

A photograph of soybean leaves showing significant damage from rust. The leaves are yellowed and have numerous holes and brown spots. The background is a bright, slightly overcast sky.

Update: Fungicides for Soybean Rust Control

Section 18 and Section 3

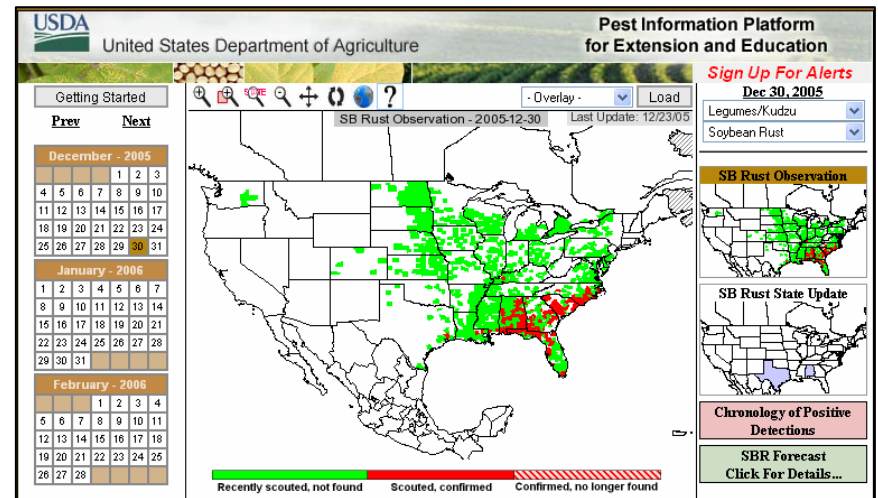
Martin A. Draper



National Program Leader,
Plant Pathology

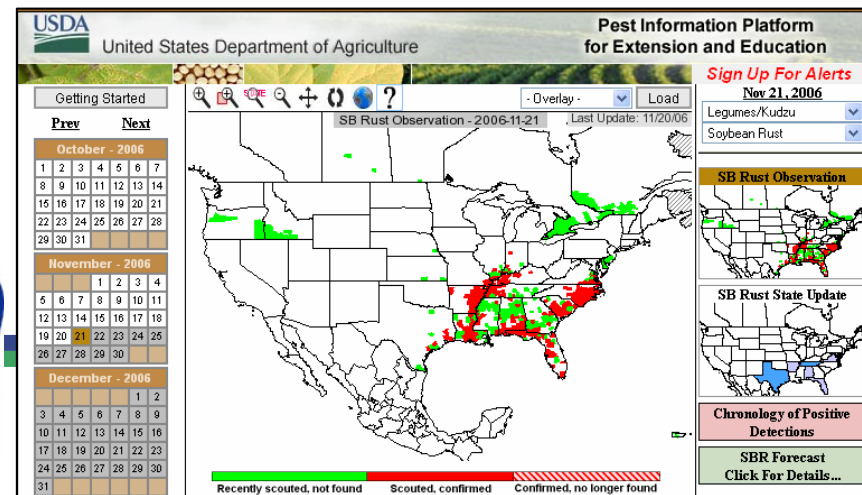
Treatment needs

- Ultimate need: 74 million acres
- Affected counties
 - 132 in 2005
 - 236 in 2006
- Why many products?
 - Production demands
 - Distributes risk
 - Grower choice
 - Stabilizes pricing for producers



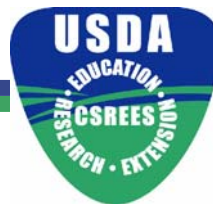
Treatment needs

- Ultimate need: 74 million acres
- EPA Request
 - How many acres are at risk?
 - Ultimately, 74 million worst case



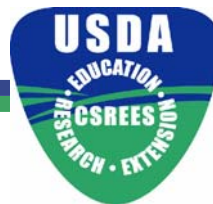
History

- 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 - Boscalid + Pyraclostrobin (Pristine) – approved but “withdrawn”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 – 11/10/04
 - *EPA revised activation date*



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



Actions

- 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



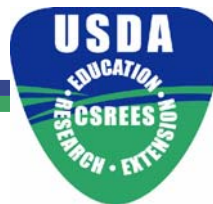
Actions

- Third product 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)



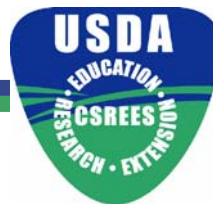
Actions

- Fourth amendment filed June 12, 2006
 - Trifloxystrobin + Tebuconazole (Absolute)



Export Concerns

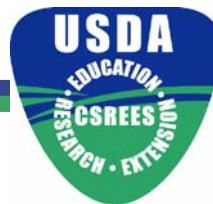
- USDA worked with EPA - Early publication of temporary tolerances
 - USDA Ag Marketing Service will establish International Maximum Residue Levels (MRLs) or agreements.
 - Allows EPA ample time to assist.
 - Intended to satisfy US trading partners.
- USDA Ag Marketing Service – Pesticide Data Program (AMS-PDP)
 - 300 samples between from Oct. 1 and Dec. 31, 2005
 - 2% (six samples) showed barely detectable residues.
 - Only pyraclostrobin was detected (Section 3 product).



Section 18/3 Progress

- Initial submissions

Product Trade Name(s)	Section 18 expiration date	Anticipated Section 3
Laredo	Nov 10, 2007	Mar 2007*
Folicur (<i>other trade names followed</i>)	Nov 10, 2007	Mar 2007*
Tilt, PropiMax, Bumper	Nov 10, 2007	Soybean use granted Nov 2006 – Section 3 forthcoming
Domark	Mar 1, 2008	Feb 2007*
Stratego	Nov 10, 2007	Dec 2006*

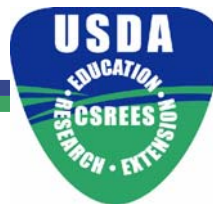


*Based on PRIA agreement – Pesticide Registration Improvement Act of 2003

Section 18/3 Progress

- Later product amendments

Product Trade Name(s)	Section 18 expiration date	Anticipated Section 3
Quilt	Nov 10, 2007	Mar 2007
Headline SBR <i>(tebuconazole/pyraclostrobin co-pack)</i>	Nov 10, 2007	Not determined
Headline STAR <i>(tebuconazole/pyraclostrobin premix)</i>	<i>withdrawn</i>	

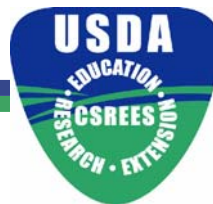


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Section 18/3 Progress

- Later product amendments

Product Trade Name	Section 18 expiration date	Anticipated Section 3
Alto	Mar 31, 2009	Submitted
Quadris Extra	Mar 31, 2009	Submitted
Caramba	Apr 19, 2009	Submitted
Headline-Caramba Co-Pack	Apr 19, 2009	Submitted
Operetta (name will be different) (tebuconazole/pyraclostrobin premix)	<i>withdrawn</i>	Submitted



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Section 18/3 Progress

- Later product amendments

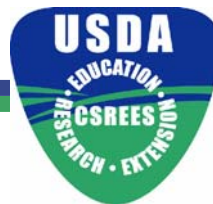
Product Trade Name(s)	Section 18 expiration date	Anticipated Section 3
Punch	Action expected soon	To be submitted in January 2007
Charisma	Action expected soon	To be submitted in January 2007
ProLine	In flux – request for reactivation filed Feb 15, 2006	May 2008
Flutriafol	In final stages of label language	To be submitted in January 2007
Absolute	n/a	Tied to tebuconazole



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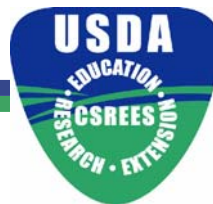
Use Suggestions

- Section 18 issuance provided products with potential to producers.
- Use guidelines will evolve.
- Produce efficacy in US environments are not clearly known.
- Product performance variable under varying disease pressure not completely known.
- Preferred products will sort out in the marketplace.



Progress/Outcome Summary

- Section 18
 - Action on all submissions will be completed by 2007 growing season
 - Remaining products are in final stages of completion
- Section 3
 - All products submitted or ready for submission
 - First Section 3 labels impending



Possible Issue/Concern

- Section 18 to Section 3 transition
 - Situation
 - Product is in storage with Section 18 labels
 - Section 3 labels may not match
 - Questions
 - Will there be supplemental labels to bridge the differences?
 - What are the regulatory/enforcement implications?
 - For specific progress on Section 18s, see:
 - http://www.epa.gov/oppfead1/cb/csb_page/updates/soybean_rust.htm

