State-wide and Beltwide Cotton Issues

Gaylon Morgan

State Extension Cotton Agronomist

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South, East, and Rolling Plains
Crop Status
All Cotton Yield
United States

~10 lb/a/year increase in lint yields
Adoption of Variety and Traits in U.S.

United States % Cotton Acreage by Company

- **All-Tex/Dyna-Gro Total**
- **Americot Total**
- **Bayer CropScience - FiberMax Total**
- **Bayer CropScience - Stoneville Total**
- **Croplan Genetics Total**
- **Deltapine Total**
- **Phytogen Total**

### 2014 (pre-new traits)
- **2014 (pre-new traits)**
  - All-Tex/Dyna-Gro: 7
  - Americot: 0
  - Bayer CropScience - FiberMax: 12
  - Bayer CropScience - Stoneville: 15
  - Croplan Genetics: 7
  - Deltapine: 0
  - Phytogen: 0

### 2015 (1st year of new traits)
- **2015 (1st year of new traits)**
  - All-Tex/Dyna-Gro: 12
  - Americot: 12
  - Bayer CropScience - FiberMax: 6
  - Bayer CropScience - Stoneville: 22
  - Croplan Genetics: 0
  - Deltapine: 7
  - Phytogen: 7

### 2016
- **2016**
  - All-Tex/Dyna-Gro: 22
  - Americot: 31
  - Bayer CropScience - FiberMax: 17
  - Bayer CropScience - Stoneville: 15
  - Croplan Genetics: 0
  - Deltapine: 6
  - Phytogen: 6

### 2017 (1st year with label)
- **2017 (1st year with label)**
  - All-Tex/Dyna-Gro: 33
  - Americot: 27
  - Bayer CropScience - FiberMax: 13
  - Bayer CropScience - Stoneville: 10
  - Croplan Genetics: 7
  - Deltapine: 7
  - Phytogen: 5
Adoption of Variety - Texas

Texas % Cotton Acreage by Company

- **All-Tex/Dyna-Gro Total**
- **Americot Total**
- **Bayer CropScience - FiberMax Total**
- **Bayer CropScience - Stoneville Total**
- **Croplan Genetics Total**
- **Deltapine Total**
- **Phytogen Total**

<table>
<thead>
<tr>
<th>Year</th>
<th>All-Tex/Dyna-Gro</th>
<th>Americot</th>
<th>Bayer CropScience - FiberMax</th>
<th>Bayer CropScience - Stoneville</th>
<th>Croplan Genetics</th>
<th>Deltapine</th>
<th>Phytogen</th>
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<tbody>
<tr>
<td>2014 (pre-new traits)</td>
<td>18</td>
<td>10</td>
<td>13</td>
<td>24</td>
<td>4</td>
<td>10</td>
<td>0</td>
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<tr>
<td>2015 (1st year of new traits)</td>
<td>33</td>
<td>11</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>10</td>
<td>1</td>
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<tr>
<td>2016</td>
<td>35</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>2</td>
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<tr>
<td>2017 (1st year with label)</td>
<td>33</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>11</td>
<td>10</td>
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</table>
Adoption of Auxin Traits

Percent of Auxin Tolerant Acres

- Auxin Tolerant (U.S.): 9, 44, 67
- Auxin Tolerant (TX): 4, 37, 66
- XtendFlex (U.S.): 3, <1, 64
- XtendFlex (TX): 3, <1, 63
- Enlist (U.S.): 4, <1, 3
- Enlist (TX): 4, <1, 3
Off-target Movement of Auxin Herbicides
Duplosan (dichlorprop)

- Targeted for chemical stalk destruction in South and East Texas
- Volunteer cotton of Enlist and/or XtendFlex?????

- State-limited use herbicide
- Current formulation = Ester formulation
Cotton Yield, Quality, and Plant Growth Response to Soil-Applied Potassium


An Extension Cotton Specialist Project
Lint yield

2012-2015: Williamson, Wharton, and Hill Counties
Diseases/Nematodes Potentially Impacting Texas Cotton

Reniform nematodes
- monoculture
- Prevent soil movement

Blue Disease
(Cotton leaf roll virus)

Target Spot

Tom Allen, Mississippi State University

Univ. of Florida

By Jane Ray (NAQS), Cherie Gambley (DAFFQ), Murray Sharman (DAFFQ) & Susan Maas (CRDC)
Insects Potentially Impacting Texas Cotton

• Old World Bollworm
• Boll weevil

• Contact
  – Suhas Vyavhare – Extension Entomologist at Lubbock
  – David Kerns – Extension Entomologist at College Station
  – IPM agents
CONTAMINATION FROM PLASTICS

- Plastics are a major concern
- Most prevalent contaminant; many types and forms

- U.S. exports about 85% of our cotton
Plastic by Region for 2017 Crop

<table>
<thead>
<tr>
<th>Region</th>
<th>Total US</th>
<th>98.9%</th>
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<tbody>
<tr>
<td>Upland</td>
<td>2,585</td>
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<tr>
<td>Pima</td>
<td>29</td>
<td>1.1%</td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Total US</th>
<th>20%</th>
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<tbody>
<tr>
<td>Abilene</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>Corpus</td>
<td>432</td>
<td></td>
</tr>
<tr>
<td>Lamesa</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Lubbock</td>
<td>1,041</td>
<td>64%</td>
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<tr>
<th>Region</th>
<th>Total US</th>
<th>14%</th>
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<tbody>
<tr>
<td>Florence</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Macon</td>
<td>295</td>
<td></td>
</tr>
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<tr>
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<th>514</th>
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<tbody>
<tr>
<td>Dumas</td>
<td>196</td>
<td></td>
</tr>
<tr>
<td>Memphis</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td>Rayville</td>
<td>35</td>
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USDA/AMS thru 5/17/2018
Plastic vs Other for 2017 Crop

(thru 5/17/2018)

Bales called with Plastic & Total Other calls

91% of all 61 Calls were Plastic

2,614 Plastic
2,868 Total Other

Other

Plastic
Total Other

National Cotton Council of America
Plastic by Color for 2017 Crop
(thru 2/28/2018 per USDA/AMS)

- Clear: 73.6%
- Red: 14.8%
- White: 4.5%
- Green: 1.8%
- Black: 1.4%
- Other Colors: 0.5%
Pakistan Mill 7/1/18
2018 Extraneous Matter code 71 or 72

460 or 695 points deduction in Loan

Previously classed as “Other Extraneous Matter” 61 or 62
Prevention Begins in the Field
Truck “rub” damage from oversize or out-of-alignment round modules.
Round Module Staging

Choosing The Proper Staging Site

IMPORTANT: Do not stage or drop modules on cut or chopped stalks.

Modules should be staged on a high, flat, well drained surface. Staging on flat driveways, turn rows or disked surface is optimal.

If at all possible do not stage modules on top of rows, beds or field locations where module truck access is difficult. Modules tend to take the shape of the surface they are placed on (see Incorrect Staging Surface graphic). Setting on beds or uneven surfaces causes module truck chains to dig into the ground to get under the bottom of module.

When choosing staging locations, make sure modules can be retrieved from the location following rain events.

If module truck tires and/or tracks slip when retrieving the load, damage may occur to the underside of the module.

This kind of damage is result of pickup chain engaging the module bottom and moving the module forward at a speed that is faster than the backward speed of the module truck.

Continued on next page
Examples of Plastic Contamination in Gin

Yellow Plastic Between Modules
Examples of Plastic Contamination in Gin
Yellow Plastic Removal At Module Feeder
Lint Contamination Costs YOU Money

- $200 Million Problem
- Broken Contracts
- Loss of Business
- Loss of Confidence
Contamination Prevention Education

Module Handling Video

Posters, brochures, direct mail
(www.cotton.org/tech/quality/contamfree.cfm)

- Prevent Lint Contamination brochure
- Round module wrap removal (video and poster)
- Contamination-Free Cotton mailings to all gins, warehouses, NCC Official Family
- “Contamination Prevention Alert – Striving for Zero Tolerance,” etc.
Contamination Research
Detection and Removal

• Researchers (USDA/ARS and University) in full cooperation

• All 3 USDA Ginning Labs plus New Orleans Labs involved

• Optical detection via various camera technologies

• Evaluating existing gin machines for better extraction
Cotton Accomplishments

Farm gate value exceeding $3 billion for lint and $400 million for seed in Texas in 2017.

Total economic value to Texas’ economy of 4X the farm gate value.

Annual yields have increased an average of 10 lb/a/year.

Pesticide use has decreased 40% since the 1960s.

Texas A&M AgriLife Extension and Research success stories result in an estimated economic value of over $230 million annually.
Dr. Murilo Maeda

New Extension Cotton Agronomist at Lubbock

- long family history with cotton
- well trained in Cotton Physiology
- in-depth UAV experience
- Starts October 1st