The Narrow Brown Leaf Spot Outbreak and Its Control in 2007
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Cercospora on Rice

- Narrow Brown Leaf Spot, also called Cercospora leaf spot
- Cercospora Sheath Rot
- Attacks panicle branches and glumes
- Causal organism: Cercospora oryzae
- The disease has been reported in all major rice producing areas of the world
- Yield losses of up to 40% have been reported
Disease Cycle

- Penetrates tissues through stomata and grows intercellularly
- Symptoms may take 30 days to develop
- Plants susceptible at all growth stages but more susceptible from panicle emergence to maturity
- Several races have been identified based on the reaction of a set of eight cultivars
Long-grain Disease Reactions
Narrow Brown Leaf Spot

- CL131 Cybonnet Trenasse
- CL151 Cocodrie CL161 Chenere Spring
- CLXL8 Banks
# Narrow Brown Reactions

<table>
<thead>
<tr>
<th>Susceptible</th>
<th>Moderately Susceptible</th>
<th>Moderately Resistant</th>
<th>Resistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL131* vs. Cybonnet</td>
<td>CL161</td>
<td>Spring</td>
<td>CLXL8</td>
</tr>
<tr>
<td>Trenasse</td>
<td>Cocodrie</td>
<td>CLXL730</td>
<td>XL723</td>
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<td></td>
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<td>Cypress</td>
<td>CLXL730</td>
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<td>Jupiter</td>
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<td>Banks</td>
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<td>Pace</td>
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<td>Bengal</td>
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<td>Medark</td>
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<td>XP712</td>
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Fungicide effects on NBLS Boot Applications

- Check: 6
- Quadris 9: 4.6
- Tilt 6: 6
- Topsin M 24: 4.6
- Stratego 16: 8.2
- Quilt 28: 6
Fungicide effects on NBLS
Boot vs. Heading Applications
# Rice Fungicide Types

<table>
<thead>
<tr>
<th>Propiconazole</th>
<th>Propiconazole + Strobulin</th>
<th>Strobulin</th>
<th>Flutolanil</th>
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</thead>
<tbody>
<tr>
<td>Tilt</td>
<td>Quilt</td>
<td>Quadris</td>
<td>Moncut</td>
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<tr>
<td>PropiMax</td>
<td>Stratego</td>
<td>Gem</td>
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<tr>
<td>Bumper</td>
<td>Tank Mix</td>
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</tbody>
</table>
Why?

- Over wintering rice in crawfish ponds contributed early inoculum.
- Very wet conditions during July favored disease development.
- Quadris used on 80-90% of treated acreage had no effect on this disease.
- Possible race change.
- Will it happen again???????