

Plant
Science
Department

Extension
Plant
Pathology



Update: Section 18
Fungicides for
Soybean Rust Control



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 - Boscalid + Pyraclostrobin (Pristine) – approved but “withdrawn”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.

