2014 Pecan Disease Management Update

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Theory vs. Reality
Test of spraying capacity

– Additional sprayer?

– Calibration?

– Trouble areas in the orchard
Aerial Application

- Not a substitute for ground application
- Useful when ground application is difficult or impossible
Spray at night?

• Why?
  • Wind
  • Behind schedule

• Issues
  • Visibility
  • Drying time (evaporation rate; increased RH; dew)
    – Leaves might need 2-3 hrs after sunrise to dry
  • Dew
    – Can lead to runoff
    – Can improve distribution of fungicide

  – Bad combo: dew + early morning rain
When to start in 2014?

• Parachute stage (~ 10-14 days after bud break)

• Bud break

• What to use early?
  • Dodine and Qols have anti-sporulation activity
Generic azoxystrobin

– active ingredient in Syngenta's Abound and Quadris fungicides

• Strobilurin
• FRAC Group 11
• High risk for fungicide resistance
# Pecan Fungicides

## FRAC Code 11 (Strobilurins)

<table>
<thead>
<tr>
<th>azoxystobin</th>
<th>kresoxim-methyl</th>
<th>pyraclostrobin</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Abound</td>
<td>☐ Sovran</td>
<td>☐ Headline</td>
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</tbody>
</table>
## Pecan Fungicides

### Multiple Active Ingredient

<table>
<thead>
<tr>
<th></th>
<th>Group 3</th>
<th>Group 11</th>
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<tbody>
<tr>
<td>Absolute</td>
<td>tebuconazole</td>
<td>trifloxystrobin</td>
</tr>
<tr>
<td>Quilt</td>
<td>propiconazole</td>
<td>azoxystrobin</td>
</tr>
<tr>
<td>Quadris Top</td>
<td>difenoconazole</td>
<td>azoxystrobin</td>
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</tbody>
</table>
Notes from UGA Research Trials

• The use of phosphite materials
  – No reduction in shuck split (5 applications)
  – Granular phosphite applications not effective
Pecan Fungicides

FRAC Code 33 (phosphites)

- Scab
  - Phostrol
  - ProPhyt
  - Viathon

- Phytophthora
  - Fosphite
  - Fungi-Phite
  - KPhite
  - Phiticide
  - Phostrol
  - Rampart
  - Topaz

- Apply 1-2 qts
- Apply in 100 gpa by ground.
- Do not apply in consecutive applications.
Notes from UGA Research Trials

• The use of phosphite materials
  – No reduction in shuck split (5 applications)
  – Granular phosphite applications not effective

• Nordox 75WG
  – Certified Organic Copper Fungicide

• Tank mixing vs. alternating fungicides
UGA Fungicide Screening Program
UGA Fungicide Screening Program

• Collect one sample per orchard from one cultivar.
• At least 50 leaflets with visible scab lesions
• Do not collect all leaves from the same tree or row.
• **Do not collect leaves less than 7 days after the last fungicide application.**
• Place in a large (1-gallon) plastic Ziploc bag
• label bag with the collector's name, orchard location and collection date, seal
• **Do not** place moist paper towels in the bag with the leaflets
• Provide the information and include completed form.
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Trade Name</th>
<th>FRAC Code</th>
<th>Fungicide Class</th>
<th>Common Name</th>
<th>Trade Name</th>
<th>FRAC Code</th>
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<tbody>
<tr>
<td>thiophanate-methyl</td>
<td>Topsin-M</td>
<td>1</td>
<td>QoIs (strobilurins)</td>
<td>azoxystrobin</td>
<td>Abound ½ of Quilt</td>
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<tr>
<td></td>
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<td>kresoxim-methyl</td>
<td>½ of Quadris Top</td>
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<td>Sovran</td>
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<td>trifloxystrobin</td>
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<td>dodine</td>
<td>Elast</td>
<td>M3</td>
<td>DMIs (triazoles, sterol inhibitors)</td>
<td>propiconazole</td>
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<td>Super Tin, Agri Tin</td>
<td>30</td>
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<td>tebuconazole</td>
<td>Monsoon, Orius, Toledo ½ of Absolute</td>
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