Agenda
Gin Management Zoom Meeting
July 23, 2020 – 1:00 – 3:00 PM Central

Opening Remarks	Curtis Stewart
NCC Remarks	Gary Adams
COVID Gin Employer Requirements	Dusty Findley and Kelley Green
Contamination Prevention	Harrison Ashley and Curtis Stewart
USDA-ARS Gin Lab Report	Greg Holt and Derek Whitelock
Bale Packaging	Lauren Krogman
Cottonseed Survey	Harrison Ashley

Covid-19 & Cotton Gins

Dusty Findley
Southeastern Cotton Ginners Association, Inc.
Dawsonville, Georgia
706-344-1212

Kelley Green
Texas Cotton Ginners' Association
Round Rock, Texas
512-615-1102

Covid-19 & Cotton Gins

- Goals
  - Protect yourself and your employees (especially high-risk)
  - Prevent initial infection
  - Prepare for infection of any employee (especially key individuals)
  - Minimize disruption to your business

Covid-19 & Cotton Gins

- No Applicable Regulations for Covid
  - Executive Orders from Local, State, Federal
  - Much Guidance for Local, State, Federal
- Follow CDC Guidance as primary source
  - Most other agencies are following CDC lead
  - OSHA has some additional information, but mainly follows CDC

Covid-19 & Cotton Gins

- Must-Have Components
  - Covid-19 Company Response Team
    - Committee of Manager, Superintendent, Ginners
    - Need to be fully trained on Company Covid Procedures and Policies.
  - Develop Procedures and Policies
    - Screening
    - Face Coverings and potentially PPE
    - Distancing and Grouping of Employees
    - Sanitation and Cleaning
    - Exposure Response

Covid-19 & Cotton Gins

- Covid-19 Company Response Team
  - Each member must be able to communicate your Covid-19 program elements to
    - Employees
    - Customers
    - Regulatory Officials

Covid-19 & Cotton Gins

- Develop Procedures and Policies
  - Screening
    - Could be temperature checks (100.4 Deg F)
    - Must include checking for symptoms per CDC guidance
  - Masks and potentially PPE
    - Face coverings are important – liability, perception, reality
    - Other PPE may be needed depending on task

Covid-19 & Cotton Gins

- Develop Procedures and Policies
  - Distancing and Grouping of Employees
    - This is a key feature – protect your workforce
    - Minimizes exposure to complete shutdown
    - Groups should be eliminated, or as small as possible
      - Can you use barriers to keep people separated?
      - Keep gin workers, office workers and truckers separate
      - Keep customers and workers separate if possible
      - Separate workers by shift
        - Analyze workflow to minimize standing or gathering
          - Time Clock – can you have touchless process?
          - Lunch Break
          - Safety Meetings
        - Are staggered shifts and staggered lunches possible?
      - Consider housing arrangements to keep groups separate

Covid-19 & Cotton Gins

Fisher Phillips

STOP

To do our part in preventing the spread of COVID-19 in our community and workplace, we are restricting access to this facility for anyone who may have recently been exposed to the virus. Please read this carefully.

By entering this facility, you are affirming and attesting that:

(a) You have **not** in the last 14 days had any close contact with anyone who is either confirmed or suspected of being infected with COVID-19, including anyone who was experiencing or displaying any of the known symptoms of COVID-19 (which are listed in item (c) below); AND

(b) You have **not** in the last month traveled to a restricted area that is under a Level 2, 3, or 4 Travel Advisory according to the U.S. State Department (including China, Italy, Iran, and most of Europe); AND

(c) You do **not** currently experience or display, and you have not in the last 14 days experienced or displayed, any of the following symptoms:

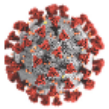
- Elevated temperature or fever of 100.4 F or higher,
- Cough,
- Shortness of breath and/or difficulty breathing,
- Loss of smell and/or taste,
- Fatigue, or
- Persistent headaches.

If you answered YES to any of the above statements,

you may NOT enter this building.

Thank you for your cooperation.

What you should know about COVID-19 to protect yourself and others



Know about COVID-19

- Coronavirus (COVID-19) is an illness caused by a virus that can spread from person to person.
- The virus that causes COVID-19 is a new coronavirus that has spread throughout the world.
- COVID-19 symptoms can range from mild (or no symptoms) to severe illness.

Know how COVID-19 is spread

- You can become infected by coming into close contact (about 6 feet or two arm lengths) with a person who has COVID-19. COVID-19 is primarily spread from person to person.
- You can become infected from respiratory droplets when an infected person coughs, sneezes, or talks.
- You may also be able to get it by touching a surface or object that has the virus on it, and then by touching your mouth, nose, or eyes.

Protect yourself and others from COVID-19

- There is currently no vaccine to protect against COVID-19. The best way to protect yourself is to avoid being exposed to the virus that causes COVID-19.
- Stay home as much as possible and avoid close contact with others.
- Wear a cloth face covering that covers your nose and mouth in public settings.
- Clean and disinfect frequently touched surfaces.
- Wash your hands often with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer that contains at least 60% alcohol.

Practice social distancing

- Buy groceries and medicine, go to the doctor, and complete banking activities online when possible.
- If you must go in person, stay at least 6 feet away from others and disinfect items you must touch.
- Get deliveries and takeout, and limit in-person contact as much as possible.

Prevent the spread of COVID-19 if you are sick

- Stay home if you are sick, except to get medical care.
- Avoid public transportation, ride-sharing, or taxis.
- Separate yourself from other people and pets in your home.
- There is no specific treatment for COVID-19, but you can seek medical care to help relieve your symptoms.
- If you need medical attention, call ahead.

Know your risk for severe illness

- Everyone is at risk of getting COVID-19.
- Older adults and people of any age who have serious underlying medical conditions may be at higher risk for more severe illness.

cdc.gov/coronavirus

CS314057A 04/01/2020

EMPLOYEE RIGHTS

PAID SICK LEAVE AND EXPANDED FAMILY AND MEDICAL LEAVE UNDER THE FAMILIES FIRST CORONAVIRUS RESPONSE ACT

The **Families First Coronavirus Response Act (FFCRA or Act)** requires certain employers to provide their employees with paid sick leave and expanded family and medical leave for specified reasons related to COVID-19. These provisions will apply from April 1, 2020 through December 31, 2020.

▸ PAID LEAVE ENTITLEMENTS

Generally, employers covered under the Act must provide employees:

Up to two weeks (80 hours, or a part-time employee's two-week equivalent) of paid sick leave based on the higher of their regular rate of pay, or the applicable state or Federal minimum wage, paid at:

- 100% for qualifying reasons #1-3 below, up to $511 daily and $5,110 total;
- ⅔ for qualifying reasons #4 and 6 below, up to $200 daily and $2,000 total; and
- Up to 12 weeks of paid sick leave and expanded family and medical leave paid at ⅔ for qualifying reason #5 below for up to $200 daily and $12,000 total.

A part-time employee is eligible for leave for the number of hours that the employee is normally scheduled to work over that period.

▸ ELIGIBLE EMPLOYEES

In general, employees of private sector employers with fewer than 500 employees, and certain public sector employers, are eligible for up to two weeks of fully or partially paid sick leave for COVID-19 related reasons (see below). *Employees who have been employed for at least 30 days* prior to their leave request may be eligible for up to an additional 10 weeks of partially paid expanded family and medical leave for reason #5 below.

▸ QUALIFYING REASONS FOR LEAVE RELATED TO COVID-19

An employee is entitled to take leave related to COVID-19 if the employee is unable to work, including unable to **telework**, because the employee:

1. is subject to a Federal, State, or local quarantine or isolation order related to COVID-19;
2. has been advised by a health care provider to self-quarantine related to COVID-19;
3. is experiencing COVID-19 symptoms and is seeking a medical diagnosis;
4. is caring for an individual subject to an order described in (1) or self-quarantine as described in (2);
5. is caring for his or her child whose school or place of care is closed (or child care provider is unavailable) due to COVID-19 related reasons; or
6. is experiencing any other substantially-similar condition specified by the U.S. Department of Health and Human Services.

▸ ENFORCEMENT

The U.S. Department of Labor's Wage and Hour Division (WHD) has the authority to investigate and enforce compliance with the FFCRA. Employers may not discharge, discipline, or otherwise discriminate against any employee who lawfully takes paid sick leave or expanded family and medical leave under the FFCRA, files a complaint, or institutes a proceeding under or related to this Act. Employers in violation of the provisions of the FFCRA will be subject to penalties and enforcement by WHD.

WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

For additional information or to file a complaint:
1-866-487-9243
TTY: 1-877-889-5627
dol.gov/agencies/whd

WH1422 REV 03/20

Symptoms of Coronavirus (COVID-19)

Know the symptoms of COVID-19, which can include the following:

Symptoms can range from mild to severe illness, and appear 2-14 days after you are exposed to the virus that causes COVID-19.

***Seek medical care immediately if someone has emergency warning signs of COVID-19.**

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake
- Bluish lips or face

This list is not all possible symptoms. Please call your medical provider for any other symptoms that are severe or concerning to you.

cdc.gov/coronavirus

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Covid-19 & Cotton Gins

- Develop Procedures and Policies
  - Sanitation and Cleaning
    - This is especially important in office and housing
      - There are sanitation companies that have products that have 30-day protection properties
      - Housing, office, break areas, bathrooms should have regular cleaning schedule for high-touch surfaces and someone in charge of the cleaning.
      - High-touch areas more difficult to define in gin
      - Be sure you have a cleaning procedure for an area if you have a worker test positive
    - Train employees who are doing the cleaning

Covid-19 & Cotton Gins

- Develop Procedures and Policies
  - Exposure Response
    - Be sure workers are trained to report if they have symptoms or potential exposure
    - Have pre-defined responses to the following
      - Worker that has a potential exposure
      - Worker exhibiting symptoms
      - Worker that has tested positive
    - How to quarantine Workers
    - Will the workers be paid?

Covid-19 & Cotton Gins

- Develop Procedures and Policies
  - Exposure Response
    - Have pre-defined responses to the following
      - Worker that has a potential exposure
        - May need to be sent home – critical infrastructure
        - Must be separated from other workers
        - Must screen daily
      - Worker exhibiting symptoms
        - Must be sent home – sanitize employees work area.
        - Inform potentially affected employees
      - Worker that has tested positive
        - Must be sent home – sanitize employees work area.
        - Inform Local Authorities
        - Inform potentially affected employees
        - Contact Tracing – 6-15-48

Covid-19 & Cotton Gins

- Any employee who worked in close proximity (within six feet) for a prolonged period of time (15 minutes depending upon particular circumstances, such as how close the employees worked and whether they shared tools or other items) with the affected employee during the 48-hour period before the onset of symptoms must be identified. These employees will be sent home for 14 days under CDC Guidance to ensure the infection does not spread. While quarantined, those employees should self-monitor for symptoms, avoid contact with high-risk individuals, and seek medical attention and notify employer if symptoms develop.

Covid-19 & Cotton Gins

- Return to Work
  - Follow Health Professional Instructions
  - Follow CDC Guidelines – Current Guidelines:
    - An employee displaying symptoms should not return to work for 72 hours after recovery (no fever, no fever medication) AND improvement in respiratory symptoms AND 7 days since symptoms first appeared
    - An employee that has tested positive should not return to work until the fever has resolved without medication, respiratory symptoms have improved AND two negative test results more than 24 hours apart have been obtained.
    - An employee that has tested positive with no symptoms may return to work seven days after the test if there is no subsequent illness and there are no further symptoms. For three additional days this worker must maintain 6' distance from other employees and wear a facemask.

Covid-19 & Cotton Gins

- Additional Considerations
  - Worker Housing
    - Ventilation
    - Spacing in Housing
    - Separate Accommodations for sick or high-risk workers
    - Post CDC Guidelines in Barracks
    - Hand-washing/sanitation facilities
    - Greater Frequency for Cleaning
    - 6 Feet Between Beds
    - Workers Sleep Head to toe
    - Person Designated for Sanitation

Covid-19 & Cotton Gins

- Policies for Workers Traveling off-site
  - Seed and Bale Truck Drivers
  - Parts pickup
- Policies for Visitors/Customers
  - Where are visitors/customers allowed
  - Procedures for visitors/customers

Covid-19 & Cotton Gins

- **Additional resources**
  - https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-agricultural-workers.html
  - https://www.gapconnections.com/resources/covid-19-resources
  - https://www.fisherphillips.com/faqs
  - https://www.cotton.org/issues/members/covid19/index.cfm?

- **Questions?**

- **WASH YOUR HANDS!**

Plastic Contamination Prevention
July 23, 2020

CONTAMINATION FROM PLASTICS

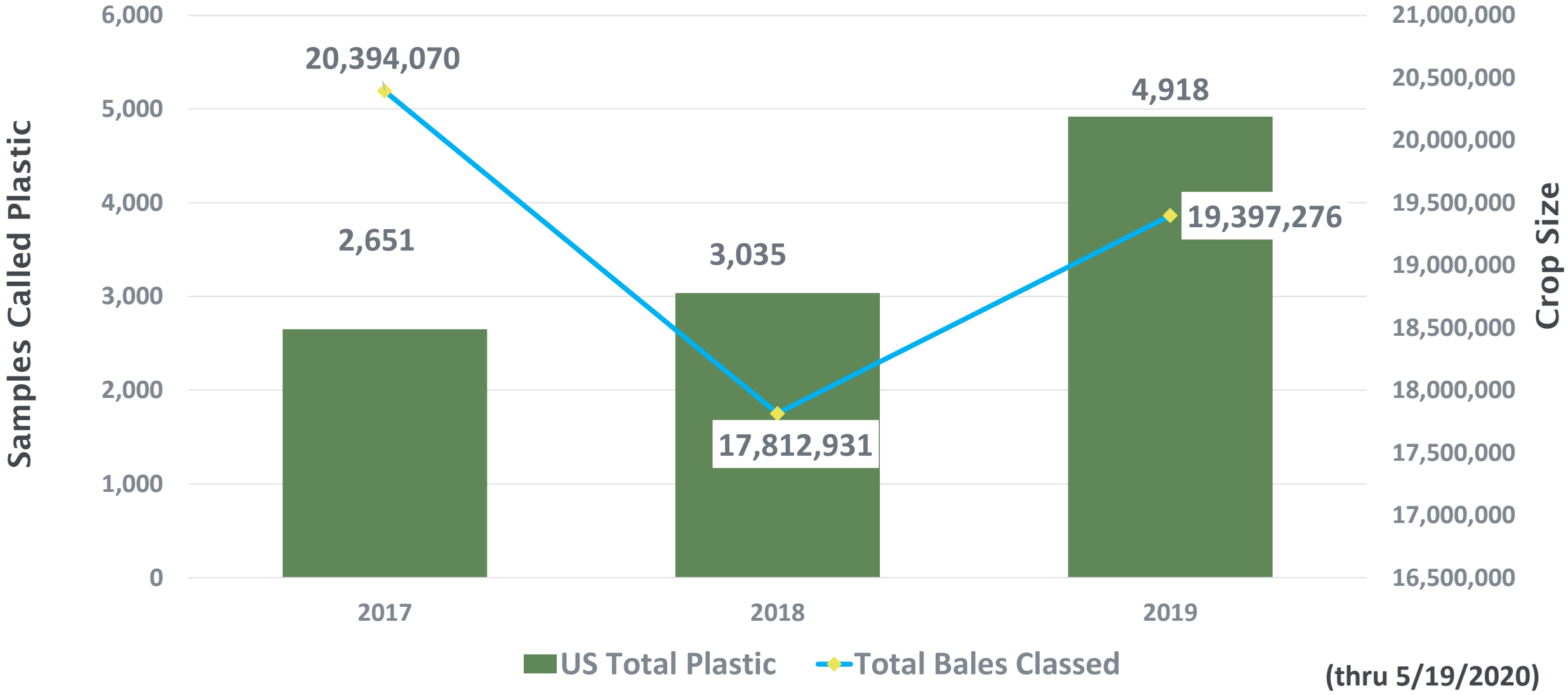
- Plastics have been a concern for many years
- Plastics have become the most prevalent non-plant contaminant
- There are many types and forms

USDA AMS 2018 ANNOUNCEMENT:

New plastic code (71 or 72) implemented July 1 beginning with the 2018 crop to distinguish Plastic from Other Extraneous Matter (61 or 62)

Plastic Contamination

2017/18 vs. 2018/19 vs. 2019/20 Crops



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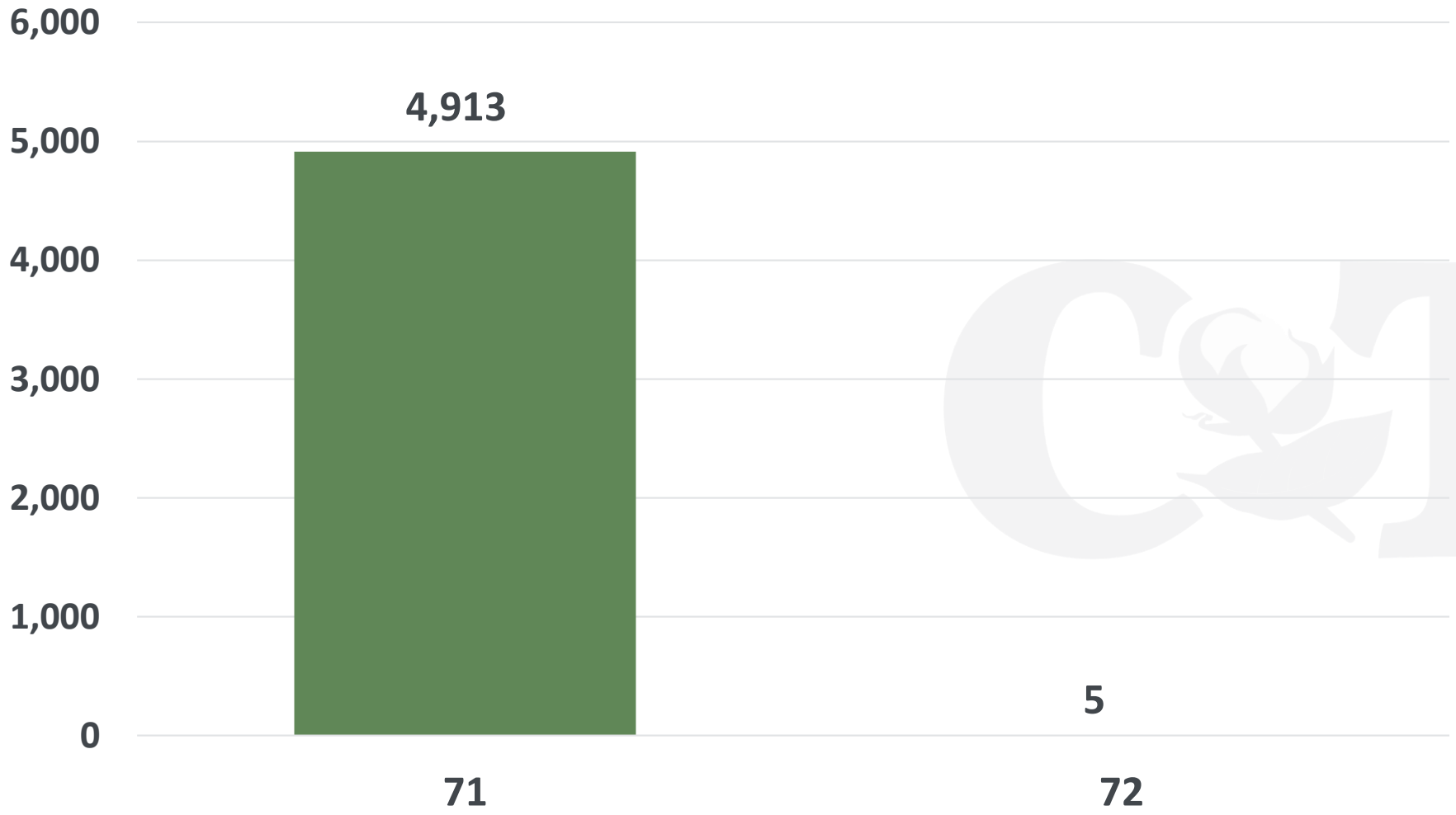
2019 Plastic 71 vs. 72



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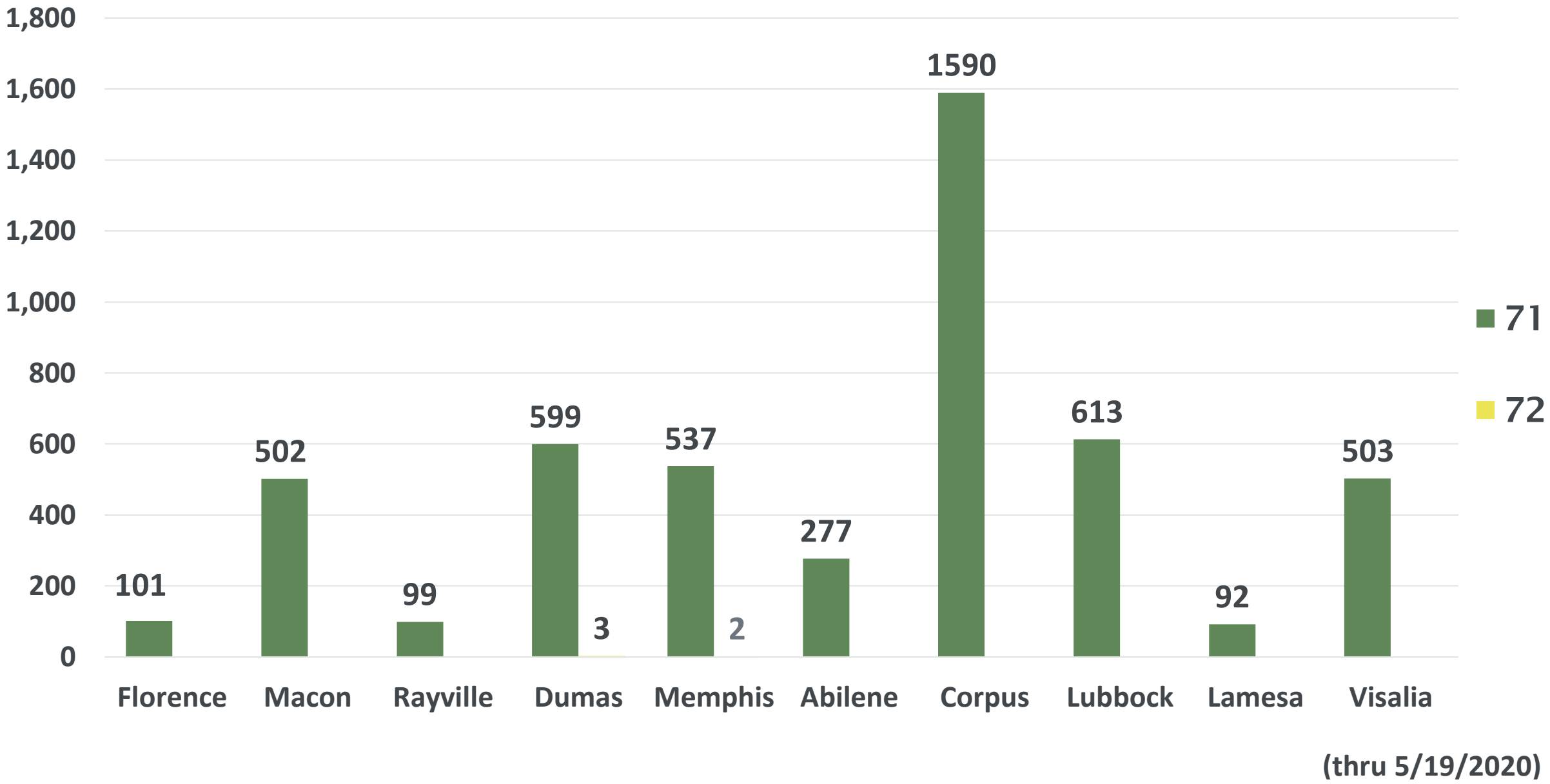
2019 Crop Plastic 71 & 72 by Office

Cotton & Tobacco



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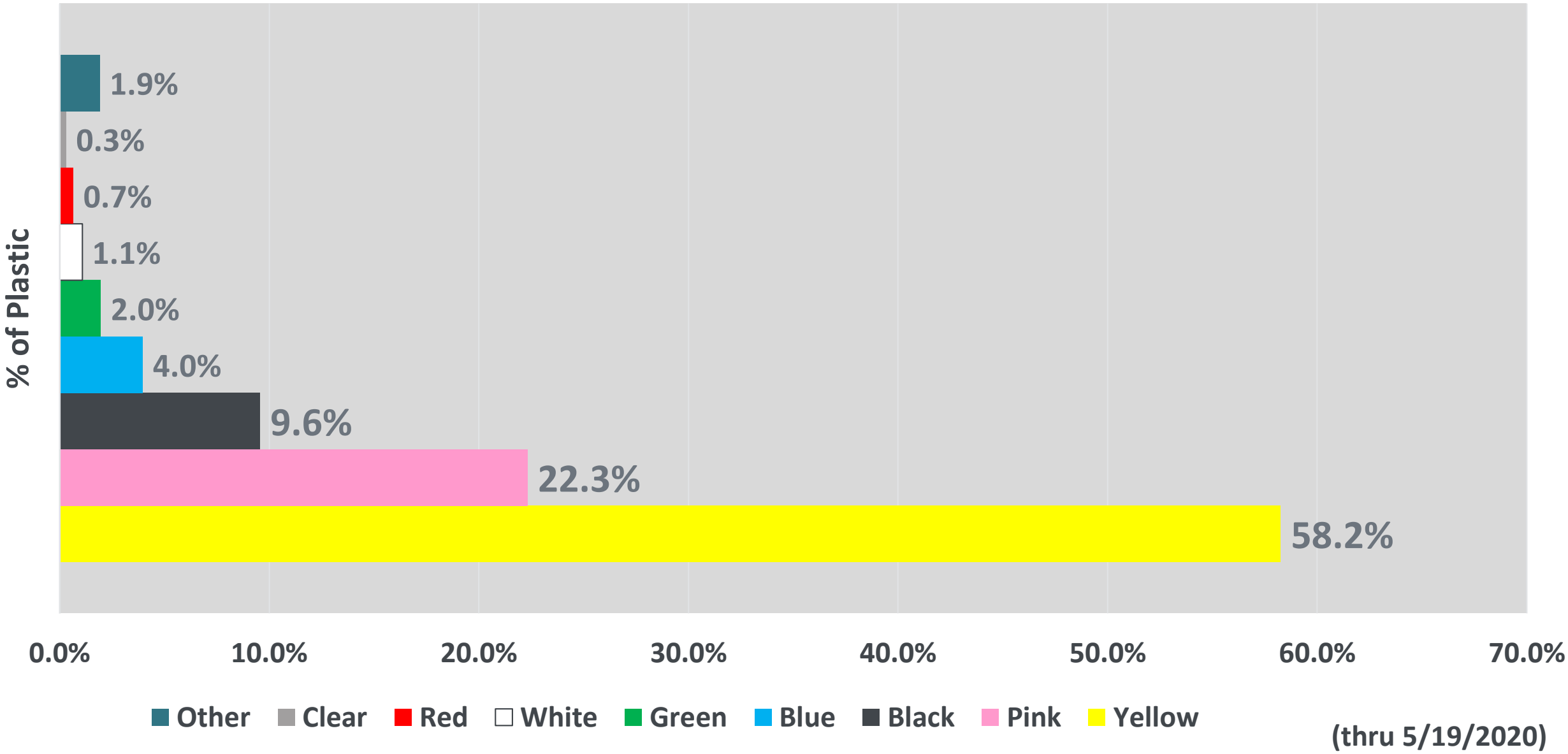
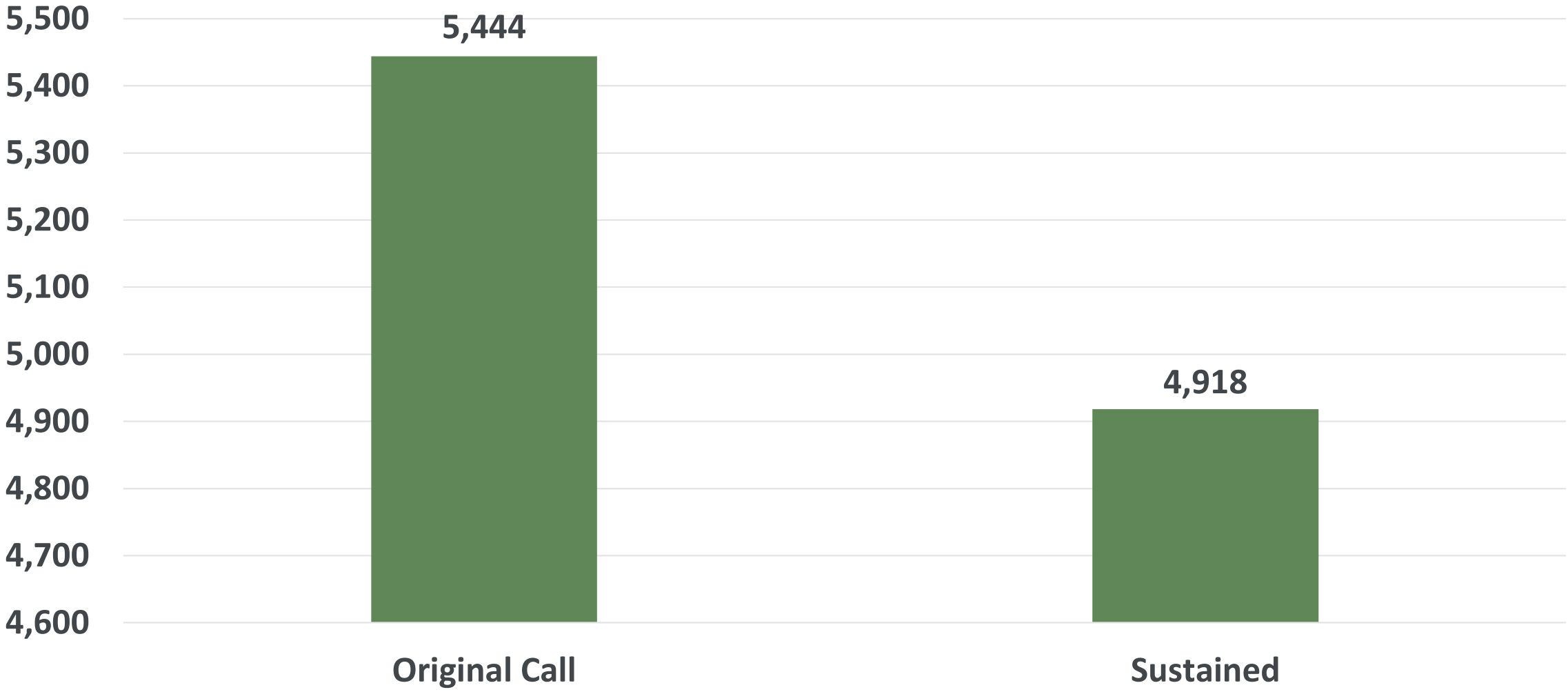
2019/20 Crop - Plastic Calls by Color



All Plastic

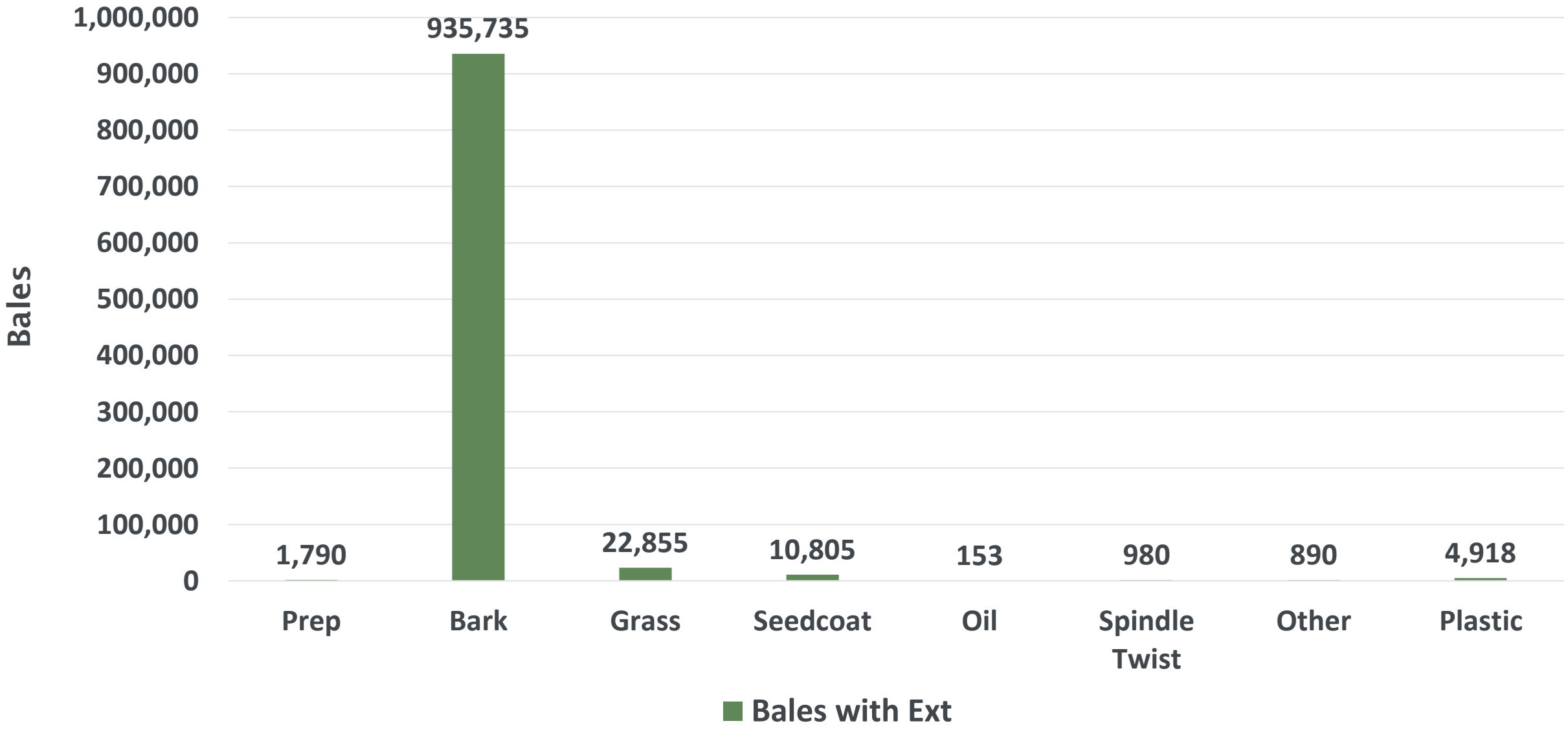
Cotton Tobacco

2019-2020 Crop



(through 5/19/2020)

All Extraneous Matter for 2019 Crop



Prevention of Plastic Contamination

Lost reputation/lost market potential

…significant loan discounts

UP	2018/19 -	71:	-460	72:	-695
	2019/20 -	71:	-510	72:	-775
	2020/21 -	71:	-1870	72:	-2080
ELS	2020/21 -	71:	-4000	72:	-4000

Concern is how many are <u>not</u> called

USDA AMS 2020 ANNOUNCEMENT:

Beginning July 1, 2020, if the original classification had a plastic extraneous matter code (e.g. 71 & 72), the following modifications will be made:

- The plastic extraneous matter code will be automatically applied to the Review or Rework classification for that sample; and
- All other factors (e.g. Grade, Leaf, Micronaire, Length, Strength, Uniformity, Color and % Area) will be classed as normal including the module averaging rules for certain factors.
- The Review and Rework classification for all other extraneous matter codes remains unchanged.

NCC and JCIBPC Contamination Policy

Prevention is CRITICAL:

- Revise and update educational material
- Contamination Awareness and Prevention efforts with growers, ginners & warehouses
- Closely monitor complaints from mills and shippers
- Internet form for reporting contamination incidents

Prevention of Plastic Contamination – Recommended Best Practices for Producers & Ginners

Education Videos

National Cotton Council Website:
http://www.cotton.org/tech/quality/contamfree.cfm
Texas A&M AgriLife Extension Zoom seminar:
https://youtu.be/GeFBzgbMO4k
National Cotton Council YouTube:
https://www.youtube.com/watch?v=5Pja_HbMElA
NCGA Safety Video Volume VI
Round Module Safety - Unwrapping, Handling and Storage
Also available on USB flash drive


TamaWrap™
Wrap for round module of cotton
Specially designed for John Deere Round Module Cotton Harvesters
Introduction to
2020
STAY CONNECTED!
Tama cotton support app updates.
WE'VE GOT YOU COVERED
Check out our Tama limited warranty.
NEW & BLUE!
Introducing our NEW & BLUE Value TamaWrap™! Check it out...
Tama
FARM GROWN SOLUTIONS

TamaWrap™

The New & Blue Value

TamaWrap™ Blue Value Introduction

- TamaWrap™ (RMW®) Blue Value was developed, designed and produced by Tama, to offer a value alternative to our customers.
- In order to achieve this significant cost reduction, some of the materials were changed, thus TamaWrap™ Blue Value can be more susceptible to damage due to less robust construction than TamaWrap Premium.
- Please carefully review the recommendations in pages 10 and 11, to minimize the risk of cotton contamination.

Handling Recommendations

- **General recommendation:** Handle with care and do not allow the module to drag on the ground or on stalks during staging.
- **Spear loaders:** Do not allow module to drag on the ground when inserting or withdrawing spears.
- **Rear and front loaders:** Make sure arms are completely on the ground before opening and closing to avoid "over squeezing".

Spear Loader

Rear and Front Loaders

Transportation Recommendations

As modules wrapped with Blue Value wrap may squat more, please follow the below recommendations:

- **Module trucks:**
  - Module diameter should not exceed 100 inches (254 CM). Thus, maximum recommended harvester monitor set size is 92", since TamaWrap™ Blue Value may squat more than TamaWrap™ Premium. If larger than 100", further reduce the set size.
  - Insure that recommended chains are used on module trucks.
- **Other trucks:**
  make sure there are no sharp edges or other sharp objects which may cause tears in modules.

Unwrapping Recommendations

- Extra care while unwrapping modules at the Gin is required!
- Examine module carefully PRIOR to unwrapping / cutting, and remove any and ALL loose pieces of plastic and other potential contaminants.
- Gins which cut wraps:
  - Use the Tama Cut Indicator™ to locate the recommended cutting zone (3 feet / 1 meter) from the Tama Cut Indicator, with the direction of the arrows.
  - Make ONE clean cut across the module, rather than several short cuts.
- Make sure you removed ALL pieces of wrap AFTER unwrapping / cutting.

Tama Cut Indicator™ on Value wrap

Blue Tama Econowrap

- Meet competition from Chinese wrap manufacturers
  - Material used not as robust as premium wraps
  - More prone to squat, rip and puncture
  - Does not have adhesive layer as found with premium
  - Only small adhesive strip

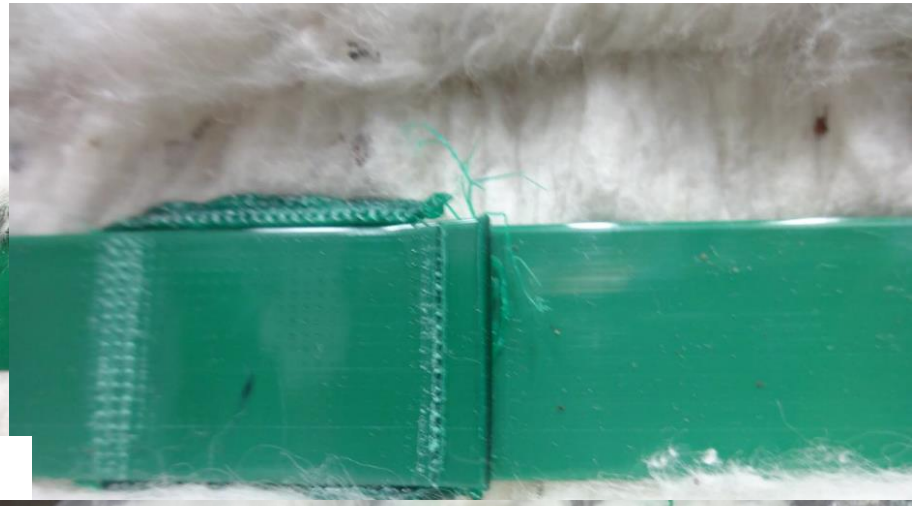
ASABE Standard

Round Module Wrap Performance Standard Development

- Data collection underway with third-party testing of TamaWrap to create baseline performance data
- Voluntary standard
- Next steps:
  - Complete data analysis
  - Review results with sub-committee (including John Deere and Tama)
  - Identify and complete any additional testing needed
  - Draft standard for consideration by committee

PET Strapping

PET Strapping



Questions

Bale Packaging

National Cotton Ginners Association Gin Management Zoom Meeting

July 23, 2020

2020 Specifications Review

- February 26, 2020– JCIBPC met and amended Specifications
- April 2, 2020 – Specification's Review Committee approved revisions
- April 9, 2020- USDA approved the 2020 Specifications recommendations

- The Specifications are available at: http://www.cotton.org/tech/bale/specs/index.cfm

Specification Revisions

- Removed all references to Cold Rolled High Tensile Steel Strapping
- Replaced NAFTA references with USMCA
- Added light blue (Pantone 306 C) as an additional approved color for woven polypropylene

3.1. Tare Weights

OFFICIAL TARE WEIGHTS IN POUNDS FOR THE 2020 – 2021 Marketing Year			
	Bale Ties[1]		
Wrapping Materials	PET Plastic Strap[2]	All 6-Wire	All 8-Wire
Polypropylene (Woven) [Approved or Experimental][3] Polyethylene (Woven) [4]	2	4	5
Polyethylene (PE) Film Bagging,[5]	3	4	5
Lightweight Woven Cotton Bagging [Experimental, West Region/Export Only][6]	3	4	5
Cotton Bagging [Fully Approved][7]	4	6	7
Fully Restrained PET Bagging [GinFast™][8]	3 (does not utilize traditional ties)		

National Cotton Council of America

3.2. Bagging and Tie Codes

Type of Bagging	Position 36		Type of Strap\Tie	Position 37
Cotton, [Fully Approved]	C		PET (Polyester) – 6-strap	1
Polyethylene (Film)	P		Steel – 6-wire	2
Polypropylene (Woven)	W			
Light weight cotton, [West Region/Export Only]	L		Steel – 8-wire	4
Fully Restrained PET Bag [GinFast™]	G		Fully Restrained PET Bag [GinFast™]	9
Experimental	X		Experimental	0 (zero)

Approved Woven Polypropylene Color

- Pg. 11- 2.2.3.1.2.3. Color: The color of the fabric containing HALS shall be translucent white, translucent light gold, or translucent light blue equivalent to Pantone color 306 C, unless otherwise approved by the JCIBPC.

Recertification of All Approved Materials

- All bagging and tie manufacturers were sent a recertification notice last summer
- Currently collecting samples and lab results
  - Delayed due to COVID-19
  - Acknowledgement received from 18 out of 34 total sent
  - 5 materials have been reapproved

PBI Tag Subcommittee

- The PBI Tag Subcommittee has been reinstated and met on March 20 to review complaints from overseas mills on tag background color and the use of dashes and spaces in the eye-readable segment of the PBI tag
- Additional meeting will be held pending the results of the mill survey

Mill Bale Packaging Survey

- A Bale Packaging Survey was created with assistance from CCI to question mills (domestic/international) about bale packaging preferences, contamination, and sustainability
- Survey was released mid-May and closed mid-June
- Response Regions: 9 domestic mills/158 international mills
- Report to the full JCIBPC by mid-August

Cotton Bale Bag Project

- Test to determine the market supply chain acceptance of the fully-approved 3lb. cotton bag (1974)
- Contamination/Sustainability
- Project funded by a merchant, ACSA, AMCOT, and the NCC
- 13,600 bags landed in early February
- 2 more containers (27,200 bags) have been ordered, expected to land end of August
- Bags will be available for the 2020 crop

National Cotton Council OF AMERICA

Thank you!

Questions?

Lauren Krogman
lkrogman@cotton.org

USDA-ARS Gin Lab Report

Presentation for NCGA Gin Management Meeting

23 July 2020

USDA-ARS Cotton Ginning Labs

Southwestern Cotton Ginning Research Laboratory, Las Cruces

Cotton Production and Processing Unit, Lubbock

Cotton Ginning Research Unit, Stoneville

Southwestern Cotton Ginning Research Laboratory Status

COVID-19 Impacts

- Maximum Telework since mid-March
  - Shop crew on half-time rotating schedule to move essential research projects forward
  - Scientists/Engineers and Technicians mostly teleworking and at Lab for essential research work

- Next 5-year Research Plan (2020-2025) completed

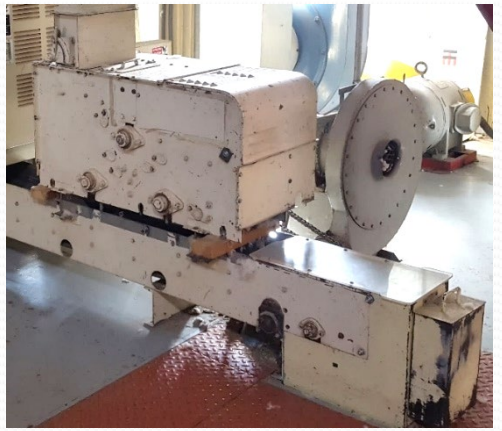
- Hiring
  - Engineer
    - Five applications reviewed
    - Two interviews the week of August 3
  - Machinist
    - Posting closed 8 Jul, should receive the applications this week

High Capacity Roller Gin Reclaimer

- Capacity to match high speed roller ginning
- Collaboration with Lummus Corporation
- Testing 2 prototypes

- Conventional
  - Small amount of seed loss
  - Very large lint loss
- Experimental
  - Higher speed = more lint loss
  - Lower speed = more seed loss
- 700 Feeder - best overall performance

- **Series Reclaimers**
- Commercial gin



Conventional

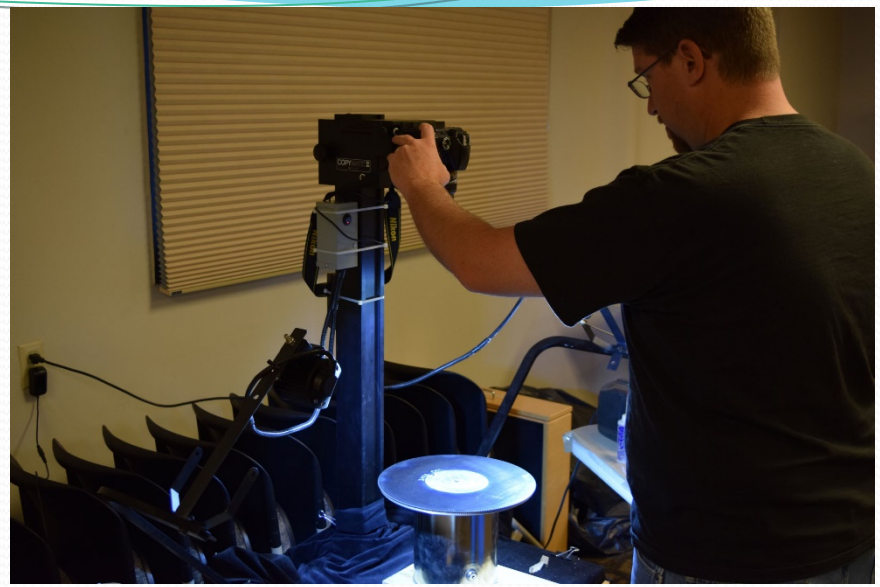
Modified 3-Saw

700 Feeder

Cryogenic Gin Saw Treatment

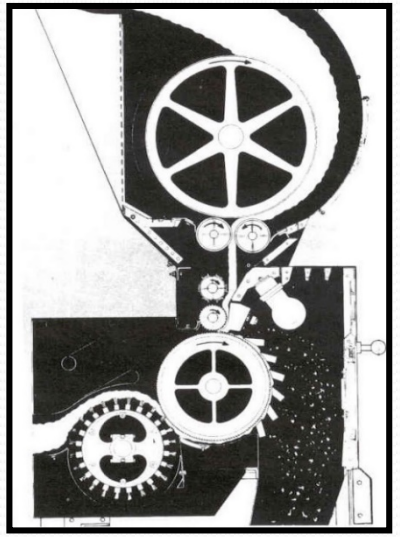
- Las Cruces & Lubbock Gin Labs, Lummus Corporation, NMSU
- West Texas Gin
- Cryogenics treatment to improve wear
- Two thicknesses to reduce power
- 3,000 gin saws
  - Weight, Thickness, Broken teeth & tooth area
- 2019 Season – 1st replication
- **2020 Season – 2nd replication**

- Laboratory saw thickness/power test
- NMSU
  - Treated saw properties
  - Measure shaft fatigue to predict shaft failure

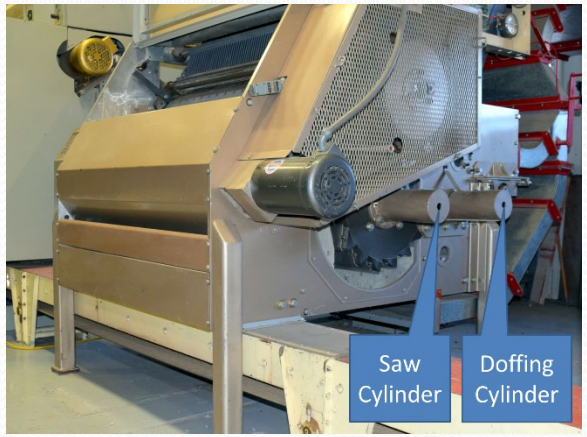


Improve Fiber Length Uniformity

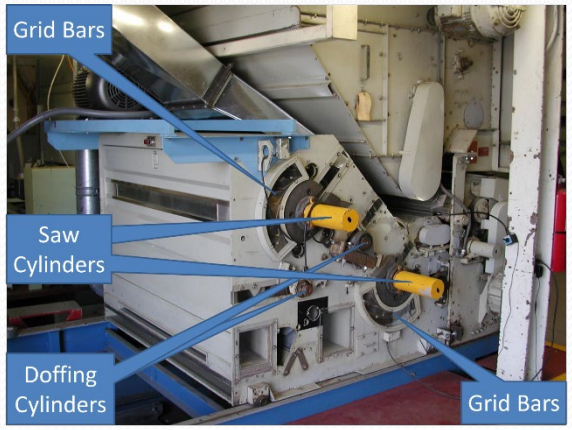
- Uniformity loss at controlled-batt saw-type lint cleaner feedworks.
- All 3 ARS Gin Labs & Cotton Incorporated funded
- Five different lint cleaner technologies
  - Las Cruces, Stoneville, & Georgia
- Western, High Plains, & Mid South cottons



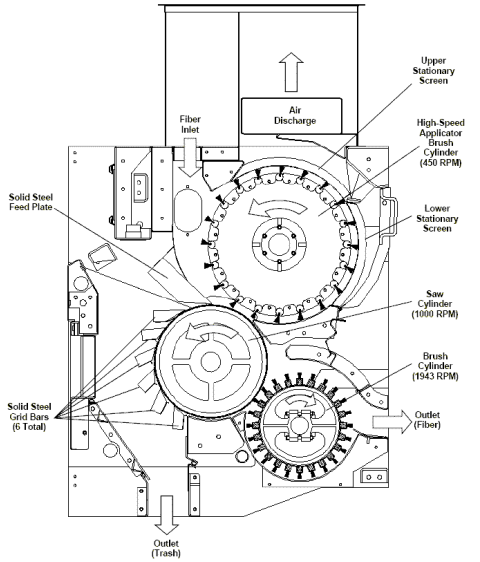
Controlled-batt lint cleaner



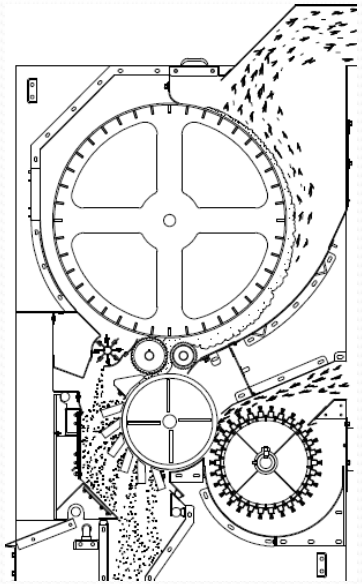
Roller gin coupled lint cleaner



Saw gin coupled lint cleaner



Lummus Sentinel



Cherokee Regal

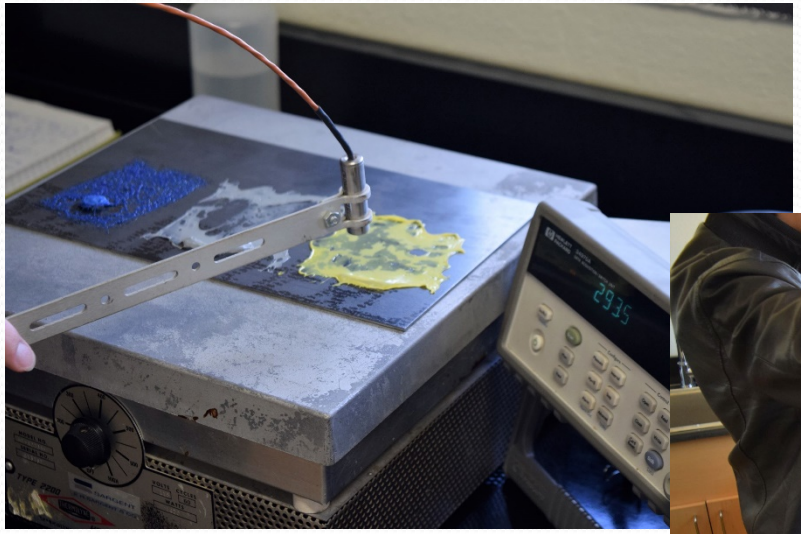
Plastic Contamination

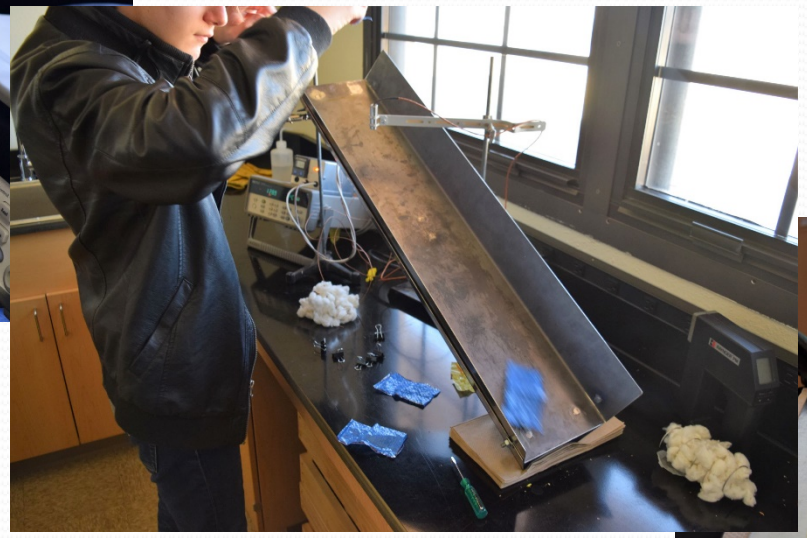
No. 1 Cotton Industry Issue

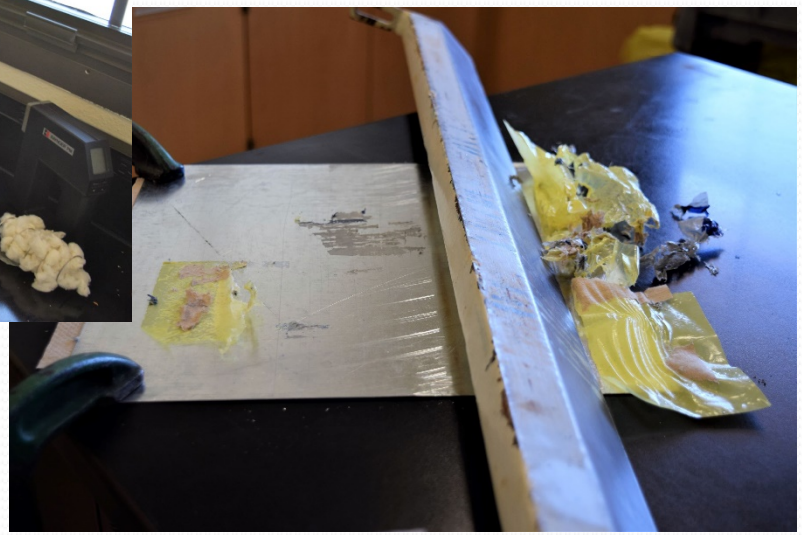
- Loss of reputation and premium
- Collaboration: Gin Labs, Universities, Industry

- Detection with Imaging
- Thermal Extraction
- Removal Machinery

Passive Thermal Plastic Removal



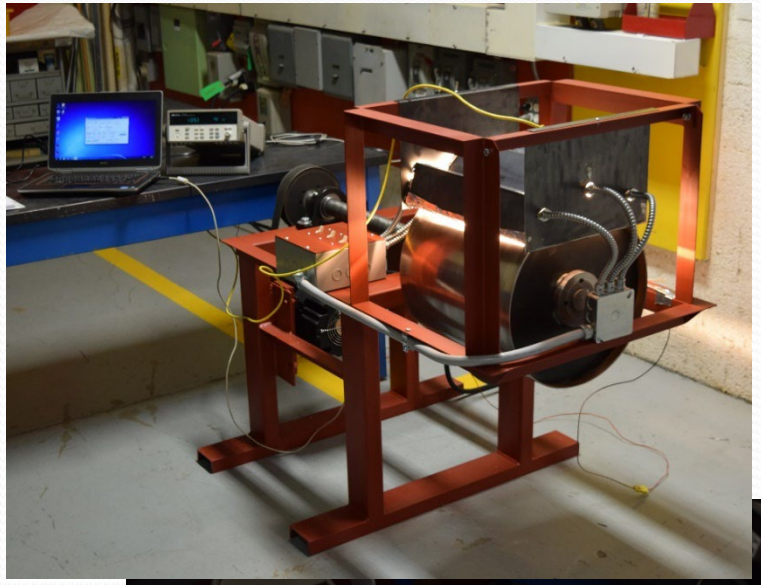


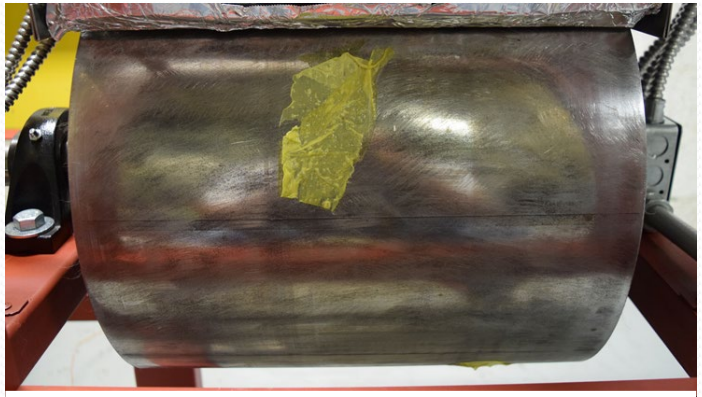


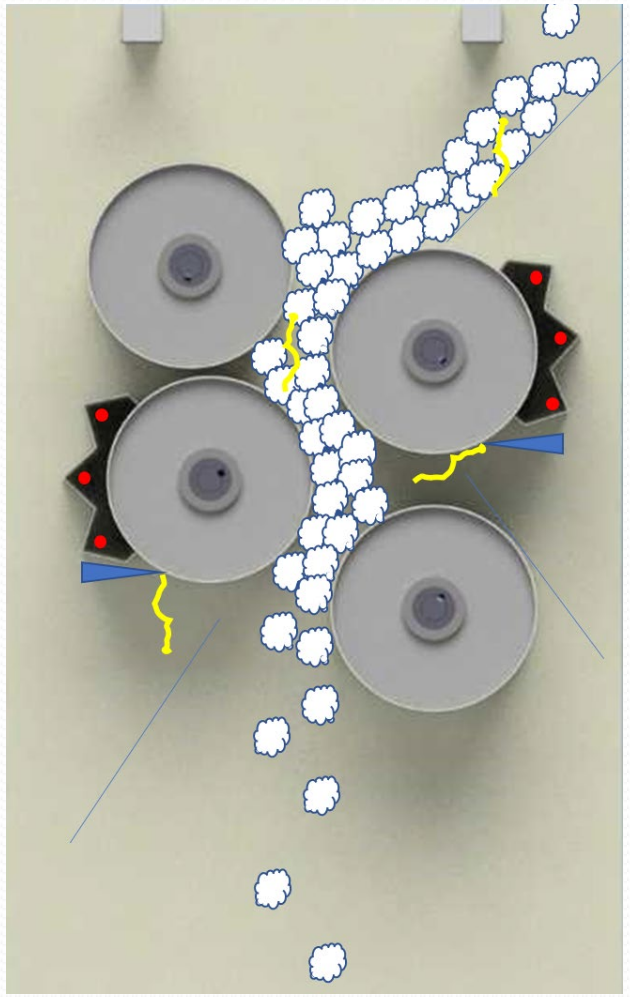
At about 100° C (200° F)

- Plastic melts & sticks
- Cotton is unharmed

Prototype Testing



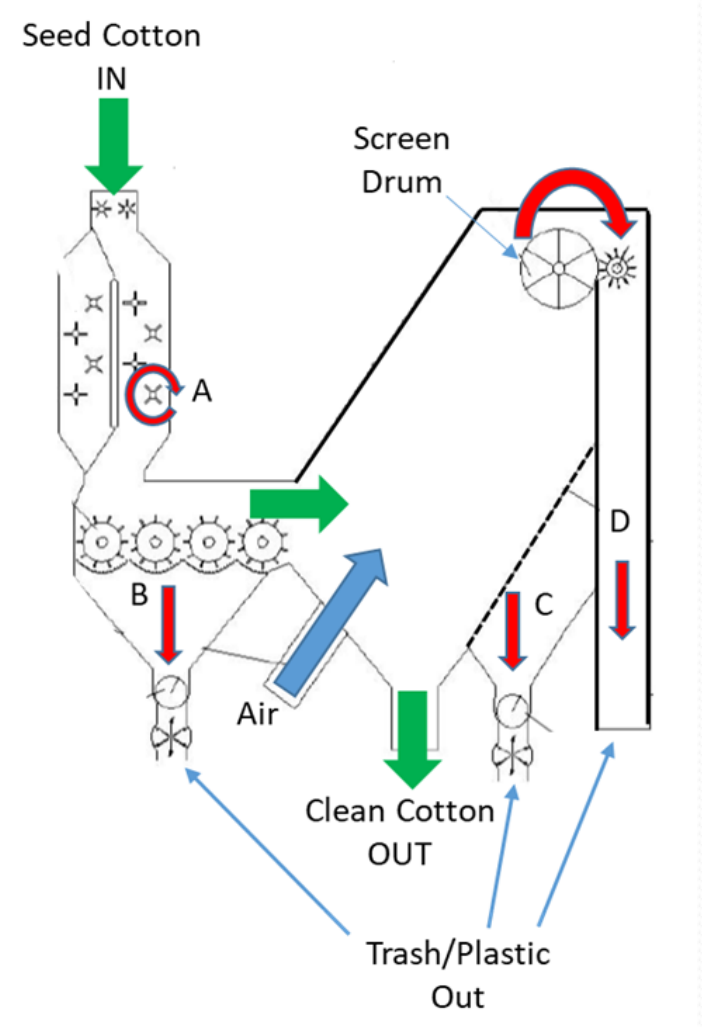




Concept

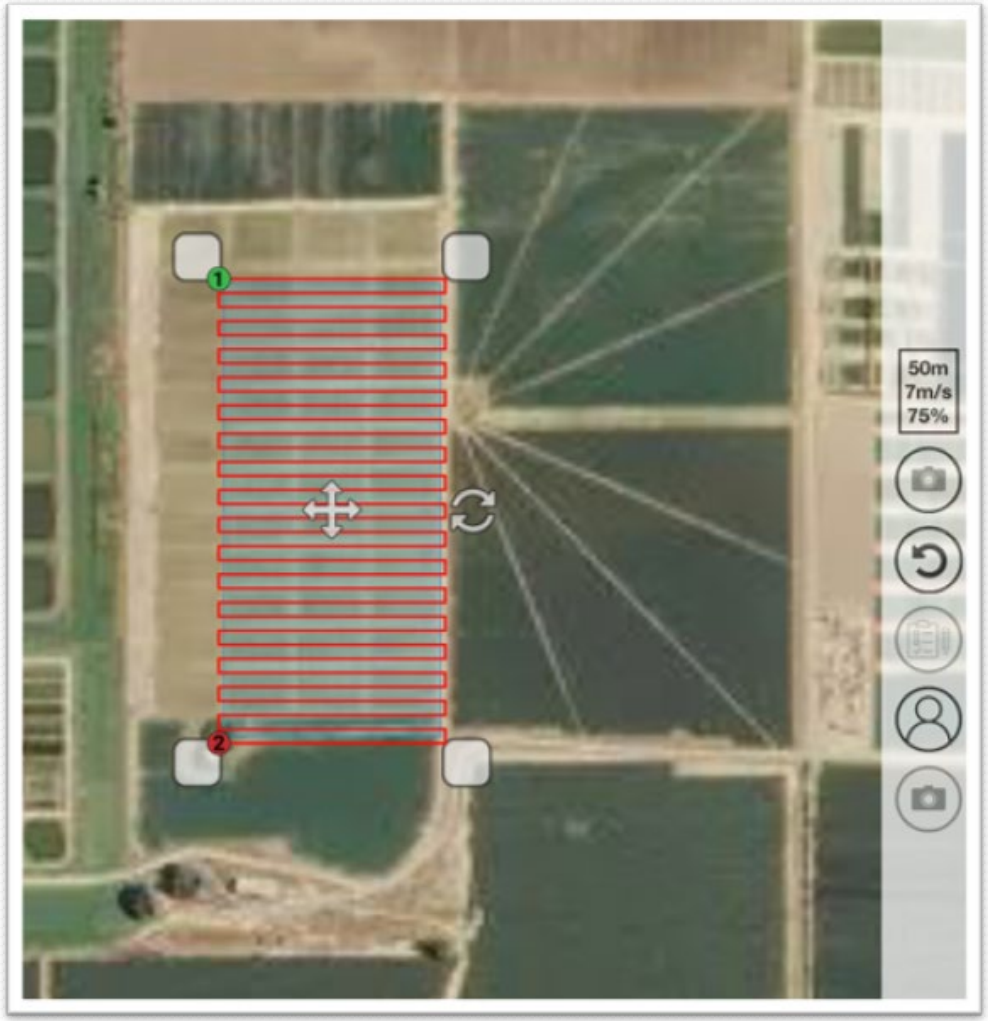
GoldenLion Contamination Cleaner

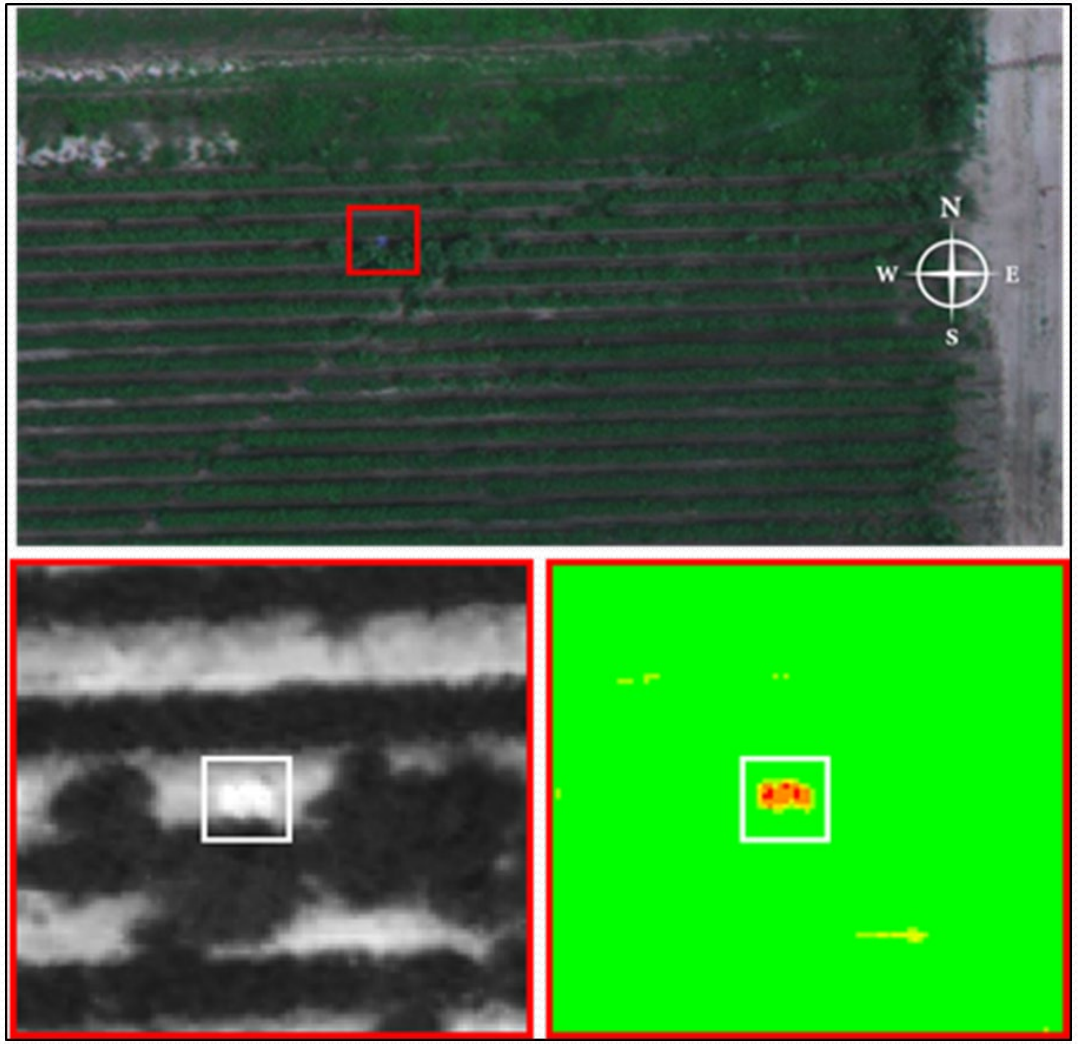
- Increasing air flow improved performance
  - Plastic capture increased (12 to 50%)
  - Increased seed cotton capture (0.8 to 67 lb per bale)
- Light weight RMW and shopping bags captured within the range of the manufacturer's claims
- Thicker, stiffer RMW was not effectively removed
- Plastic (& cotton) stripped from screen drum by airflow



Stoneville Ginning Laboratory

UAV in-field plastic contamination detection - prior to harvest





Cotton Transport

- Material flow at rates above Ginners Handbook recommendation
- High Speed video
- Particle motion modeling with Texas A&M

Other Stoneville activities

- Ginning energy – continuing work from Bobby Hardin and Clif Boykin
  - Impact of variety on energy consumption during ginning
  - Compact sensors built for deployment on breeder gins
- Lint Cleaners
  - After COVID-19, explore **NEW** approaches to lint cleaning
- Partnerships for Data Innovation (Mike Buser – ARS National Program Leader for Engineering)
  - Coordinate field, harvest, ginning, and fiber quality data
  - How can ginning outcomes be improved by knowing variety and production history prior to ginning?
    - Varieties respond differently to ginning (data collected at David Blakemore's gin)

- Staff!!!

USDA-ARS Gin Lab Report

USDA-ARS Lubbock Gin Lab Research Update

NCGA - Gin Management Meeting

By: Greg Holt

United States Department of Agriculture
Agricultural Research Service

Status of Lubbock Gin Lab (July 23, 2020)

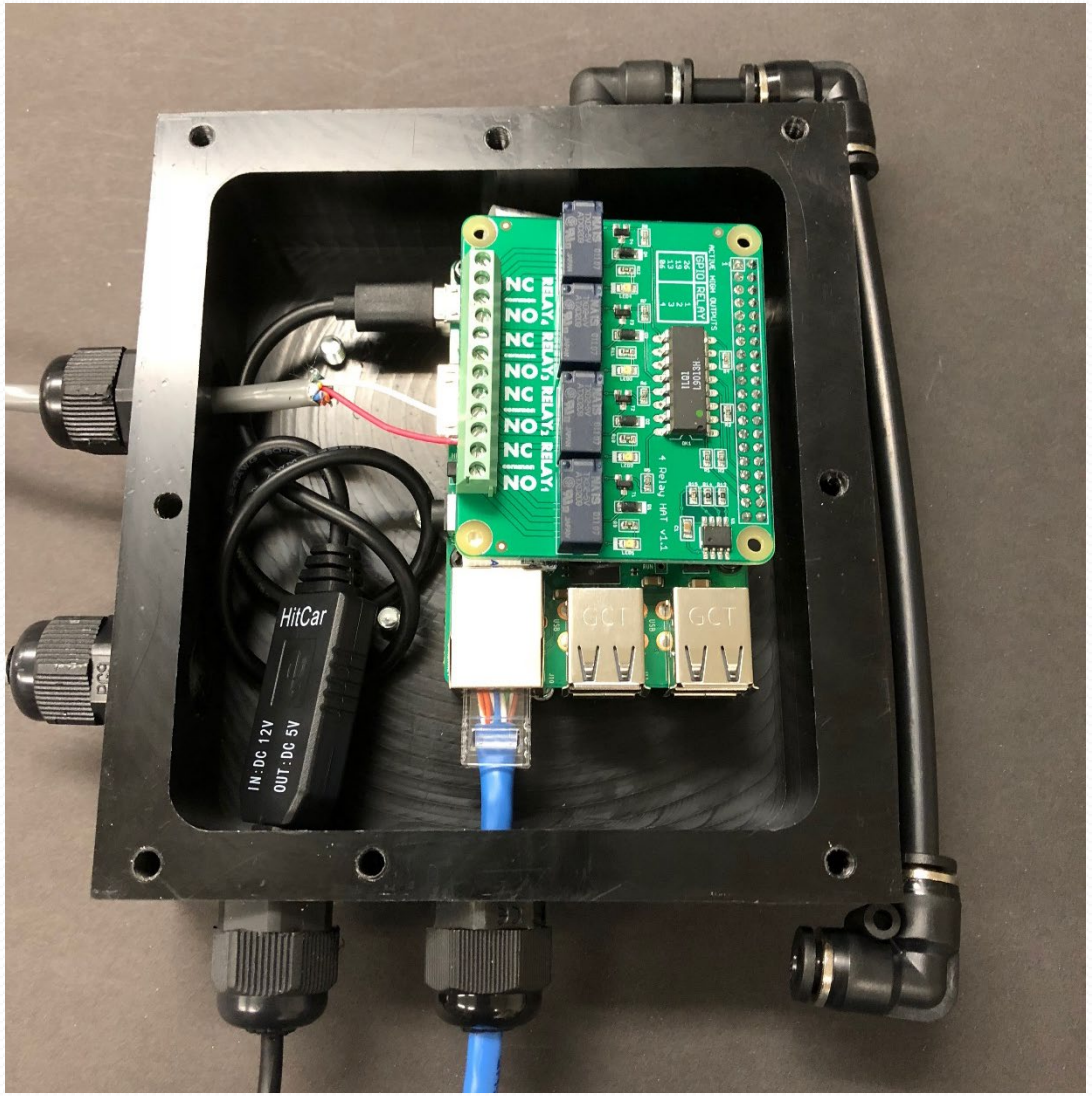
- Under “Maximize Telework” mandate. Waiting to go to Phase 1.
- Have been permitted to have support technicians and one Engineer come in a few days a week, with restrictions, since the end of May.
- All travel associated with research has been severely restricted/denied. Only allowed 35 mile radius of lab.
- Working to increase time onsite (gin and shop) for support staff.
- Currently focusing on select projects - Plastic Contamination (gin stand and module feeder), RFID, and Field Cleaner Validation Testing.

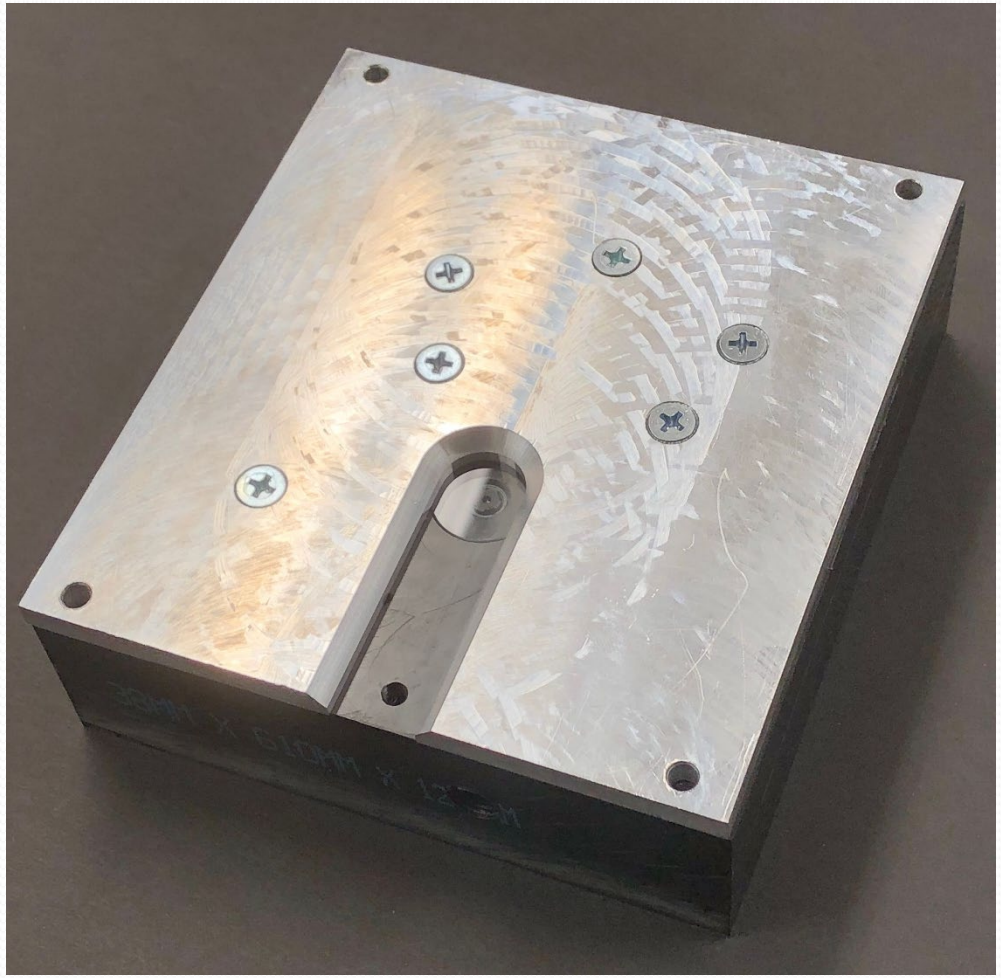
Camera Detection and Removal System over Feeder Apron

Plastic Sensor Lab Test Setup

Gin Stand Feeder Apron provides Optimal location for detection-removal station in Cotton-Gins

Camera Housing Design with Cooling and Self-cleaning Optics






LUMUS
700


LUMMUS
470
LUMMUS

Images Captured by System above Feeder Apron







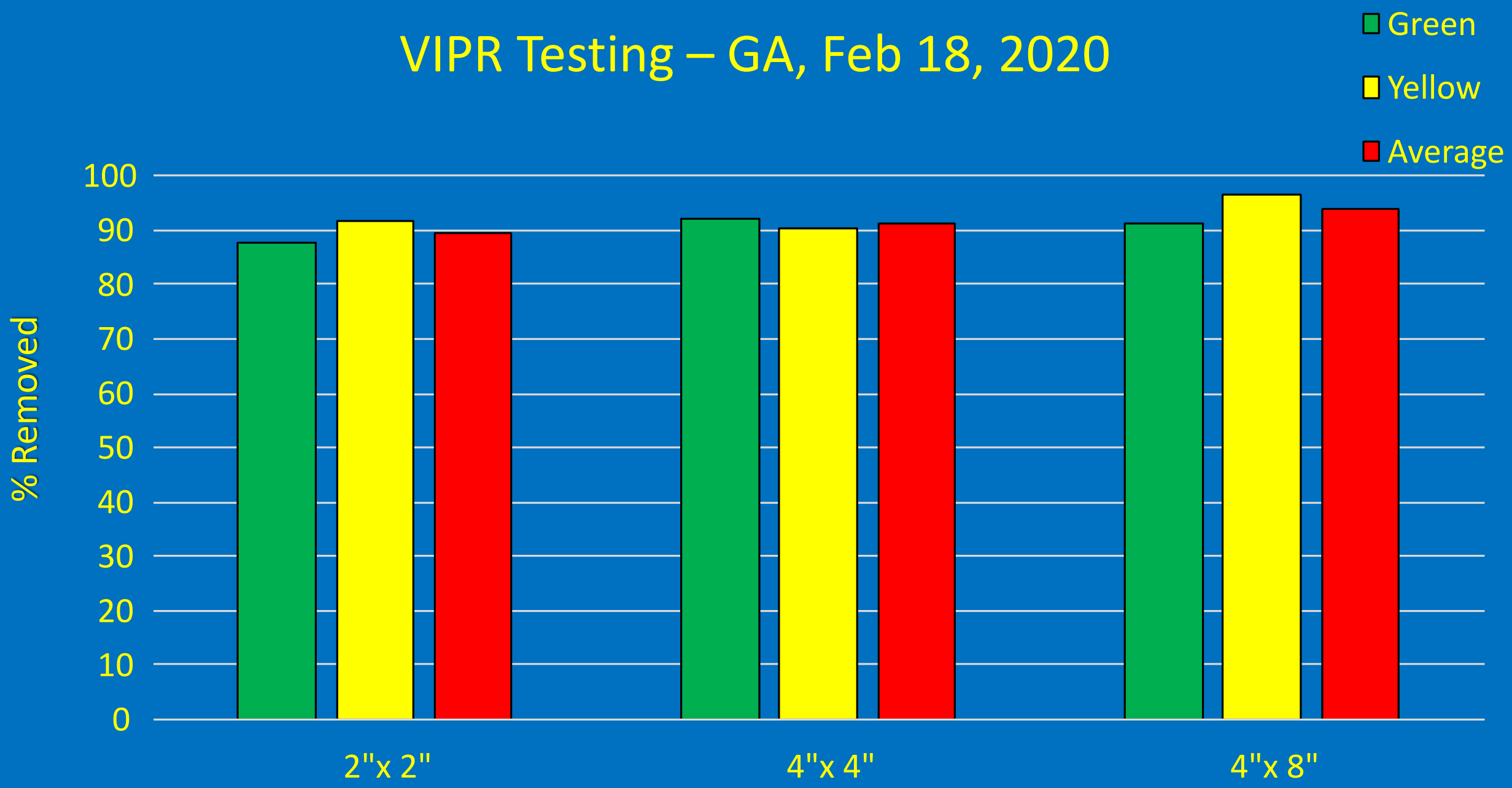




Visual Imaging Plastic Removal – VIPR system

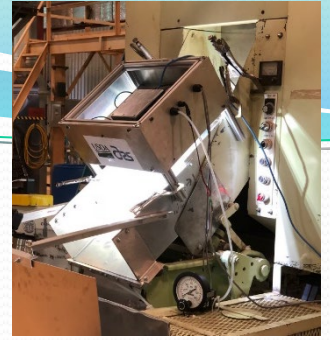

LUMMUS

VIPR Testing – GA, Feb 18, 2020

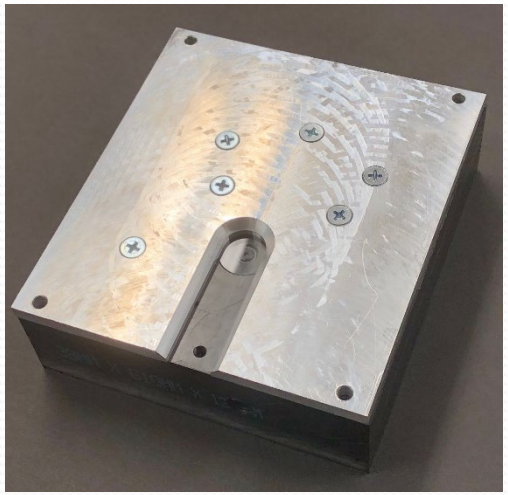


Samples Kicked Out by VIPR System During Testing

What's Next?



- Plastic Contamination Inspection (PCI) System.
- Train system to recognize white and clear plastic.
- Looking at other locations upstream of Feeder Apron.
- Other technologies?
- Look at adaptation to cotton harvester?



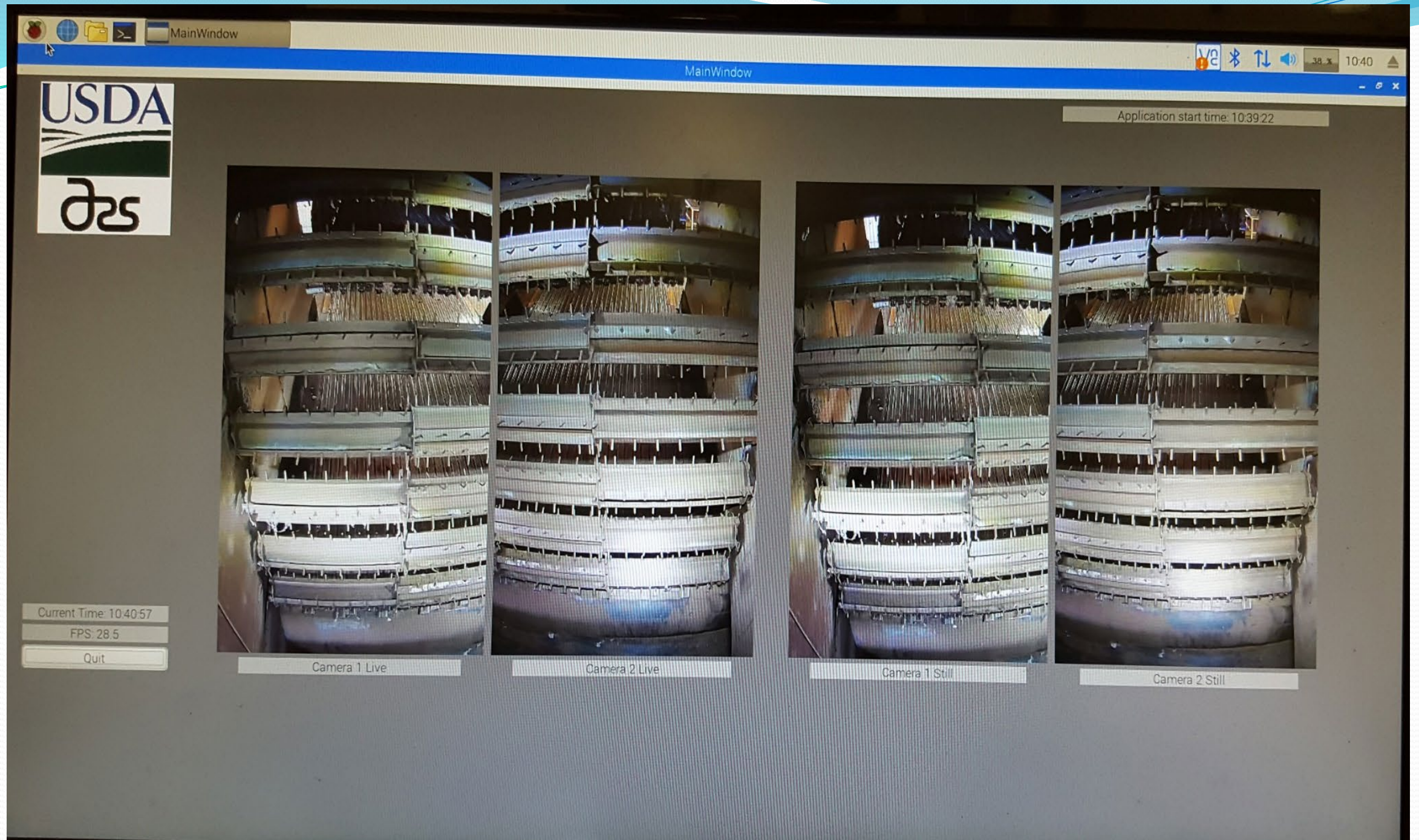
Plastic Contamination Inspection (PCI) System

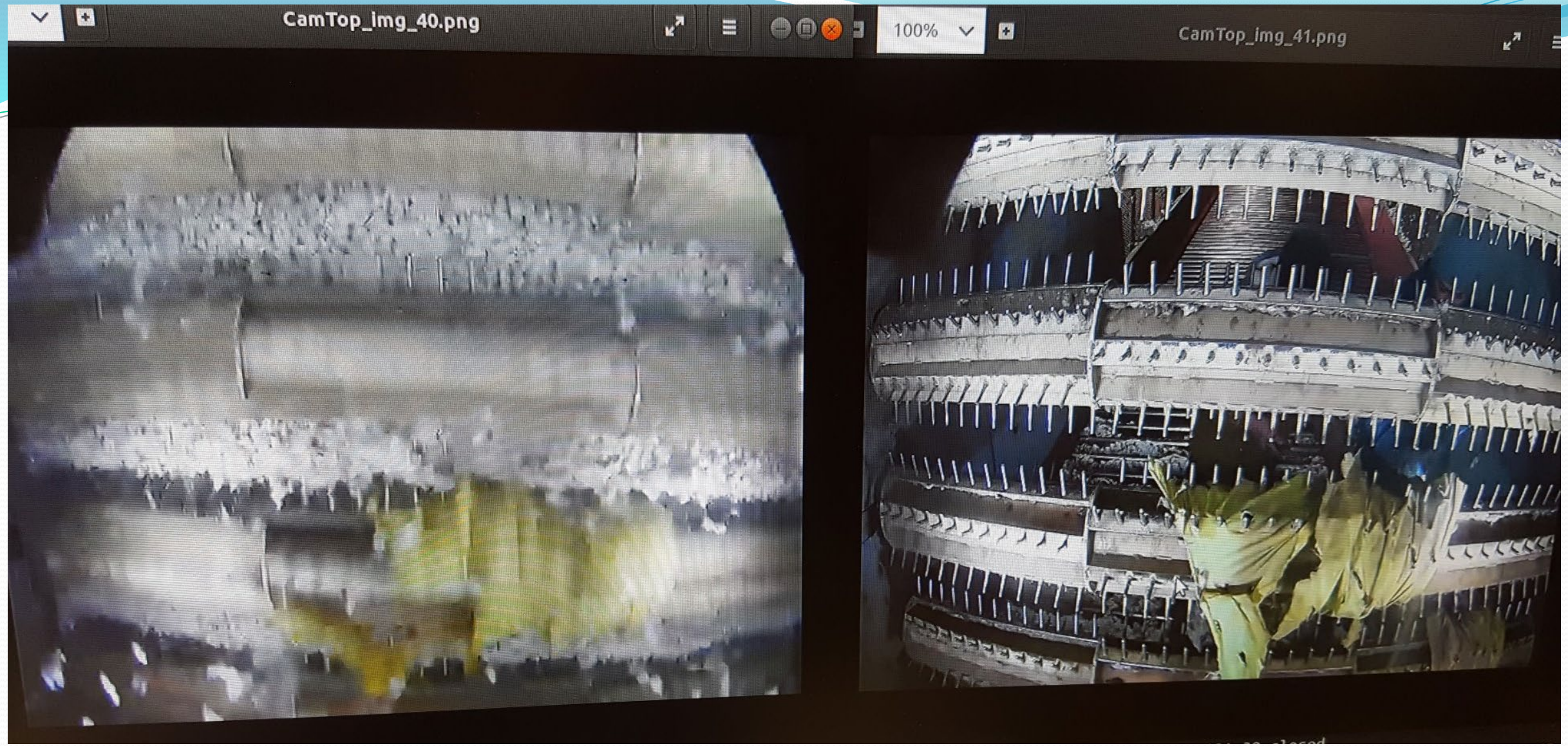
- Address the comment, “I don’t know if I have a problem, I don’t think we do…”
- Experimental Unit to Allow a Survey of Gins to Ascertain Depth of Industry Contamination Problem.
- Deploy to Select Commercial Gins to help Raise Awareness.

Camera Detection System in Module Feeder

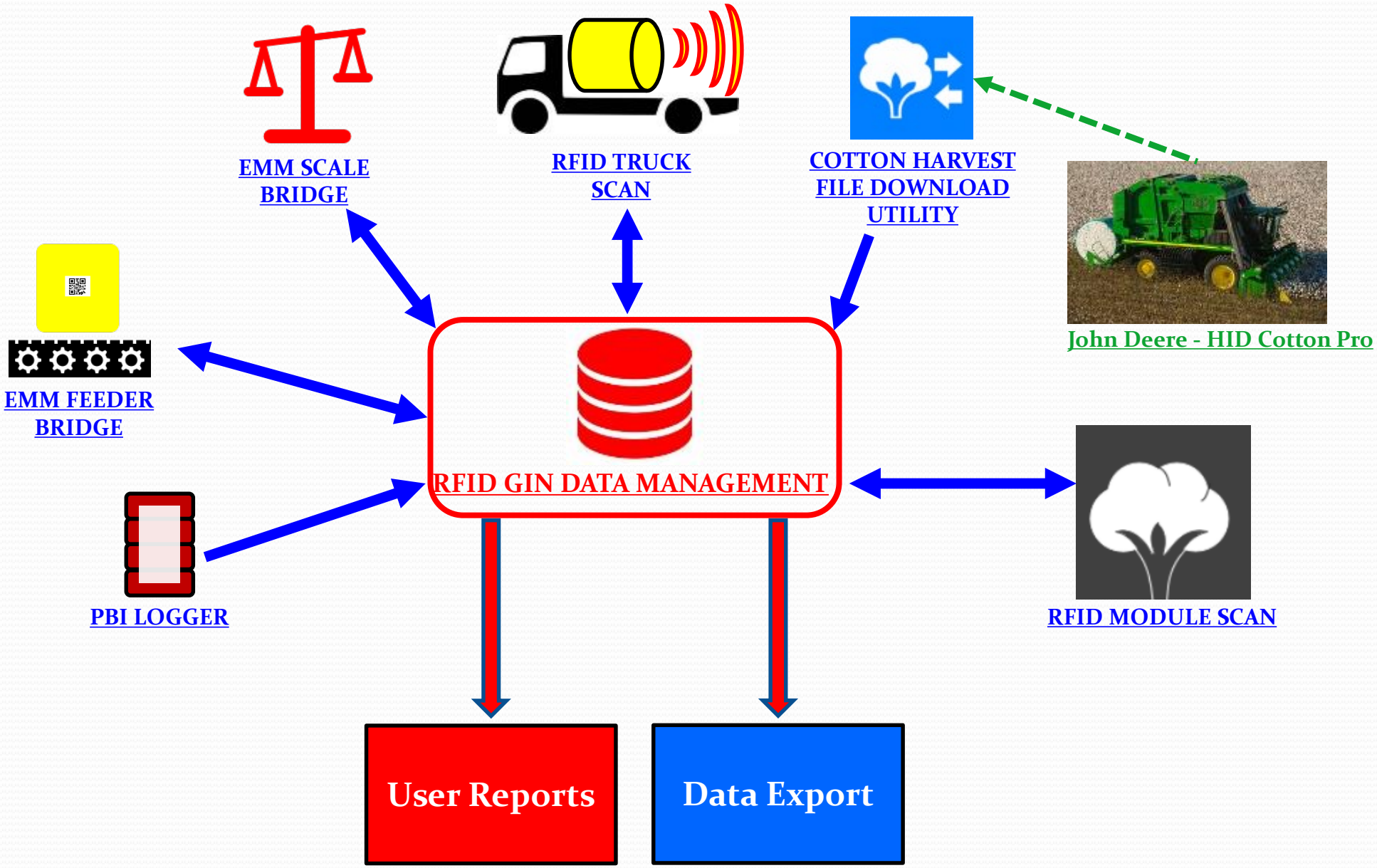
New Camera for Module Feeder


JEAS


MainWindow
MainWindow
10:40
USDA
ars
Application start time: 10:39:22
Current Time: 10:40:57
FPS: 28.5
Quit
Camera 1 Live
Camera 2 Live
Camera 1 Still
Camera 2 Still


CamTop_img_40.png
100%
CamTop_img_41.png

Electronic Module Management System



Application of RFID Feeder Bridge to Track Potential Plastic Contamination Events

RFID Scanning Tower and
IP Cameras to Record
Unloading/Unwrapping Process

RFID Scanning System and
NVR to Record Module Handling

Application of RFID Feeder Bridge to Track Potential Plastic Contamination Events

RFID Scanning Log Shows Date and Time for Each Module Processed

Cameras Mounted on RFID Bridge Capture Unloading/Unwrapping Events That May Cause Contamination

Module Feeder Inspection System Captures Images of Plastic Caught on MF Cylinders

Harvester Research Projects

- To be published: Influence of Spindle Harvester Drum Arrangement on Fiber Quality and Yield
  - Inline versus opposed drum arrangement
  - Testing in the U.S. and Australia

- Planned test this fall
  - Compare the basket 9996 to the CP690
  - Quality differences especially leaf

Thank You

Cotton Incorporated

Cottonseed Price Gin Survey

Cottonseed Price and Gin Survey

- April 7 letter to Sec. Perdue with industry support recommendations stated that cottonseed prices had remained relatively stable, but they were being monitored
- April-May price decline
  - Reported $30 for cottonseed crush components
  - Reported $35-$40 decline in cottonseed prices

Cottonseed Crush Product Prices

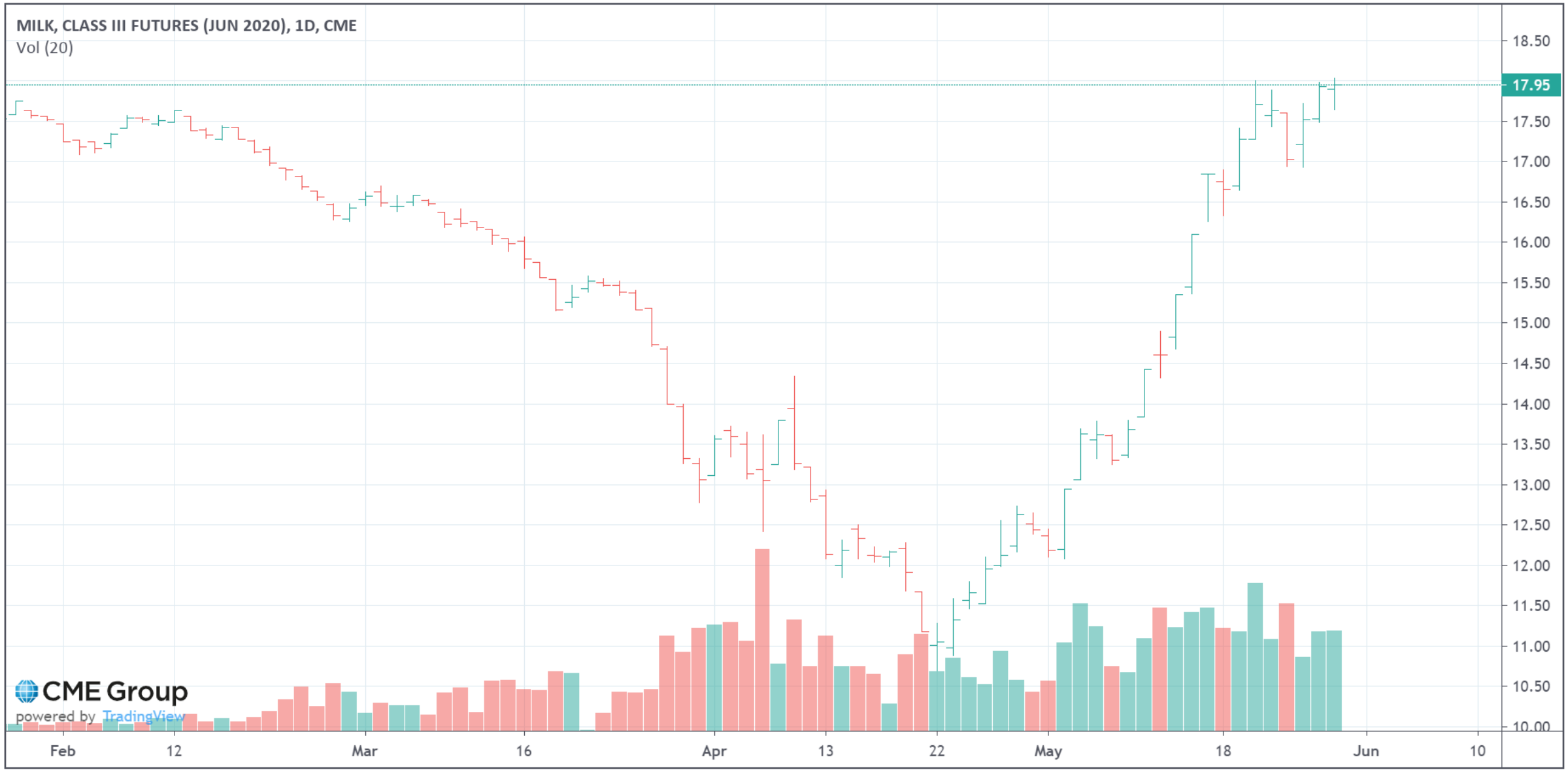
Source: Cottonseed Digest

Products	March 27	May 1	Change	July 17	Change
Cottonseed Oil	$128.10	$116.66	-$11.41	$112.09	-$16.01
Cottonseed Meal	$118.95	$112.85	-$6.10	$112.85	-$6.10
Cottonseed Linters	$24.00	$19.20	-$4.80	$19.20	-$4.80
Cottonseed Hulls	$39.20	$26.20	-$13.00	$25.20	-$14.00
Total Product Value	$310.25	$275.31	-$34.94	$269.34	-$40.91

Does not include:
Average Milling Costs ($62.00)
Freight From Gin ($14.00)

National Cotton Council OF AMERICA

CME:DCM2020, D 17.95 ▲ +0.02 (+0.11%) O:17.90 H:18.04 L:17.63 C:17.95



Cottonseed Gin Survey

Regional Totals	Tons CS in storage and has not been priced	Tons of CS priced not paid for and remain in storage	Average price of CS for the 2019 season prior to April 1	How much onsite CS storage does your gin have available
West - 17	51,350	31,000	$286	203,500
Southwest - 77	43,990	50,154	$213	370,251
Mid-South - 58	114,154	57,533	$176	482,530
Southeast - 44	87,417	88,549	$166	389,915
BW - 196	296,911	227,236	$210	1,446,196

Cottonseed Price

- Impact of Cares Act Food Assistance Program and Food Purchases
- May 12 letter to House and July 10 Senate letter reference cottonseed
- Continue to monitor both whole cottonseed and crush product prices