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

EXCALIA™
Fungicide

Provysol™
Fungicide

VELUM
BAYER
1 Gallon

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 help you through the four step process to determine your disease risk level and then consult 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 values associated with each factor to obtain your overall disease risk value. This worksheet does not contain all of the variables included in the 2021 Peanut Rx for the reasons that accompany each factor. To obtain the complete 2020 Peanut Rx, visit the University of Georgia peanut Web site at www.peanuts.org.

Step 1: Assess Your Disease Risk

<table>
<thead>
<tr>
<th>Factor</th>
<th>High Risk Value</th>
<th>Medium Risk Value</th>
<th>Low Risk Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Step 2: Calculate Your Severity Points

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

<table>
<thead>
<tr>
<th>Severity Points</th>
<th>Spotted Wilt</th>
<th>Leaf Spot</th>
<th>White Mold</th>
<th>Abiotic/Link Rx</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Step 3: Interpret Your Index Values

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

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Low Risk</th>
<th>Medium Risk</th>
<th>High Risk</th>
</tr>
</thead>
</table>

In a year when tomato spotted wilt 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.
- Adjutant application rate.
- Consult the complete Peanut Rx for additional options or extend banded benefit.

Step 4: Develop Your Peanut Rx

Syngenta Crop Protection has worked with the university of the Peanut Disease Risk Index to minimize disease risk and reduce crop injury. Syngenta recommends the Peanut Rx program for growers at every risk level. Syngenta recommends the Peanut Rx program for each risk level and for use 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

- **Dynasty PD**
  - Azoxystrobin + Mefenoxem + Fludioxonil
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?
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

Disease Severity Ratings
Leaf Spot 11/10
- Provysol/Teb
- Lucento
- Fontelis
- Miravis/Convoy
- Provost Silver
- Elatus/Miravis

White Mold 11/10
- Provysol/Teb
- Lucento
- Fontelis
- Miravis/Convoy
- Provost Silver
- Elatus/Miravis

<table>
<thead>
<tr>
<th></th>
<th>Provysol/Teb</th>
<th>Lucento</th>
<th>Fontelis</th>
<th>Miravis/Convoy</th>
<th>Provost Silver</th>
<th>Elatus/Miravis</th>
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<tbody>
<tr>
<td>Leaf Spot</td>
<td>4.70</td>
<td>3.30</td>
<td>5.67</td>
<td>5.67</td>
<td>3.67</td>
<td>6.33</td>
</tr>
<tr>
<td>White Mold</td>
<td>0.06</td>
<td>0.06</td>
<td>0.28</td>
<td>0.06</td>
<td>0.17</td>
<td>0.11</td>
</tr>
</tbody>
</table>
2020 Peanut Fungicide Study
Chad Mathis Farm
Paul Wigley, Brian Cresswell, and Luke Crosson

![Graph showing yield comparison for different fungicides with values for Leaf Spot 11/10]

- **Provysol/Teb**: 6867 lb/A
- **Lucento**: 7780 lb/A
- **Fontelis**: 7052 lb/A
- **Miravis/Convoy**: 6661 lb/A
- **Provost Silver**: 6990 lb/A
- **Elatus/Miravis**: 7195 lb/A
**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.
White Mold (WM) Rating
(Number 1’ WM hits/200’ row averaged among 3 reps)

LSD P = .10

<table>
<thead>
<tr>
<th>Product</th>
<th>Rating</th>
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<tr>
<td>Elatus 3X</td>
<td>7</td>
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<tr>
<td>Excalia 3X (2, 2, 2oz)</td>
<td>9</td>
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<tr>
<td>Priaxor 1X Umbra 2X</td>
<td>3</td>
</tr>
<tr>
<td>Muscle adv 2X</td>
<td>4</td>
</tr>
<tr>
<td>Lucento 2X Elatus 1X</td>
<td>8</td>
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<tr>
<td>Muscle adv 1X</td>
<td>5</td>
</tr>
<tr>
<td>Excalia 3X (3, 3, 2oz)</td>
<td>6</td>
</tr>
<tr>
<td>Priaxor 2X Convoy 2X</td>
<td>2</td>
</tr>
<tr>
<td>Fontelis 3X</td>
<td>1</td>
</tr>
<tr>
<td>Elatus 2X Prov Silver 2X</td>
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</tr>
<tr>
<td>Muscle adv 3X</td>
<td></td>
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</tbody>
</table>
Yield Comparison (lbs.)

(Averaged among 3 reps)

LSD P = .10

Muscle ADV 3X
Lucente 2X
Convoy 1X
Elatus 1X
Fontelis 3X
Muscle adv 2X
Priaxor 2X
Convoy 2X
Elatus 2X
Prov Silver 2X
Priaxor 1X
Umbra 2X
Excalia 3X
(3, 3, 2oz)
Elatus 3X
Excalia 3X
(2, 2, 2oz)
# 2020 Peanut Fungicide Programs

<table>
<thead>
<tr>
<th>Days after Planting</th>
<th>30</th>
<th>45</th>
<th>60</th>
<th>75</th>
<th>90</th>
<th>105</th>
<th>120</th>
<th>134</th>
<th>148</th>
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<tr>
<td><strong>Matrix</strong></td>
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<td><strong>2020 County Fungicide Selected Programs</strong></td>
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<tr>
<td>1 Sipcam</td>
<td>Echo 1.5 pt</td>
<td>Echo 1.5 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Echo 1.5 pt</td>
<td></td>
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<tr>
<td><strong>MANDATORY</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Sipcam</td>
<td>MAIZINGA ADY 32 fl oz</td>
<td>MAIZINGA ADY 32 fl oz</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Muscle ADY 2.0 pt</td>
<td>Echo 1.5 pt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- **Mandatory:** Indicates the mandatory fungicide program.
- **Foliar Only:** Indicates the fungicide applied via foliar spray.
- **Absolute Max:** Indicates the maximum amount of fungicide that can be applied.

**Ingredients:**
- **Piazoar:** 6 fl oz/A
- **Convoy:** 32 fl oz
- **Elatus:** 3.5 oz
- **Miravis:** 3.4 fl oz
- **Purosol:** 5 fl oz
- **Microthiol Dispers:** Micronized 5 lb
- **Echo:** 1.5 pt/A
- **Propulse:** 13.7 oz
- **Proval Silver:** 13 fl oz
- **Fontalis:** 16 fl oz

**Additional Notes:**
- Sipcam is a mandatory fungicide program.
- Sipcam, MAIZINGA ADY 32 fl oz, Beger, and other fungicides are included in the 2020 county fungicide selected programs.
- The table provides a comprehensive overview of the fungicide programs recommended for peanut cultivation in 2020.
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)
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?

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