2012 Pecan Disease Management Update

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Anthracnose Symptoms

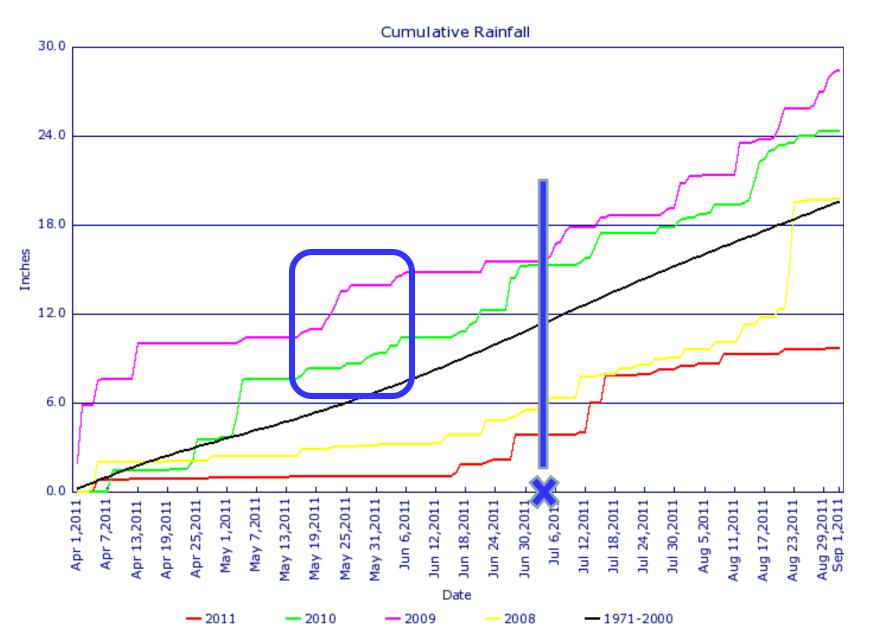
2009 2010





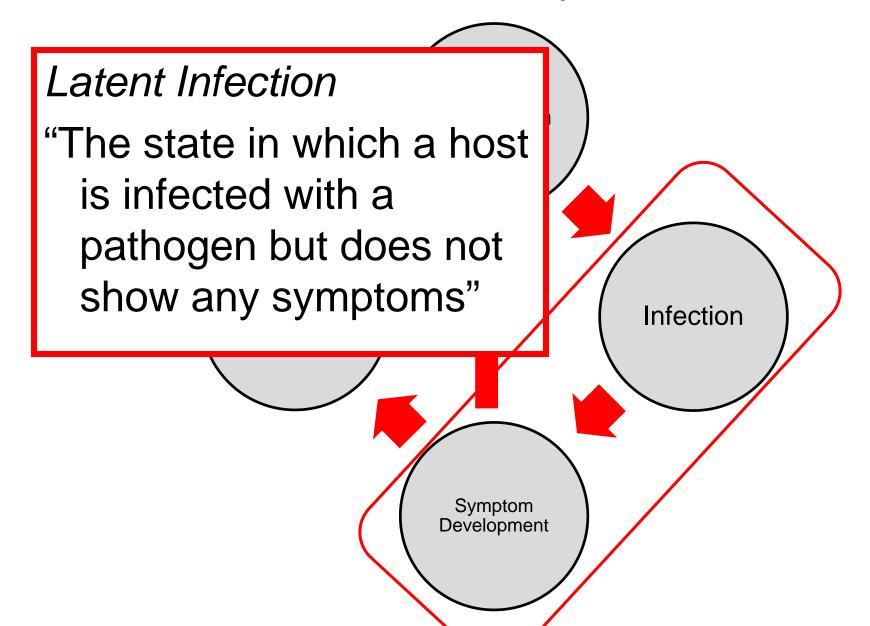


Rainfall, Ponder Farm, 2011





Disease Cycle



Latent infections

- Freeze, bleach, and ethanol dip
- Pathogen grows saprophytically

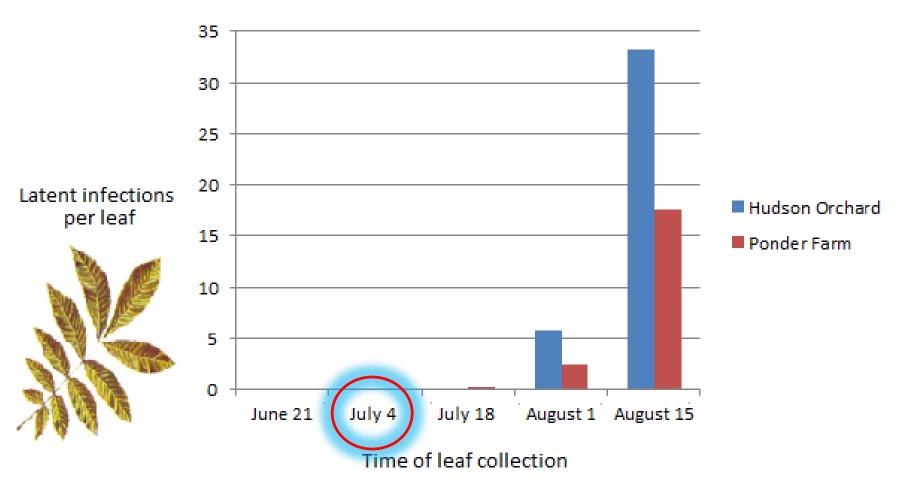




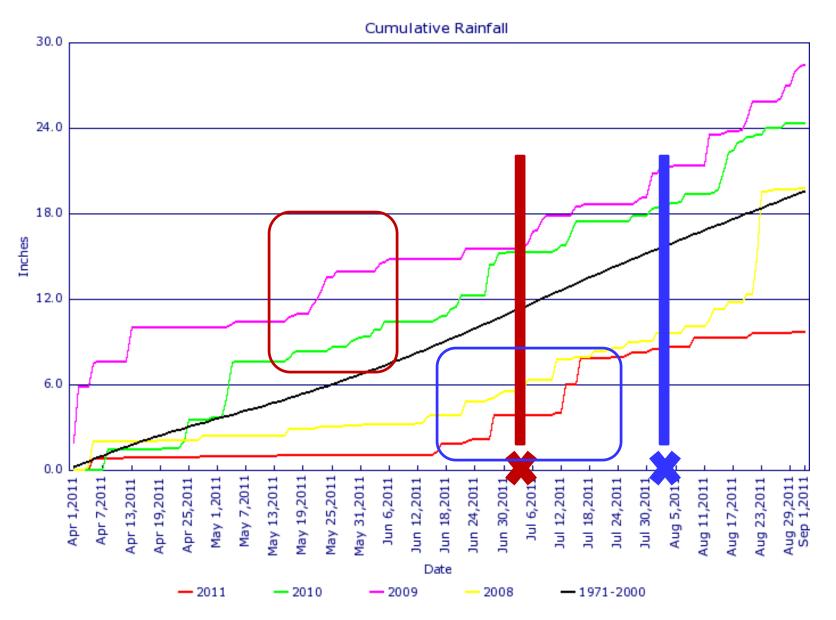
Leaf Sampling, 2011

(No symptoms present at harvest)

Latent Infections



Rainfall, Ponder Farm, 2011



- Will anthracnose continue to be a problem?
- What influences symptom development?
- Non-chemical control?
- Fungicides?
 - -Selection
 - -Timing

Recommendations for Control of Anthracnose

- Tree Health
- Promote good air movement
- protectant fungicide program
 - -Strobilurins (Group 11)
 - -Topsin
 - Phosphorous Acid Fungicides

Abound, Headline, Sovran Absolute, Stratego, Quadris Top, Quilt

Topsin

Trade Names

Agri-fos
Fosphite
Fungi-Phite
K-Phite
Phostrol
Rampart
Topaz

Phosphite fungicide label examples

ACTIVE INGREDIENTS:

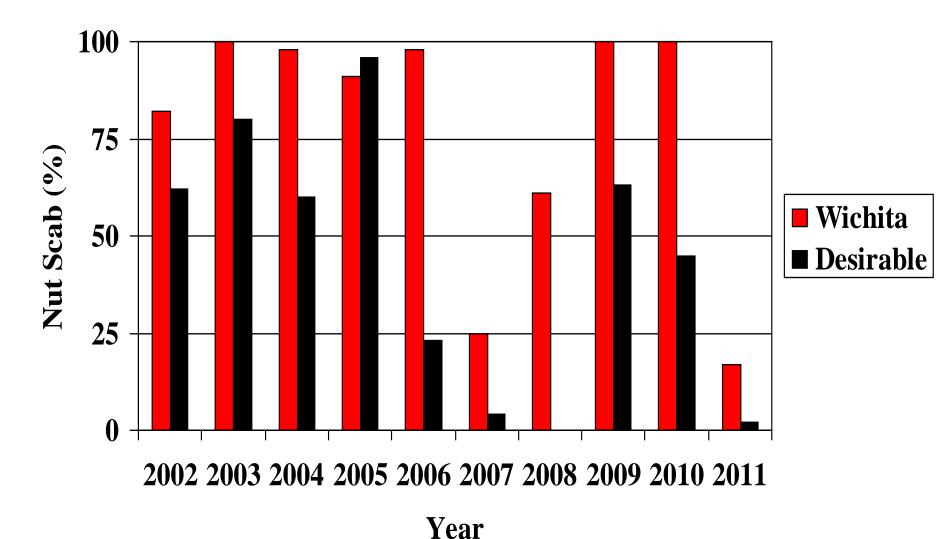
ACTIVE INGREDIENTS:

Phosphite fungicides have up to 48 hr eradicant activity

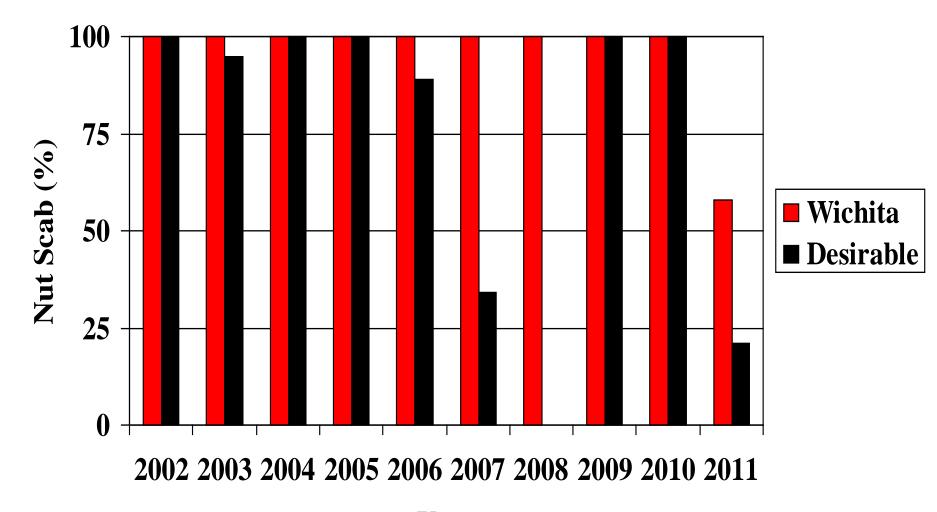
Scab?



Nut Scab <u>Severity</u> by Year, Tifton, GA (Nonsprayed Desirable and Wichita)

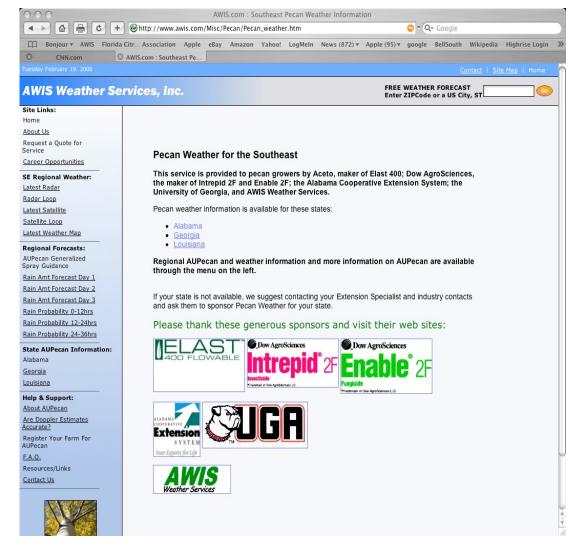


Nut Scab <u>Incidence</u> by Year, Tifton, GA (Nonsprayed Desirable and Wichita)



Year

A Great Year for a Spray Advisory (AWIS.com)?





2102



Fungicide Application Strategies

The Use of Reduced-Rate Fungicide Tax Mixes

Fungicide Application Strategies

Spiking Tank Mixes

2004 Wichita Fungicide Trial

Treatment	Rate/A	INC	SEV
Nontreated		100	98 a
Enable 2F + Elast 400F	4.0 fl oz 25.0 fl oz	100	46 b
Enable 2F + Elast 400F	6.0 fl oz 25.0 fl oz	100	36 b
Enable 2F + Elast 400F	6.0 fl oz 37.5 fl oz	100	22 c
Enable 2F + Elast 400F	4.0 fl oz 37.5 fl oz	100	19 c

2006 Wichita Fungicide Trial

Treatment (App's 1 – 10)	Rate/A (oz.)	NIN
Nontreated		100 a
Enable 2F + Elast 400F	4.0 25.0	35.9 b
Enable 2F + Elast 400F	8.0 25.0	23.7 b
Enable 2F + Elast 400F	4.0 50.0	2.1 c
Super Tin 80WP + Elast 400F	3.75 25.0	19.7 c
Super Tin 80WP + Elast 400F	7.5 25.0	4.7 d
Super Tin 80WP + Elast 400F	3.75 50.0	0.8 d

Fungicide Application Strategies

Tank Mixing vs. Alternating

2006 Wichita Fungicide Trial

Treatment	App's	Rate/A (oz.)	NIN	
Nontreated			100 a	
Enable 2F + Elast 400F	1 – 10	4.0 25.0	35.9 b	
Enable 2F Elast 400F	1,3,5,7,9 2,4,6,8,10	8.0 50.0	24.2 b	
Super Tin 80WP + Elast 400F	1 – 10	3.75 25.0	19.7 c	
Super Tin 80WP Elast 400F	1,3,5,7,9 2,4,6,8,10	7.5 50.0	11.5 c	

2010 Desirable Fungicide Trial

Treatment	App's	Rate/A (oz.)	LIN	LSEV	NIN	NSEV
Nontreated			63.5 a	12.0 a	95.7 a	54.0 a
Enable 2F + Elast 400F	1 – 10	4.0 25.0	46.8 b	6.8 b	93.3 a	14.2 b
Enable 2F Elast 400F	1,3,5,7,9 2,4,6,8,10	8.0 50.0	45.5 b	6.7 b	96.7 a	10.9 bc
Super Tin 80WP + Elast 400F	1 – 10	3.75 25.0	33.1 c	5.5 c	60.0 c	4.5 c
Super Tin 80WP Elast 400F	1,3,5,7,9 2,4,6,8,10	7.5 50.0	27.3 с	4.2 c	31.3 d	8.8 bc

			Fungicide Class	Common Name	Trade Name	FRAC Code
			QoIs	azoxystrobin	Abound 1/2 of Quilt 1/2 of Quadris Top	
Common Name	Trade Name	FRAC Code	(strobilurins)	kresoxim- methyl	Sovran	11
thiophanate-				pyraclostrobin	Headline	
_	Topsin-M	1		4	1/2 of	
methyl	_			trifloxystrobin	Absolute	
	Elast				Bumper,	
dodine Elas		M3	30 p	propiconazole	Orbit	
					Propimax	
fentin	G TO				½ of Quilt	
hydroxide	Super Tin,	30			Monsoon,	
_	Agri Tin	30			Orius,	
(=TPTH)			DMIs	tebuconazole	Tebuzol,	
			(triazoles, sterol	tebuconazoie	Toledo	3
			inhibitors)	· · · · · · · · · · · · · · · · · · ·	1/2 of	
		_		Absolute		
			metaconazole	Quash		
				fenbuconazole	Enable	
				difenoconazole	½ of Quadris Top	
					- 1	