# Latest Information About Rust and Smut (and Some Other Stuff)

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# Public Enemy No. 1: Brown Rust

# Rust BMPs

- Grow resistant varieties: L 99-233, HoCP 85-845, HoCP 00-950, L 01-299
- Diversify varieties under cultivation
- Avoid excess fertility
- Clip during winter
- Apply fungicide when needed

# Fungicide Application Recommendations

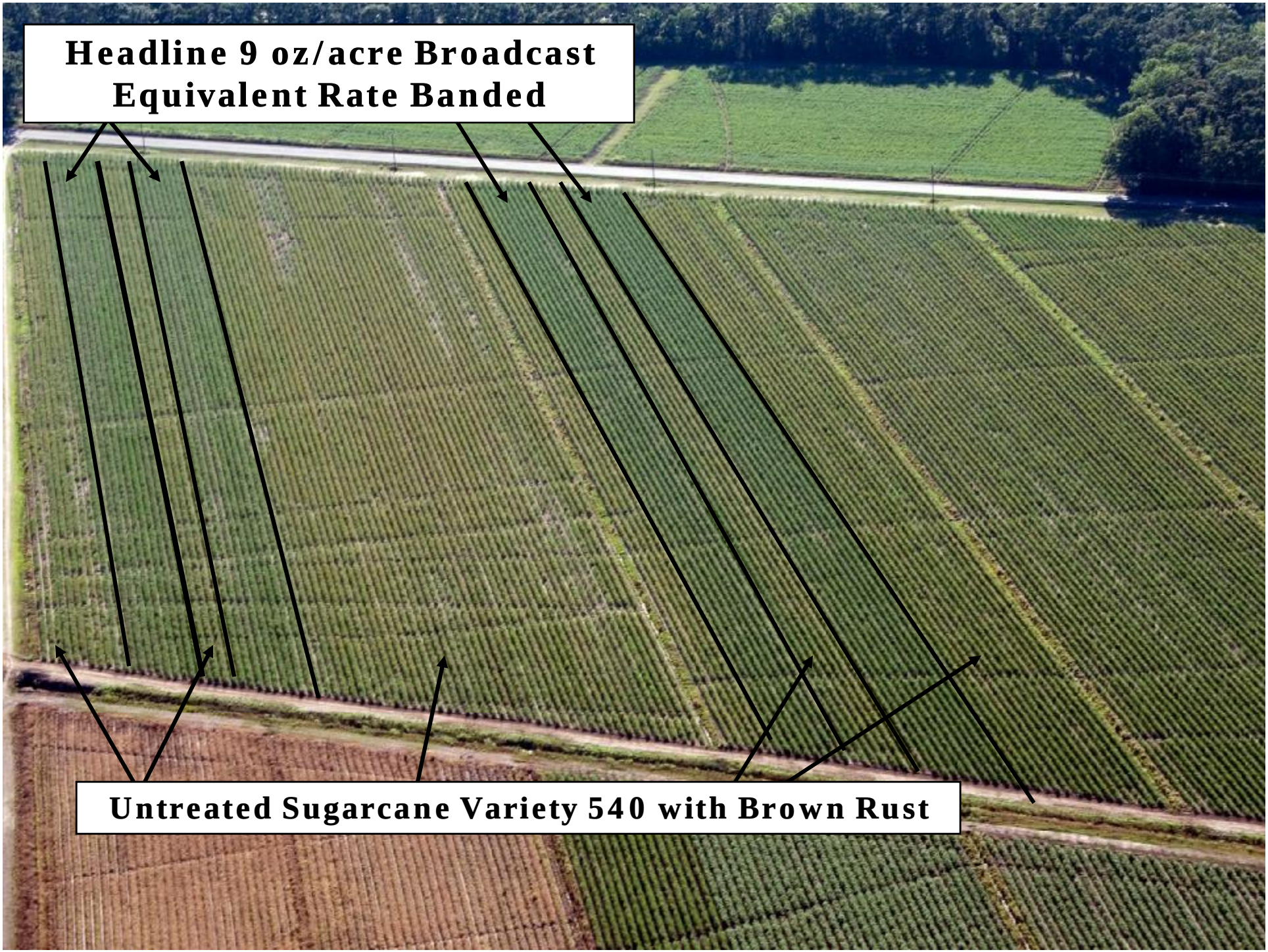
- Apply Headline® at 9 oz/acre in at least 15 gal of water per acre
- **Apply on 36 inch band at first application**
- Spray before extensive development of rust on young leaves
- Re-evaluate situation after 18-21 days (two applications allowed under current label)

# Will Fungicides Pay??

- In 2010 experiment with LCP 85-384, a single Headline treatment increased yield 7 tons, and two applications increased yield 8 tons
- With moderately susceptible varieties the benefit will be less
- Varieties become more susceptible over time
- With variety like HoCP 96-540, benefit from fungicide application will probably increase in future

# When Should You Apply Fungicide?

- **Susceptible variety being grown:** Ho 95-988, HoCP 96-540, L 99-226
- **Early, vigorous plant growth:** plant cane, light textured soil, high fertility, lack of freezes or protected location
- **Rust infection beginning on young leaves of plants with most advanced growth**
- **Rust infection becomes evident from late March until early June**


Headline 9 oz/acre Broadcast
Equivalent Rate Banded
Untreated Sugarcane Variety 540 with Brown Rust

# Does a Rescue Mission Pay??

- Fungicide applications to already rusty cane will reduce but not eliminate rust symptoms on new growth
- A slight height increase has been observed in sprayed rows
- Significant yield increases have not been detected
- Probably will at least cover costs, but close to break-even proposition
- More research needed

# Breeding Program Approach

- Developing inoculation methods for evaluating rust resistance
- Will study seedling inoculation method
- Will increase basic breeding for rust resistance

# Rust Outlook for 2010

- A lot of acreage in susceptible varieties
- Cold weather killed above ground plant growth and rust at the same time
- Start of rust epidemic should be delayed, and epidemic may be light
- Severity will depend on spring weather

# Smut is a Threat

# What Can You Do About Smut?

- Possible to grow moderately smut susceptible varieties with tissue culture based healthy seedcane program
- Susceptible varieties: Ho 95-988, L 97-128, L 99-226, L 99-233, and L 01-299
- Explosive year to year increase of smut does not occur in Louisiana
- Ignoring smut in susceptible varieties will result in eventual yield loss

# Healthy Seedcane Needed

- Must protect L 01-283 from RSD
- Will keep yellow leaf from becoming a problem
- Has kept leaf scald under control