

2020 Pecan Pathology Update

Jason Brock & Tim Brenneman
UGA Dept. of Plant Pathology



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Spraying non-bearing trees

- Probably no "right" answer
- Phosphites (cost, efficacy, and safety)
 - equivalent of 1-2 quarts per 100 gal
- Group 3 and Group 11 fungicides are suitable options .



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Adding sulfur with DMI fungicides?

- Sulfur has improved efficacy of Group 3 (DMI) fungicides in other pathosystems.
- 2019 UGA Fungicide Trials
 - Sulfur (6lbs/A)
 - Cevya (5 fl oz)
 - Cevya (5 fl oz) + sulfur (6 lbs/A)
- Addition of sulfur actually reduced scab control.



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Phosphite (Phosphonate) fungicides

European Union Phosphate Residues Limits

- There may be a few cases of very high rates and frequent apps that would exceed the **500 PPM**, but normal use rates and apps of 5 or less per season should not be an issue.

Phosphite Use Recommendations

- Consecutive applications - OK
- Stand-alone use – mostly OK
- Rates: as recommended by UGA
 - Pre-pollination: min. of 4 pints (2 quarts)
 - Post-pollination: min of 6 pints (3 quarts)

Miravis Top

- pydiflumetofen (7) + difenoconazole (3)
- Group 7 fungicides
 - Succinate dehydrogenase inhibitors (SDHIs)
 - Effects mitochondrial electron transport chain
 - Medium to high resistance risk
- Rate: 13.6 fl. oz./A
- Greatest strength is management of nut scab

Miravis Top

- Use as a protectant.
- Rotate modes of action (away from 3 and 7)
- Apply no more than 2 sequential applications
- No more than 4 applications per year
- Minimum application interval of 14 days
- Pre-harvest interval: after shuck split or within 45 days of harvest

	common name	Trade Names
1	thiophanate-methyl	Topsin; T-methyl
3	fenbuconazole	Enable
3	metconazole	Quash
3	propiconazole	Orbit, Bumper, Propimax, Tilt
3	tebuconazole	Folicur, Monsoon, Orius, Tebuzol, Toledo
3	tetraconazole	Andiamo, Domark
3	mefentrifluconazole	Cevya
11	azoxystrobin	Abound, Azaka
11	kresoxim-methyl	Sovran, Narvos
11	pyraclostrobin	Headline
11	picoxystrobin	Aproach
30	triphenyltin hydroxide (TPTH)	Super Tin; Agri Tin
33	phosphite	Fosphate, FungiPhite, K-Phite, Phiticide, Phostrol, ProPhyt, Rampart, Reliant, Topaz
U12	dodine	Elast
3 + 1	tebuconazole + thiophanate-methyl	Topsin XTR
3 + 7	pydiflumetofen + difenoconazole	Miravis Top
3 + 11	difenoconazole + azoxystrobin	Quadris Top, Amistar Top
3 + 11	flutriafol + azoxystrobin	Topguard
3 + 11	propiconazole + azoxystrobin	Quilt
3 + 11	tebuconazole + trifloxystrobin	Absolute
3 + 11	tebuconazole + azoxystrobin	Custodia, Helmstar
3 + 11	tetraconazole + azoxystrobin	Brixen
3 + 30	tetraconazole + TPTH	Minerva Duo
3 + 33	tebuconazole + phosphite	Viathon

DMIs (triazoles, sterol inhibitors)	3	Orbit, Propimax, Bumper, Enable, Quash, Folicur, Tebuzol, Toledo, Monsoon, Orius, Andiamo, Domark, <i>Cevya, Topguard, Miravis Top,</i> <i>Absolute, Quilt, Quilt Xcel, Amistar Top, Custodia,</i> <i>Minerva Duo, TopsinXTR2, Viathon, Topguard,</i> <i>Helstar, Brixen</i>
Qols (strobilurins)	11	Abound, Azaka, Sovran, Narvos, Approach, Headline, <i>Absolute, Amistar Top, Quilt, Quilt Xcel, Custodia,</i> <i>Topguard, Helstar, Brixen</i>
Guanidines	U12	Elast
Organo-metallics	30	Super Tin, Agri Tin, <i>Minerva Duo</i>
Phosphonates	33	Phostrol, ProPhyt, FungiPhite, Reliant, Fosphate, Kphite, Phiticide, Rampart, Topaz, <i>Viathon</i>
MBCs (thiophanates)	1	Topsin; T-methyl, <i>TopsinXTR2</i>
SDHIs	7	<i>Miravis Top</i>



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Pre-pollination Recommendations

- Group 3
- Group 11
- Group 3 + Group 11
- Phosphite

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Post-pollination Recommendations



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Post-pollination Recommendations

- Tin (TPTH)
- Elast
- Tin + Elast mix



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- Tin (TPTH)
- Elast
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Can mix with

- Phosphite
- Group 3 (DMI)
- Group 11 (strobilurin)



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Post-pollination Recommendations

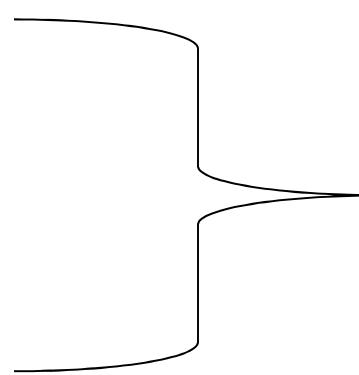
- Tin (TPTH)
- Elast
- Tin + Elast mix
- Miravis Top (Group 3 + 7)
- Group 3 + Group 11
- Phosphite (conditional use)



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