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PRIVATE APPLICATOR TRAINING

When …………1st Tuesday of even months  Pre-Registration Required…(361)767-5223
Time ………………  8:00 am—11:30 am  Where……..TX A&M AgriLife Ext. Office
Fee: $50.00 (Includes study manuals)

A Private Applicator is defined by law as a person who uses or supervises the use of a restricted-use or state-limited use pesticide for the purpose of producing an agricultural commodity.

Want to Know the Real Dirt?

Get your soil tested before adding fertilizer by participating in the 2015 Soil Testing Campaign*

The cost is only $7 for routine analysis and shipping to the lab is free!

October 1st through November 20th

There are three steps involved in obtaining a soil test:
1) obtain sample bags and instructions,
2) collect composite samples,
3) select the proper test and complete the information sheet.

Take sample to Extension office, 710 East Main Avenue, Suite 1, Robstown or call 361.767.5223

* Agricultural Soil Samples Only; No Homeowner Samples

FARM WORKER PROTECTION SAFETY TRAINING

When…………………………….Oct. 9, 2015  Time ……………………9:00 –11:00 am
Where …………………………………………… Texas A&M AgriLife Extension Office
Johnny Calderon Building) 710 E. Main, Robstown

Pesticide handlers and workers must be trained every five years unless they are certified applicators. All participants in this training will be issued cards verifying they have successfully completed the required training.
Enhanced Soil Testing Campaign

As in past years, we will once again be offering a Soil Testing Campaign to agricultural producers in Nueces County at reduced lab costs. However, this year we will also be helping farmers interested in crediting themselves for deeper residual nitrogen collect those samples. We will sample fields to a depth of 24 inches and have nutrient analysis done at the Texas A&M AgriLife Extension Service Soil, Water, and Forage Laboratory.

The cost to participate in this program is as follows:

- $40 per field up to 160 acres ($0.25/A over 160 acres)
- $21 per sample for nutrient analysis (Routine Analysis plus Micronutrients and Residual Nitrogen)

Contact JR Cantu, Nueces Co. Demonstration Assistant, at 361.767.5223 or hrcantu@ag.tamu.edu for additional information. Sample collection will be on a first come first served basis and as weather permits.

Field studies conducted by Dennis Coker and Mark McFarland, AgriLife Extension Soil Specialists, have been conducted at 26 sites throughout the Upper Coastal Bend and Central Texas Blacklands from 2008-2012 to determine the effects on cotton, corn and grain sorghum yield of crediting residual soil nitrate to a 24-inch depth of soil.

Detailed information on its effect on cotton can be found at http://bit.ly/1EATbac. Effects on corn and grain sorghum in 2012 demonstration trials are summarized below from a previous IPM Newsletter by Stephen Biles, AgriLife Extension IPM Agent.

Table 1. Effect of crediting nitrogen fertilizer rate according to pre-plant, residual NO₃-N on grain yield of corn and grain sorghum. Upper Gulf Coast and Central Texas Blacklands regions. 2012.

<table>
<thead>
<tr>
<th>Crop &amp; Location</th>
<th>According to Yield Goal</th>
<th>NO₃-N to 6&quot;</th>
<th>NO₃-N to 12&quot;</th>
<th>NO₃-N to 24&quot;</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>---Corn---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guadalupe Co.</td>
<td>120.5</td>
<td>119.6</td>
<td>125.8</td>
<td>124.4</td>
<td>123.9</td>
</tr>
<tr>
<td>Medina Co.</td>
<td>179.8</td>
<td>188.0</td>
<td>175.6</td>
<td>179.6</td>
<td>176.9</td>
</tr>
<tr>
<td>Victoria Co.</td>
<td>116.2</td>
<td>111.0</td>
<td>100.4</td>
<td>106.7</td>
<td>100.8</td>
</tr>
<tr>
<td>---G. Sorghum---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guadalupe Co.</td>
<td>5874</td>
<td>6259</td>
<td>5942</td>
<td>5900</td>
<td>5900</td>
</tr>
<tr>
<td>Victoria Co.</td>
<td>5576</td>
<td>---§</td>
<td>---</td>
<td>5559</td>
<td>5101</td>
</tr>
<tr>
<td>Williamson Co.</td>
<td>5717</td>
<td>5472</td>
<td>5322</td>
<td>5130</td>
<td>5399</td>
</tr>
</tbody>
</table>

* Corn yields corrected to 15.5% moisture, grain sorghum yields to 14% moisture. Means within rows were not different according to ANOVA F Test (P≤0.05).

§ Amount of residual N at interval soil depth was in excess of crop need.
2015 Fall Seminar Series


Sep 14: Sugar Cane Aphid on Sorghum: Southern Texas Update. Robert Bowling, Texas A&M AgriLife Extension, Corpus Christi


Nov 2: Analyzing Implied Discount Rates from the Gulf of Mexico IFQ Programs. Andrew Ropicki, Texas A&M AgriLife Extension, Corpus Christi

Dec 7: Beef Cattle in Latin America. Joe Paschal, Texas A&M AgriLife Extension, Corpus Christi

Meetings will be broadcast via the web. Use this link for online meeting location: https://texasrangedclassroom.adobeconnect.com/coastalbend/ and this link for system check: https://ccag.tamu.edu/files/2014/01/online.pdf.

Program starts at 1 p.m.
Texas A&M AgriLife Research
& Extension Center
10345 Hwy 44
Corpus Christi, TX 78406
Center Auditorium
Contact phone: 361.265.9201
E-mail: s-klock@tamu.edu
Preparing for the 2015 South Texas Cotton Harvest

By Dr. Josh McGinty – AgriLife Extension Agronomist, Corpus Christi, TX and Dr. Gaylon Morgan – AgriLife Extension State Cotton Specialist, College Station, TX

As this year’s cotton crop is approaching harvest, the proper application of harvest aids is critical to help facilitate an efficient and timely harvest and to preserve fiber quality. Though it is grown as an annual crop, cotton is a perennial shrub that will continue to produce new leaves as long as conditions are favorable. Thus, it is important to properly prepare the cotton crop for harvest. As the cotton plant reaches “cut-out” (physiological maturity), the energy demand of the fruit exceeds that produced by the leaves of the plant. At this point, the growth of new leaves is temporarily halted. Once bolls mature and open, however, cotton plants may begin to resume vegetative growth, especially with additional rainfall and excessive soil nitrogen. Any vegetative regrowth before harvest can lead to significant problems due trash in the harvested cotton, lint staining and decreased color in picker-harvested cotton, and high moisture content in modules of stripper-harvested cotton. What follows are a few key points to consider before applying harvest aids.

APPLICATION TIMING
The proper timing of harvest aid applications can be thought of as a balance between allowing immature bolls to mature and preserving the lint quality of earlier maturing bolls. Applying harvest aids too soon may halt the development of green bolls that could contribute to yield, and may negatively affect fiber and seed quality. Outlined below are a few methods for determining the optimal timing for harvest aid applications.

1. Percent Open Boll. This is the most common method outlined on harvest aid product labels. This is simply the percentage of harvestable bolls on the plant that are open. Typically, product labels will recommend applications at 50 to 70% open boll. However, this is not the most accurate method as research has shown that optimal application timings may range from 42 to 81% open boll, depending on distribution of fruit on the plant.

2. Sharp Knife Technique. A determination of boll maturity can be made by cutting a cross section of the uppermost harvestable boll. A mature boll will be difficult to cut and will contain seed with dark seed coats and fully developed cotyledons. Very light boll. A mature boll will be difficult to cut and will contain seed with dark seed coats and fully developed cotyledons. Very light

3. Nodes above Cracked Boll (NACB). From the uppermost first position cracked boll, count the main stem nodes from there up to the uppermost harvestable boll. Sufficient research has shown that harvest aids applied at three NACB will not result in any lint weight loss. If harvest aids are applied at NACB greater than four, yield loss can be expected. The efficacy of harvest aid products is greatly affected by environmental conditions. In general, the most effective harvest aid applications are made under warm, sunny conditions, with low soil moisture (but sufficient to maintain active growth), without excessive soil nitrogen, to plants that have reached maturity and are not producing new leaves. Thorough spray coverage is critical when applying harvest aids. Choose a spray nozzle that will provide uniform coverage and small spray droplets. Total spray volume should be at least 15 GPA for ground applications and 5 GPA when aerially applied.

HARVEST AID PRODUCT TYPES
Cotton harvest aid chemicals are generally grouped into three categories – defoliants, desiccants, and boll openers. The most effective product or combination of products varies depending on the type of cotton (picker- vs strip-type), the harvest method, and environmental conditions.

Defoliants remove foliage from the cotton plant by stimulating ethylene production, which promotes the formation of an abscission layer at the base of leaf petioles. Defoliants can be classed into two categories: (1) hormonal defoliants such as thiadiazuron (Dropp, FreeFall, etc.), and (2) herbicidal defoliants such as tribufos (Folex) and the PPO inhibitors (Aim, Display, Sharpem, etc.). For conventional cotton (non-Roundup Ready), glyphosate may be used as an herbicidal defoliant. If applied at too high a rate, herbicidal defoliants may cause excessive leaf injury, preventing the formation of the abscission layer and resulting in “stuck” leaves. Desiccants, such as paraquat or sodium chlorate, simply kill and dry plant tissues. At the higher rates, these products act very rapidly and do not allow an abscission layer to form at the junction of leaf petioles and the stem, resulting in “stuck” leaves. Desiccants are typically used in stripper-harvested cotton to dry plant tissues after a defoliant has been applied. Desiccants can be used at lower rates to help defoliate cotton, but selecting the appropriate rate to defoliate and not desiccate is challenging and is dependent upon environmental conditions.

Boll openers contain the active ingredient ethephon. Within the plant, ethephon is converted to ethylene, which causes bolls to open at a more rapid pace. Increased levels of ethylene within the plant also help activate abscission layers of the leaf petioles, further defoliating the plant. It is important to note that although ethephon does hasten the opening of bolls, it will not speed up the maturity of immature bolls. Additionally, boll openers tend to enhance basal and terminal leaf growth following the application, thus timely harvest is more critical when using a boll opener.

For more information, consult local AgriLife Extension professionals and these helpful publications:

High Plains and Northern Rolling Plains Cotton Harvest Aid Guide

Cotton Harvest Aid Guidelines for Louisiana
Introduction to Aquaponics

Join AgriLife Fisheries Specialist, Peter Woods for an informative short course on the Basics of Aquaponics.

September 24th
8:30 to 3:00pm

Aquaponics is a method of growing plants in a symbiotic relationship with fish. The fish waste feeds the plants, the plants clean the water that returns to the fish!

Register now to attend this full day Aquaponics Workshop. You will gain insight into how to design and manage your very own backyard aquaponics system, as well as, learn about the marketing strategies, business planning, and economics of larger aquaponics systems.

Topics to be Covered:
SYSTEM DESIGN AND TERMINOLOGY
PLANTING AND HARVESTING TECHNIQUES
FISH HEALTH AND WATER QUALITY
MARKETING AQUAPONIC PRODUCE
ECONOMICS OF AN AQUAPONIC SYSTEM

To be held at:
DEL MAR ECONOMIC DEVELOPMENT CENTER, ROOM 117
3209 S. STAPLES
CORPUS CHRISTI, TX 78404

A participation fee of $30, which includes lunch and a light breakfast, will be charged at the door. Seating is limited to the first 30 participants to RSVP before September 17th to:

Texas A&M AgriLife Extension Service
Nueces And San Patricio Counties
710 East Main
Robstown, TX 78380
361.767.5223
j-ott@tamu.edu

Individuals with disabilities, who require an auxiliary aid, service or accommodation in order to participate in any of the mentioned activities, are encouraged to contact the County Extension Office at 361.767.5223 eight days before all programs for assistance.

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status.

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

Nueces Agriculture “IMPROVING FOOD & FIBER PRODUCTION” 5
Spring Wheat Workshop

September 23rd
10:30 to 1:30
To be held at the
Johnny Calderon
Nueces County Building
710 East Main,
Robstown, TX.

A participation fee of $15 which
includes lunch will be charged at
the door.

Please RSVP by
September 16, 2015
By calling 361.767.5223

Texas A&M AgriLife
Extension Service
Nueces County
710 East Main Street
Suite 1
Robstown, TX 78380
Phone: 361.767.5223
Fax: 361.767.5248
E-mail: j-ott@tamu.edu

Workshop Topics

Spring Wheat Variety Performance Data
Insect Management
Dealing With Foliar Disease
Weed Management
Fertility Management

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

Nueces Agriculture “IMPROVING FOOD & FIBER PRODUCTION”
# Spring Wheat Variety Test—Odem, TX

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variety</th>
<th>Yield bu/A @ 13% moisture</th>
<th>Test Weight lb/bu</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Expresso</td>
<td>33.40</td>
<td>55.30</td>
</tr>
<tr>
<td>2</td>
<td>WB9518</td>
<td>30.10</td>
<td>53.55</td>
</tr>
<tr>
<td>3</td>
<td>Samson</td>
<td>30.00</td>
<td>53.70</td>
</tr>
<tr>
<td>4</td>
<td>Iguacu</td>
<td>28.80</td>
<td>51.47</td>
</tr>
<tr>
<td>5</td>
<td>Rockland</td>
<td>28.40</td>
<td>53.20</td>
</tr>
<tr>
<td>6</td>
<td>Mayville</td>
<td>27.50</td>
<td>53.80</td>
</tr>
<tr>
<td>7</td>
<td>Goliad</td>
<td>24.70</td>
<td>53.50</td>
</tr>
<tr>
<td>8</td>
<td>Verde</td>
<td>24.00</td>
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</tr>
<tr>
<td>9</td>
<td>TX12M4688</td>
<td>22.70</td>
<td>52.85</td>
</tr>
<tr>
<td>10</td>
<td>Digger</td>
<td>22.60</td>
<td>52.10</td>
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<tr>
<td>11</td>
<td>Dinero</td>
<td>21.80</td>
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<tr>
<td>12</td>
<td>Express</td>
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<td>13</td>
<td>TX11D3117</td>
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<td>44.30</td>
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<td>TX12M4713</td>
<td>20.70</td>
<td>52.85</td>
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<tr>
<td>16</td>
<td>Fallar</td>
<td>20.60</td>
<td>51.68</td>
</tr>
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<td>17</td>
<td>Albany</td>
<td>20.40</td>
<td>54.50</td>
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<td>18</td>
<td>WB9229</td>
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<tr>
<td>19</td>
<td>TX10D2265</td>
<td>18.70</td>
<td>51.30</td>
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<tr>
<td>20</td>
<td>Vantage</td>
<td>18.40</td>
<td>51.87</td>
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<td>21</td>
<td>Breaker</td>
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<td>22</td>
<td>Joaquin Oro</td>
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<td>23</td>
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<td>16.90</td>
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<td>27</td>
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<tr>
<td>30</td>
<td>Metcalfe</td>
<td>11.50</td>
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</tr>
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</table>

LSD (5%) 6.88  3.07
CV (%) 33.59  6.09
Mean 20.90  51.92
Cotton Harvest Aid Performance Demonstration

Summary
A total of six different treatments were applied to the cotton variety PHY 333 WRF to evaluate their leaf drop and harvest aid effectiveness in a strip test located at the Claude Otahal Farm on FM 2826, Southeast of Robstown. An eight and fourteen day after treatment rating were taken with treatment costs ranging from a low of $8.10/acre to a high of $17.50/acre.

Objective
To evaluate the effectiveness of selected harvest aid treatments in preparing cotton for harvest.

Materials and Methods
Treatments were established in a strip test of dryland cotton on 30-inch row spacing, with each plot 100 feet in length. Defoliation treatments were applied on August 11 with a CO\textsubscript{2} backpack sprayer delivering 10 gallons per acre. Treatments were applied from 1:00 P.M. to 2:00 P.M. The broadcast application was made with XR 8002 nozzle tips on 20-inch spacing. The cotton variety was PHY 333 WRF, and had about 40% open bolls the day prior to initial treatment. Average plant height was 38 inches. Defoliation ratings will be taken at 8, 11 and 14 DAT. A small rain event occurred on 8/13/15 with 0.32 inch according to FarmLogs.com.

Results and Discussion
Table 1 summarizes the initial evaluation of treatments 8 DAT. At this time many treatments appear very good based on ratings below, however, many did not knock out the terminal and with recent rainfall new growth is likely and will be apparent in evaluations at 11 and 14 DAT.

Table 1. Comparison of percent defoliation, desiccation, green leaf and price between treatments, 8 DAT, Otahal Farm, Nueces County.

<table>
<thead>
<tr>
<th>Trt #</th>
<th>Product and Rate</th>
<th>Application</th>
<th>Estimated Cost ($/A*)</th>
<th>Defoliation %</th>
<th>Desiccation %</th>
<th>Green Leaf %</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Dropp SC @ 1.6 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Finish 6 Pro @ 21 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>3</td>
<td>Ginstar EC @ 3.2 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>4</td>
<td>Folex 6 @ 8 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>5</td>
<td>Dropp SC @ 1.5 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>6</td>
<td>Dropp SC @ 2.0 fl oz</td>
<td>A</td>
<td>90</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

* Estimated cost is for educational purposes only and prices listed are not actual “carry out” prices.