

Cotton, Diseases, and Nematodes

Five Points for 2021



Robert C. Kemerait, Jr. PhD
Professor & Extension Specialist
Department of Plant Pathology

January 2021

Twitter “bob kemerait”



Cotton Diseases & Nematodes in 2021

Likely you will face

- **Peanuts**
 - Tomato spotted wilt
 - Aspergillus crown rot
 - Leaf spot
 - White mold
 - Nematodes
- **Cotton**
 - **Nematodes**
 - **Target spot**
 - **Areolate mildew**
- **Corn**
 - Southern corn rust
 - Nematodes
 - Southern and northern leaf blights
- **Soybeans**
 - Rust and Nematodes

Less likely you will face

- **Peanuts**
 - Peanut Rust
- **Cotton**
 - **Boll rot**
 - **Bacterial blight**
 - **Cotton leafroll dwarf virus**
- **Corn**
 - Eyespot
 - Diplodia ear rot
- **Soybeans**



1. Cotton and Nematodes in 2020

Screven County



Jason Mallard

Colquitt County



Jeremy Kichler



Products to Manage Cotton Nematodes



Copeo® Prime
Seed Treatment

NEMASTRIKE™
TECHNOLOGY



AVICTA™
complete pak
Think out of the box™

AgLogic

BIO**ST**

RETURN™ XL

Vydate® C-LV

INSECTICIDE/NEMATICIDE



Velum Total vs. Velum

- Fluopyram + imidicloprid
- Nematode + thrips control
- 14.0-18.0 fl oz/A

- Fluopyram
- Nematode control only
- 6.5-6.8 fl oz/A



RKN Resistant Varieties for 2020

- PHY 350 W3FE resistance to *M. incognita* and BB
- **PHY 400 W3FE resistance to *M. incognita* and BB**
- PHY 440 W3FE resistance to *M. incognita* and BB
- PHY 480 W3FE resistance to *M. incognita* and BB
- **PHY 500 W3FE resistance to *M. incognita* and BB**
- PHY 580 W3FE resistance to *M. incognita* and BB
- **ST 5600 B2XF (BB susceptible)**
- **DP 1747NR B2XF (BB susceptible)**



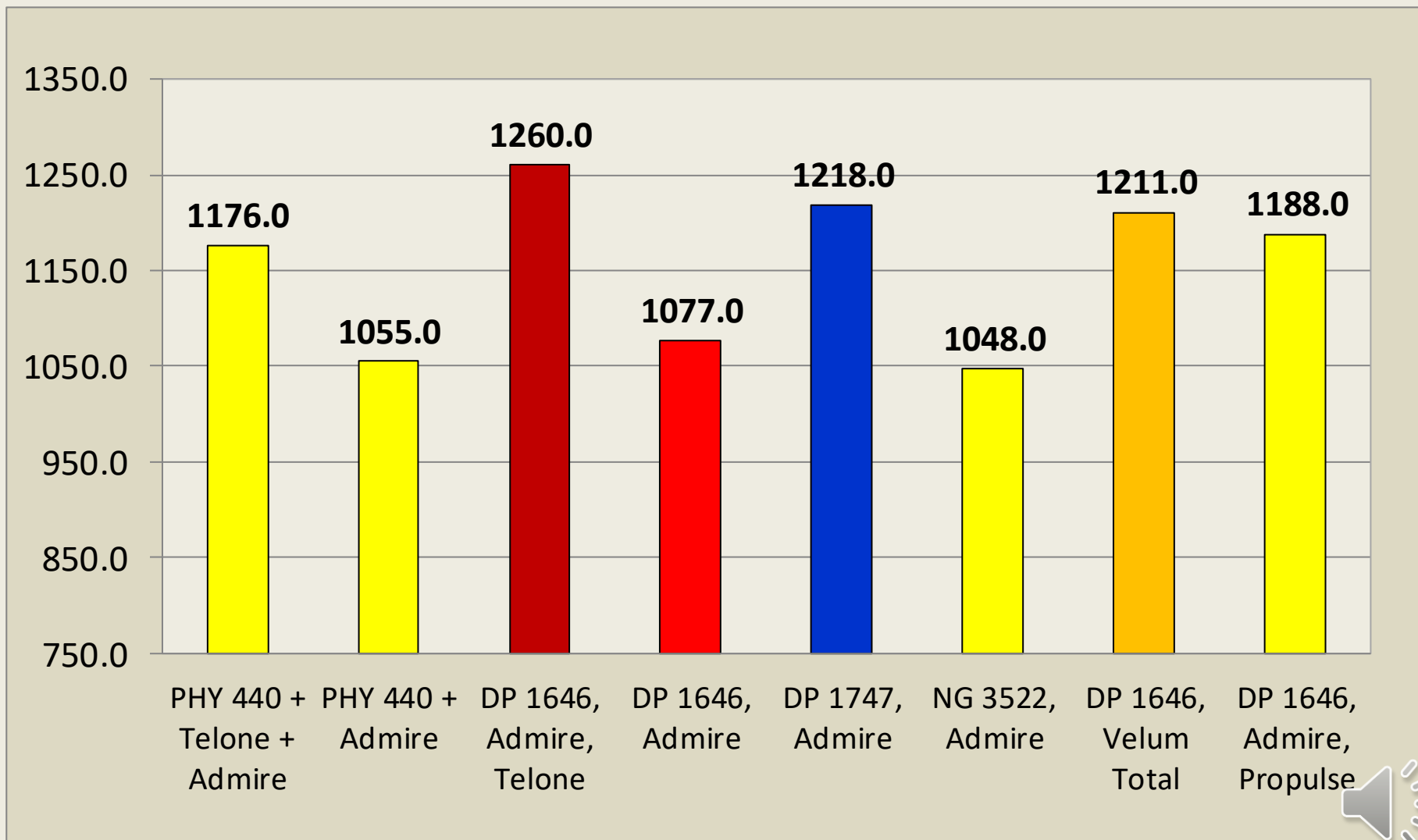
ST DP DP
5471 1646 1851

PHY
3807 580 5028



Variety X Nematicide Trial, Colquitt County

Yield (lb/A)



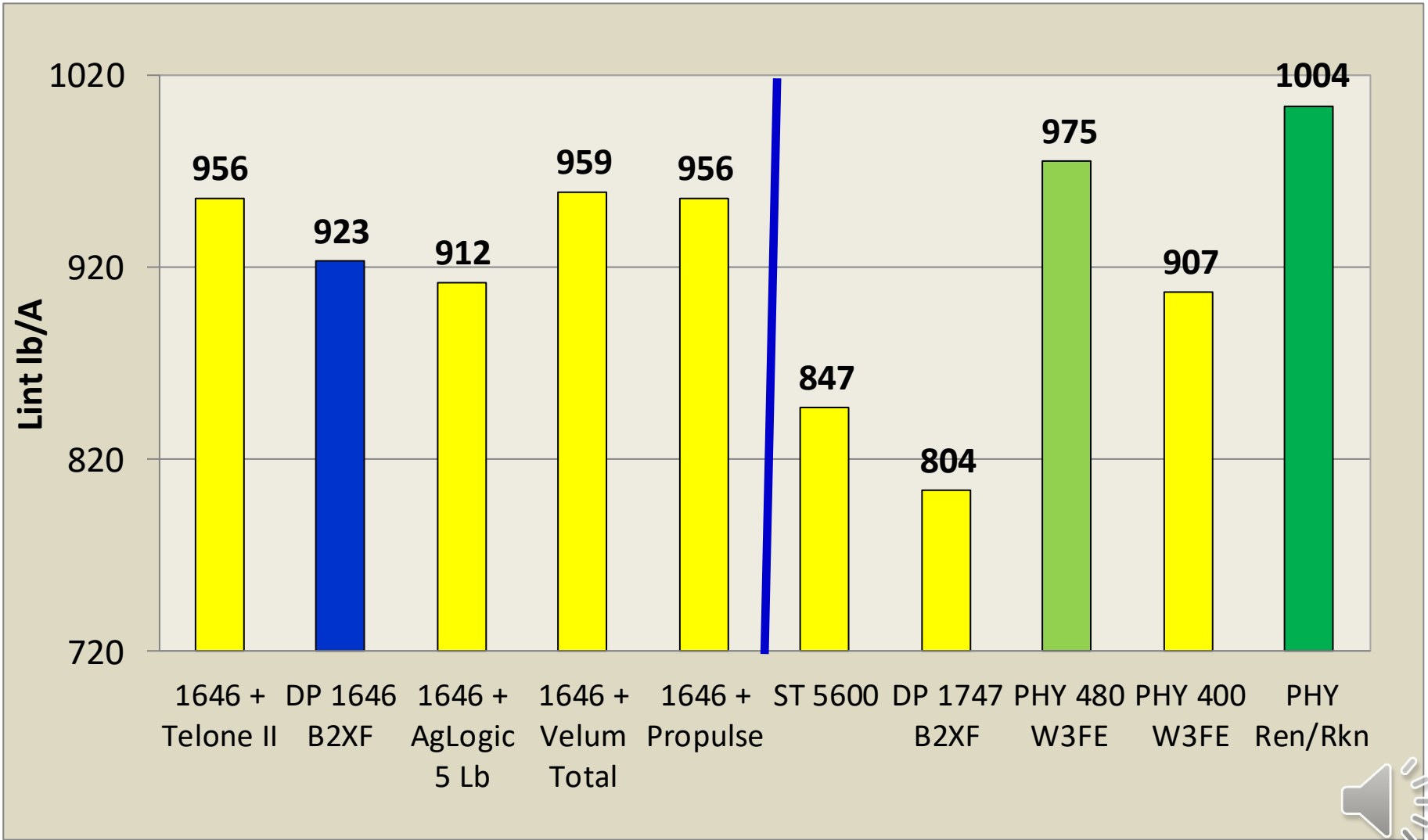
Root-knot and Reniform Nematodes

PHY 443 W3FE and PHY 332 W3FE



2020 Cotton Nematode Trial

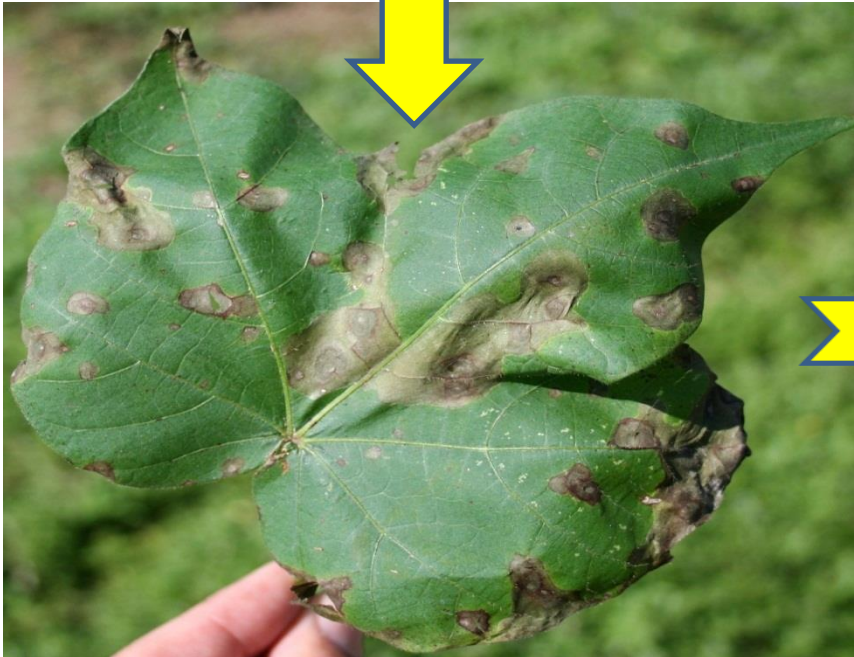
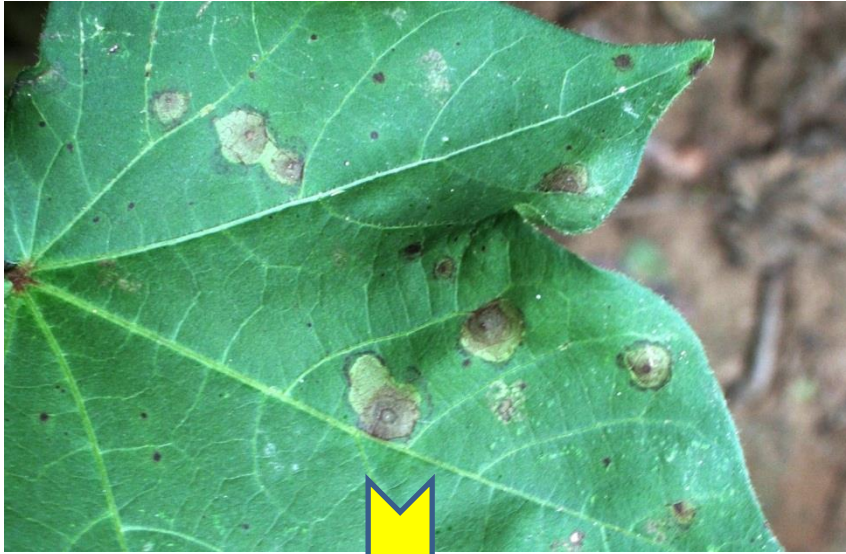
Yield (lb lint/A)
Colquitt County



Foliar Symptoms of Bacterial Blight



2. TARGET SPOT



Fungicides for Foliar Diseases of Cotton

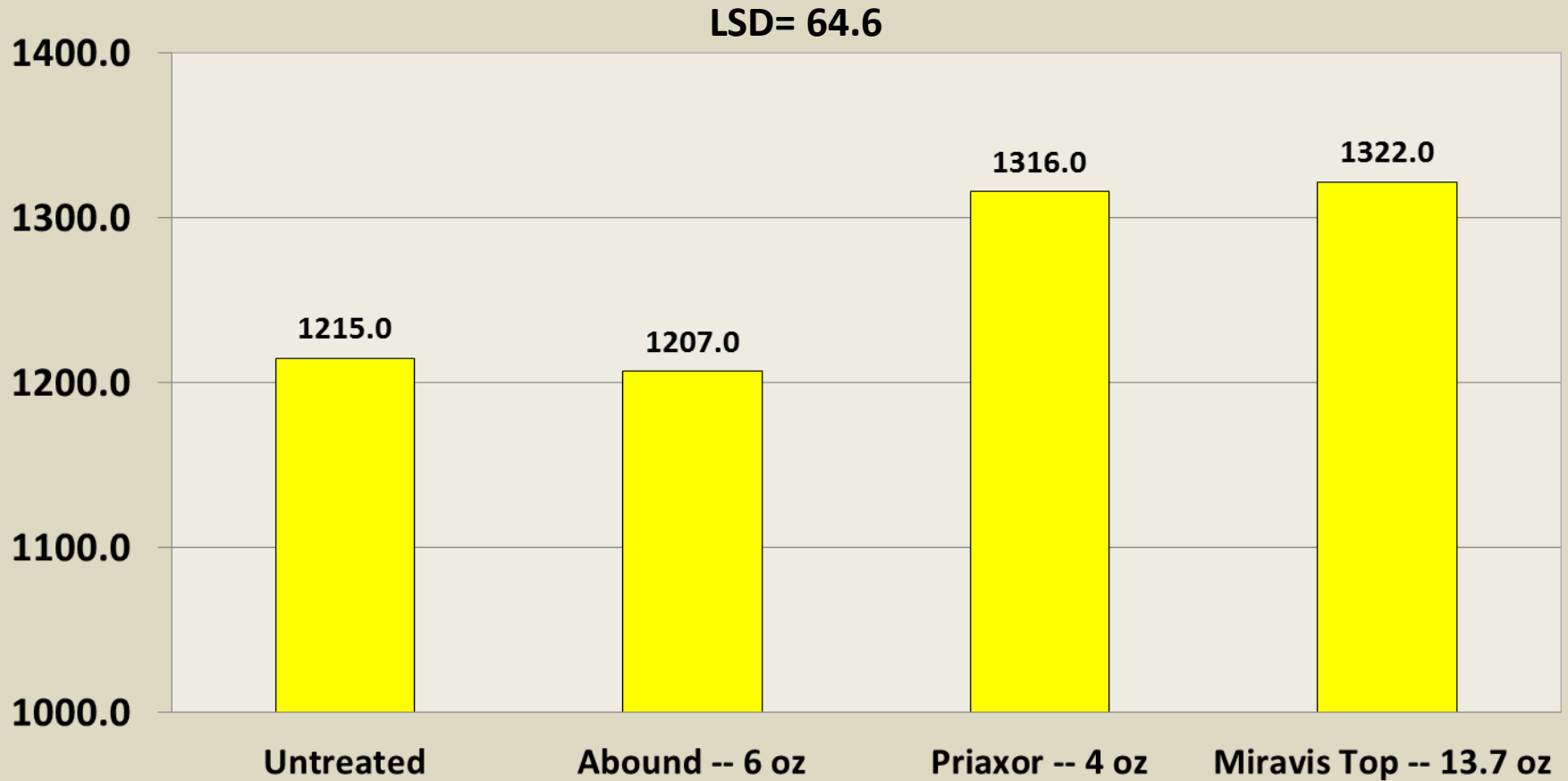
- **Headline** (pyraclostrobin) (**6 fl oz/A**)
- **Twinline** (pyraclostrobin + metconazole) (**7-8.5 fl oz**)
- **Quadris** (azoxystrobin) (**6 or 9 fl oz/A**)
- **AzoxyStar** (azoxystrobin) (**6 or 9 fl oz/A**)
- **Tebuzol 3.6F** (tebuconazol) (**6-8 fl oz/A**)
 - Labeled for control of southwestern cotton rust
 - *Puccinia cacabata*
- **PROLINE** (prothioconazole) (**5.0-5.7 fl oz/A**)
- **PRIAXOR** (**4.0-6.0 fl oz/A**)
- **MIRAVIS TOP** (**13.6 fl oz**)
- **Elatus**
- **TOPGUARD** (flutriafol)



AzoxyStar



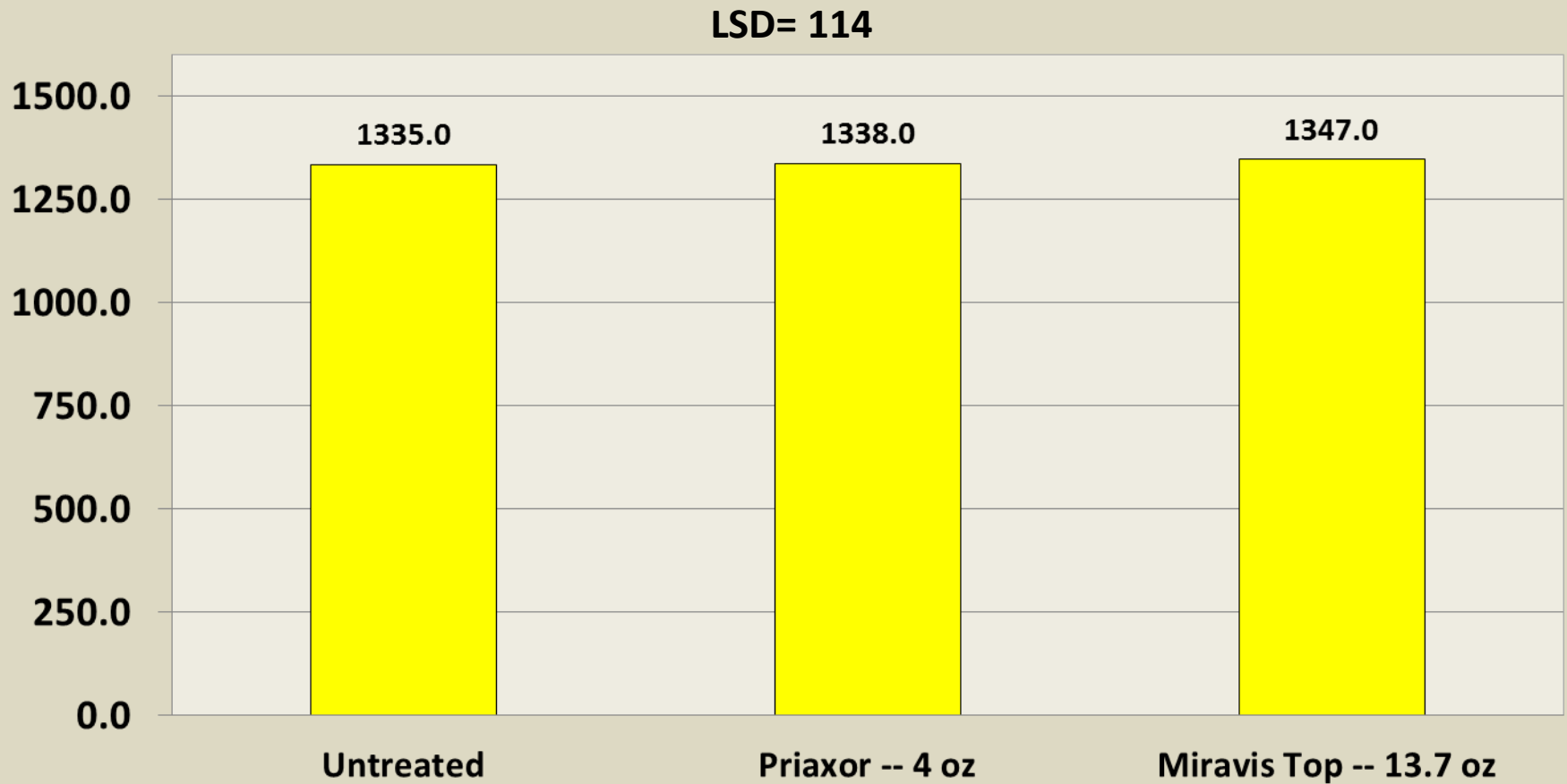
2019 Colquitt County Cotton Fungicide Plot Bay, Georgia Lint Yield (Lbs/A)



Fungicide Application 3 week of Bloom.



2019 Colquitt County Cotton Fungicide Plot Doerun, Georgia Lint Yield (Lbs/A)



Fungicide Application 3 week of Bloom.



3. Areolate Mildew



2020 Areolate Mildew

Jeremy Kichler, UGA Extension Colquitt County



afame -118.15 -118.52
untreated 38.04 37.66

Positive values show pairs of mean


Connecting Letters Report

Level	Mean
priaxor A	1217.3090
mirvaus A	1216.9350
afame A	1193.9679
untreated B	1037.7849

Levels not connected by same letter

Ordered Differences Report

Level	- Level	Difference	S
-------	---------	------------	---



4. Cotton Boll Rots in 2020



- Boll rot was severe in 2020
- We observed five types of boll rot:
 - Phytophthora
 - Diplodia
 - Colletotrichum
 - Sclerotium rolfsii
 - Bacterial



5. COTTON LEAFROLL DWARF VIRUS

NOV 05, 2019



See what's emerging

Two strangers go looking for cotton farmers and their problems

NOV 05, 2019

Might be the perfect 21st century food

NOV 04, 2019



Aphid-transmitted virus found in lower Southeast cotton

Cotton blue disease is a big problem in Brazil, and it seems to have come to the U.S. by a hurricane, like soybean rust did with Hurricane Katrina.



UGA-Tifton

Plants crashed within 7-10 days of symptom observations

Planting Date: June 17, 2019



07/30/2019 Tifton



UNIVERSITY OF
GEORGIA



Symptoms



QUESTIONS

