

Peanut Disease and Nematode Update



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When You Leave Here Today

- What did we learn in 2020 that will help in 2021?
- What can we expect in 2021?
- What's new out there in 2021?
- What might we do differently in 2021?



New(er) Products for Peanuts 2021



Provysol™
Fungicide



MAZINGA® ADV
FUNGICIDE



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



Sulfur as a "tank-mix" partner for Management of Peanut Leaf Spot

- Microthiol 80W
- Drexel Sulfur 80W
- Drexel Suffa 6F
- TechnoS 90W
- Accoidal 80WG
- Kolla 6F
- Yellow Jacket 90W



Tomato Spotted Wilt

Assess Disease Risk in Your Field and Develop a Peanut Rx

This worksheet will lead you through the four-step process to determine your disease risk level and then customize a Peanut Rx™ for your individual field using the reverse side of this worksheet and with the assistance of your Syngenta representative.

For each of the risk index factors, identify which option best describes the situation for your field, and add the index value associated with each choice to obtain your overall disease risk value. This worksheet does not contain all of the varieties included in the 2007 Peanut Rx or the notes that accompany each factor. To view the complete 2007 Peanut Rx, visit the University of Georgia peanut Web site at www.uga-peanuts.com.



Step 1: Assess Your Disease Risk

Variety Selection					
Variety	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Georgia Green	10	20	20	20	25
Arriba II	25	30	20	25	25
C-MR	20	15	15	15	25
Carver	20	30	20	25	25
AT 2007D	25	Unknown	Unknown	Unknown	Unknown
Georgia 40L	15	15	10	10	20
Georgia 40C	10	20	10	10	20
Georgia 41E	10	10	10	15	15
York	10	10	10	Unknown	Unknown
AP 3	10	25	10	25	25
Georgia 40E	15	20	25	Unknown	Unknown
Florida 47	10	20	10	Unknown	Unknown
TBrunner	10	15	25	25	25

Planting Date					
Peanuts are planted:	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Prior to May 1	20	0	5	0	0
May 1 to May 10	15	0	5	0	0
May 11 to May 24	5	0	0	0	0
June 1 to June 10	10	5	0	0	5
After June 30	20	0	0	0	5

Plant Population (final stand, not seeding rate)					
Peanuts are planted in:	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Less than 3 plants per ft.	25	NA	NA	NA	NA
3 to 4 plants per ft.	15	NA	NA	NA	NA
More than 4 plants per ft.	5	NA	NA	NA	NA

At-Plant Insecticide					
Insecticide used	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
None	15	NA	NA	NA	NA
Other than Thimet® 20G or Phorate 20G	5	NA	NA	NA	NA
Thimet 20G, Phorate 20G	5	NA	NA	NA	NA

Row Pattern					
Peanuts are planted as:	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Single rows	5	0	0	0	0
Twin rows	5	0	0	0	0

Tillage					
Tillage	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Conventional	15	20	0	0	0
Beddown	5	0	0	0	5

Classic Herbicide					
Classic herbicide usage	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
Classic applied	5	NA	NA	NA	NA
No Classic applied	0	NA	NA	NA	NA

Crop Rotation (with a non-legume crop)					
Years between peanut crop	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
0	NA	20	20	20	25
1	NA	15	20	15	15
2	NA	10	10	10	10
3 or more	NA	5	5	5	5

Field History					
Have you had a problem controlling these diseases?	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
No	NA	0	0	0	0
Yes	NA	10	15	15	10

Irrigation					
Does the field receive irrigation?	Spotted Wilt Points	Leaf Spot Points	Soil-borne Disease White Mold Points	Limb Rot Points	Disease Points
No	NA	0	0	0	0
Yes	NA	10	5	5	10

Step 2: Calculate Your Severity Points

Fill in the following table to calculate your severity points for each of the four major peanut diseases given the 10 determining factors. Total each column in order to establish your disease index values.

	Spotted Wilt	Leaf Spot	White Mold	Rhizoctonia Limb Rot
Variety				
Planting Date				
Plant Population				
At-Plant Insecticide				
Row Pattern				
Tillage				
Classic Herbicide				
Crop Rotation				
Field History				
Irrigation				
Your Total Index Values				

Step 3: Interpret Your Index Values

Once you've calculated your index values, utilize the following information to interpret your risk level situation.

	Spotted Wilt	Leaf Spot	White Mold	Rhizoctonia Limb Rot
Low Risk	< 65	10-35	10-25	15-25
Moderate Risk	70-110	40-60	30-50	30-40
High Risk	> 115	65-100	55-80	45-75

In a year when tomato spotted wilt virus incidence is high statewide, even fields with a low risk level may experience significant losses. Consider the following recommendations to reduce your spotted wilt risk level:

- Use less susceptible varieties.
- Adjust your planting date.
- Consult the complete Peanut Rx for additional options that may also provide limited benefit.

Step 4: Develop Your Peanut Rx

Syngenta Crop Protection has joined forces with the authors of the Peanut Disease Risk Index to minimize disease risk and establish season-long fungicide spray programs for growers at every risk level. Syngenta recommended fungicide spray programs for each risk level are included on the reverse side. Once you have calculated your total risk for each fungal disease, utilize the most conservative fungicide program as your guide for customizing a per-field prescription spray program with the assistance of your Syngenta representative.

Programs developed through the cooperation of



Mitchell County, 2020



Two species of *Aspergillus*



Seed Treatment Fungicides

- RANCONA
 - Ipconazole + Carboxin
+ Metalaxyl

The logo for Rancona features the brand name in a black, italicized serif font. A blue, wavy line underlines the text, starting from the left and ending under the 'a'. A registered trademark symbol (®) is located at the top right of the 'a'.

- Dynasty PD
 - Azoxystrobin +
Mefenoxem +
Fludioxonil

The logo for Dynasty PD consists of a stylized icon on the left, made of three overlapping leaf-like shapes in purple and gold. To the right of the icon, the word "Dynasty" is written in a bold, black, sans-serif font, followed by "PD" in a larger, bold, purple, sans-serif font. A registered trademark symbol (®) is positioned above the "y" in "Dynasty".

Protecting Peanut Stand

Seed Treatment

1. Dynasty PD
2. Rancona

In Furrow Treatment

1. Velum Total (18 fl oz)
2. Velum (6.5-6.84 fl oz)
3. Propulse (13.7 fl oz)
4. Proline (5.7 fl oz)
5. Abound (6.0-9.0 fl oz)



Peanut Nematodes 2020

Lesion Nematodes

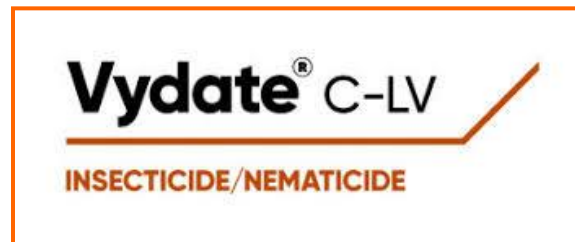


Root-knot Nematodes



Nematicide Options for 2021

- AgLogic more available in 2020
- Velum Total (fluopyram + imidicloprid)
 - In-furrow
 - 18 fl oz/A
 - **6.5-6.84 fl oz/A (VELUM) + thrips product**
- **Propulse** (fluopyram + prothioconazole)
 - Pegging-time for leaf spot, white mold and nematodes.
 - Irrigated/chemigated 13.7 fl oz/A
- **Vydate-CLV** back in 2020
- Telone II
 - Supply in 2021?

The logo for AgLogic, featuring the word "AgLogic" in a bold, black, sans-serif font. A small blue triangle is positioned above the letter "i".

Peanut Leaf Spot Diseases

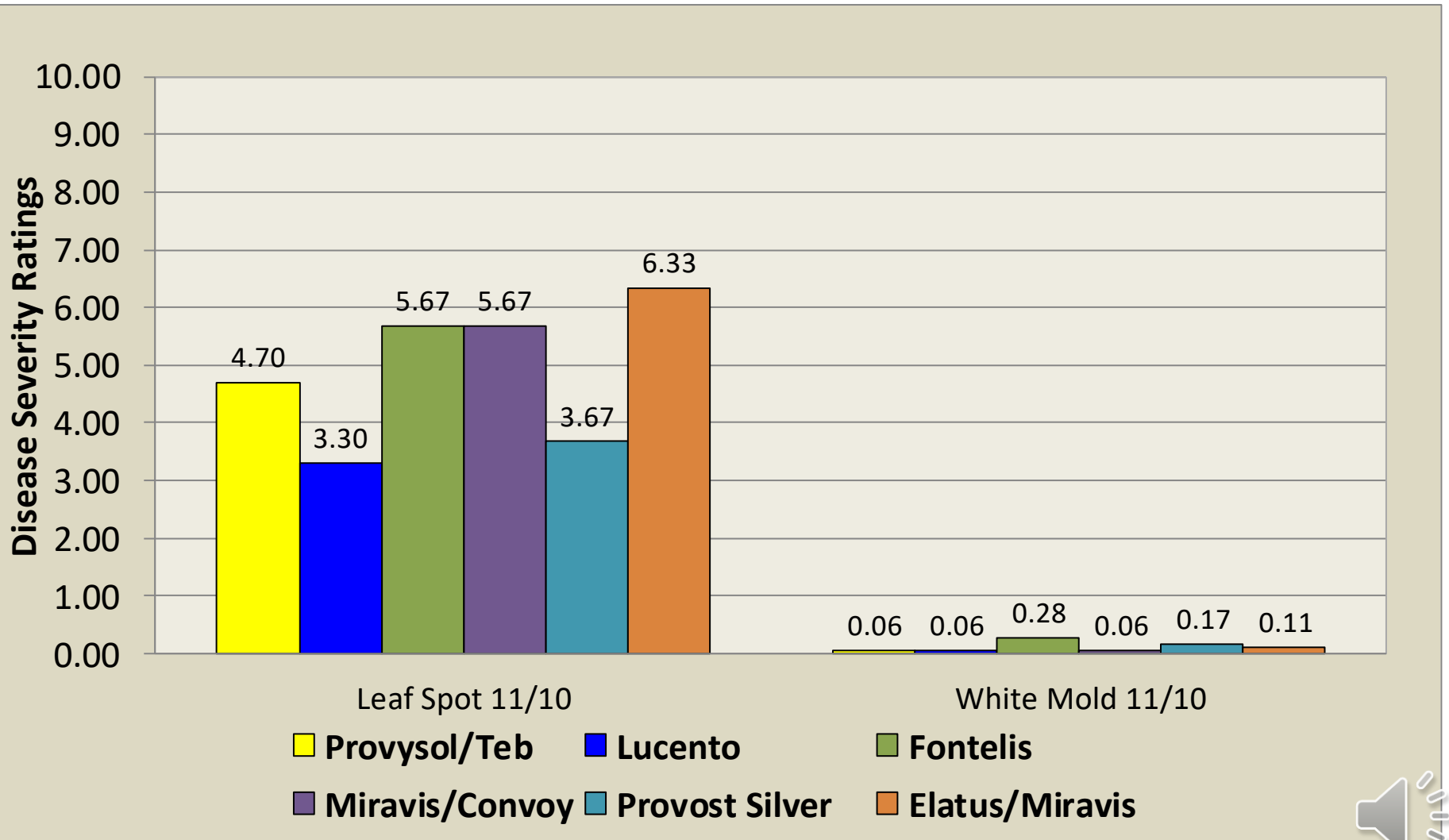
- If not effectively managed:
 - defoliates crop
 - **weaken pegs**
 - can reduce yields
- Leaf spot problems likely linked to:
 - delays to start of a program
 - delayed mid-season applications
 - rain too soon or too often
 - fungicide resistance issues with tebuconazole, etc.



2020 Peanut Fungicide Study

Chad Mathis Farm

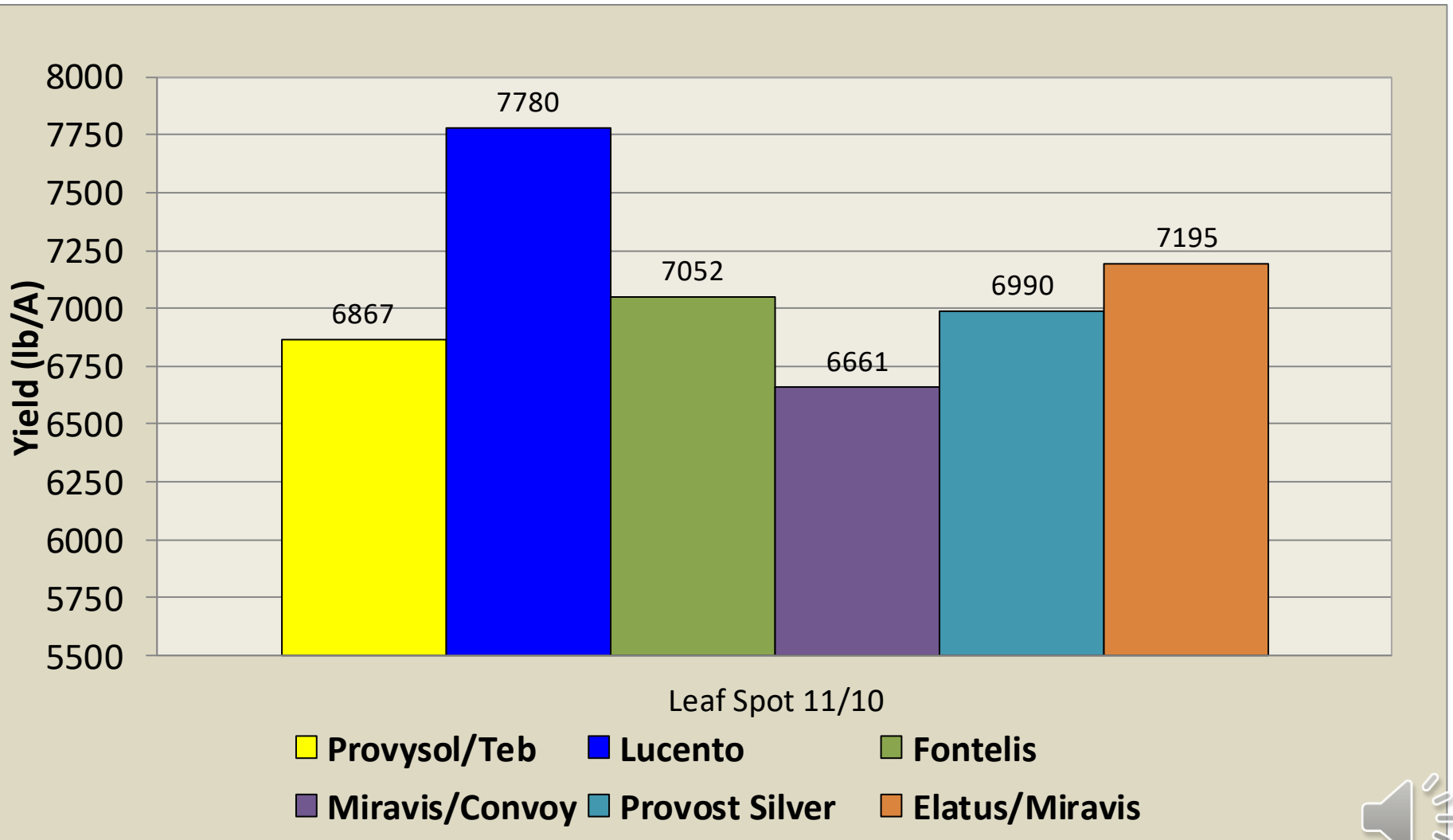
Paul Wigley, Brian Cresswell, and Luke Crosson



2020 Peanut Fungicide Study

Chad Mathis Farm

Paul Wigley, Brian Cresswell, and Luke Crosson



Sclerotium rolfsii/White Mold



- Currently the most important pathogen/disease affecting peanut in Georgia.
- Widespread distribution.
- Shortened rotations with corn and cotton increase risk.
- Peanut “architecture” makes management difficult.



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FUNGICIDE

Provysol[™]
Fungicide

Evito[®]

CONVOY[®]
FUNGICIDE

priaxor[™]
PREMIUM BRAND FUNGICIDE

UMBRA[®]
FUNGICIDE

LUCENTO[™]
FUNGICIDE

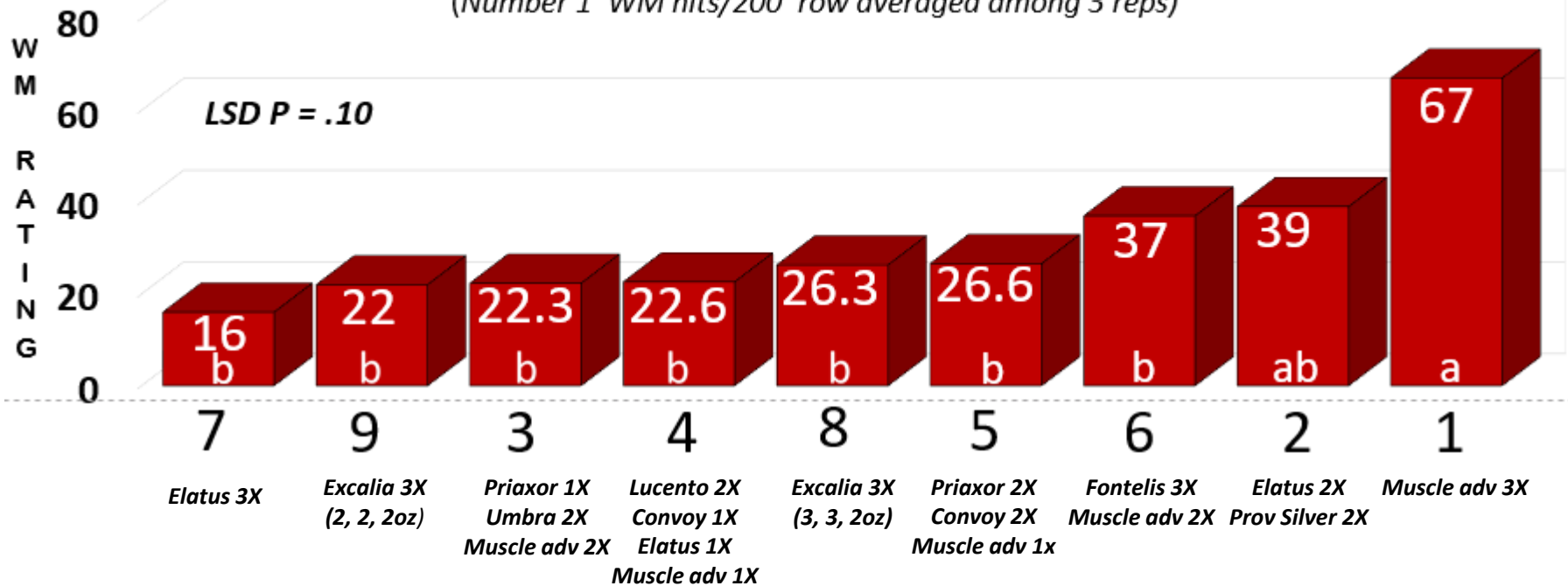
Muscle[®] ADV
Fungicide

 **custodia**[™]



White Mold (WM) Rating

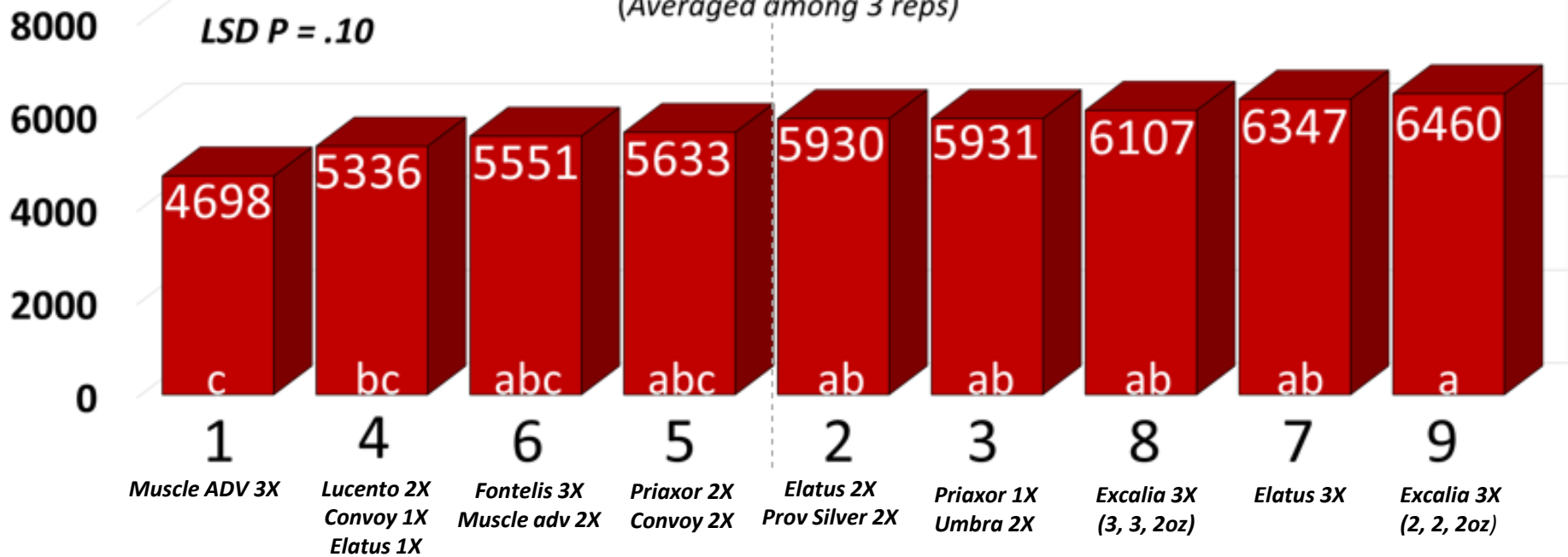
(Number 1' WM hits/200' row averaged among 3 reps)



Yield Comparison (lbs.)

(Averaged among 3 reps)

LSD P = .10




2020 Peanut Fungicide Programs

A Extension		2020 County Fungicide Selected Programs								
	Days after Plant	30	45	60	75	90	105	120	134	148
1	Sipcam MANDATORY	Echo 1.5 pt/A	Echo 1.5 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Echo 1.5 pt/A		
2	SIPCAM	MAZINGA ADV 32 fl oz	MAZINGA ADV 32 fl oz	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Muscle ADV 2.0 pt/A	Echo 1.5 pt/A		
3	Bayer elum Prime Preferi 6.5 oz		Absolute MAX 3.5 fl oz	Propulse 13.7 oz	Provost Silver 13 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	Echo 1.5 pt		
4	Bayer Foliar Only	chlorothalonil 1.5 pt	Absolute MAX 3.5 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	Elatus 7.3 oz	Provost Silver 13 fl oz	Echo 1.5 pt		
5	Nichino BASF		Priazor 6 fl oz/A	Umbra 36 fl oz Echo 1.0 pt	Muscle ADV 2.0 pt/A	Umbra 36 fl oz Echo 1.0 pt	Muscle ADV 2.0 pt/A	Echo 1.5 pt		
6	FMC		LUCENTO 5.5 fl oz	Convog 32 fl oz Echo 1.5 pt	LUCENTO 5.5 fl oz	Elatus 9.5 fl oz	Muscle ADV 2.0 pt	Echo 1.5 pt		
7	Corteva	Aproach Prima 6.8 fl oz	Muscle ADV 2.0 pt	Fontelis 16 fl oz	Fontelis 16 fl oz	Fontelis 16 fl oz	Muscle ADV 2.0 pt	Echo 1.5 pt		
8	Nichino BASF sulfur		Priazor 6 fl oz/A	Umbra 36 fl oz Microthiol Disperss Micronized 5 lb	Muscle ADV 2.0 pt/A	Umbra 36 fl oz Microthiol Disperss Micronized 5 lb	Muscle ADV 2.0 pt	Echo 1.5 pt		
9	Syngenta	Echo 1.5 pt	Echo 1 pt Alto 5.5 oz	Elatus 9.5 oz Miravis 3.4 fl oz		Elatus 9.5 oz Miravis 3.4 fl oz		Echo 1.5 pt		
10	Syngenta	Echo 1.5 pt	Elatus 7.3 oz	Elatus 7.3 oz Miravis 3.4 fl oz		Elatus 7.3 oz Miravis 3.4 fl oz		Echo 1.5 pt		
11	BASF		Priazor 6 fl oz/A	Convog 32 fl oz Provgosol 5 fl oz	Priazor 6 fl oz/A	Convog 32 fl oz Provgosol 5 fl oz	Muscle ADV 2.0 pt	Echo 1.5 pt		
12	Nichino Covog		Priazor 6 fl oz/A	Convog 32 fl oz Echo 1.5 pt	Muscle ADV 2.0 pt/A	Convog 32 fl oz Echo 1.5 pt	Muscle ADV 2.0 pt/A	Echo 1.5 pt		



Play-calling in the 4th quarter (104 -145)

- Sidelined by lack of curative activity:
 - Chlorothalonil needs help
- Sidelined by resistance management or cost:
 - Priaxor, Miravis, Aproach Prima, Lucento
- **Sidelined by PHI**
 - **Umbra (40 days)**
 - **Convoy (40 days)**
 - **Excalia (40 days)**
 - **Alto (30 days)**



**WINNING ISN'T
IMPERATIVE, BUT GETTING
TOUGHER IN THE FOURTH
QUARTER IS**

BEAR BRYANT

PICTUREQUOTES.COM



Play-calls in the 4th (104 -145 days)

- Dance-partners with chlorothalonil
 - Domark
 - Topsin
- Mazinga ADV
- White mold products
 - Tebuconazole (needs leaf spot help)
 - Abound (needs leaf spot help)
 - Provost Silver
 - Fontelis



My Objectives for Today

- What did we learn in 2020 that will help in 2021?
- What can we expect in 2021?
- What's new out there in 2021?
- What might we do differently in 2021?

