weather
- ★ Soil moisture relatively low but sufficient to maintain cotton plant in active growth condition without moisture stress
- ★ Soil nitrogen levels relatively low
- ★ Leaves active and uniformly expanded on plants
- ★ Little or no secondary growth evident on plants
- ★ Plants with a high percentage of open bolls that have reached "cutout" and shed some mature leaves

Factors that negatively affect harvest aid chemical performance include:

- applications made under cool cloudy conditions
- prolonged periods of wet weather following treatment
- plants in vegetative growth stage with low fruit set
- plants severely moisture stressed with tough, leathery leaves at the time of treatment
- plants exhibiting secondary growth (regrowth) and improper calibration of application rates



Remember harvest aid chemicals cannot increase the rate of fiber development. Only additional good weather (heat units) combined with functional leaves can mature bolls. *When determining boll maturity of adjacent fruit, one can consider the following. When moving up the plant from a first position boll that has just cracked to a first position closed boll on the next fruiting branch, about 60 additional heat units (DD60s) are required to obtain similar boll maturity. If moving out from a first position boll to a second position boll on the same fruiting branch, about 120 heat units will be required to reach the same level of maturity. For an individual boll, a total of about 800-850 heat units are required after pollination to produce normal size and quality. However, bolls obtaining fewer heat units may still make productive lint of lower micronaire that may contribute to final yield.*

Nodes above cracked boll (NACB) is a recently developed tool that can be used to time harvest aid application. In a series of harvest aid projects, it was determined that if the uppermost first position-cracked boll is within three nodes of the uppermost harvestable first position boll, then no lint weight will be lost if a defoliant type harvest aid is applied. However, if the uppermost harvestable first position boll is four or more nodes above the first position cracked boll, then potential for some lint loss exists.

Micronaire reduction generally follows a similar pattern when using the NACB criterion. Information regarding crop termination is excerpted from the *2005 High Plains Cotton Harvest Aid Guide*. Copies of this Extension resource can be accessed via the internet from the following website: http://lubbock.tamu.edu/cotton/pdf/2005harvaidhandout.pdf. If you are unable to access the internet and would like our office to mail you a paper copy, please call (915)859-7725 ext. 238 and ask for Kim or leave a message.

We know that we can consistently rely on August 20 as being the last effective date for a white bloom to turn into a harvestable boll. This date may seem a little early for us, and I am sure there are many that would argue with me; however, this date is supported by data from several Extension projects/research and I think it is probably a safe guideline. Most fields in the scouting program reached physiological cutout (NAWF=5) around August 15, 2005; so it shouldn't be much of a concern. The heat unit accumulation (DD60) from August 20th until September 21st is 576 (lower valley). Bolls are mature after 850 HU have been accumulated. In the last 10 days we are averaging approximately 16.4 HU (DD60) per day, therefore we still lack 274 HU to make those white blooms into harvestable bolls.

DEGREE DAY AND WEATHER INFORMATION

	2005 Upper Valley	2005 Lower Valley	2004 Upper Valley	2004 Lower Valley	2002 - 2003 Lower Valley (Average)
PBW *Jan 1.*	3532.5	3530.5	3588.5	3521.5	3755.75
Cotton *April 15*	2663.5	2643	2541	2501	2703.5
Pecans *Jan. 1*	7519.5	7578	7423.5	7417.5	7683.25
PNC *March 28*	6540	6267.5	6438	6397	6541.75

Temperatures as of September 21st

RAIN/MOISTURE RECEIVED AS OF SEPTEMBER 8, 2005:

DEPUTY FARMS: 5.63" **RIO BRAVO FARMS: 9.15"**

TEXAS BOLL WEEVIL UPDATE FOR WEEK ENDING ON September 17, 2005

PINK BOLLWORM	BEET ARMYWORM	BOLL WEEVIL
Traps Inspected: 3155	Traps Inspected: 10	Traps Inspected: 3136
Average Moths/Traps: .1	Average Moths/Traps: 9.4	Average Moths/Traps: 0

The above information was obtained from the Texas Evapotranspiration Network. Texas ET contains weather information, evapotranspiration, and crop watering recommendations. Individual weather stations have been placed at Rio Bravo Farms near Tornillo and at Deputy Farms in the Upper Valley. The weather stations record daily temperatures (high and low), relative humidity, rain received, wind speed, as well as crop water requirements and DD information.

This information is updated daily and is available on the internet at http://texaset.tamu.edu. Locations are Deputy Farms and Art Ivey Farms. If you need any help using this website please call the El Paso Extension Office and ask for Ray Bader or Sarah Downing. Please use this website as it is an excellent service.

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