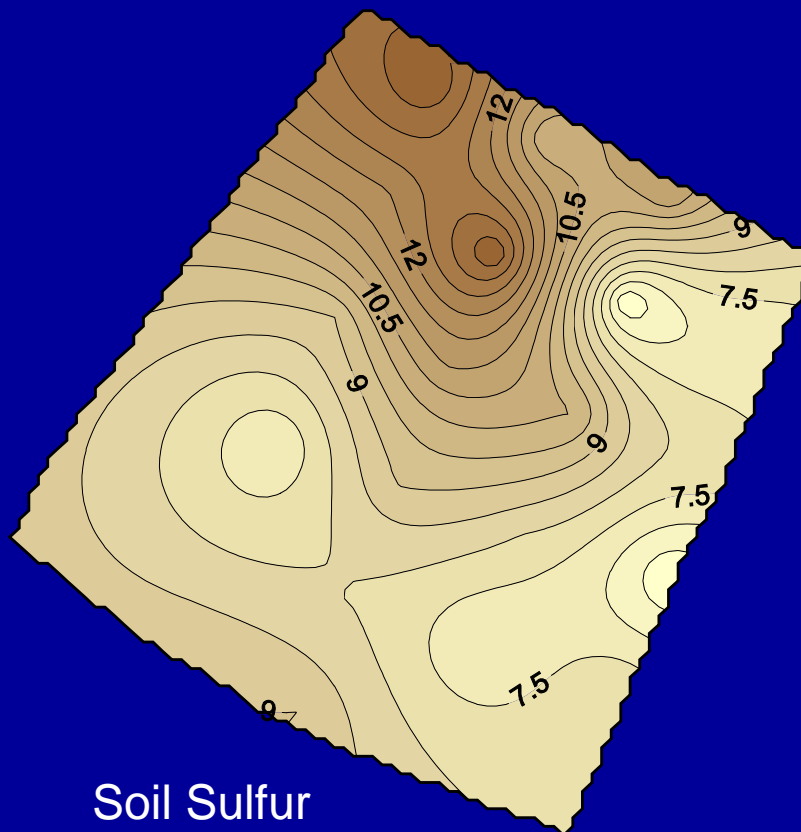
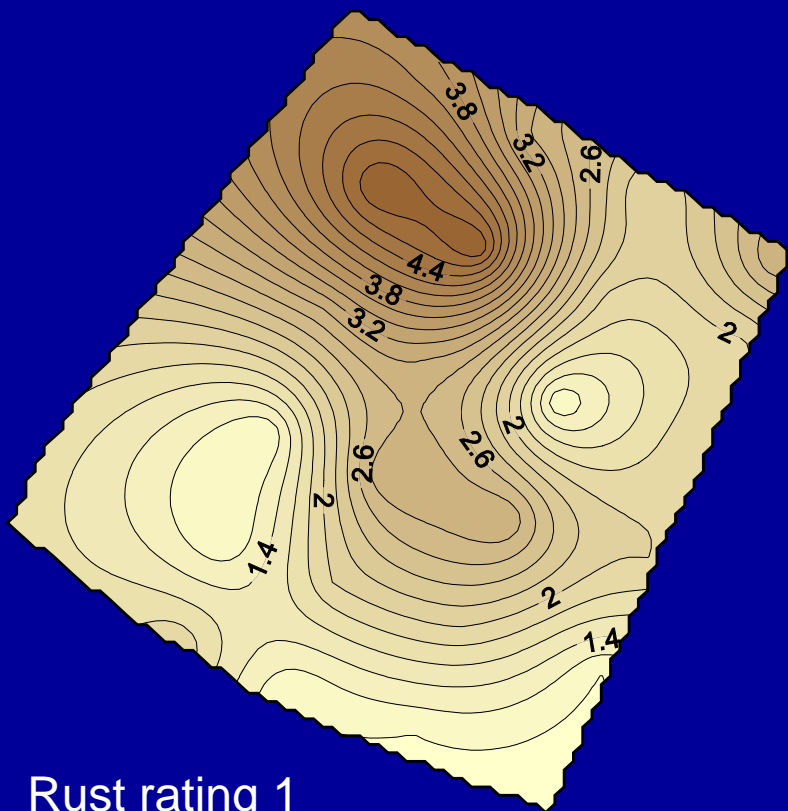


Rust Yield Loss, Disease Update of Newly Planted Varieties

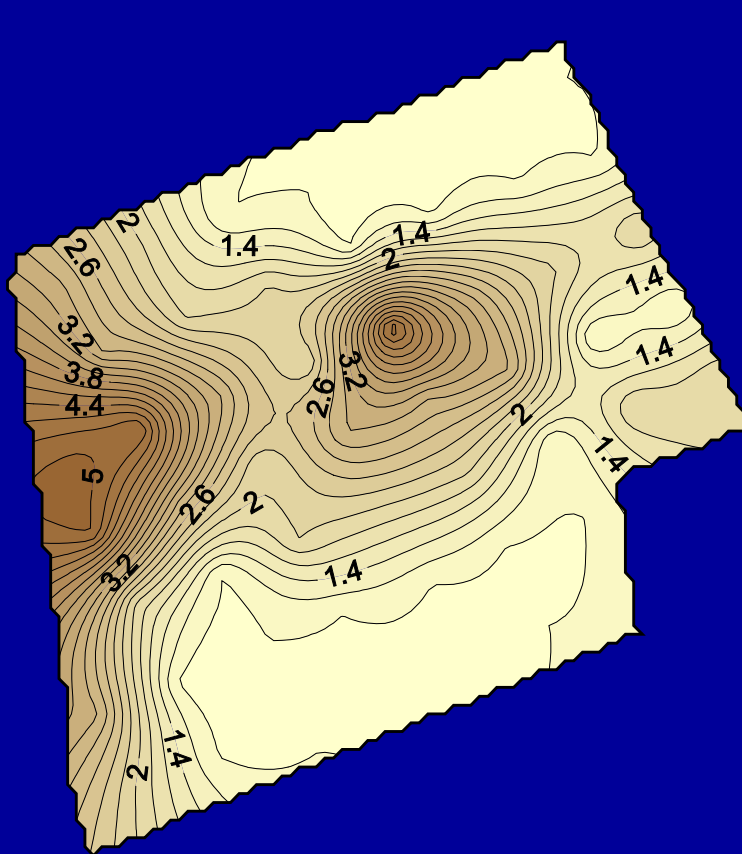
Mike Grisham



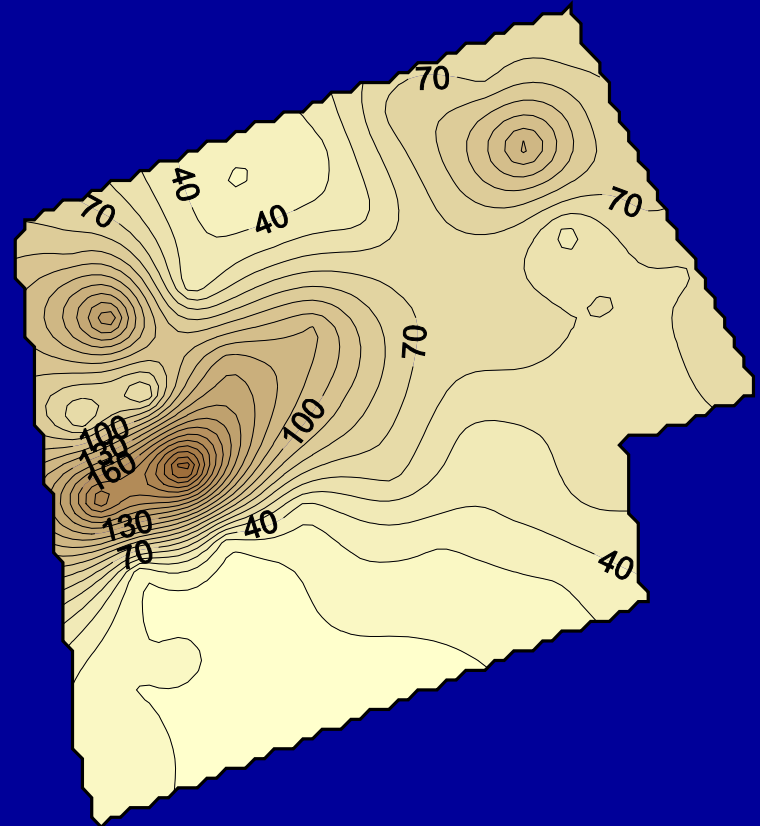
Golden Ranch Plantation



Acadia Plantation

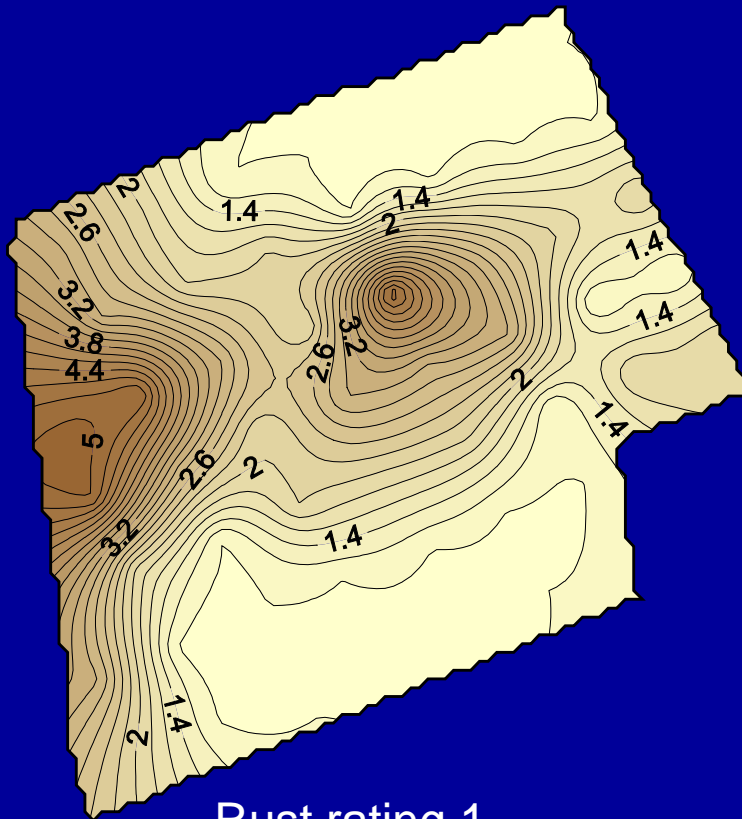


Rust rating 1

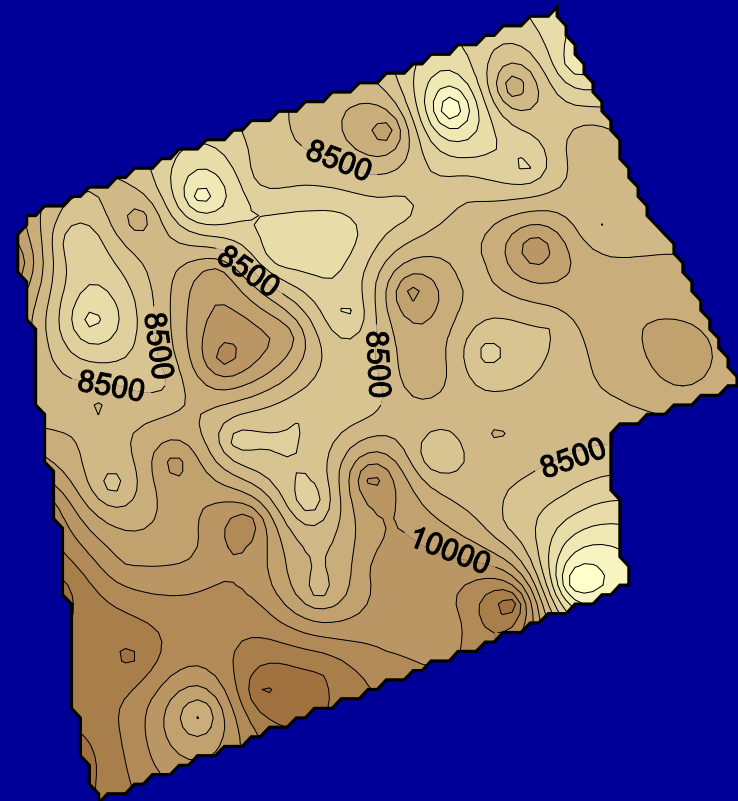


Soil Phosphorus (mg/Kg)

Acadia Plantation

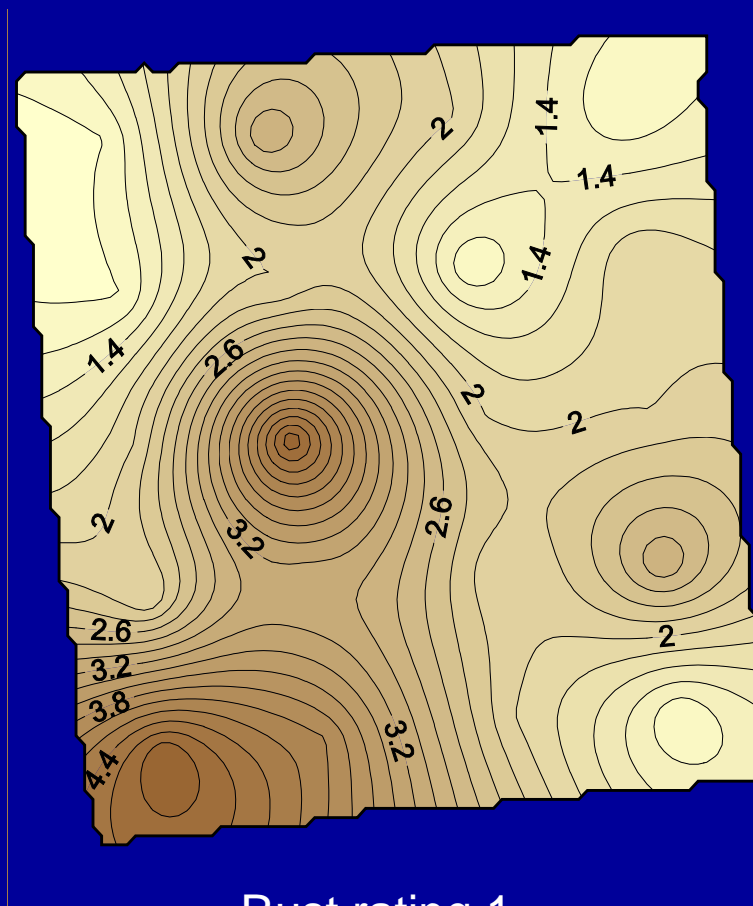


Rust rating 1

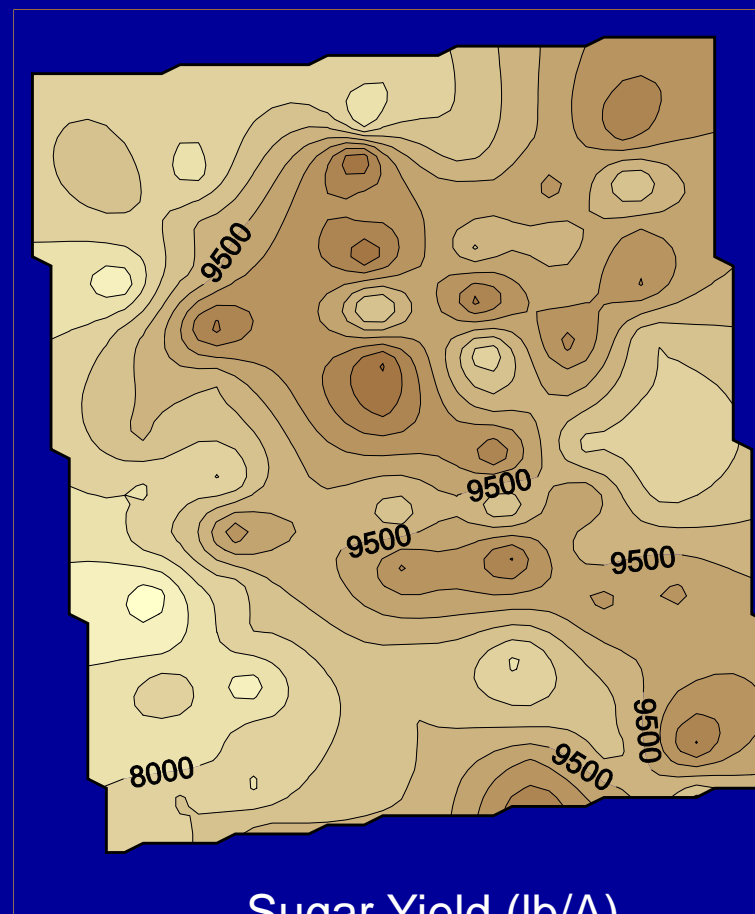


Sugar Yield (lb/A)

Rebecca Plantation



Rust rating 1



Sugar Yield (lb/A)

Orange Rust Rating of Louisiana Varieties

Variety	Breeding Cans	Nursery	Stage IV
HoCP 96-540	1+	2	-
L 97-128	1+	1	3
L 99-226	2	1+	3
Ho 95-988	1	2+	2+
L 99-233	1	1	1
HoCP 00-950	1+	1+	2+
L 01-283	0	0	-
L 03-371	1	-	-
HoCP 04-838	2+	2	-

Louisiana Sugarcane Varieties Current & Near-release

Variety	Acreage (%) (2010*)	Acreage (%) (2011)
HoCP 96-540	48	43
L 97-128	11	6
L 99-226	17	19
Ho 95-988	2	1
L 99-233	10	11
HoCP 00-950	4	6
L 01-283	4	8
L 01-299	1	3
L 03-371	-	-
HoCP 04-838	-	-

Legendre and Gravois, 2011, Sugar Bulletin 89 (9) 27-32

Disease Traits of Commercial Varieties

	HoCP 96-540	L 97-128	L 99-226	L 99-233	HoCP 00-950	L 01-283	L 01-299	L 03-371	HoCP 04-838	HoCP 05-961
	Year of Release									
	2003	2004	2006	2006	2007	2008	2009	2010	2011	(2012)
RSD	T	T	P	P	P	P	P	T	T	P
Leaf scald	R	R	MR	MR	R	R	R	R	MR	R
Smut	R	S	M	MS	R	R	S	R	R	R
Rust	MS	M	MS	M	M	M	R	R	R	R
Mosaic	R	R	MR	MR	R	R	R	R	R	R
Yellow leaf	S	S	S	S	R	S	S	R	S	R

Off-types in HoCP 04-838

Difference between 2⁰ station and HWT seedcane (%)
Light Soil Test

Trait	Thib. Bro.	Sterling
Stalk count	+23	+16
Tons	-11	-22
TRS	-12	-7
S/A	-21	-28
Fiber	ns	ns

Off-types in HoCP 04-838

Difference between 2⁰ station and HWT seedcane (%)
Light vs Heavy Soil - Sterling

Trait	Light	Heavy
Stalk count	+16	+3
Tons	-22	-13
TRS	-7	-7
S/A	-28	-21
Fiber	ns	ns

Managing Disease in Susceptible Varieties

- **Have an effective clean seed cane program**
 - RSD, leaf scald, yellow leaf, mosaic, smut
- **Residue management**
 - Yellow leaf, RSD
- **Avoid over-fertilization**
 - Rust
- **Variety diversity**
 - Minimize rust inoculum
 - Reduce opportunity for new races to develop

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- **American Sugar Cane League**
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 - **Jeri Maggio**
 - **Dave Jones**
 - **Lionel Lomax**
 - **Halley Burleson**
 - **Brenda Campbell**



Major Diseases of Louisiana Sugarcane

Disease	Type of Pathogen
Brown rust	fungus
Smut	fungus
RSD	bacteria
Leaf scald	bacteria
Mosaic	virus
Yellow leaf	virus

Smut	Rust	Mosaic	Yellow leaf	RSD
L 97-128	Ho 95-988	L 99-233	L 01-283	L 99-233
L 01-299	L 97-128	L 99-226	HoCP 96-540	L 99-226
Ho 05-988	HoCP 96-540		L 97-128	L 01-283
L 99-233	L 99-226		Ho 95-988	HoCP 00-950
L 99-226	L 99-233		L 99-226	L 01-283
	L01-283		L 01-299	L 01-299