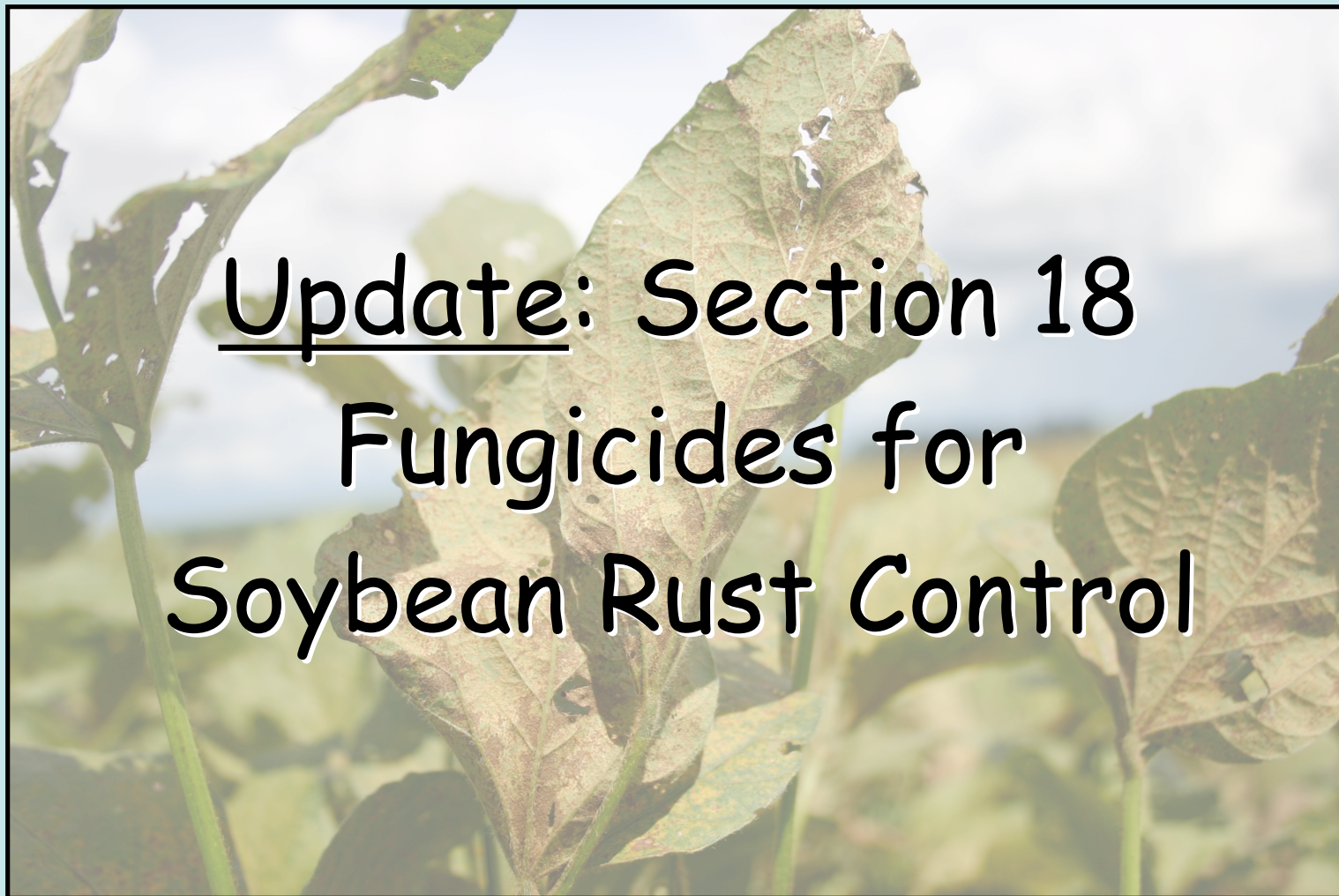


Plant  
Science  
Department

Extension  
Plant  
Pathology



# Update: Section 18 Fungicides for Soybean Rust Control



**Martin A. Draper**  
**Extension Plant Pathologist**



# History

- Available controls ineffective
  - Cultural alternatives
  - Resistant varieties
  - Labeled fungicides limited and only preventative (Quadris, Bravo/Echo)
- Decision made to pursue more fungicide chemistries at initial NC-504 meeting in February 2003 (initiated March 2003)
  - Concerned with product availability to treat 74 million acres
  - Concerned with resistance management
  - Concerned with no “curative” products labeled
  - Moratorium on new Triazole uses (EPA review)



# History

- EPA allowed a Quarantine Section 18
- Initial submission filed in November 2003
  - Myclobutanil (Laredo) - 04/04 – *activation date*
  - Tebuconazole (Folicur) – 05/04
  - Propiconazole (Tilt, PropiMax, Bumper) – 06/04
  - Tetraconazole (Domark) – 03/05
  - Pyraclostrobin (Headline) – Sec 3 granted Dec. 2004
  - Propiconazole + Trifloxystrobin (Stratego) 12/04
  - Boscalid + Pyraclostrobin (Pristine) – approved but “withdrawn”
- Soybean rust find in continental US – 11/10/03
  - *EPA revised activation date*
- Since submission – coordinated by USDA-OPMP



# History

- Strategies followed to persuade EPA of need
  - Inadequate product supplies
    - Need more products
    - Distributed manufacturing
  - Need products with the highest efficacy
  - Need more premixes
    - May allow for lower efficacious rates of a.i. – stretches supplies
    - Reflects trend of successful disease control in South America





# History

- Discussions with EPA about additional products/chemistries – Criteria
  - Initially had FQPA risk cup concerns about EBDCs
  - Now open to evaluating efficacious chemistries
  - EPA preference for S-18s (*in order of preference*)
    - Already approved active ingredients (*3s and 18s*)
    - Already registered active ingredients
    - Favorably inclined toward FRAC Group 3 and Group 11
    - Less favorable to non-registered chemistries

# Actions

- Amended in December, 2004 changing tetraconazole to a 230g/l (Domark) formulation from a 125g/l (Eminent)
- First product amendment filed January, 2005
  - Propiconazole + Azoxystrobin (Quilt)
- Second product amendment filed February 2005
  - Tebuconazole + Pyraclostrobin
    - CoPack (Headline SBR)
    - Premix (Headline STAR)
    - “Replaces” Pristine
- Amendment filed (Ohio) to allow three treatments



# Actions

- Third amendment filed March, 2005
  - Cyproconazole (Alto)
  - Cyproconazole + Azoxystrobin (Quadris Xtra)
  - Metconazole (Caramba)
  - Metconazole + Pyraclostrobin
    - Headline-Caramba CoPack
    - Operetta premix
  - Flusilazole (Punch)
  - Flusilazole + Famoxadone (Charisma)
  - Prothioconazole (JAU 6476 - Proline)
  - Flutriafol (Topguard formerly referred to as Impact)



# Actions

- Most recent EPA action – *Approval March 31, 2006*
  - Cyproconazole (Alto)
  - Cyproconazole + Azoxystrobin (Quadris Xtra)
- Anticipated action before 2006 growing season
  - Metconazole (Caramba)
  - Metconazole + Pyraclostrobin
    - Headline-Caramba CoPack
    - Operetta premix
  - Flusilazole (Punch)
  - Flusilazole + Famoxadone (Charisma)
  - Flutriafol (Topguard *formerly referred to as Impact*)
  - **Prothioconazole\* (JAU 6476 - Proline)**



# Actions

- Additional submissions possible
  - Absolute (trifloxystrobin + tebuconazole)
    - Already approved active ingredients
  - Indar (fenbuconazole)
  - Dithane (mancozeb)







# Recent Concerns

- USDA request to EPA - Early publication of temporary tolerances
  - USDA Foreign Ag Service will establish International Maximum Residue Levels (MRLs) or agreements.
  - Allows EPA ample time to assist.
  - Should satisfy US trading partners.



# Residue Surveys

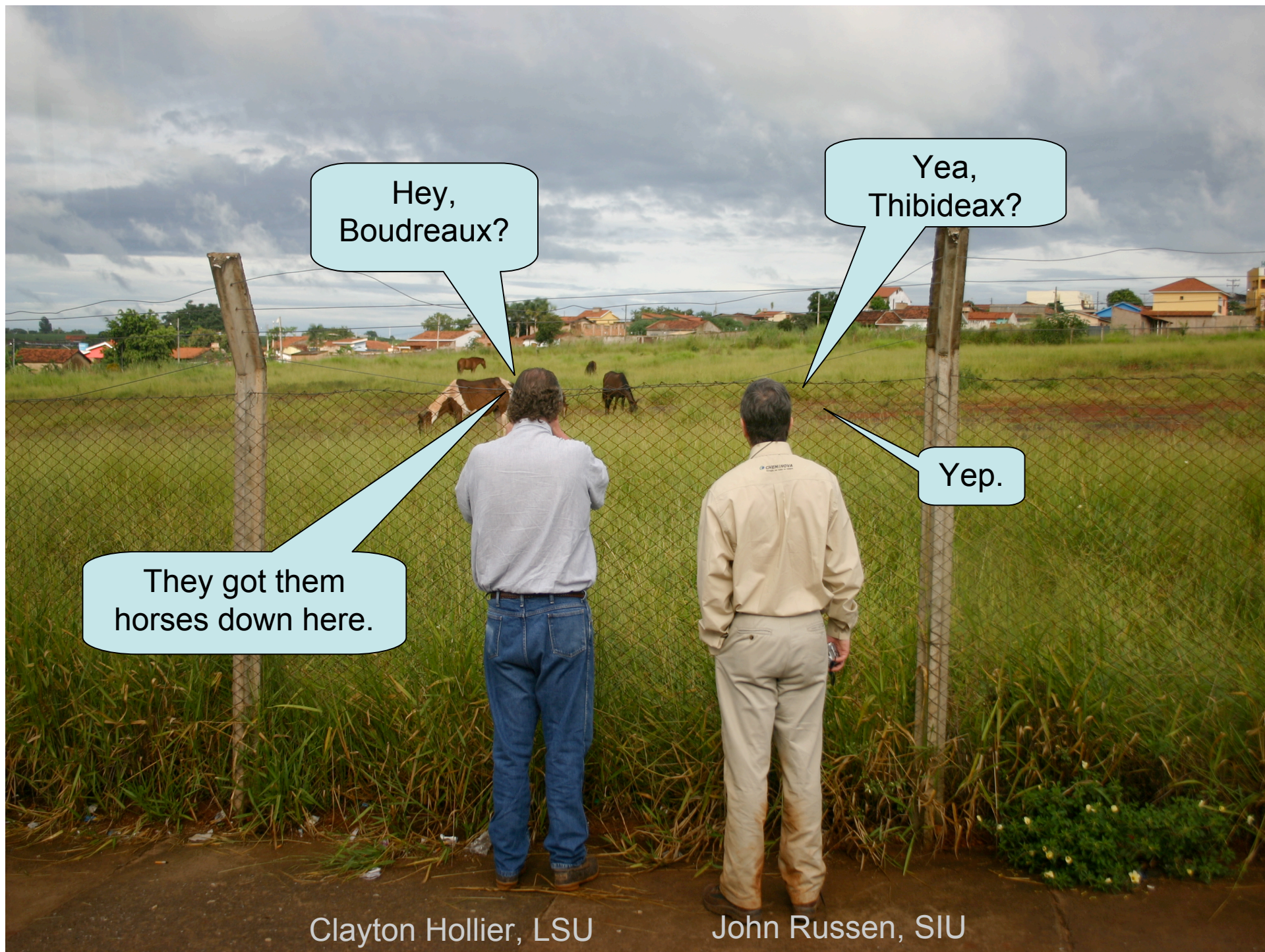
- USDA Foreign Marketing Service – Pesticide Data Program (AMS-PDP)
  - 300 samples between from Oct. 1 and Dec. 31, 2005
    - ~90% of the samples were drawn from New Orleans.
    - Remainder from New Brunswick and Chesapeake ports.
    - No soybean samples were collected from the PNW.
  - Preliminary results reported March 2005
    - 2% (six samples) showed barely detectable residues.
    - Only pyraclostrobin was detected.
  - AMS PDP has already shared the preliminary results to the American Soybean Association (ASA).
  - ASA may be monitoring US and Brazilian soybeans.



# Use Suggestions

- Section 18 issuance provided producers products with potential.
- Use guidelines will evolve.
- Produce efficacy in US environments are not known.
- Preferred products will sort out in the marketplace.





Hey,  
Boudreaux?

Yea,  
Thibideax?

Yep.

They got them  
horses down here.

Clayton Hollier, LSU

John Russen, SIU