Brown Rust, Brown Stripe, and Smut

Jeff Hoy

Rust during 2012

- Earliest start ever
- Worst in HoCP 96-540
- Plant cane and stubble affected
- Delayed start in L 99-226
- First wide-spread application of fungicide
- Two applications in many 540 fields

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Rust in 540 Impact/Control Benefit

HoCP 96-540 Strip Trials

Strip Trial Results

Parish	Treatment	Tons/Acre	Difference
Assumption	No spray	52.6	
	One spray	51.0	-1.6
	Two sprays	54.5	+1.9
Pointe Coupee	No spray	56.8	
	Two sprays	60.2	+3.4
St. Mary	No spray	44.5	
	No spray/clip	41.4	-3.1
	Two sprays	48.4	+3.9
St. Mary	No spray	51.7	
	One spray	52.2	+0.5
	Two sprays	55.6	+3.9

Did It Pay To Spray?

- Avg. increase in strip trials = 3.3 tons
- At 27¢ sugar, need 1 ton increase/spray
- $39 per acre return
- Spray benefit under-estimated

What Did We Learn?

- HoCP 96-540 at greatest risk – need to spray
- 540 hurt less than 384
- Spraying pays $$$ (also reduces Maalox need)
- Spraying after rust bad also pays

What Did We Learn?

- Do not clip late
- Single, early spray alone not worthwhile
- Wait and see on L 99-226

When Should You Apply Fungicide?

- Susceptible variety being grown: LCP 85-384, HoCP 96-540, L 99-226, L 03-371
- Early, vigorous plant growth: plant cane, light textured soil, high fertility, lack of freezes or protected location

When Should You Apply Fungicide?

- Night temperatures in mid-60s
- Rust infection begins on young leaves of plants with advanced growth

What Will Happen In 2013?

- Another mild winter underway
- No hard freeze = severe rust in susceptible varieties
- Lot of acreage in susceptible varieties
- Will need to spray fungicide again

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Five Fungicides for 2013

- Headline®
- Quadris ®
- Tilt ®
- Caramba ®
- QuiltXcel ®

Application Rates

- Headline 9 oz/acre
- Quadris: 9-12 oz/acre
- Tilt and Caramba: not recommended alone
- Quilt Xcel: 16-22 oz/acre

Fungicide Application Recommendations

- Apply in at least 15 gal of water
- Apply on 36 inch band at first application
- Spray before extensive rust development
- Re-evaluate after 18-21 days

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- Rust only affects cane during spring
- After rust, cane probably still the best
- BUT, rust does reduce growth
- **Fungicide can minimize loss**

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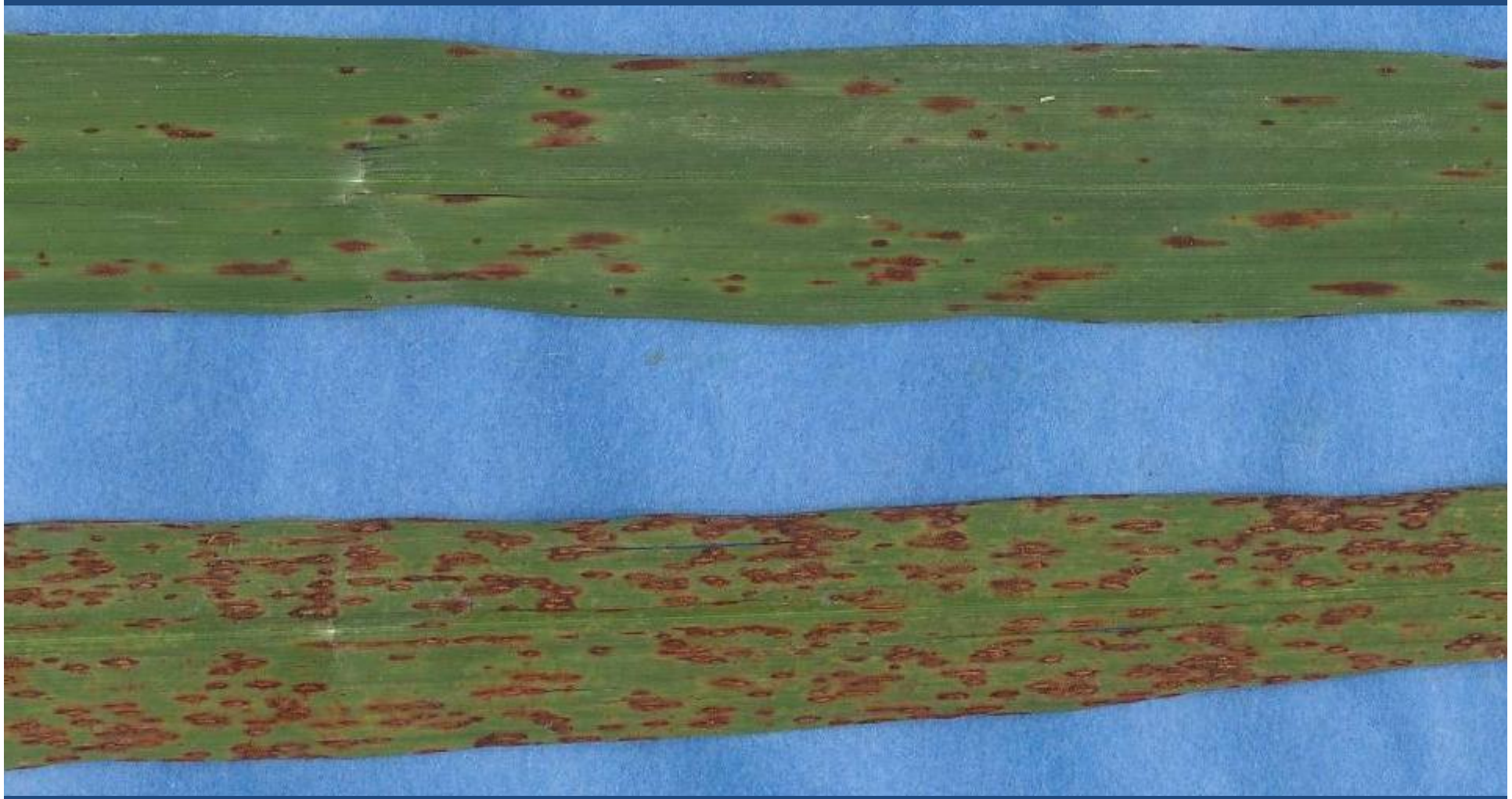
Brown Stripe vs. Brown Rust



Brown Stripe

- L 01-299, L 03-371, and HoCP 04-838
- Symptoms appear early
- Injury and low fertility make worse
- Recovery rapid after fertilization
- Fungicide effect uncertain – no label
- Best course of action: Try to ignore

Smut is a Threat to L 01-299