Soybean Rust
EPA’s Response to the Emergency Situation
Soybean Rust and EPA
EPA: Regulating Agency

- A Use Site and Pest Must be on an EPA Approved Label
- Regulatory Avenues
  - Section 3 Labels
  - Section 24c Labels
  - Section 18s
  - Section 2ee
Section 18s

- Generally for pest problems that occur where no registered alternatives are available
- Usually involve the authorization of a single active ingredient
- Are generally limited in scope with regards to geographic area
Homeland Security

- Soybean Rust Classified as a Select Agent under the Agricultural Bioterrorism Protection Act
- EPA acted in conjunction with USDA and State Lead Agencies to provide growers with the chemical tools to combat a potential SBR outbreak
- All tools were in place for use by the beginning of the first use season after SBR detected in the continental U.S. (November, 2004)
- Supporting working groups investigating other select agents (citrus greening, avian flu, citrus canker)
Products Available For Control of SBR Under Section 18

12 Section 18 Products Have Been Authorized (5 Active Ingredients)

- **Tilt** (Propiconazole)
- **Propimax** (Propiconazole)
- **Bumper** (Propiconazole)
- **Quilt** (Propiconazole + Azoxystrobin)
- **Folicur** (Tebuconazole)
- **Headline SBR** (Tebuconazole + Pyraclostrobin)
- **Orius** (Tebuconazole)
- **Uppercut** (Tebuconazole)
- **Laredo EC** (Myclobutanil)
- **Laredo EW** (Myclobutanil)
- **Stratego** (Trifloxystrobin + Propiconazole)
- **Domark** (Tetraconazole)
Products Available For Control of SBR Under Section 3

- **8 Registered Products**
  - Pristine  (Boscalid + Pyralostrobin)
  - Headline (Pyraclostrobin)
  - Quadris (Azoxystrobin)
  - Bravo Weather Stik (Chlorothalonil)
  - Echo 720 (Chlorothalonil)
  - Echo 90DF (Chlorothalonil)
  - Equus 720 SST (Chlorothalonil)
  - Equus DF (Chlorothalonil)
Registrants Involved

- 9 Registrants with both Section 18 and Section 3 SBR Products
  - **Syngenta** (Propiconazole, Azoxystrobin, Chlorothalonil)
  - **Dow Agrosciences** (Propiconazole, Myclobutanil)
  - **Makhteshim-Agan of North America** (Propiconazole, Tebuconazole)
  - **Bayer Corporation** (Tebuconazole)
  - **BASF** (Tebuconazole, Boscalid, Pyraclostrobin)
  - **DuPont** (Tebuconazole)
  - **Isagro** (Tetraconazole)
  - **Sipcam Agro** (Chlorothalonil)
  - **Farmsaver.com** (Chlorothalonil)
Tolerances have been established for all Section 18 approved chemicals on soybeans and their associated commodities:

- Tetraconazole
- Myclobutanil
- Propiconazole
- Tebuconazole
- Trifloxystrobin

Tolerances facilitate the export of soybeans to other countries, such as Japan.
Features of The Section 18 Approvals

- Both curative and protectant materials approved
- Approval of combination products
- Authorized a 3rd spray of section 18 product
- Strategically used growth stages (vs. PHI) to advantage growers
- Available for 3 full use seasons (11/04 – 11/07)
Soybean Rust on EPA’s Website

Pesticide News Story: Soybean Rust Pesticides Available

For Release: July 27, 2005

Part of EPA’s mission to protect human health and the environment includes strategically planning for the possibility that an invasive species could threaten the food supply in the United States.

Since November 10, 2004, the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service has confirmed that soybean rust - an aggressive and harmful plant disease in soybeans - has been discovered in Louisiana, Alabama, Arkansas, Florida, Georgia, Mississippi, Missouri, South Carolina, and Tennessee.

Soybean rust is caused by a fungus that spreads by spores that can be carried by the wind. It is believed that spores were carried to the southeastern United States from South America during the 2004 hurricane season.

The soybean plants in Louisiana and the eight other states listed above were infected with the Asian species of the fungus, which is the most destructive variant. Yield losses of up to 60 percent have been reported in soybean-growing areas of South America and Africa as a result of untreated infection by the fungus. The arrival of soybean rust to the continental United States had been predicted by experts for some time, since it is found around the globe in soybean-producing countries and is a wind-spread disease.

EPA, along with USDA and state departments of agriculture, has been planning for just such an event and has approved a number of fungicides for soybean growers. The following tables indicate pesticides that EPA has approved for use against soybean rust as of October 19, 2006. Updates will follow if additional new products clear the regulatory and safety review process. Growers should be aware that availability of these products in the marketplace depends on a number of factors beyond EPA’s control, including manufacturers’ marketing decisions, availability of supplies, product distribution and production, state registration of EPA-registered products, and state requests for
Pending SBR Emergency Exemption Requests

- 5 additional active ingredients have been requested for use on soybeans
  - Flutriafol
  - Flusilazole
  - Famoxadone
  - Cyproconazole
  - Metconazole
Pending SBR Emergency Exemption Requests (cont’d)

- All Currently Under Review
  - Most are new, unregistered active ingredients
  - Willing to evaluate European data to facilitate review
  - Working through risk issues now
  - Appreciate that there are scientific uncertainties about disease and growers continue to look for more tools
Specialty Legumes

- Section 18s Requested for
  - Myclobutanil
  - Azoxystrobin
  - Trifloxystrobin
  - Tebuconazole
  - Propiconazole

- Still Under Agency Review
2005 Growing Season

- Soybean Rust has been detected in Louisiana, Alabama, Arkansas, Florida, Georgia, Mississippi, Missouri, South Carolina, Tennessee, and recently Texas
- Companies had stockpiles available for a significant outbreak
- Use was extremely limited
- Economic impact was limited
- EPA evaluating section 18 use reports from 2005
- Little or no need to treat commercial soybeans and other legumes
The Agency’s Workplan and PRIA

- Under the Pesticide Registration Improvement Act (PRIA) registration review work done on a “fee-for-service” basis
- Provides registrants and stakeholders with predictable schedule for risk assessment and regulatory work
Workplan 2006
(http://www.epa.gov/opprd001/workplan)
Motivated registrants initiate PRIA schedule

Agency Workplan based on submissions

Posting of the entire plan 11/30/05 includes:
- new chemicals
- new uses
- inert ingredients
Pending PRIA Fungicides

- For use on soybeans
  - Tebuconazole
  - Propiconazole

- For use on legume vegetables
  - Prothioconazole
Triazole - Update

- Review of metabolite proceeding
  - Agency completed an interim risk assessment in 2003. This allowed the Agency to issue time-limited registrations for propiconazole and tetraconazole
  - U.S. Triazole Task Force (USTTF) was formed to address data needs and the Agency’s concerns
  - There has been a good dialogue between the Agency and the USTTF to address the data needs
  - The Agency is working toward comprehensive risk assessment for the metabolites