

2024 Row Crop Disease Update

“Bob, do you have anything new for me, or are you just going to waste my time?”

Chris Goodman, Tift County



Row Crop Diseases & Nematodes



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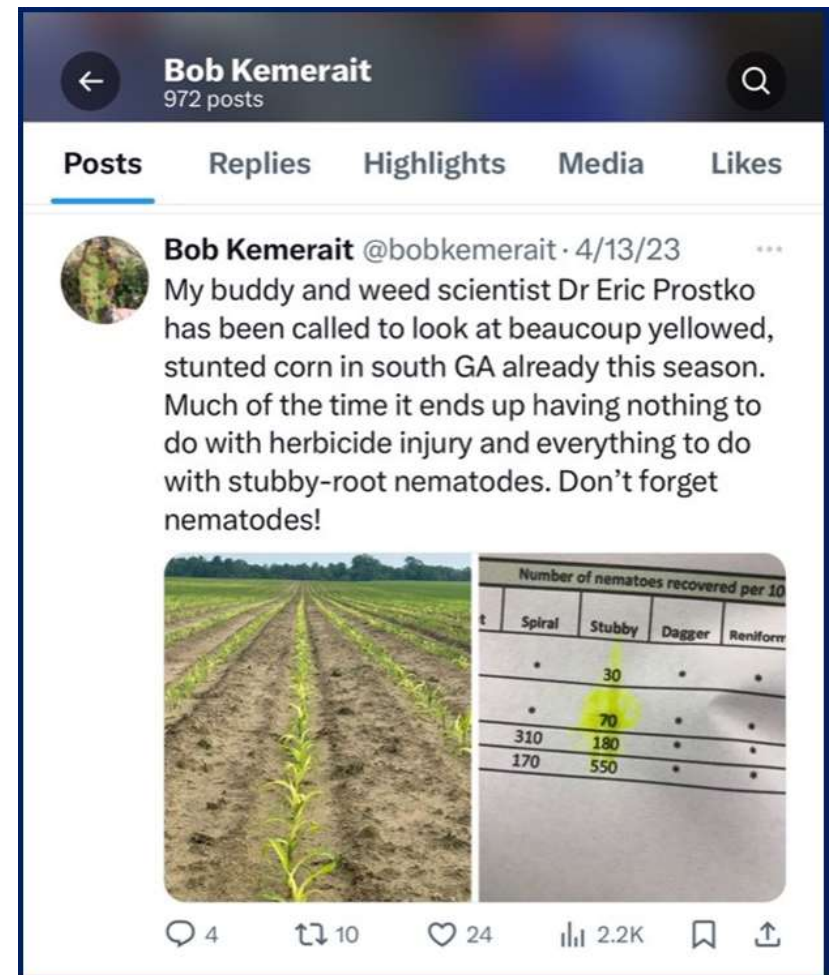
Twitter

“bob kemerait”

Terrell Webster Sumter
22 February 2024



Twitter



Fear Monger?

THE WORLD NEWS

Since 1883

YOUR NUMBER ONE SOURCE FOR HEADLINES

\$1.00

THE SKY IS FALLING!

PRESIDENT DECLARES

RELIGIOUS LEADERS
URGE ALL TO LOOK UP

CHICKEN LITTLE
NOWHERE TO BE FOUND

Things you get one chance at:

- Tomato spotted wilt in peanuts.
- Nematode control in all crops. (I know, pegging time in peanuts too...)
- Fusarium wilt in cotton.
- Seedling diseases, especially in cotton and peanuts.
- Bacterial blight in cotton.
- Starting a fungicide program on all crops.



4 Threats for 2024

1. Tomato Spotted
Wilt

2. Seedling
disease

3. Nematodes

4. Leaf spot and
white mold



Late Leaf Spot



Leaf Spot Problems Are Not New

- A late start on a fungicide program.
- Getting behind on a fungicide program.
- Using the wrong product at the wrong time.
- What about **NOW**?

Pathogens overwinter in peanut debris



- Late leaf spot
- Early leaf spot
- CBR
- White mold (maybe)

Why White Mold in 2023?



2023 – An EPIC white mold year! (especially dryland fields)



Why White Mold in 2023?



- Early season moisture initially very good growing conditions.
- Hot soil temperatures mid-season fueled white mold.
- Sparse rainfall prevented movement of fungicide to crown.
- Desire to use lowest rates of good fungicides.

Getting the most from a soilborne fungicide



Tim Brenneman





Does night spraying work?

YES!

07/10/2009

Why do night sprays work better?



1. Get more and larger droplets deeper into the canopy
2. Fungicides last longer in shaded part of canopy
3. Redistribution by spraying wet foliage in morning (vs evening w/ dry, folded leaves)

Tift County, the impact of shifting 18 inches on cotton behind cotton

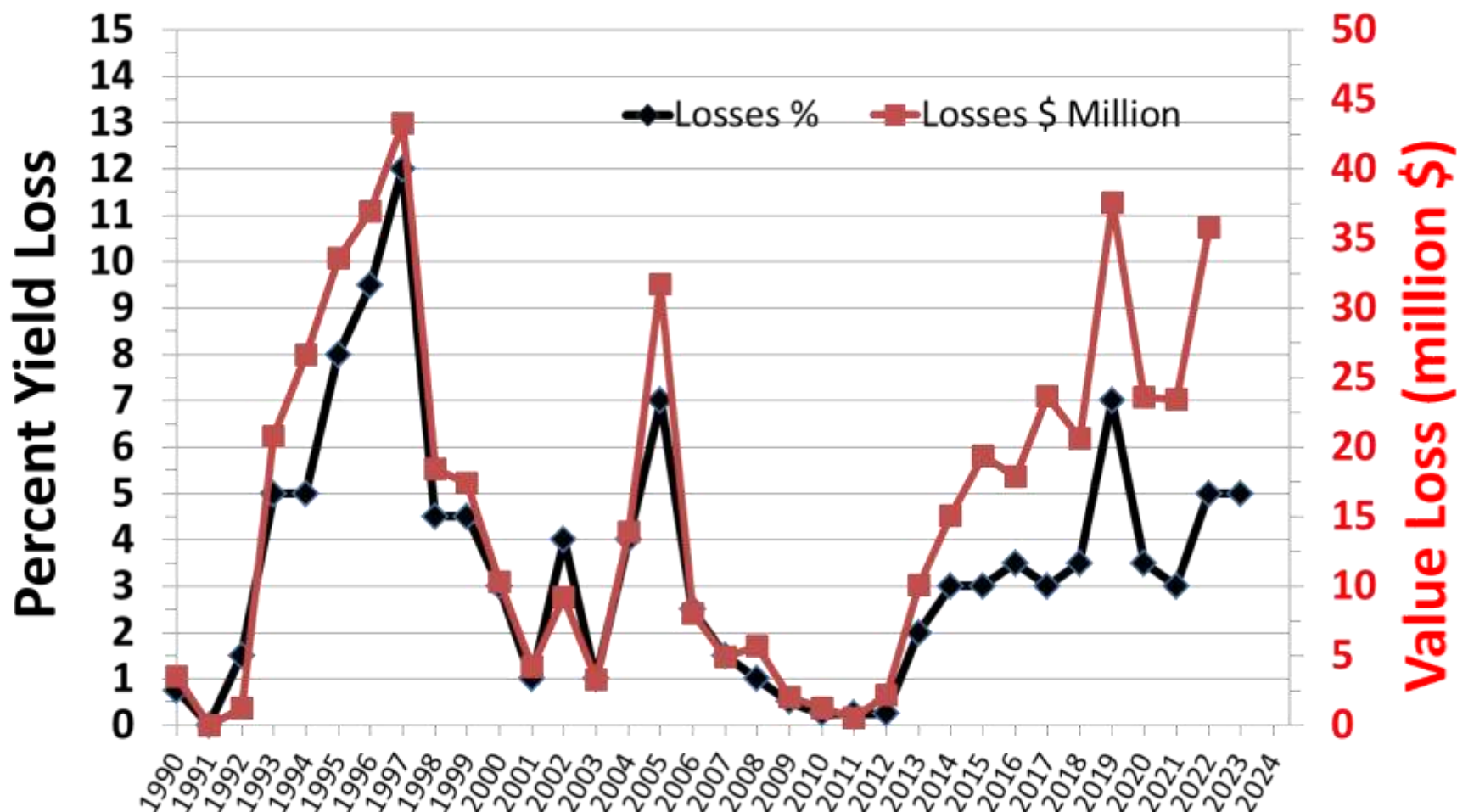




Tomato Spotted Wilt: Tough again in 2023



Losses to Tomato Spotted Wilt in Peanut in Georgia 1990-2023



The logo features the text "PEANUT Rx" in a bold, sans-serif font. The word "PEANUT" is in dark brown, and "Rx" is in a bright yellow. The text is framed by two stylized, wavy yellow lines that resemble peanut shells, each containing three small, light-colored oval shapes representing peanut kernels.

PEANUT Rx

www.peanutrx.org

Peanut Rx updated for 2024



- Variety update
 - Adjust some point values
 - Add some new varieties
- Classic herbicide update from Dr. Prostko

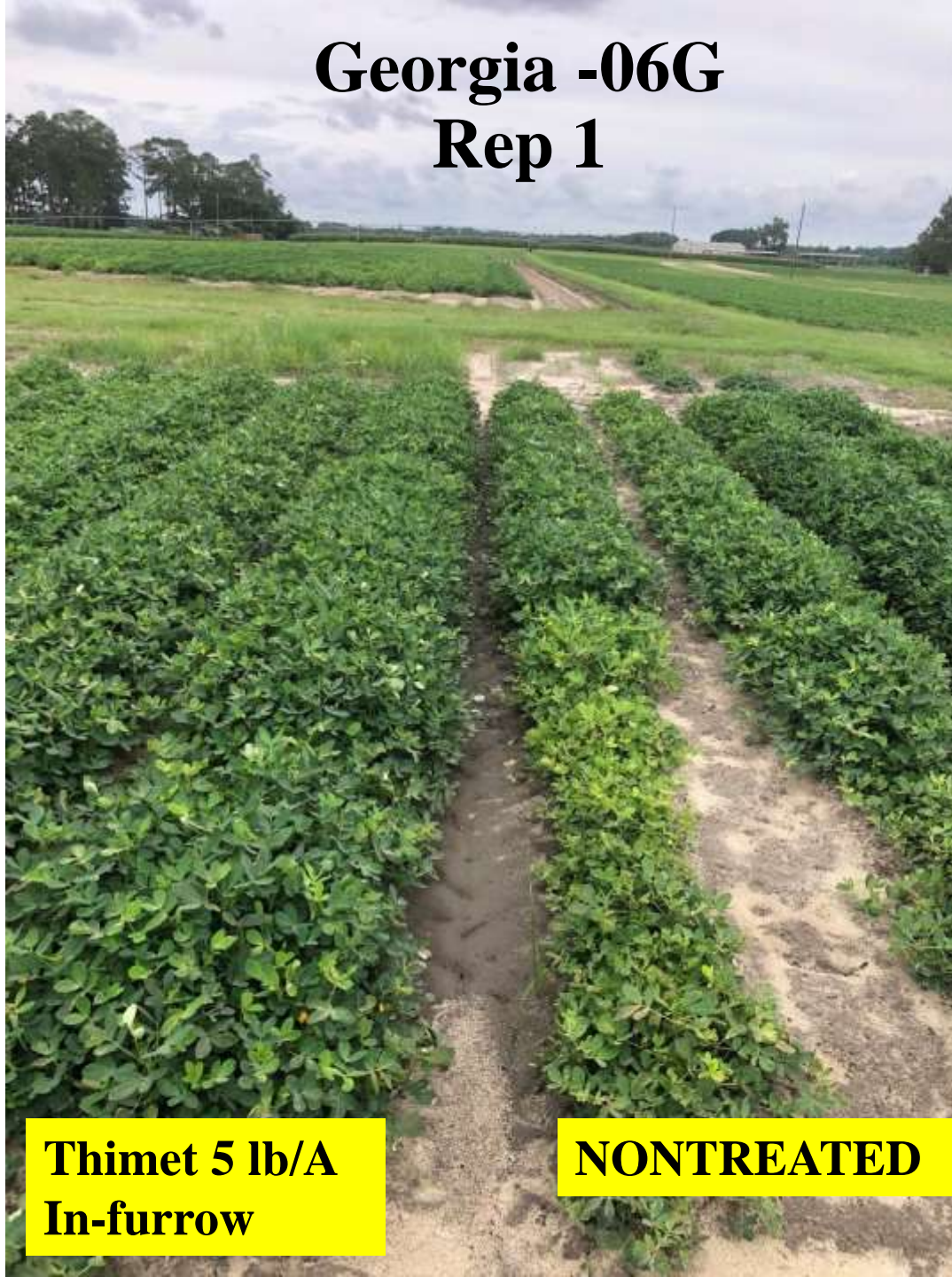
GA-12Y vs GA-06G for Stem Rot

(2015, T. Brenneman)



Georgia -06G

Rep 1



**Thimet 5 lb/A
In-furrow**

NONTREATED

***Aspergillus* spp.** – Virulent peanut pathogens that thrive when *hot & dry*



Current Seed Treatment Options



- **Trebuset (liquid + polymer)**
 - Azoxystrobin* **Group 11**
 - Fludioxonil **Group 12**
 - Mefenoxam **Group 4**
 - **Pydiflumetofen Group 7**
 - **Sedaxane Group 7**
- **Rancona VPD**
 - Ipconazole **Group 3**
 - Carboxin **Group 7**
 - Metalaxyl **Group 4**
- **Rancona VPL (+ polymer)**
 - Ipconazole **Group 3**
 - Carboxin **Group 7**
 - Metalaxyl **Group 4**
 - **Thiophanate methyl Group 1**

In Furrow Fungicides

1. **Abound/Quadris (6-11 fl oz)**

- Used to enhance stands & vigor
- Good on *Rhizoctonia* but not on *Aspergillus*, (Resistance verified)

2. **Proline (5.7 fl oz)**

- Used for CBR and early season white mold, with some stand and vigor benefits

3. **Velum (4.3-6.5 oz) or Propulse (13.6 oz)**

- Fluopyram for nematodes is currently the best option for *Aspergillus* (but not all seedling diseases, as in 2023!)

Peanut Root Knot Nematode



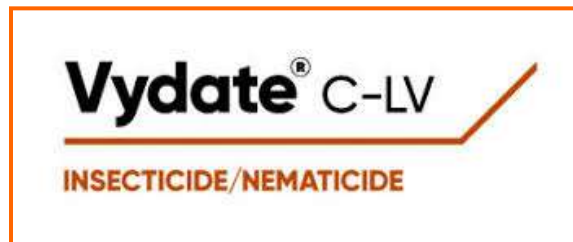
Attapulgis REC



Nematicide Options for 2024

- AgLogic
- Velum (fluopyram ONLY)
 - In-furrow
 - **6.5-6.84 fl oz/A (VELUM)**
 - **Needs thrips product**
- **Propulse** (fluopyram + prothioconazole)
 - Pegging-time for leaf spot, white mold and nematodes.
 - Irrigated/chemigated 13.7 fl oz/A
- **Vydate-CLV** is back
- Telone II
 - Supply ?

AgLogic



Telone* II

Early and Late Leaf Spots 2024



Sulfur as a "tank-mix" partners for Peanut Leaf Spot

- Microthiol 80W
- Drexel Sulfur 80W
- Drexel Suffa 6F
- TechnoS 90W
- Accoidal 80WG
- Kolla 6F (**Not as good**)
- Yellow Jacket 90W (**not recommended**)



More recent fungicides for leaf spot

- Aproach Prima
 - Picoxystrobin + cyproconazole

Aproach® Prima
FUNGICIDE

- Miravis
 - Pydiflumetofen

 **Miravis®**

- Provost Silver
 - Prothioconazole + Tebuconazole


PROVOST®
SILVER

- Provysol
 - Mefentrifluconazole

Provysol™
Fungicide

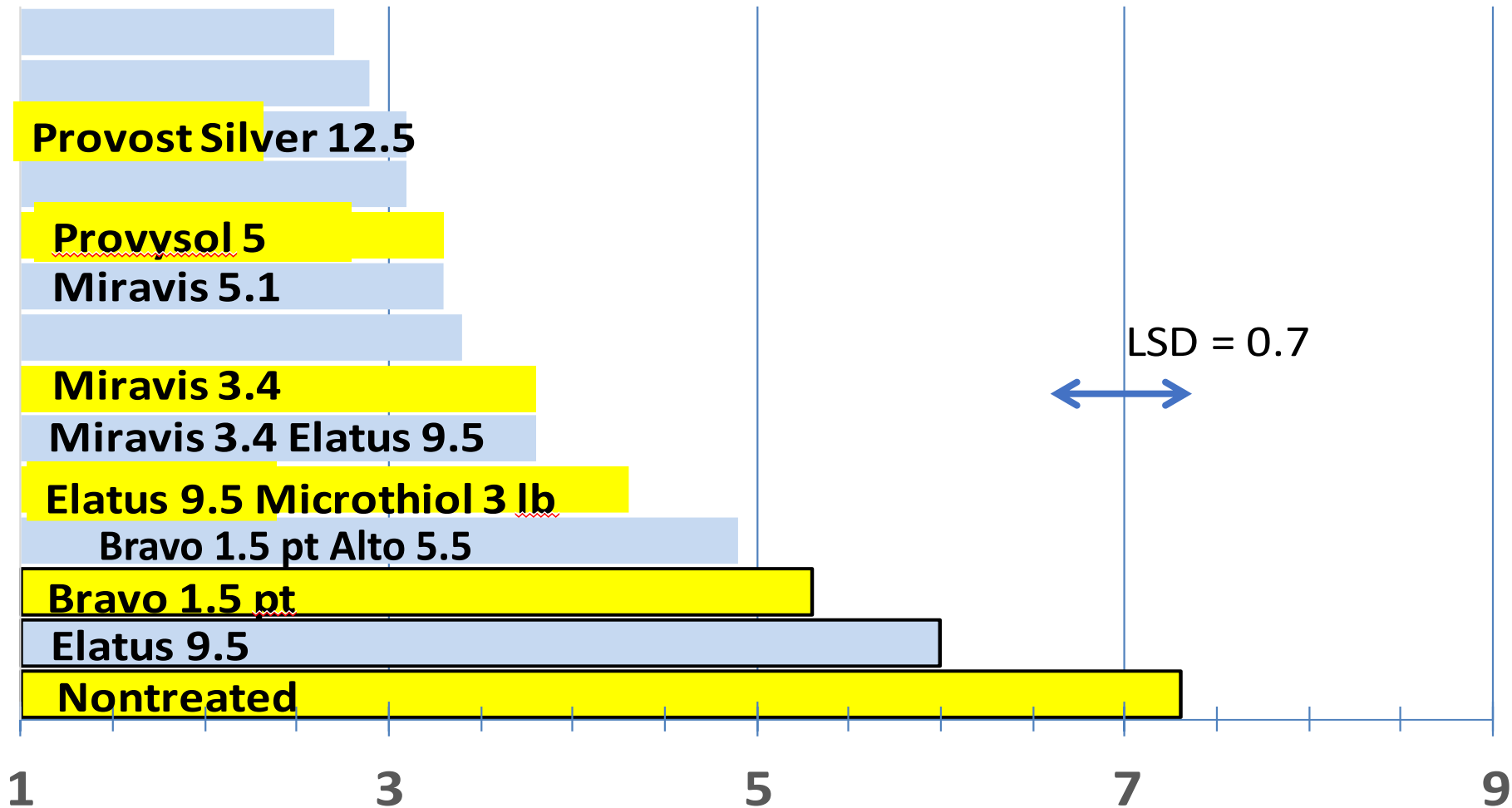
- Lucento
 - Flutriafol + Bixafen


LUCENTO™
FUNGICIDE

Treatment application timing, Fungicide Test, Lang Farm, 2023

A	B+7	D	E	F+7
Alto 5.5 Bravo 1.5	TRT	Bravo 1.5	TRT	Bravo 1.5
40 DAP	57 DAP	78 DAP	92 DAP	113 DAP

Effect of fungicides on early leaf spot, UGA Lang Farm, 2023 (Florida Scale 1-10)



Leaf Spot Control in 2024

- Leaf spot control may be more difficult.
- You do not have to have perfect leaf spot control to make top yields.
- Making top yields where leaf spot occurs does require timely harvests.
- Extended intervals can and do work, but consider a) Peanut Rx and b) your tolerance for leaf spot.
- Triazole fungicide combinations like Provost Silver and, possibly Provysol + teb, benefit in full programs.
- SPECIFIC Sulfur products (2.5-5 lb/A) can help improve a leaf spot program.

White Mold 2023 and 2024



Tebuconazole 30 years later



- Inexpensive.....
- Still effective, especially for white mold
- Tebuconazole should be tank-mixed for best leaf spot control....



- Remember **RATE** and resistance management...
- **WE HAVE BETTER FUNGICIDES**

White Mold Control at 45 Days?

- In-furrow option



- Strong leaf spot control, fair white mold control



Priaxor[®]
Xemium[®] Brand Fungicide

- Tebuconazole
- Premium fungicides at generally lower rates

EXCALIA[®]
FUNGICIDE

 **Elatus**[®]

And then to 60 days and beyond



Vantana™
Control so good it's nuts.

- Spray program with Bravo Weather Stik® for full-spectrum disease control
- Targets late blight, white mold/southern blight
- Fallow multi-site contact fungicide
- Non-SDFI fungicide

Kyle Barker
ADAMA Territory Sales Rep
kyle.barker@adama.com
229.256.7745

ADAMA
Linen | Leaves | Delivers

Always read and follow label directions. Bravo Weather Stik is a registered trademark of ADAMA. U.S. Manufacture is a trademark of ADAMA U.S. ©2022 ADAMA.

Fontelis®

FUNGICIDE



Elatus®



PROVOST®

SILVER

EXCALIA®

FUNGICIDE



CONVOY®

FUNGICIDE



UMBRA®
FUNGICIDE

STOP THE CREEP

Fungicide and Best Results for White Mold control

1. Initial deposition

- Application method (pressure, spray volume, nozzle)
- Timing of application (ex. night sprays)

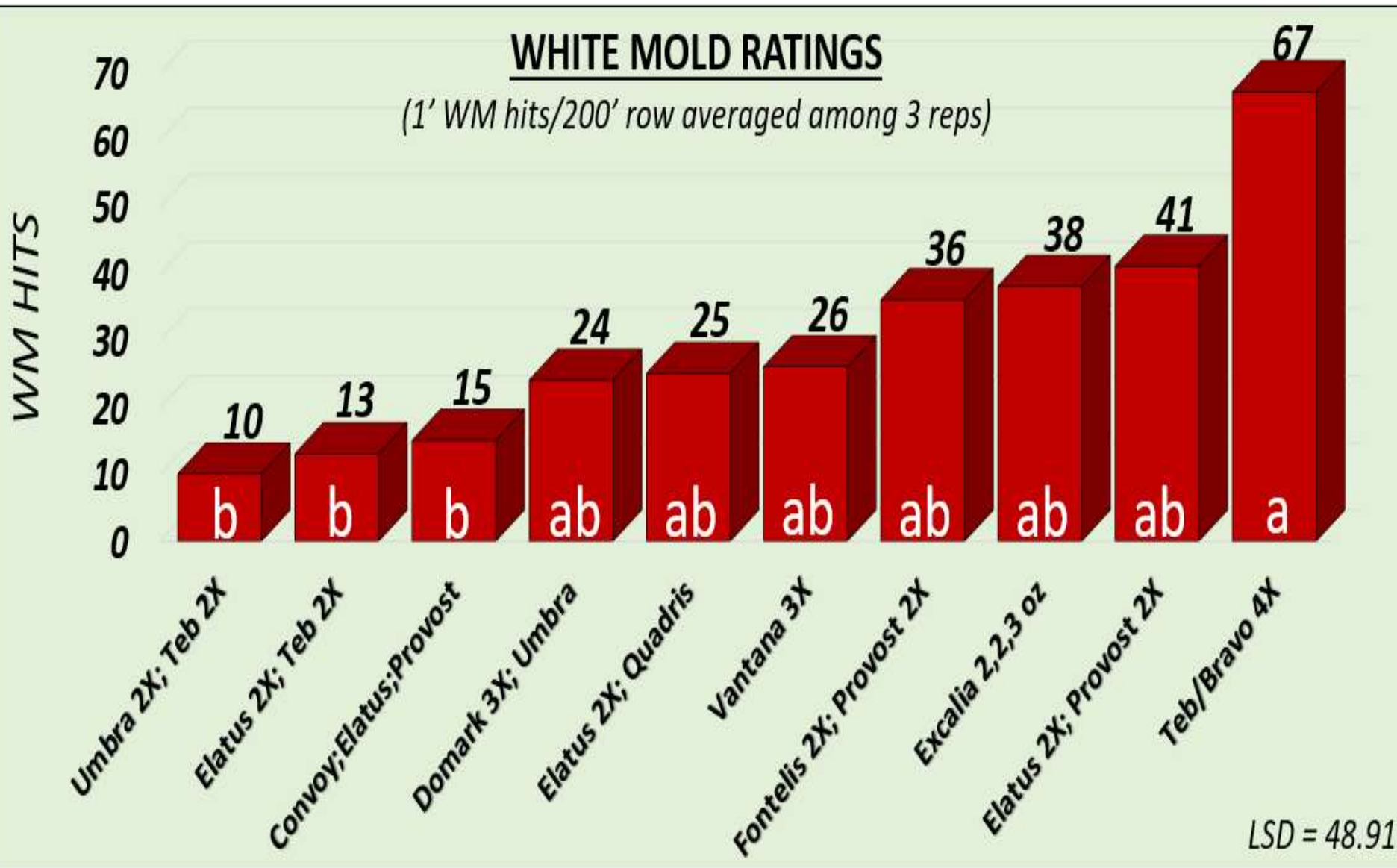
2. Redistribution

- Systemic movement within plant (up only)
- **Downward needs irrigation or rainfall**

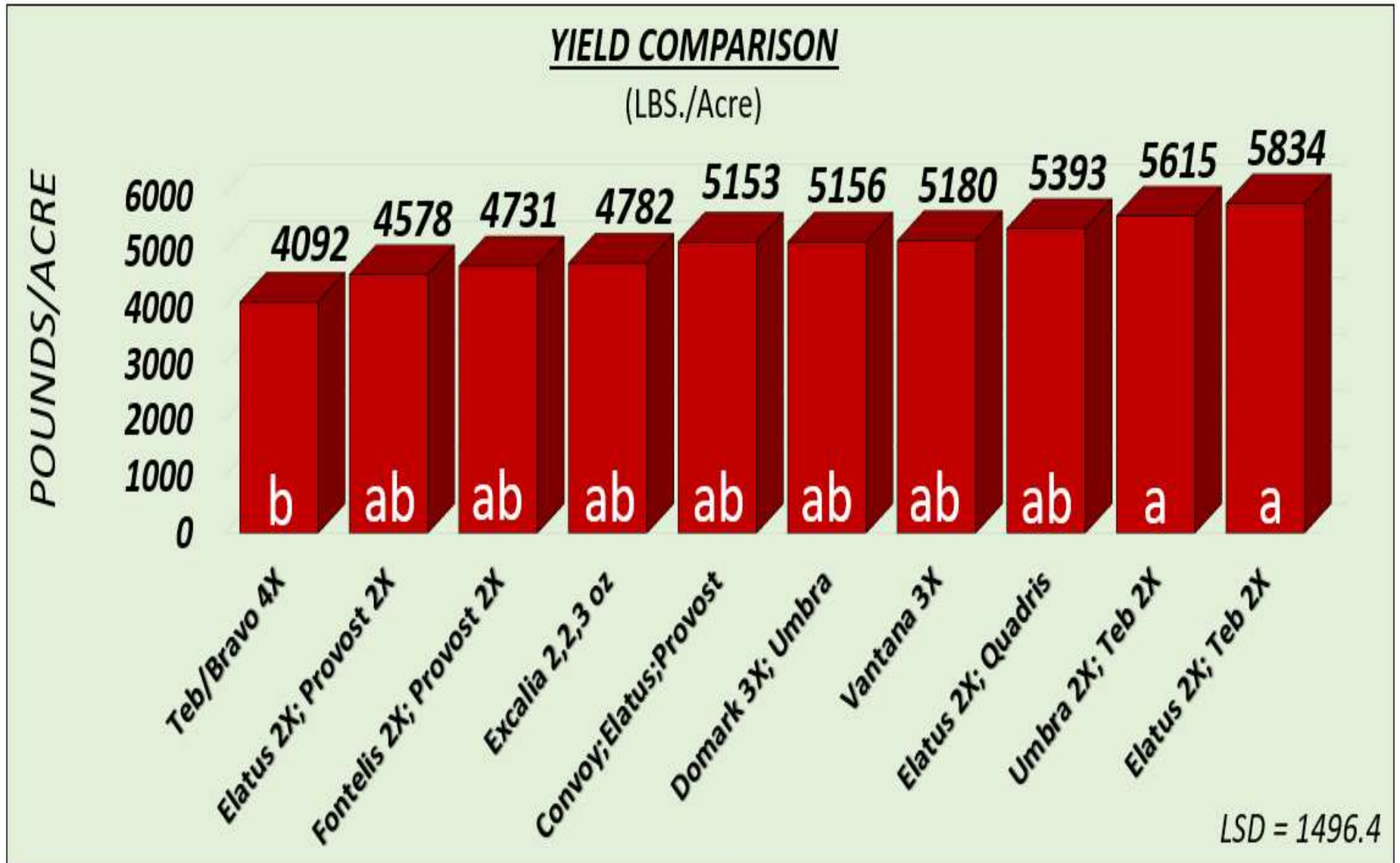
3. SELECTION OF FUNGICIDE



Cook County 2023



Cook County 2023



Cotton, Diseases, and Nematodes

Update for 2024



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Areolate Mildew



UNIVERSITY OF
GEORGIA
EXTENSION

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)



2023 Colquitt County Cotton Fungicide Plot – 50 DAT



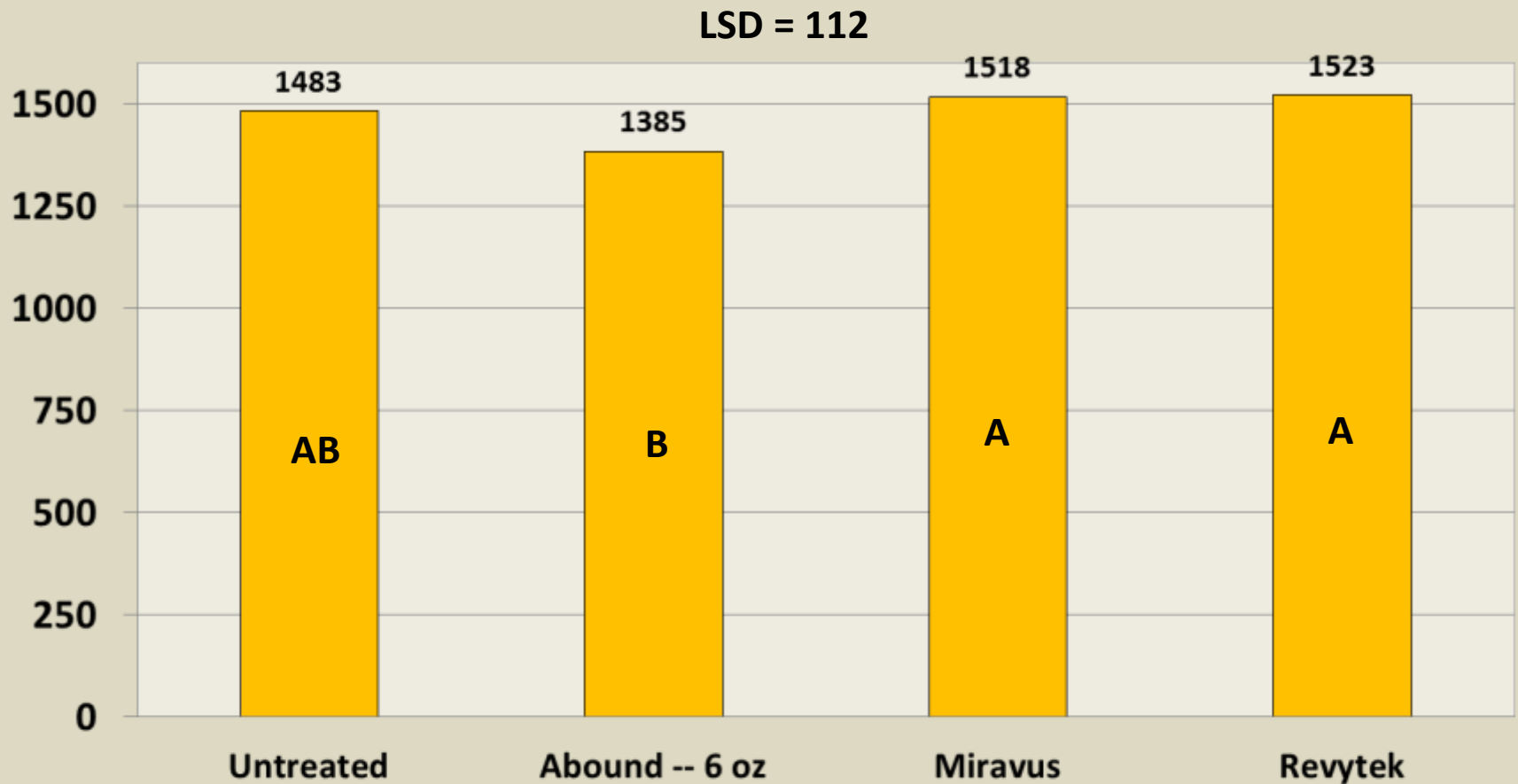
2023 Colquitt County Cotton Fungicide Plot – 69 DAT



2023 Colquitt County Cotton Fungicide Plot

Bay, Georgia

Lint Yield (lb/A)



Fungicide Application 3rd week of bloom. DG 3799 Assuming 40% Turnout

Conclusions for Areolate Mildew

- Until 2023, use of fungicides always reduced defoliation.
- In 2023, azoxystrobin did not reduce defoliation.
- Until 2023, Priaxor and Miravis Top were best, azoxystrobin better than untreated check.
- In 4 out of 5 trials, yields increased by at least 100 lb lint/A, sometimes more.
- Concern now is that growers likely not able to use azoxystrobin for management of Areolate Mildew.

QUESTIONS

